1: Introduction & Summary: Introduction & Summary
Growth Management Act

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Skagit County
Comprehensive Plan 2025-2045

Adopted by the Board of County Commissioners through Ordinance O20250004 on June 23, 2025.

Amended by the Board of County Commissioners through Ordinance O20260002 on January 27, 2026.

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Preface

Growth Management Act

The Growth Management Act (GMA) is a series of State of Washington (State) statutes, first adopted in 1990, that requires fast-growing cities and counties to develop a comprehensive plan to manage their population growth. It is primarily codified under Chapter 36.70A RCW, although it has been amended and added to in several other parts of the Revised Code of Washington (RCW)[1].

The goals of the GMA, not listed in order of priority, for guiding the development of comprehensive plans and development for cities and counties are:

1. **Urban Growth.** Encourage development in urban areas.
2. **Reduce Sprawl.** Reduce the inappropriate conversion of undeveloped land.
3. **Transportation.** Encourage efficient multimodal transportation systems.
4. **Housing.** Plan for and accommodate housing affordable to all economic segments.
5. **Economic Development.** Encourage economic development throughout the state.
6. **Property Rights.** Private property shall not be taken for public use without just compensation having been made.
7. **Permits.** Applications should be processed in a timely and fair manner.
8. **Natural Resource Industries.** Maintain and enhance natural resource-based industries.
9. **Open Space and Recreation.** Retain open space, enhance recreational opportunities.
10. **Environment.** Protect the environment and enhance the state's high quality of life, including air and water quality, and the availability of water.

[1] Municipal Research and Services Center (MRSC), Growth Management Act Basics, 2024 https://mrsc.org/explore-topics/planning/gma/growth-management-act-basics

11. **Citizen Participation and Coordination.** Encourage the involvement of citizens.
12. **Public Facilities and Services.** Ensure that those public facilities and services necessary to support development shall be adequate.
13. **Historic Preservation.** Identify and encourage preservation.
14. **Climate Change and Resiliency.** Ensure that comprehensive plans, development regulations, and regional policies, plans, and strategies adapt to and mitigate the effects of a changing climate.
15. **Shoreline Management**. (RCW 36.70A.480)[2].

The GMA regulates every element in the Comprehensive Plan including the new Climate Element and Resiliency and Greenhouse Gas (GHG) Emissions Sub-Elements. The general requirements for all elements in the Comprehensive Plan can be found in RCW 36.70A.070.

Specific GMA requirements have been cited throughout the document as footnotes and linked to the State Legislature website.

Countywide Planning Policies

A city or county must coordinate its comprehensive plan with any other cities or counties with which it shares a common border (RCW 36.70A.100). To help facilitate this requirement, counties, in cooperation with cities within their boundaries, are responsible for establishing "countywide planning policies" (CPPs) that create a framework for where population growth and infrastructure investment will be directed within a given county (RCW 36.70A.210)[3].

The GMA Steering Committee (GMASC) is the governing body of the GMA Committee – a planning organization composed of cities, towns, and Skagit County (County). An agreement, executed in 2002, established by the GMA Committee and its steering and advisory committees. The GMASC develops recommendations on countywide planning policies, urban growth areas, and employment and population allocations to the Board of County Commissioners. A technical

[2] Revised Code of Washington RCW 36.70A.020
[3] Municipal Research and Services Center (MRSC), Comprehensive Planning, 2024, https://mrsc.org/explore-topics/planning/gma/comprehensive-planning#coordination

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advisory committee provides advice to the GMASC and is composed of planning staff from member jurisdictions[4].

The Countywide Planning Policies establish regionally specific policies that are applied to all cities and the County. The policies are revised concurrently with the Comprehensive Plan periodic updates. To review the most recently adopted Countywide Planning Policies visit www.skagitcounty.net/comprehensiveplan.

Statewide and Regional Planning

The GMA encourages and, in some cases, mandates regional collaboration between jurisdictions and agencies. The County Comprehensive Plan is meant to work in conjunction with other partners and agency plans like:

- Skagit Council of Governments (SCOG) Comprehensive Economic Development Strategy (CEDS)
- Skagit 2040 (SCOG Regional Transportation Plan)
- Washington State Department of Transportation (WSDOT) Freight Mobility Plan
- WSDOT Rail Plan
- WSDOT Long-Range Ferry Plan
- WSDOT Long-Range Statewide Transportation Plan
- WSDOT Bicycle Transportation and Pedestrian Walkways Plan
- WSDOT Statewide Public Transportation Plan (under development)
- Island & Skagit Counties Coordinated Public Transit – Human Services Transportation Plan Update
- Skagit Transit Development Plan 2014-2019

[4] Skagit Council of Governments (SCOG), GMA Steering Committee, 2024, https://www.scog.net/growth-management/growth-management-act-steering-committee/

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- WSDOT Ferries Division Final Long-Range Plan 2040

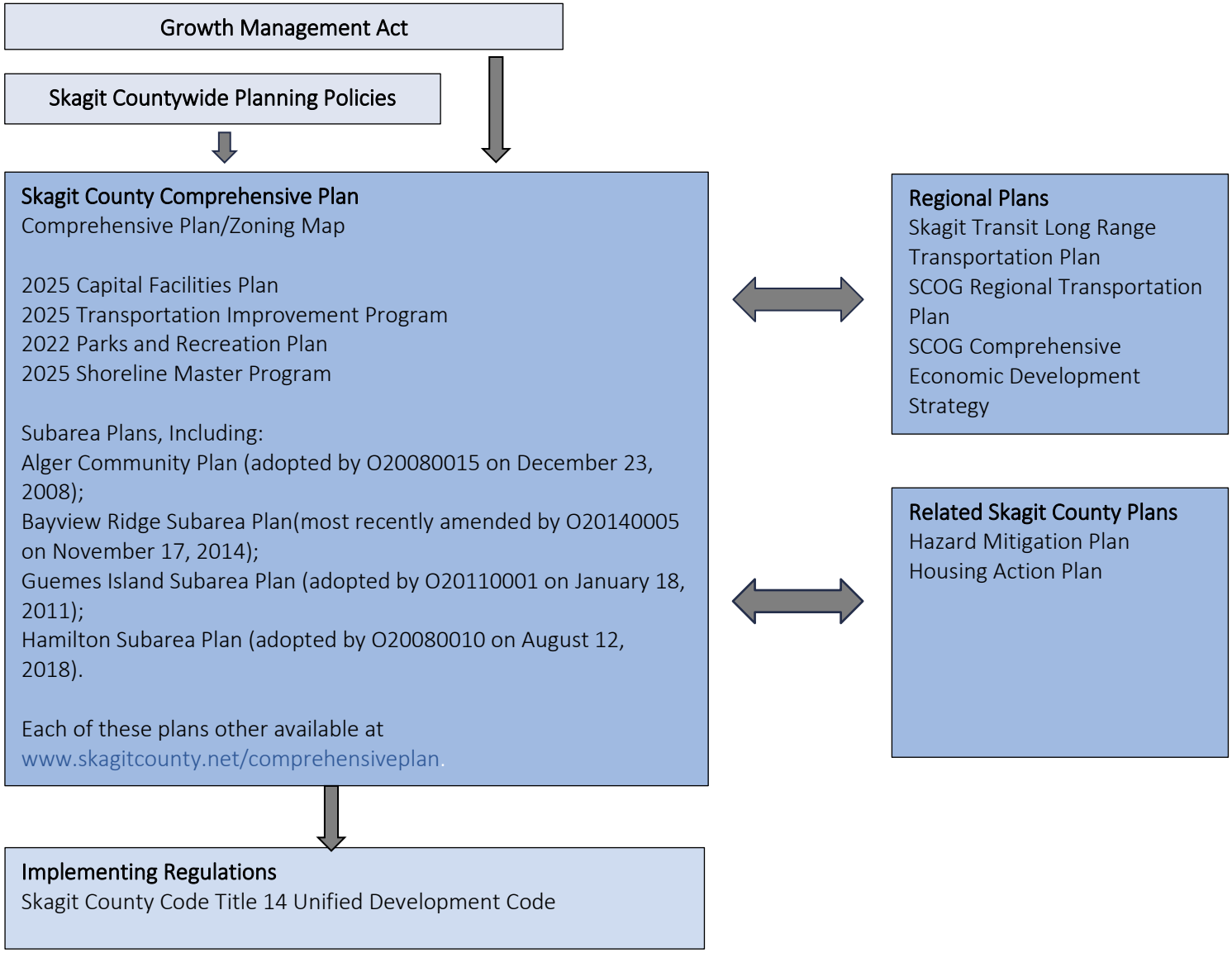
Tribal Coordination

Skagit County encompasses land within the ancestral territory of Indigenous Coast Salish Tribes named under the 1855 Treaty of Point Elliott. The County is committed to coordinating with Tribal Governments in its planning processes and continues to enhance government-to-government relations. The County will continue to work with tribal governments and their representatives in its planning efforts and policies to protect cultural and natural resources.

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Skagit County Planning Framework

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Skagit County Planning Framework



The 2025 Update

Local jurisdictions are required to periodically review and update their plans and development regulations every ten years in accordance with the GMA. The plans can be amended annually as well, but the periodic update requires a more comprehensive review to consider:

- Updated population and employment projections;
- Urban growth area sizing;
- Consistency with GMA and any recent updates to the act and related State statutes; and
- Evolving local circumstances.

For this periodic update there were two important pieces of legislation that impacted the Comprehensive Plan analysis and ultimately the final goals and policies adopted into the plan.

House Bill (HB) 1220 - In 2021, the Washington Legislature changed the way communities are required to plan for housing. House Bill 1220 (2021) amended the GMA to instruct local governments to "plan for and accommodate" housing affordable to all income levels. This significantly strengthened the previous goal, which was to encourage affordable housing.

The amended law also directed the Department of Commerce to project future housing needs for jurisdictions by income level and made significant updates to how jurisdictions are to plan for housing in the housing element of their comprehensive plans. These new changes to local housing elements include:

- Planning for sufficient land capacity for housing needs, including all economic segments of the population (moderate; low; very low; and extremely low income, as well as emergency housing and permanent supportive housing).
- Providing for moderate density housing options within Urban Growth Areas (UGAs), including but not limited to, duplexes, triplexes, and townhomes.
- Making adequate provisions for housing for existing and projected needs for all economic segments of the community, including documenting programs and actions needed to achieve housing availability.

Identifying racially disparate impacts, displacement and exclusion in housing policies and regulations, and beginning to undo those impacts; and identifying areas at higher risk of displacement and establishing anti-displacement policies[5].

This legislation revised the following sections of the GMA: 36.70A.020, 36.70A.390, and 36.70A.030.

HB 1181 - Legislation signed into law in 2023 (HB1181) added a climate goal to the GMA and requires local comprehensive plans to have a climate element. Climate elements must maximize economic, environmental, and social co-benefits and prioritize environmental justice to avoid worsening environmental health disparities. A climate element can take the form of a single comprehensive plan chapter or be integrated into several chapters/elements such as housing, transportation, and land use[6]. The County is also required to adopt a resiliency sub-element and GHG emissions reductions sub-element.

This legislation revised the following sections of the GMA: 36.70A.020, 36.70A.480, 36.70A.280, 36.70A.320, 36.70A.190, 86.12.200, 36.70A.030, and 70A.125.180.

2025 Growth Forecast

In 2025, the Board of County Commissioners adopted the Final 2045 Population, Housing, and Employment Targets, commonly referred to as growth targets in the state. The growth targets are set collaboratively with cities, towns, the County and the SCOG to help distribute growth where adequate services, facilities, and land are available. The Countywide Planning Policies set forth regional growth target policies, including requiring that 80 percent of the growth is allocated to UGAs and 20 percent of the growth is allocated to rural Skagit County. These growth targets are used to assess how land use needs to change to accommodate growth, housing, and employment.

[5] Washington Department of Commerce, Updating GMA Housing Element, 2024 https://www.commerce.wa.gov/growth-management/housing-planning/housing-guidance/
[6] Washington Department of Commerce, Climate Planning, 2024 https://www.commerce.wa.gov/growth-management/climate-planning/

Table 1: 2025 Population Allocations

Urban Growth Areas	2022 Population Estimates	2045 Population Allocations	Amount	Percent of Total Growth
Anacortes	17,983	22,971	4,988	16.9%
Burlington	12,111	16,930	4,819	16.3%
Mount Vernon	37,679	46,460	8,781	29.7%
Sedro-Woolley	14,096	18,582	4,486	15.2%
Concrete	949	1,130	181	0.6%
Hamilton	302	302	0	0.0%
La Conner	980	1,191	211	0.7%
Lyman	425	425	0	0.0%
Bayview Ridge	1,694	1,694	0	0.0%
Swinomish	2,565	2,746	199	0.7%
Urban Growth Areas Subtotal	**88,784**	**112,449**	**23,665**	**80.0%**
Skagit County Rural Areas	**42,465**	**48,381**	**5,916**	**20.0%**
Total	**131,249**	**160,830**	**29,581**	**100.0%**

Table 2: 2025 Housing Allocations

Urban Growth Areas	0-30% AMI	31-50% AMI	51-80% AMI	81-100% AMI	101-120% AMI	Above 120% AMI	Total
Anacortes	943	604	422	226	201	546	2,942
Burlington	911	584	408	218	194	528	2,843
Mount Vernon	1,659	1,064	743	398	353	963	5,180
Sedro-Woolley	848	544	380	203	180	491	2,646
Concrete	35	22	15	8	7	20	107
Hamilton	0	0	0	0	0	0	0
La Conner	40	26	18	10	8	22	124
Lyman	0	0	0	0	0	0	0
Bayview Ridge	0	0	0	0	0	0	0
Swinomish	38	24	17	9	8	22	118
Urban Growth Areas Subtotal	**4,474**	**2,868**	**2,003**	**1,072**	**951**	**2,592**	**13,960**
Skagit County Rural Areas	**0**	**0**	**501**	**268**	**238**	**2,483**	**3,490**
Total	**4,474**	**2,868**	**2,504**	**1,340**	**1,189**	**5,075**	**17,450**

Table 3: 2025 Employment Allocations

Urban Growth Areas	2022 Population Estimates	2045 Population Allocations	Amount	Percent of Total Growth
Anacortes	9,503	12,648	3,145	15.3%
Burlington	11,640	17,410	5,770	28.1%
Mount Vernon	18,781	23,559	4,778	23.3%
Sedro-Woolley	4,640	7,040	2,400	11.7%
Concrete	391	506	115	0.6%
Hamilton	466	489	23	0.1%
La Conner	1,020	1,905	885	4.3%
Lyman	56	76	20	0.1%
Bayview Ridge	2,962	4,901	1,939	9.4%
Swinomish	1,140	1,579	439	2.1%
Urban Growth Areas Subtotal	**50,599**	**70,113**	**19,514**	**95.1%**
Skagit County Rural Areas	**8,972**	**9,987**	**1,015**	**4.9%**
Total	**59,571**	**80,100**	**20,529**	**100.0%**

Update Process

The 2025 periodic update for the Comprehensive Plan was completed between January 2024 to June 2025. The periodic update was completed in the following phases listed below. For details about the public participation events and results please see **Appendix H**.

Comprehensive Plan Periodic Update Process Phases

1. January to September 2024: Growth Allocations Adoption

Before the County can assess land capacity and housing availability for the Comprehensive Plan policies, the growth targets must be established through the GMASC. Preliminary targets were released in early 2024, however, the growth targets for Skagit County were reconciled and finalized in September 2024. The GMASC made a recommendation for the Board of County Commissioners to adopt the growth targets in December 2024. The Board of County Commissioners adopted the growth targets in March 2025.

2. January to July 2024: Data Collection and Analysis

As part of the data collection and analysis for the Comprehensive Plan, the County completed a land capacity analysis, housing needs assessments, transportation analysis, and review of existing regional and supporting plans and documents. These documents are available in the Appendices.

3. July to October 2024: Release Draft Comprehensive Plan Policies

Preliminary draft policies for all elements were presented at the Planning Commission between July to October 2024. For each meeting where preliminary draft policies were presented, a 30-day comment period was opened for public comments following the presentation.

4. October 2024 to January 2025: Incorporate Comments Received

Based on the feedback collected from the Planning Commission and through public comment, the County reviewed and revised the policies to better align with the County's collective vision and respond to agency comments collected.

5. January to June 2025: Public Hearings and Adoption Process

The Planning Commission and Board of County Commissioners held several public briefings and public hearings with comments period between January 2025 to June 2025 for the Comprehensive Plan, updates to Title 14 development regulations, and Critical Areas Ordinance Update.

Climate Element Process (with Resiliency and GHG Emission Sub-elements)

In drafting a new climate element and sub-elements, the County followed the guidance provided by the Washington Department of Commerce. The Climate Element Planning Guidebook was released in January 2024. Based on the guidance, County completed the following analysis and engagement for the climate element and sub-elements. Reports for analyses mentioned below can be found in the Appendices.

6. Inventory GHG Emissions

The State completed a GHG Emissions inventory for Skagit County. This report establishes a baseline of GHG emissions to establish policies that will reduce GHGs to net zero by 2050 in accordance with the State's Climate Commitment Act. The results of this inventory influenced the recommended policies in the GHG sub-element to support the statewide goal to reduce GHG emissions.

7. **Review Existing Policies and Plans**

The current Comprehensive Plan was reviewed to identify gaps in climate related policy required for all comprehensive plans as of 2023 per HB 1181. Some climate related policies were integrated throughout the Comprehensive Plan elements to promote a user-friendly and efficient method of implementing new climate related state requirements.

8. **Identify Climate Hazards, Inventory County Assets, Assess Vulnerability, and Risk**

Per the guidance provided by the State, the County reviewed best available science to assess all possible climate related hazards that may impact Skagit County. County controlled or owned assets were also reviewed against each climate hazard to determine the assets with the vulnerability and risk from potential climate impacts. These results influenced the recommended policies in the Climate Element to substantially reduce the adverse impacts of climate related hazards, as required by State law[7].

9. **Proposed Preliminary Draft Policies**

Based on the results collected from the GHG Emissions inventory; review of climate hazards and assets; and review of vulnerability and risks, draft policies were presented to the Planning Commission in October 2024. A 30-day comment period was open following the Planning Commission meeting.

10. **Release Final Draft Policies with Comprehensive Plan**

After reviewing public comments and comments received from regional and State agencies, the final goals and policies were released with the entire Comprehensive Plan in February 2025 and presented at a series of meetings and hearings with the Planning Commission and Board of County Commissioners.

Putting the Plan into Action

The Skagit County Comprehensive Plan provides a legally recognized framework for making decisions about land use in the unincorporated areas of Skagit County. It is intended to aid a broad range of public and private users, including property owners, the general public,

[7] RCW, 36.70A.070 (9)(e) https://app.leg.wa.gov/rcw/default.aspx?cite=36.70a.070

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community groups, developers, County officials, and other government agencies in making choices and decisions that may affect the quality of life in Skagit County. Responsibility for putting the Plan's policies into action relies on an understanding of several characteristics of the Comprehensive Plan:

It is a declaration of the community's vision, standards, and expectations for future growth and development. The Comprehensive Plan's general goals and policies inform the purpose and intent of specific land use and development regulations and contribute to a stable and predictable setting for economic and community development.

It guides the development of additional community plans and implementing regulations. The Comprehensive Plan is the framework for more detailed community plans. These more detailed community plans and regulations consider specific local circumstances that may be unique to certain areas of unincorporated Skagit County.

It guides the provision of public facilities and services by integrating land use, infrastructure, and human service delivery. The Comprehensive Plan provides the framework for decisions about public facilities and services (such as where facilities should be located to support planned growth) and directs public spending to areas where growth is targeted.

It provides regional coordination and consistency with other jurisdictional planning efforts. The intent is that other public agencies (local, regional, State, federal, and Tribal), in cooperation with the County, use the Comprehensive Plan in conjunction with the Countywide Planning Policies, as a regional perspective or guidepost when developing other plans and growth policies, and when making project decisions.

It allows for citizen participation and involvement. Comprehensive planning is an evolving process which allows for periodic review and updates in response to changing community goals and vision as articulated by citizens, businesses, and interested organizations.

It protects citizen property rights while achieving countywide goals and policies. Implementation of the Comprehensive Plan is carried out through a process that assures regulatory or administrative actions do not result in unconstitutional taking of private property. The land use plan and implementing zoning provide reasonable use of private properties. A permit process system implements the Comprehensive Plan to ensure that there is consideration of applications in a timely manner. Comment and appeal procedures are included as appropriate to provide avenues for public and property owner input.

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Plan Organization

Comprehensive Plan Policy Elements

Each element contains narrative description of the intent, context, or history related to the goals and policies. This narrative is not itself policy, but rather ancillary information that supports the policies. Following the narrative, each element recites the underlying GMA goals and Countywide Planning Policies, followed by the Comprehensive Plan's binding goals and policies.

1: Introduction and Summary.

This chapter does not contain policies, but provides a brief history and general description of Skagit County today, and offers a brief discussion on the Skagit Valley in its earlier days. It includes information on past comprehensive planning and public involvement, as well as how this Comprehensive Plan was developed and updated.

Consolidated Land Use Element

Land uses recognized in the Comprehensive Plan fall into four general categories: Urban, Rural, Natural Resource Lands (NRLs), and Open Space. The following three chapters contain guiding policies for these land uses, and together comprise the Land Use Element of the Comprehensive Plan:

2: Urban, Open Space, and Land Use Element

This Element addresses the general distribution and location, and the appropriate intensity and density of Urban and Open Space land uses. The Element also addresses certain land use goals and policies that are generally applied consistently across all land use categories: the treatment of historic land use approvals; pre-existing non-conforming uses; public uses; lot certification; and land divisions. The element also includes goals and policies for the establishment of regional, or difficult-to-site facilities referred to under State law as essential public facilities.

3: Rural Element

This Element establishes broad goals and policies guiding residential, commercial, and industrial uses in unincorporated Skagit County consistent with the GMA's allowance of development in the rural area, including limited areas of more intensive rural development (LAMIRDs).

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4: Natural Resource Lands Element

These policies guide long-range planning, programs, and regulations to conserve Agricultural, Forest, and Mineral Resource lands.

Unconsolidated Elements

5: Environment Element

The Environment Element provides the policy basis for the protection and regulation of critical areas, such as wetlands; aquifer recharge areas; frequently flooded areas; geologically hazardous areas; and fish and wildlife habitat conservation areas.

6: Shorelines Master Program Element

This Element contains the goals, policies, and implementation procedures of the County Shorelines Master Program. Topics addressed include shoreline use; conservation; public access; circulation; economic development; recreation; protection of historical, cultural, and educational values; and restoration and enhancement.

7: Housing Element

This Element contains plan policies that promote suitable living environments at all income levels, encourage housing maintenance, redevelopment, and safety, and promote faster approval time, when possible, in the permitting process.

8: Transportation Element

This Element details the transportation goals, objectives, and policies which set forth the adopted Level of Service (LOS) standards and other policy commitments for Skagit County.

9: Utilities Element

The policies in this Element discuss the following: natural gas, telecommunications, electricity, solid waste, sewer, public water, water quality, drainage, flooding, and storm runoff.

10: Capital Facilities Element

The focus of this Element is the planning and provision of needed public facilities for the County's unincorporated and countywide populations. This element includes specific goals and policies that address capital costs; financing; levels of service methods and consequences; statutory requirements; and specific related goals and policies.

11: Economic Development Element

This Element details policies relating to economic needs such as: creating and maintaining diverse employment opportunities; protecting natural resource utilization; increasing non-resource industry diversity; promoting a range of commercial retail and service businesses; increasing tourism; conserving natural resources and open spaces; and fostering a healthy public-private cooperative partnership in support of diverse business operations and investment.

12: Climate and Resiliency with Resiliency Sub-Element and GHG Emissions Sub-Element

This Element addresses how the County can address natural hazards aggravated by climate change, enhance natural areas for the purposes of hazard protection, enhance community resilience, reduce GHG emissions, reduce vehicle miles traveled, and prioritize reductions that benefit overburdened communities and promote environmental justice.

The Skagit County Climate and Resiliency Element and Sub-Elements are integrated across all elements through policies. Policies that promote climate, resiliency, and GHG reductions are noted across the whole Comprehensive Plan with the following icons.

This resiliency icon appears throughout the Comprehensive Plan and represents policies that help address natural hazards aggravated by climate change, protect natural areas, and enhance community resilience.

This GHG icon appears throughout the Comprehensive Plan and represents policies that help the County reduce GHG emissions overtime contributing the State goal of net-zero emissions by 2050.

13: Implementation and Monitoring

This Element describes the concepts involved in putting a plan into action, how this Comprehensive Plan is updated and amended, and how the Comprehensive Plan is monitored and evaluated. This Element also addresses how the Comprehensive Plan and its development regulations will be applied at the community level, through the community planning process.

Appendices

- Appendix A Acronyms and Definitions: Provides a list of key definitions and acronyms used throughout this document.
- Appendix B Skagit County Comprehensive Planning History: process from 1965 to the initial adoption of this Comprehensive Plan in 1997.
- Appendix C Land Capacity Analysis
- Appendix D Housing Needs Assessment
- Appendix E Climate Impacts/Risks/Vulnerabilities & Potential Opportunities
- Appendix F Climate Policy Assessment & Initial Recommendations
- Appendix G Greenhouse Gas Emissions Inventory
- Appendix H Public Participation Plan
- Appendix I Community Engagement Results Report

Comprehensive Plan/Zoning Map and Supplemental Maps (under separate cover)

The Skagit County Comprehensive Plan/Zoning Map depicts general land uses, such as UGAs, Rural lands, and NRLs, among others. These land uses are guided by and designated countywide based on the policies and criteria set forth in the Comprehensive Plan. The map also establishes zoning boundaries that are part and parcel of the County Code. Each land use designation includes one or more zoning districts, within which specific County land-use regulations apply. Such regulations are consistent with and carry out the policies of the Comprehensive Plan. Also shown on the map are federally designated lands such as national parks and wilderness areas.

In recent years, the County has maintained a variety of maps on its website, such as the iMap interactive mapping tool at www.skagitcounty.net/maps/imap. Online mapping technology allows for greater public access, decreased mapping costs, and provides the most up-to-date information available.

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The primary purpose of comprehensive planning is to help the public and elected officials define objectives, set priorities, and seek solutions to long-term issues. The Comprehensive Plan provides a sense of direction, a broad overview of where a community is (existing conditions) and where it is going (trends and vision). It is a way of assuring that a community's health, safety, and general welfare are protected by striving for and creating a better, more healthful, efficient, and aesthetically pleasing environment in which to live.

The purpose of the Comprehensive Plan is to address these principles within the framework of the GMA, providing goals, policies, and strategies for managing growth over the next 20 years.

Skagit County Background

Skagit County is located in the northwestern portion of Washington State. It encompasses 1,735 square miles, ranks 21st in geographic size among the State's counties and had approximately 131,250 residents as of December 2022 (State Office of Financial Management).

Skagit County was established in 1883 and named after the river and one of the Indigenous tribes that lived along its banks. The Skagit River is the third largest in the western United States, flowing 78 miles through a diverse and beautiful land. The county stretches from the crest of the rugged North Cascade Mountains on the east, down through the fertile valleys, to saltwater beaches. The topography of Skagit County ranges from sea level to 8,966-foot Mount Logan and is reflected in the terms used for such places as the Skagit Flats, western islands, upper Skagit, Sauk, and Samish River Valleys, and the Cascades.

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Skagit County has a marine climate affected by its proximity to the Puget Sound and the Pacific Ocean resulting in mild winters and warm, drier summers. Agriculture is the dominant factor in Skagit County's economy and community character. Farming and ranching have been an important part of the community's heritage since early settlement in the 1800s. The Skagit Valley is regarded as one of the most fertile valleys in the world, producing major commodities, specialty crops, and vegetable seeds and flowers with unique market niches. Forest lands, which predominate much of the county's upland landscape, are another significant natural resource. The practice of forestry (logging, reforestation, and timber management) was established in the earliest stages of settlement in the county. Large-scale commercial forestry remains a vital industry and is practiced on well over 300,000 acres, or about 29 percent of Skagit County's total land area of 1.1 million acres. Fishing, both commercially and recreationally, is another natural resource industry that has influenced Skagit County economically and culturally. The mining industry similarly has much importance to the county economy. In addition to natural resource-based industries, the economy has diversified to include strengths in the areas of retail sales, contracting, fabrication, and services.

Skagit County Values & Vision

Skagit County has upheld a strong commitment to the principles of planning for over 60 years. The first Comprehensive Plan was adopted in 1965 and was the guiding document for the county's physical development until the growth management era.

The 1965 Comprehensive Plan:

- *Set the stage for farmland preservation.*
- *Identified logical areas for industrial and residential uses.*
- *Called for avoiding development in areas sensitive to or suffering from pollution.*
- *Introduced the County's first zoning and subdivision regulations.*

Community Values

The goals, objectives, and policies of the Comprehensive Plan are based on these community vision statements and expand upon the Countywide Planning Policies and State GMA goals. They

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reflect the vision and values developed through Skagit County's 60-year planning legacy, with the foundational principles first established in 1965.

Preserve the high quality of life: Residents of Skagit County choose to live here for many reasons: natural beauty, clean air, good jobs, a good place to create a home and family. This plan seeks to foster this high quality of life for residents and future generations by providing for social, cultural, educational, economic, recreational, civic, transit, health, and safety needs.

Strive for government efficiency: This plan calls for efficient delivery of services in a cost-effective way by:

- *Concentrating infrastructure investments and service delivery to support development patterns near cities and towns where a full range of local services are or can be made available.*
- *Looking to the County to provide certain countywide, regional facilities and services.*
- *Relying primarily upon cities, towns, and special purpose districts as the providers of local facilities and services appropriate to serve those local needs, except where the County is a local service provider.*

Support economic opportunities: This Comprehensive Plan strives to promote a strong and diverse economy for Skagit County residents through policies and programs that promote new business opportunities, increase family wage jobs, and create a predictable regulatory environment for businesses and citizens. Sustainable economic development efforts will focus on providing all communities with a balance of jobs and housing and helping communities with redevelopment or new economic initiatives.

Increase the housing choices for all residents: Skagit County unincorporated residents live in a wide variety of home types: single-family houses with yards, large rural lots, duplexes, apartments, and mobile homes. This Comprehensive Plan seeks to increase housing opportunities for all residents (families, individuals, seniors, and persons with special needs). It promotes more choices for both owners and renters alike, such as single-family homes on smaller lots, middle housing in LAMIRDS (when connected to public sewer), creative opportunities for all types of home ownership, and high quality housing design that fits with surrounding neighborhoods and is located closer to jobs, in particular within UGAs.

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Ensure that necessary transportation facilities and services are available to serve development at the time of occupancy and use: This Comprehensive Plan provides a basis for targeting road and transit investments where growth is desired and for equitable contributions to the transportation system by new development.

Balance urban uses and environmental protection: This Comprehensive Plan promotes an efficient and effective land use pattern within UGAs that respects environmental values by balancing urban uses with nature and open space. This will be achieved through careful site planning that maximizes developable land while respecting natural systems. This Comprehensive Plan also proposes that the County consider community and joint planning to ensure natural systems continue functioning at a smaller geographical level while allowing the economy to expand.

Protect and retain rural lifestyles: This Comprehensive Plan seeks to maintain the unique rural lifestyle for which Skagit County is widely known and cherished. Skagit County's rural communities and open spaces require protection and conservation from urban sprawl and suburban development patterns. Rural community character and open spaces are a valued part of Skagit County's diversity.

Protect and conserve Agriculture, Forest, and Mineral Resource Lands: NRLs, such as farms and timber lands, provide economic, social, cultural, and environmental benefits. This Comprehensive Plan ensures that these areas, including Mineral Resource lands, continue to be viable today and into the future.

Protect and conserve the environment and ecologically sensitive areas, and preclude development and land uses which are incompatible with critical areas: This Comprehensive Plan recognizes that the environment is an important public resource. Protecting and conserving the environment and ecologically sensitive areas is in the community's best interest. Development of areas susceptible to natural hazards may lead to inefficient use of limited public resources, jeopardize environmental resource functions and values, subject persons and property to unsafe conditions, and affect the quality of life.

Respect property rights: This Comprehensive Plan respects private property rights by assuring that regulatory and administrative actions do not result in an unconstitutional taking of private property. The County, in exercising its land use regulatory authority to protect the public health, safety and general welfare (Article XI Section 11 of the State Constitution), must respect private

property rights by not exceeding the constitutional limits on its authority. Planning, land use regulations, and zoning protect individual and community rights in the following ways:

- *By avoiding nuisances through ensuring against incompatible neighboring land uses;*
- *By balancing public and private responsibilities that may have conflicting interests;*
- *By providing predictability that enhances the value of private property;*
- *By incorporating trends of population growth and resource availability to provide necessary public facilities;*
- *By providing codes, ordinances, and regulations that organize a community's physical layout;*
- *By protecting and conserving the natural resources that provide us with clean air and water;*
- *By protecting our heritage by preserving both natural and man-made resources, and scenic and cultural areas that generate civic pride;*
- *By assuring that each generation has responsibilities as a trustee of the environment for future generations;*
- *By attaining the widest range of land uses without degradation, risk to health or safety, or other undesirable and unintended consequences;*
- *By recognizing that each person has a fundamental and inalienable right to a healthful environment and that each person has a responsibility to contribute to the protection and enhancement of the environment; and*
- *By recognizing existing non-conforming land uses and the development rights associated with them.*

Encourage citizen participation and involvement: This Comprehensive Plan derives its strength from the thousands of citizens who have participated throughout the planning process to develop a vision for Skagit County's future. Skagit County has a diverse and vocal population whose opinions continually shape public policy. The development of the County's Comprehensive Plan is the product of a planning process that included extensive public participation. Procedures provided for broad dissemination of all plan proposals and alternatives, opportunities for written

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comments, public meetings after effective notice, provision for open discussion, communication programs, information services, and consideration of and response to public comments.

Urban growth coordination: Continue inter-agency and city coordination to best use land in UGAs and focus growth near adequate facilities and services.

Emphasis on employment growth: This was identified in the 2016 update and reflects the desire by local elected officials to strengthen the local economy and emphasize growth in family wage jobs.

Emphasis on the preservation of resource land band: This was identified in the 2005 update highlighting the concern of farming, forestry, and other resource activities being threatened by the loss of the land to non-resource uses. In particular, the transfer of resource lands to non-profit corporations and other agencies for purposes of habitat protection or enhancement results in farms and forest land being taken out of natural resource production.

Closer coordination with natural hazard avoidance: This was identified in the 2005 update emphasizing the need to be more sensitive to the threats posed by devastating natural hazard events, particularly flooding. UGA expansion, rural community development, public facility siting and other forms of growth in identified hazard areas should be avoided through integrated comprehensive and hazard mitigation plans.

More and better incentives: This was identified during the 2005 update and called for toolbox methods for achieving the County's growth management goals for the preservations of resource lands, protection of critical areas, and preservation of property rights should be expanded.

Themes from the 2025 Update

During the 2025 Periodic Update process between January 2024 to June 2025, the County initiated a series of community and stakeholder engagement events to gather input on existing policies and new planning topics. The engagement strategies and activities used for this periodic update were heavily influenced by State legislation that required cities and counties to include new climate and resiliency elements in their comprehensive plans. Previous periodic updates included engagement data around these topics, therefore time and resources were prioritized to collect data about climate impacts, resiliency, and GHG emissions reductions.

Some of the key themes observed through this update were:

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- ***Enhance resiliency in Skagit County:*** *Although the climate and resiliency sub-elements are required by the State, there is a strong sentiment in Skagit County, reflected in the engagement data, to improve the County's resiliency to climate related hazards.*
- ***Housing Affordability****: Affordable housing emerged as a top priority, with broad support for promoting housing at different income levels and in rural areas. Addressing farmworker housing received notable reference, especially proposals to encourage urban housing development to minimize the impact on agricultural land. Community-oriented development strategies also garnered significant support, including reducing lot sizes in non-agricultural lands to create more parks, open spaces, and walkable neighborhoods, thereby enhancing both affordability and livability.*
- ***GHG Emissions Reductions****: There was strong support for reducing GHG emissions by promoting multi-modal transportation, expanding bike lanes, pedestrian infrastructure, and public transit. Commenters emphasized reducing vehicle miles traveled (VMT) by concentrating development and housing near existing infrastructure and services, creating more walkable, connected communities. Aligning land use with climate goals was seen as key to enhancing sustainability and resilience across Skagit County.*

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Future Vision to 2045

During the first community-wide survey, residents were asked what priorities should the County focus on over the next 20 years, respondents listed preserving agricultural land as the number one priority, improving housing supply and affordability as the second priority, and environmental preservation as the third priority. The top priority is consistent with the previous community engagement conducted during past Comprehensive Plan updates and reflects the original 1965 Comprehensive Plan, which emphasized farmland preservation. However, recent changes in socioeconomic conditions and housing affordability in the last 10 years revealed a strong interest from respondents for improvements to housing supply and affordability. In addition to housing affordability, many communities in the State have shown an increase in awareness and concerns around potential natural hazards. This was mentioned at several other engagement events and when the draft climate element policies were released to the public, the County received over 90 comments specifically related to climate resilience and hazard mitigation.

What priorities should Skagit County focus on over the next 20 years?
#1 Preserving agricultural land
#2 Improving housing supply and affordability
#3 Environmental preservation
#4 Economic growth and jobs
#5 Community resilience and hazard mitigation
#6 Transportation improvements
Results collected from the 2025 Periodic Update Community-Wide Survey May 2024

Moving forward, the County intends to continue the preservation of agricultural lands, established in the 1965 Comprehensive Plan and mirrored in the 2025 community engagement findings. Agricultural preservation will be maintained through the NRL policies, while growth will be directed to urban areas to prevent sprawl addressed in the urban growth, open space, and land use policies. Environmental preservation will be guided by the goals and policies in the Environment Element.

In addressing concerns related to housing affordability and availability, the County intends to focus growth and future housing opportunities in areas where services and facilities can be provided to reduce costs of construction. However, the policies also contemplate the provision of additional housing in limited areas of more intense rural development and some additional housing in rural areas to accommodate growth and prevent displacement of existing rural families currently facing housing affordability.

To address environmental preservation, identified as the third priority in the community survey, the Resilience Sub-element policies, and Environment Element policies, will help the County reduce pressure of development in areas prone to natural hazards. Areas prone to natural hazards exacerbated by climate change are often also areas that are important for environmental preservation and ecosystem retention. Wetlands are often in areas with flood risk, valuable forests are at risk of wildfire, shorelines are at risk from sea-level rise, and the county's vital agricultural lands may be at risk of flooding, drought, or other hazards depending on the conditions of the land.

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2 Urban, Open Space, and Land Use

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Introduction

Skagit County's Comprehensive Plan focuses on a countywide, regional land use approach that is derived from GMA goals, Countywide Planning Policies, market and other factors affecting land development, projections about future trends, the community vision statements described in Chapter 1, and evolving public opinion.

The Comprehensive Plan is based on a vision of how Skagit County can grow and develop while protecting the region's high quality of life and equitably sharing public and private costs and benefits of growth. The Comprehensive Plan encourages well-managed development to protect public health, safety, and welfare; and to enhance Skagit County's community character, natural beauty, and environmental quality.

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The Comprehensive Plan establishes four general land use categories: UGAs, the Rural Area, NRLs, and Open Space areas. These various land use categories are distinguished from each other through land use *designations* that are reflected on the Comprehensive Plan and Zoning Map. Each land use designation has a corresponding zoning district that contains the specific development standards for land use activities in that zone. **Table 4** shows the general distribution of Urban, Rural, NRL, and Open Space areas in the county.

Table 4: Land Use Designations and Acreage*

Land Use Designations	Acreage
Public Open Space of Regional/Statewide Importance (OSRSI)	
National Forest	282,812
National Park & Recreation Areas	130,848
Wilderness	83,530
State Parks & Recreation Areas	5,425
Other	16,727
Subtotal	519,342
Natural Resource Lands (NRL)	
Secondary Forest (SF-NRL)	37,300
Industrial Forest (IF-NRL)	321,410
Rural Resource (RRc-NRL)	26,522
Agriculture (Ag-NRL)	88,506
Subtotal	473,738
Mineral Resource Overlay (MRO)	[61,492]
Rural Lands	
Rural Village Residential (RVR)	2,717
Rural Intermediate (RI)	8,043
Rural Reserve (RRv)	70,126
Subtotal	80,886

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Land Use Designations	Acreage
Commercial/Industrial Lands	
Rural Business (RB)	184
Rural Freeway Service (RFS)	46
Rural Village Commercial (RVC)	25
Natural Resource Industrial (NRI)	183
Small-Scale Recreation & Tourism (SRT)	90
Rural Center (RC)	19
Rural Marine Industrial (RMI)	53
Small-Scale Business (SSB)	31
Master Planned Resort (MPR)	113
Subtotal	744
Urban Growth Areas (UGA)	
Incorporated UGA Areas (not including incorporated water areas)	25,558
Unincorporated UGA Areas	12,447
Subtotal	38,005
Total	**1,112,715**

Source: Skagit County Mapping Services, 2024. Acreage figures are based on the best information and technology available. Accuracy may vary depending on the source of the information, changes in political boundaries or hydrological features, or the methodology used to map and calculate a particular land use. Bracketed figures represent an overlay to other land uses and do not contribute to the total acreage.

The Urban, Open Space, and Land Use Element addresses the general distribution and location, and the appropriate intensity and density, of urban and open space land uses. There are separate elements for Rural and Natural Resource Lands—Elements 3 and 4 respectively—because of their significance in Skagit County. The Urban, Open Space, and Land Use Element also addresses essential public facilities and certain land use goals and practices that are generally applied consistently across all land use categories: the treatment of historic land use approvals; pre-existing, non-conforming uses; public uses; lot certification; and land divisions.

The essential public facilities policies were moved from the Capital Facilities Element to the Land Use Element during the 2016 update. Essential public facilities are a land use issue because land use planning involves determining the appropriate placement of various uses in relation to other activities and functions occurring on the land. Since essential public facilities can have significant

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impacts on the land and the populations living and working around them, it is important to consider how they fit into the larger land use planning picture.

Land Capacity

Based on the 2024 land capacity analyses conducted by the County and cities for their UGAs, collectively there is adequate capacity to accommodate the allocated residential growth of 29,581 new people and the allocated employment growth of 20,529 new jobs by 2045. Countywide planning policies were revised in 2016 to add guidance on land capacity analysis and establish an annual land use monitoring program through the GMASC. Each city and the County were evaluating their plans and addressing land uses and zoning to address the balance of GMA goals and unique local circumstances.

Urban Growth Areas

Most new growth in Skagit County is encouraged to locate in UGAs. These areas include the incorporated cities and towns and unincorporated land surrounding the incorporated areas that the County has determined to be necessary and appropriate for urban growth through the year 2036. UGAs are designated in policy 2A-1.5. Each city or town in Skagit County has a UGA. The UGAs for the towns of La Conner and Lyman do not extend beyond their town limits, whereas the UGAs for the other municipalities include the incorporated area—the city or town itself—as well as additional land which may be added to the corporate limits through annexation. There are also two non-municipal UGAs: the Bayview Ridge UGA, and the Swinomish UGA. Only about 3 percent of all land in Skagit County is designated urban.

The UGA designation recognizes historic urban development patterns and present and future needs for urban land. An adequate supply of land through 2045 will ensure that immediate and future urban needs are met, and will provide for an orderly and efficient transition from low-intensity land use to urban land use over time. The establishment or modification of UGA boundaries takes into consideration population and employment growth projections for the planning period, the ability of local jurisdictions to provide required urban services in an efficient and economical manner, and the protection of critical areas and NRLs of long-term commercial significance.

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The County, cities, and towns have worked closely together to establish development standards for the unincorporated portion of municipal UGAs that address the needs of property owners, the local jurisdictions, and service providers. Prior to annexation, only low-intensity rural residential and commercial uses are allowed, to preclude land division patterns and uses that may prevent future development at full urban densities. Urban development may only take place concurrent with the availability of public services and capital facility programs. When property is annexed and services are made available, development may occur at appropriate urban densities, resulting in an orderly, economical transition from rural to urban land use patterns.

Since many of the policies in the Urban, Open Space, and Land Use Element refer to residential density, and it is important to understand the difference between “gross density” and “net density.” Gross density means the total number of dwelling units divided by the total land area of the site or area, excluding nothing. Net density means the total number of dwelling units divided by the net area of the lot or site. The net area excludes roads, public open spaces, community facilities, and critical areas.

Bayview Ridge UGA

The only unincorporated UGAs that are not expected to be annexed by a city or town are the Bayview Ridge UGA and the Swinomish UGA. The County has adopted a subarea plan and development regulations for the Bayview Ridge UGA that includes goals, policies, and land use and zoning designations specific to that area. The plan, development regulations, and land use designations were updated in 2013 and 2014 to expand the area within the UGA available for industrial development and to remove from the UGA lands previously intended for new urban residential development. The Bayview Ridge Subarea Plan has been developed following the goals, policies, and procedures contained in Element 13 of this Comprehensive Plan.

The Bayview Ridge Subarea is 3,586 acres located approximately one mile west of the City of Burlington. The Bayview Ridge Subarea community is characterized by a mix of industrial/business uses, airport and aviation-related uses, pastureland, and a variety of residential uses. The land use designations for the subarea include:

- *Bayview Ridge Residential (BR-R)*
- *Bayview Ridge Light Industrial (BR-LI)*
- *Bayview Ridge Heavy Industrial (BR-HI)*

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- *Aviation Related (AVR)*
- *Aviation-Related Limited (AVR-L)*

These designations have been created to respond to the existing and anticipated future growth conditions within the subarea based on an extensive community-based planning process including environmental review. The subarea plan includes a capital facilities element and utilities element identifying needs and solutions for infrastructure improvements in support of anticipated growth.

Swinomish UGA

The Swinomish UGA is located within a portion of the Swinomish Indian Reservation. The County's authority and responsibility for planning and land use management within the Reservation is promulgated by federal and case law. In general terms, within the exterior boundary of the Swinomish Indian Reservation the interests of the Tribe extend to all lands regardless of ownership while the County's regulatory authority extends only to non-trust and non-Tribal fee-simple lands. As such, the County's regulatory authority is put into practice by adopting the Residential District (R) land use designation for the non-trust and non-Tribal fee-simple lands within the Swinomish UGA.

Open Space Areas

There are a variety of types of open space lands in Skagit County. Open space areas include greenbelt corridors within and between urban growth areas, green belts which connect critical areas, lands receiving open space tax incentives, resource lands, conservation easements, rural open space areas, park lands, and significant historic, archaeological, scenic and cultural lands.

In January 2009, Skagit County adopted the Skagit Countywide UGA Open Space Concept Plan, which identifies and prioritizes open space corridors and greenbelts within and between UGAs that include lands useful for recreation, wildlife habitat, trails and connection of critical areas, and working farm and forestlands. The plan identifies and prioritizes open space and greenbelt lands desirable for public acquisition or continued private ownership and conservation. Any land acquisition under the plan will not include any condemnation actions but instead will only be

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achieved by voluntary donation, Conservation and Reserve Development (CaRD) subdivision, or mutually agreeable sale.

Public Open Space

Public open space areas include publicly owned lands that are dedicated or reserved for public use or enjoyment for recreation, scenic amenities, NRL management, or for the protection of environmentally sensitive areas. *Where identified below to be of regional or statewide importance, such lands are designated on the Comprehensive Plan/Zoning Map.* Other publicly held lands, such as local neighborhood parks, scenic roads and highways, shorelines, rivers and streams, and utility corridors, *although not designated as open space on the Comprehensive Plan Map,* nevertheless offer similar open space functions and benefits. However, certain areas may not be open to the public, such as utility corridors, road easements, etc., where ownership or public safety reasons may preclude public access, even though these areas may provide open space benefits to wildlife.

Public Open Space of Regional/Statewide Importance

The County has designated certain public open space areas on the Comprehensive Plan/Zoning Map as Public OSRSI. These areas are so identified because their recreational, environmental, scenic, cultural, and other open space benefit extend beyond the local area to be regional or statewide in significance. They include:

- Deception Pass State Park
- Burrows Island
- Hope Island
- Huckleberry Island
- Hat Island
- PUD #1 Judy Reservoir
- North Cascades National Park
- Glacier Peak Wilderness
- Sharpes Park and Montgomery-Duban Headlands
- Saddlebag Island
- Ika Island
- Skagit Island
- Larrabee, Rasar, and Bayview State Parks
- Skagit Wildlife Refuge
- Noisy Diobsud Wilderness
- Ross Lake National Recreation Area

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- Mount Baker National Forest
- Rockport State Park
- Seattle City Light Wildlife Mitigation Lands
- WA Department of Natural Resources Natural Resource Conservation Areas and Natural Area Preserves
- and portions of the Northern State Recreation Area

Private Open Space

There are several private organizations in Skagit County that in some way set aside lands for conservation purposes, such as for their ecological, scenic, or natural resource values. Private land trusts, such as Skagit Land Trust, San Juan Preservation Trust and Nature Conservancy, among others, own or in some way administer a significant amount of land in Skagit County.

These private organizations contribute to the preservation of wildlife habitat, biodiversity, natural and scenic greenbelts, and open-space corridors. Through the use of such techniques as conservation easements, purchase of development rights, or the outright purchase of land, development of these lands is limited or precluded altogether.

Open Space Taxation

Lands enrolled in a taxation program as defined in RCW 84.34 are identified in the Current Use Open Space Taxation Program map. This map also may change over time according to participation.

Public Uses

Public Uses generally are government or quasi-government owned and operated facilities including primary and secondary schools, libraries, postal services, offices, training facilities, fire and police stations, and courts. Public Uses do not necessarily include Essential Public Facilities as provided for in Element 10 of this Comprehensive Plan.

2: Urban, Open Space, and Land Use: Urban, Open Space, and Land Use
Essential Public Facilities

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Within each Comprehensive Plan land use designation, public uses may be considered as "special uses" under the County Unified Development Code. Public uses are reviewed as site specific projects so that public benefits and land use impacts can be analyzed and, if necessary, appropriate mitigation applied.

Essential Public Facilities

State laws under the GMA require that comprehensive plans include a process for identifying and siting essential public facilities, or facilities that are generally difficult to site (RCW 36.70A.200). Examples of an essential public facility include state educational facilities, correctional facilities, transportation facilities, solid waste handling, mental health facilities, human services, and more. As such, no local plan or development regulations can preclude the siting of these facilities.

Existing essential public facilities in Skagit County include:

- Skagit County Fairgrounds
- Skagit Regional Airport
- Skagit Transit Station
- Puget Sound Energy Fredonia Generating Station
- Skagit Valley Hospital
- Skagit County Jail
- Interstate 5 (I-5)
- State Route 20 (SR-20)
- Washington State Ferries Anacortes Terminal

Goals and Policies

Skagit County's land use goals and policies are implemented through land use designations and related zoning districts and regulations. Comprehensive Plan land use designations are intended to represent the most appropriate uses of land in the unincorporated portion of Skagit County.

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Designation criteria provide objective rationale for the application of land use designations to the Comprehensive Plan/Zoning Map, based on the characteristics of the land.

This next portion of the Urban, Open Space, and Land Use Element describes the criteria and procedures for designating UGAs; the policies that guide development and the provision of infrastructure within those areas; and the need for coordination and joint planning between the County and cities, towns, and Tribal governments to ensure the necessary transition of governmental services within the UGAs. In discussing municipal UGAs, or those associated with a city or town, it is important to keep in mind that there is both an *incorporated portion* which is the area within the city or town limits, and an *unincorporated portion*, or the area outside of the municipal limits that may be added through annexation.

Urban Growth Areas

Goal 2A Guide most future development into concentrated UGAs where adequate public facilities, utilities, and services can be provided consistent with the Countywide Planning Policies.

Urban Growth Area Designation

Goal 2A-1 Establish UGAs in which urban development will be encouraged and outside of which growth can occur only if it is rural in character.



policy 2A-1.1 Work with local jurisdictions to designate and maintain UGAs of sufficient size to accommodate the County's 20-year urban population and employment allocations. Areas proposed for UGA designation shall meet the following criteria:

(a) Compact development can be accomplished through infill or expansion, while minimizing the fiscal and environmental impacts of growth and assuring opportunities for housing, jobs, and commerce.

(b) A range of governmental facilities and services presently exists or can be economically and efficiently provided at urban levels of service in a timely manner. These services include sewer, water, storm drainage, transportation

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improvements, fire and law enforcement protection, and parks and recreation.

(c) The area has a physical identity or social connection to an existing urban environment.

(d) Natural features and land characteristics are capable of supporting urban development without significant environmental degradation.

(e) The land does not have long-term, commercially significant value for agriculture, forestry, or mineral production and that can accommodate additional development without conflicting with activities on nearby NRLs.

policy 2A-1.2 The area includes identified patterns of development and likely future development pressure that needs to be addressed according to RCW 36.70A.130. Proposals for UGA expansions shall be evaluated by the GMASC. Proposals for UGAs shall include a land capacity analysis; ability to provide urban services; patterns of development, impacts on critical areas, NRLs, and hazard areas; and compliance with related Countywide Planning Policies.

UGA expansion proposals shall demonstrate that expansion is necessary within the 20-year planning period, that public facilities and services can be provided concurrent with development, and that reasonable efforts have been made to encourage infill and redevelopment within existing UGA boundaries before those boundaries can be expanded.

policy 2A-1.3 In designating UGAs, consider GMA requirements to provide for recreational lands, critical areas, open space corridors, greenbelts, and view sheds, and to avoid natural hazard areas prone to flooding or other risks to public safety.

policy 2A-1.4 Engage federally recognized Indigenous tribes that may be potentially affected by the proposed revision in meaningful consultation prior to the revision of the County's UGA according to RCW 36.70A.110.

policy 2A-1.5 The following UGAs are designated within Skagit County:

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Non-Municipal UGAs

Bayview Ridge

Swinomish

Municipal UGAs

Anacortes

Burlington

Concrete

Hamilton

La Conner

Lyman

Mount Vernon

Sedro-Woolley

policy 2A-1.6 Overall residential densities within UGAs shall be a minimum of four dwelling units per net acre, when urban services are provided. Allow at least two accessory dwelling units on residential lots, and duplexes and other middle housing types in the UGAs where sewer is available according to RCW 36.70A.635.



Concurrency

Goal 2A-2 Adequate urban public facilities and services shall be provided concurrently with urban development, as appropriate for each type of designated land use in the UGA.

policy 2A-2.1 Encourage growth in areas already characterized by urban development or where the appropriate levels of urban public facilities and services are established in adopted capital facilities plans.

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(a) Ensure that adequate urban public facilities and services are provided in UGAs concurrent with urban development.

(b) Implement streamlined standards and development procedures to encourage and facilitate development within the UGAs.

Urban Services

Goal 2A-3 Within the designated UGAs, coordinate with the respective local jurisdictions and other service providers within the UGAs to ensure that growth and development are timed, phased, and consistent with adopted urban level of service standards.

policy 2A-3.1 Urban public facilities include: improved streets, roads, highways, sidewalks, road lighting systems and traffic signals, urban level domestic water systems, sanitary sewer systems, storm sewer systems, park and recreational facilities and schools, as defined in the Capital Facilities Element with adopted level of service standards.

policy 2A-3.2 Urban public services include fire protection and suppression; emergency medical services; public safety; public health; education; recreation; environmental protection; and other services as identified in the Capital Facilities Element with adopted level of service standards.

policy 2A-3.3 Urban governmental services should not be extended to, or expanded in, rural areas except in those limited circumstances necessary to protect basic public health and safety and the environment, and when such services are financially supportable at rural densities and do not support urban development.

policy 2A-3.4 The process of siting of Major Industrial Developments in the rural area with associated provision of urban facilities and services shall be in conformance with RCW 36.70A.365 and Countywide Planning Policy 2.6.

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policy 2A-3.5 The process of siting new fully self-contained communities in the rural area with associated provision of urban facilities and services shall be in conformance with RCW 36.70A.350 and the Countywide Planning Policies.

Joint City-County Planning

Goal 2A-4 Conduct joint planning between the County and local jurisdictions for future annexation areas within the UGAs in accordance with the Framework Agreement and the Countywide Planning Policies.

policy 2A-4.1 Joint planning should consider issues including, but not limited to:

(a) coordination of development permit review.

(b) assessment of the capacity of current public facilities and services to accommodate projected growth.

(c) the phasing of development within the UGA and the provision of capital improvements to the area concurrent with development.

(d) the impacts of annexation on property owners, service providers, and other stakeholders in the UGA.

(e) fiscal impacts and cost/revenue implications of future annexations.

(f) patterns of development in the UGAs.

policy 2A-4.2 Use interlocal agreements, pre-annexation agreements, and/or development agreements to equitably allocate financial burdens and resolve other issues resulting from the transition of governance from the County to local jurisdictions.

policy 2A-4.3 Work with local jurisdictions to implement the Countywide Planning Policies and address other regional land use, economic, and transportation issues through interlocal agreements and codes.

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Commercial Development

Goal 2A-5 Encourage commercial and industrial development to locate in well-defined centers within the UGAs. Prohibit new zoning that furthers the continuation of strip commercial development.

policy 2A-5.1 Plan for compact commercial and industrial centers in the UGAs and provide infrastructure accordingly.

policy 2A-5.2 Attract commerce and industry to designated areas within UGAs by ensuring an adequate supply of land with adequate urban public facilities and services.

Quality of Life

Goal 2A-6 Ensure a high quality of life within UGAs.

policy 2A-6.1 Foster development within UGAs that creates and maintains safe, healthy, and diverse communities. These communities should contain a range of affordable housing and employment opportunities, school and recreational facilities, and be designed to protect the natural environment and significant cultural resources.

policy 2A-6.2 Adopt plans, policies, codes, and development standards that promote public health by increasing opportunities for residents to be more physically active. Such actions include concentrating growth into UGAs, promoting more compact urban development, allowing mixed-use developments, and adding pedestrian and non-motorized linkages where appropriate.

policy 2A-6.3 Concentrate facilities and services within UGAs, using urban design principles, to make them desirable places to live, work, and play; increase the opportunities for walking and biking within the community; use existing infrastructure capacity more efficiently; and reduce the long-term costs of infrastructure maintenance.

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Transformance of Governance

Goal 2A-7 Provide for the orderly transition from rural to urban development patterns within the unincorporated portions of the municipal UGAs.

policy 2A-7.1 Work with the cities and towns to ensure the cooperative and timely transfer of governmental responsibilities as urban development occurs.

policy 2A-7.2 Limit land divisions and development intensities within the unincorporated UGAs to rural levels until property is annexed, thereby creating an economic incentive to encourage annexation. Encourage annexation prioritization or phasing plans to ensure that utility extension is done in an orderly and affordable manner.

policy 2A-7.3 Allow residential development within unincorporated UGAs at rural densities prior to the provision of urban infrastructure, provided that future development at urban densities is not precluded.

Development Process

Goal 2A-8 Work with local jurisdictions to simplify the permitting process for landowners and developers within the unincorporated portions of the UGAs.

policy 2A-8.1 Maintain, in consultation with local jurisdictions, a common set of municipal UGA zoning districts and development regulations for residential, commercial, industrial, and other land uses in the UGAs.

policy 2A-8.2 Maintain development regulations that follow standards generally consistent with those applied in the rural portions of the county prior to annexation and infrastructure availability. Through joint planning consider joint development standards between the County and city assigned to a UGA to facilitate urban development consistent with the community character and housing needs at all income levels.

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policy 2A-8.3 Maintain zoning maps for each of the UGAs showing the zoning of all lands within the unincorporated portions of the UGAs.

policy 2A-8.4 Development at urban densities and/or intensities may be allowed prior to annexation. However, such development shall only be allowed if urban infrastructure is provided, and shall be subject to the standards of the future annexing jurisdiction.

policy 2A-8.5 Any subdivision of land under these regulations shall include measures to ensure the accommodation of future rights-of-way for urban transportation infrastructure and utilities that will be required when the property is further subdivided and developed at urban densities and land uses.

policy 2A-8.6 Collaborate with cities and towns to explore the feasibility of allowing urban levels of development within unincorporated UGAs.

policy 2A-8.7 Collaborate with the SCOG to investigate the feasibility of revising Countywide Planning Policy 1.2 by reducing target growth allocations in rural areas.



Open Space

As discussed in greater detail above, there are two major categories of Open Space in Skagit County: public and private. Open space lands in private ownership play an important role in maintaining ecological, scenic, and natural resource values, but because of their private nature they are not shown on the Comprehensive Plan/Zoning Map. Public open space lands are those lands in public ownership that are dedicated or reserved for public use or enjoyment for recreation, scenic amenities, NRL management, or for the protection of environmentally sensitive areas. *Where identified below to be of regional or statewide importance, such lands are designated on the Comprehensive Plan/Zoning Map.* Other publicly held lands, such as local neighborhood parks; scenic roads and highways; shorelines, rivers and streams; and utility corridors, *although not designated as open space on the Comprehensive Plan Map,* nevertheless offer similar open space functions and benefits.

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Goal 2B Recognize the important functions served by private and public open space, designate and map public open space of regional importance, and designate open space corridors within and between UGAs.

policy 2B-1.1 Public open space areas shall be those lands in public ownership that are dedicated or reserved for public use or enjoyment for recreation, scenic amenities, NRL management, or for the protection of environmentally sensitive areas. These open space areas may include:

(a) Neighborhood and community parks. These should be linked by open space networks whenever possible.

(b) Land that offers special natural resource-based and recreational opportunities, such as: federal, state and local regionally important parks and recreation areas; islands; federal wilderness areas; wildlife refuges; lakes; reservoirs; creeks; streams; river corridors; shorelines and areas with prominent views.

(c) Lands which include a significant historic, archaeological, scenic, cultural, or unique natural feature.

(d) Areas that take advantage of natural processes, wetlands, tidal actions, and unusual landscape features such as cliffs and bluffs.

policy 2B-1.2 Recognize public open space with recreational, environmental, scenic, cultural and other open space benefits that extend beyond the local area to be regional or statewide significance as Public OSRSI.

policy 2B-1.3 Consistent with RCW 36.70A.160, the County should continue to work with its partners—partner governments, organizations, residents, and property owners—to identify, prioritize, and conserve open space corridors within and between UGAs, including lands useful for recreation, wildlife habitat, trails, and connection of critical areas.

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policy 2B-1.4 Private Open Space is privately owned land that has been or will be set aside by the operation of the Critical Areas Ordinance, by voluntary conservation or by other means. These lands may include:

(a) Critical areas as defined in the Critical Areas Ordinance.

(b) Lands with conservation and land reserve easements in place.

(c) Lands within UGAs that are wooded and serve a functional purpose in climate, noise, light or pollution control, or provide wildlife habitat or greenbelts.

(d) Lands that can provide for a separation between communities; minimize or prevent sprawl; provide a buffer between urban and rural areas; or between NRL and Rural areas.

policy 2B-1.5 The Current Use Open Space Taxation Program includes properties utilized for agricultural, timber, and open space uses as provided in RCW 84.34. Property owners should be encouraged to enroll in the Current Use Open Space Taxation Program.

Land Use Approvals

Goal 2C Recognize for a reasonable period of time land use approvals that have been granted but not yet acted upon. After landowner notification and the designated period of time, those approvals shall expire.

policy 2C-1.1 Historic land use approvals such as conditional use permits, special use permits, and contract rezones that already have been exercised may continue to operate under the conditions of their original permit or land use approval. Any expansion or change beyond the conditions of the original permit or land use approval shall require a revised permit or land use approval.

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Pre-Existing Non-Conforming Uses

Goal 2D Prohibit expansions of pre-existing non-conforming uses that are not in conformance with the Comprehensive Plan or development regulations.

policy 2D-1.1 Nonconforming uses will be allowed to continue operation subject to County regulations governing nonconforming uses and general municipal police powers regarding health and safety. Expansion of such uses shall be limited to certain previously approved and therefore vested expansion plans.

Public Uses

Public Uses, generally, are government or quasi-government owned and operated facilities such as primary and secondary schools, libraries, postal services, offices, training facilities, fire and police stations, and courts. Public Uses under this section do not necessarily include Essential Public Facilities.

Goal 2E Allow public uses as special uses in most comprehensive land use designations, to be reviewed on a site-specific basis.

policy 2E-1.1 Allow public uses in most land use designations. They should be reviewed as site-specific projects so that public benefits and land use impacts can be analyzed and, if necessary, mitigated.

Public uses on NRLs are limited to those providing emergency services. Alternatives to the development of the use in the NRL must be provided.

Lot Certification

Goal 2F Allow develop permits only for lots created in a legal manner consistent with State law and County regulations.

policy 2F-1.1 Establish and maintain a review process to determine whether lots on which development is proposed were created legally. Only lots created legally shall be

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considered for development permits pursuant to the provisions of RCW 58.17.210.

policy 2F-1.2 The performance standards used in reviewing substandard lots will seek to protect property rights and investment-backed expectations, as well as preserve NRLs and prevent sprawl.

Land Division

Goal 2G

Allow for the orderly division of land by providing for the creation of new lots meeting the dimensional standards of the zoning district in which the lots are located.

Encourage innovative land division technique as an alternative to traditional land division practices. These techniques allow flexibility in design and provide for better preservation of critical areas, NRLs, and rural character.

Agricultural Land Preservation allows for the separation of an existing house from the existing larger parcel on lands designated Ag-NRL and RRc-NRL, and is intended to encourage long-term agricultural land protection. This type of division allows flexibility to the landowner and protects the land with a conservation easement held in perpetuity.

Planned Unit Developments (PUD) or *Planning Residential Developments* (PRD) allow variations in controls related to density and other design elements. PUDs/PRDs are more appropriately located in UGAs or new fully contained communities where urban services and utilities are provided. They differ from standard land divisions because they routinely involve density bonus beyond what is normally permitted in a given land use designation or zone in exchange for meeting certain land use management objectives. PUDs often involve permitting of mixed uses (commercial/residential) development whereas PRDs are typically limited to residential uses.

policy 2G-1.1 Allow the separation of an existing house from the larger parcel where it is located on lands designated Ag-NRL, SF-NRL, Land and RRc-NRL in order to encourage long-term protection of agricultural and forest land. Establish conservation easement on the separated resource land in perpetuity.

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policy 2G-1.2 PUDs and PRDs shall be allowed only in UGAs where public services and utilities are available or will be provided concurrent with development.

The CaRD provisions allow innovative techniques to be used for land divisions in the Rural area and in certain circumstances on NRLs. The CaRD land division concept is attractive because it provides future land use options and protects and conserves open space, NRLs, rural character, and critical areas. It also allows landowners to maintain some equity and development potential on the land while retaining open spaces and minimizing infrastructure costs. In certain Rural land use designations, incentives are provided in the form of density bonuses to encourage voluntary participation in this approach to land division. Even where density bonuses are not provided, CaRD land divisions can reduce infrastructure and other costs.

policy 2G-1.3 Consider the following benefits when applying CaRD land divisions:

(a) Flexibility in site development, which may result in more compact, clustered lots, or environmentally sound use of the land, while maintaining the county's rural character.

(b) Buffer areas to reduce land use conflicts between Rural and natural resource uses and the loss of NRLs.

(c) Reduction in housing costs due to reduced engineering, infrastructure, and development costs, smaller lot sizes, and more intense use of buildable areas.

(d) Greater opportunity for property owners to derive reasonable economic use of the land by maintaining larger open space areas that may be used for the production of food, fiber, or minerals.

(e) More flexible land development options in areas with potential to be designated UGAs in the future.

(f) Allowance of bonus development lots when a landowner meets the various requirements of the CaRD provisions.

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(g) Large tracts of open space land held for recreation, natural resource management, and protection of critical areas and significant cultural resources.

policy 2G-1.4 CaRD land divisions shall be designed to minimize impacts on neighbors, infrastructure systems, and the surrounding environment.

policy 2G-1.5 Place conservation easements or conditions/covenants/restrictions (CCRs) for a specified period of time when CaRD land divisions are approved.

Essential Public Facilities

Essential public facilities are facilities "typically difficult to site, such as airports; state education facilities; state or regional transportation facilities; state and local correctional facilities; solid waste handling facilities; and in-patient facilities including substance abuse facilities, mental health facilities, and group homes" (RCW 36.70A.200). The County and the cities may also identify additional public facilities that are essential to providing services without which development cannot occur.

These policies guide the process of identifying and siting of essential public facilities. The Comprehensive Plan may not preclude the siting of essential public facilities.

Goal 2H Establish siting criteria and procedures for Essential Public Facilities of a statewide and countywide nature to ensure that they will not be excluded from Skagit County as long as their siting conforms with this Comprehensive Plan and the Countywide Planning Policies.

policy 2H-1.1 Ensure that Comprehensive Plan policies do not prohibit or exclude the siting of essential public facilities.

policy 2H-1.2 Use regulations and procedures to identify and site essential public facilities where there is a need, public review, and mitigation appropriate to the facility as follows:

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(a) The State or local government proposing to site an essential public facility must provide a justifiable need for a public facility and for its location in Skagit County based upon forecasted needs and a logical service area;

(b) The State or local government proposing to site an essential public facility must establish a public process by which the residents of the county and affected communities, "host" municipalities, and all other affected jurisdictions, agencies, and utilities have a reasonable opportunity to participate in and comment on the site selection process.

(c) The impact of siting new essential public facilities should be weighed against the impact of expansion of existing essential public facilities, with appropriate buffering and mitigation. During this process, possible appropriate mitigation measures may be determined.

policy 2H-1.3 Ensure consistency with all federal, State, and County land use, development, and operational regulations and requirements including the policies of this plan. All State Environmental Policy Act provisions and concurrency of supporting capital facilities must be addressed as part of any project approval by the County.

policy 2H-1.4 Establish approval criteria for facility requirements and impacts. Proposals should be conditioned to be consistent with the Comprehensive Plan, functional plans, and development regulations. The County may execute interlocal agreements regarding the siting, operation and/or expansion of such facilities within Skagit County. Agreements are encouraged to the extent they would result in locally beneficial siting decisions, facilitate the sponsor's voluntary provision of enhanced mitigation measures exceeding those required by applicable regulatory standards, and/or provide for mitigation of any disproportionate financial burden on the County created by the proposed facility.

policy 2H-1.5 Ensure the applicant for a proposed essential public facility provides justification for the location of the facility based upon anticipated need and the service area.

policy 2H-1.6 Encourage the siting of essential public facilities equitably so that no single community and no racial, cultural, or socio-economic group should absorb an

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inequitable share of these facilities and their impacts. In addition, siting should consider environmental, economic, technical, and service area factors.

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Introduction

The GMA requires counties include in their comprehensive plans:

- *a rural element [which includes] lands that are not designated for urban growth, agriculture, forest, or mineral resources. The rural element shall permit appropriate land uses that are compatible with the rural character of such lands and provide for a variety of rural densities and uses. It may also provide for clustering, density transfer, design guidelines, conservation easements, and other innovative techniques that will accommodate appropriate rural uses not characterized by urban growth. (RCW 36.70A.070 (5))*

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This Element establishes broad goals and policies guiding residential, commercial, and industrial uses in unincorporated Skagit County consistent with the GMA's allowance of development in the rural area, including "limited areas of more intensive rural development."

This section provides documentation supporting the goals and policies in the Rural Element. It summarizes current conditions, describes the character of Skagit County's rural area, and provides background information on the rural land use designations. The Natural Resource Conservation Element describes the County's designated NRLs, while the Land Use Element discusses UGAs, Open Space areas, Public Uses, and other general land use matters.

Rural Character

About 80,000 acres in Skagit County fall under one of the rural area designations. These lands are outside of the UGAs and the designated NRLs (Ag-NRL, IF- and SF-NRL, and RRc-NRL). **Table 5** on the following page shows the acreage of the various rural land use designations.

Skagit County's rural area is characterized by large areas of relatively undeveloped land, in which natural features and vegetation predominate over the built environment; scattered unincorporated rural communities and villages; isolated rural businesses and industries; and regionally important recreation areas. The rural area land use designations provide a variety of living environments at lower than urban densities which are compatible with farming, fishing, and timber management. Rural areas preserve historic and cultural structures and landscapes, retain open spaces, protect designated NRLs and identified critical areas, and minimize service demands and costs on County government.

Rural Growth and Development

In 2022, the population of the rural area was estimated to be 42,465 (including the small number of residents living on designated NRLs). This was about one-third of the total county population. By 2036, the rural population is expected to be about 45,665, or less than 30 percent of the total. The rate of growth in the rural area should be lower than the urban rate. The Countywide Planning Policies state that over the 20-year planning period, no more than 20 percent of the county's growth should locate in the rural area. Based on the 2022 SCOG Monitoring Report, the

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County and cities achieved a 75.4 percent urban and 24.6 percent rural growth split over the years 2017-2022, reflecting the general success of growth management planning by the County and cities. In addition, limitations on water rights and measures to protect critical areas and resource lands may tend to further restrict rural residential development.

Table 5: Land Use Designations and Acreage for Rural Land*

Land Use Designations	Acreage
Rural Lands	
Rural Village Residential (RVR)	2,717
Rural Intermediate (RI)	8,043
Rural Reserve (RRv)	70,126
Subtotal	80,886
Rural Commercial/Industrial Lands	
Rural Business (RB)	184
Rural Freeway Service (RFS)	46
Rural Village Commercial (RVC)	25
Natural Resource Industrial (NRI)	183
Small-Scale Recreation & Tourism (SRT)	90
Rural Center (RC)	19
Rural Marine Industrial (RMI)	53
Small-Scale Business (SSB)	31
Master Planned Resort (MPR)	113
Subtotal	744
Total	**81,630**

(Source: Skagit County Mapping Services)
*Acreage figures are derived based on the best information and technology available. Accuracy may vary depending on the source of the information, changes in political boundaries or hydrological features, or the methodology used to map and calculate a particular land use.

The land use designations for the Rural Area allow for a variety of residential densities and rural- and natural resource-related businesses while protecting rural character. Several of these designations implement the GMA's allowance of "limited areas of more intensive rural development," or LAMIRDs, based on 1997 amendments to the Act. LAMIRDs allow greater development than is generally allowed in the rural area, provided that certain limitations are maintained to retain rural character and prevent sprawl. One category of LAMIRD recognizes

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areas that were already for the most part developed in 1990, when the GMA was adopted. These existing residential, commercial, or industrial areas primarily allow infill development, and must be contained within logical outer boundaries to prevent sprawl. Two other types of commercial LAMIRDs – small scale recreation and tourism uses, and isolated small scale businesses – may allow new development provided that development is contained and consistent with the surrounding rural character.

Rural Residential Designations

The residential land use designations in the Rural Area are:

- Rural Intermediate (RI)
- Rural Village Residential (RVR)
- Rural Reserve (RRv)

All lands designated RI and RVR are considered to be part of a LAMIRD that was predominantly developed by 1990 and contained by a logical outer boundary consisting of the "built environment."

In contrast to RVR and RI, the RRv designation covers those portions of the rural area that were not already developed at higher densities in 1990. The Growth Management Hearings Boards have generally said that rural area densities must be one residence per five acres or lower – equating to lot sizes of five acres or larger – unless the area is designated a LAMIRD.

Commercial and Industrial Uses Outside UGAs

In developing its rural commercial and industrial designations 1998 - 2000, the County undertook an extensive review of existing commercial and industrial uses and zoning in the rural area. The County combined this information with an analysis of the commercial, industrial, and natural resource industrial uses allowed in the rural area under the GMA, to develop the following rural commercial and industrial land use designations:

- Rural Village Commercial (RVC)

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- Rural Center (RC)
- Rural Freeway Service (RFS)
- Small-Scale Recreation and Tourism (SRT)
- Small-Scale Business (SSB)
- Rural Business (RB)
- Natural Resource Industrial (NRI)
- Rural Marine Industrial (RMI)

Virtually all of these rural commercial or industrial designations may be categorized as a type of LAMIRD allowed under GMA. These designations are shown on the Comprehensive Plan/Zoning Map to indicate an existing use in the rural area meeting the appropriate land use designation criteria. In some cases, new rural commercial or industrial uses may be designated on the map following the map amendment process described in the Community Plans and Implementation Element. Comprehensive Plan amendment applications for new rural commercial or industrial designations require the submittal of a development proposal consistent with the designation criteria for the commercial or industrial designation being requested.

Following is a brief description of the various rural commercial and industrial land use designations. Greater detail is provided in the goals, policies, and designation criteria contained in the Rural Element. In some cases, detailed information has been removed from the designation policies and added to the narrative as a way to maintain the legislative history behind certain land use decisions.

Rural Village Commercial

RVC districts are intended to serve as the major centers of rural commercial activity in the county unincorporated area. An RVC district is identified for each of the 10 Rural Villages in the county (Alger, Bay View, Big Lake, Clear Lake, Conway, Edison, Lake Cavanaugh, Lake McMurray, Marblemount and Rockport). RVC districts may be expanded through the annual Comprehensive Plan amendment cycle or through a community plan, provided that the district remains within the boundaries of the Rural Village itself. RVC districts are the top priority location under the Comprehensive Plan for new commercial development in the rural area. RVC districts existing

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within Rural Villages, which are pre-existing LAMIRDs surrounded by logical outer boundaries as allowed by RCW 36.70A.070(5)(d)(i) and (iv).

Rural Center

RCs are clusters of small-scale commercial uses at selected locations in the unincorporated portion of the county. In some cases they include public uses such as a fire hall or post office. Typically, they are located at crossroads of county roads, state routes, or major arterials. They are smaller in size and intensity than Rural Villages, but like their larger counterparts above, RCs are intended to help meet existing and future commercial needs at existing areas of commercial activity. RCs are pre-existing LAMIRDs surrounded by logical outer boundaries as allowed by RCW 36.70A.070(5)(d)(i) and (iv).

Rural Freeway Service

RFS areas were designated at portions of four I-5 freeway interchanges in the rural area that had existing commercial development (or development commitments) as of 1990. They qualify as pre-existing LAMIRDs surrounded by logical outer boundaries as allowed by RCW 36.70A.070(5)(d)(i) and (iv). The County conducted extensive research in 1998 – 2001 to establish and verify that the properties currently designated RFS meet the GMA and Comprehensive Plan LAMIRD requirements. Each RFS-designated area underwent close scrutiny by the Western Washington Growth Management Hearings Board following appeals of those designations. Because the RFS designation recognizes areas that had existing commercial development or development commitments in 1990, the County does not expect that new RFS areas will be designated.

Small Scale Recreation and Tourism

The SRT designation is intended to foster economic development and diversification that is recreational or tourist-related, that relies on a rural location and setting, and that incorporates the scenic and natural features of the land. The SRT designation is consistent with the type of LAMIRD authorized by RCW 36.70A.070(5)(d)(ii).

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Natural Resource Industrial

The NRI designation is intended to support the production of agricultural, forest, and aquatic products by allowing processing facilities, limited direct resource sales, and limited natural resource support services. Examples of typical NRI uses include saw mills, agricultural or forest industry equipment maintenance, agricultural processing plants, and seafood processing and on-site sales. Mineral processing activities are generally guided by separate policies found in the Natural Resource Lands Element of the Comprehensive Plan. The NRI designation provides a location for natural resource processing and support services that does not remove designated NRLs from production. The NRI designation may qualify as a LAMIRD under RCW 36.70A.070(5)(d)(i), if the site has been in industrial use since 1990, or under RCW 36.70A.070(5)(d)(iii), if the use is new.

Rural Marine Industrial

The RMI designation is intended to recognize existing rural marine industrial facilities, to permit expansion of existing rural marine industrial activities that are water or shoreline dependent, and to provide for limited changes of use. The term “rural marine industrial facilities” includes harbors, marinas, docks, moorages, and other existing or permitted facilities that support and enable marine industry and commerce.

Because Skagit County has significant navigable waters, and a long and continuing history of marine related commerce and industry, a rural marine industrial designation is an essential component of Skagit County’s comprehensive land use plan and its rural and natural resource-based economy.

Despite the abundance of navigable waters in Skagit County, marine access is very limited, particularly outside of UGAs. Due to the state’s Shoreline Management Act, the siting of new marine industrial facilities would be difficult. The RMI designation seeks to utilize to best advantage those existing locations in the rural area with a history of marine industrial activity or regulatory approval, and with continuing use of the property for marine industrial purposes.

The RMI-designated properties were reviewed under, and found to comply with, the GMA criteria for limited industrial areas of more intensive rural development as authorized by RCW 36.70A.070(5)(d)(i).

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Small Scale Business

The SSB designation allows small-scale commercial or industrial activities involving the provision of services or fabrication or production of goods, primarily for clients and markets outside of the immediate rural area. The SSB designation may be applied to existing or new businesses, whereas the RB designation applies only to businesses that were established as of June 1, 1997. The name of the designation was changed during the 2005 GMA Update from Cottage Industry/Small Scale Business to avoid any confusion with a Home-Based Business (HBB). An SSB may be substantially larger, and requires a designation on the Comprehensive Plan/Zoning map, whereas a HBB does not. The SSB designation is a type of LAMIRD authorized by RCW 36.70A.070(5)(d)(iii).

Rural Business

The RB designation is intended to acknowledge certain significant uses in the rural area that were in existence as of June 1, 1997, when the Comprehensive Plan was adopted, that do not match any of the other commercial and industrial Comprehensive Plan designations. The RB designation provides reasonable expansion and change of use opportunities for these pre-existing rural uses. The designation is consistent with the GMA's allowance for "the intensification of development on lots containing isolated nonresidential uses" (RCW 36.70A.070(5)(d)(iii)). The RB designation may not be appropriate for all pre-existing commercial uses in the rural area, if the use is more consistent continuing to operate under a special use permit, or if the granting of a commercial designation might jeopardize the appropriate use of surrounding NRLs.

Master Planned Resorts

MPRs are self-contained and fully integrated planned unit developments, in settings of significant natural amenities, providing short-term visitor accommodations including a range of indoor or outdoor recreational facilities and visitor services. MPRs are larger in scale, and involve greater potential impacts on the surrounding area, than uses permitted under the SRT designation. MPRs may constitute urban growth outside of UGAs as limited by RCW 36.70A.360 and RCW 36.70A.362. Designation of MPR requires amending the Comprehensive Plan/Zoning Maps, prior to, or concurrent with an application for master plan review. The Comprehensive Plan amendment process should evaluate all the probable significant adverse environmental impacts

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from the entire proposal, even if the proposal is to be developed in phases, and these impacts shall be considered in determining whether any particular location is suitable for an MPR.

Rural Water

Pursuant to RCW 19.27.097 and RCW 58.17.110, the County legally cannot issue a permit for a building requiring potable water or approve subdivision applications unless the applicant has a lawful and adequate water supply. Typically, the applicant provides a letter of availability from a public water source, such as a public utility district, provides demonstration of a water right, or proposes to use a permit-exempt well. State law regulates water and its availability for appropriation, determining whether an applicant's proposed use of a well is lawful.

In 2001, the State adopted an Instream Flow Rule for the Skagit River Basin, establishing minimum river and stream flows for salmon habitat. Although the 2001 Rule in draft form allocated water for rural landowners and agriculture, the published 2001 Rule failed to provide a water allocation for rural landowners or agriculture.

In 2006, the State amended the 2001 Rule in an effort to fix this problem, establishing a small allocation for rural landowners and agriculture in the Skagit River Basin and each of its tributaries (the "2006 Amendment").

In 2008, the Swinomish Indian Tribal Community ("Swinomish") filed suit against the State in an effort to invalidate the 2006 Amendment. On October 3, 2013, the Washington Supreme Court ruled in favor of Swinomish, invalidating the 2006 Amendment. *Swinomish v. State, Wa. Sup. Ct. Case No. 87672-0*.

As a result of the *Swinomish* lawsuit, the State Department of Ecology (Ecology) provided the following guidance to the County:

> Skagit County is legally required to stop issuing building permits and subdivision approvals in the Skagit Basin that rely on new wells, unless Ecology approves a plan for mitigation (or a plan for reliance on an alternative water source during times when the minimum instream flow requirements set in WAC 173-503 are not met).

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The County is working with the State, Skagit Public Utility District (Skagit PUD), and other stakeholders to ensure that rural landowners are able to utilize their land consistent with rural zoning requirements.

Goals and Policies

Rural Area Characteristics

The Skagit County rural landscape is characterized by open spaces with natural vegetation; a variety of rural residential densities; farms, forests, mining, and aquatic resource areas; small unincorporated rural communities; small, isolated rural commercial and industrial developments; and regionally important recreation areas.

The Rural Area land use designations provide a variety of living environments at lower than urban densities which are compatible with farming, fishing, and timber management. Rural areas preserve historic and cultural structures and landscapes, retain open spaces, protect designated NRLs, and identify critical areas and minimize service demands and costs on County government. The following goals and policies for the rural area include general intent statements based on the above discussion as well as the more formal policies for the designation of rural land uses. Urban and resource land use goals and policies are included in the Land Use and Natural Resource Lands Elements.

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Goal 3A-1 Protect the rural landscape, character, and lifestyle by:

(a) Defining and identifying rural lands for long-term use and conservation and resilience;

(b) Providing for a variety of rural densities and housing opportunities;

(c) Maintaining the character, and historic and cultural roles of existing rural communities;

(d) Allowing land uses which are compatible and in keeping with the protection of important rural landscape features, resources, and values;

(e) Encouraging economic prosperity for rural areas; and

(f) Ensuring that appropriate and adequate rural levels of service are provided.

Monitoring Rural Growth

policy 3A-1.1 Monitor rural growth in relation to the target established in Countywide Planning Policy 1.2 that 80 percent of new growth should locate in urban areas. Analyze development trends to determine if changes in land use designations are necessary or additional regulatory techniques or measures are needed to assure compliance with targeted urban/rural population distribution goals.

Goal 3A-2 Provide for a variety of residential densities and affordable housing types and business uses that maintain rural character, respect farming and forestry, buffer NRLs, retain open space, minimize the demand and cost of public infrastructure improvements, provide for future UGA expansion if needed, and allow rural property owners reasonable economic opportunities for the use of their land.

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policy 3A-2.1 Manage development in rural areas through density requirements that protect and maintain existing rural character, NRLs, open space, critical areas, significant cultural resources and water resources, and that manage traffic volumes.

(a) Consistent with RCW 19.27.097, the County will not issue a permit for a building requiring potable water unless the applicant can demonstrate they have a legal and adequate source of water and the water source meets drinking water standards.

(b) Consistent with RCW 58.17.110, the County will not approve a land division unless the applicant can demonstrate they have a legal and adequate source of water.

(c) The County should work with the State legislature, State agencies, landowners, Tribes, and other affected parties to resolve the uncertainty over rural water availability and achieve a long-term solution that meets the needs of all affected parties consistent with State law.

policy 3A-2.2 The rate of development in rural and resource areas should be in accordance with adopted Countywide Planning Policies stating that urban areas should accommodate 80 percent of new population growth, with the remaining 20 percent locating in non-urban areas. Monitor the pace of development in conjunction with the maintenance of data describing the inventory of available buildable land.

policy 3A-2.3 Rural residential development near designated NRL shall minimize potential conflicts and not contribute to the conversion of farm and forest land to non-resource uses. Encourage techniques such as land conservation, clustering and buffering.

policy 3A-2.4 Encourage rural CaRD land divisions through public outreach and communication with property owners and developers.

policy 3A-2.5 The design of rural residential developments near urban areas should include means to further subdivide at urban densities should these developments be

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added to the urban area in the future, using techniques such as CaRD land divisions.

policy 3A-2.6 Rural land-use designations within ¼-mile of the designated MRO shall be no greater than one dwelling unit per 10 acres, except for isolated situations where higher densities, and an existing mining operation within the MRO, already exist. Where greater densities would normally be possible through a CaRD subdivision, such increase in density can be transferred to a portion of the property located outside the ¼-mile.

policy 3A-2.7 Develop and implement standards to ensure that noise and light impacts from residential and commercial development in the rural area do not diminish rural character.

Goal 3A-3 Ensure that public facilities, services, roads, and utilities are properly planned for and provided, consistent with rural character, needs, and lifestyles.

policy 3A-3.1 Priorities for funding public investment in rural areas shall be to maintain or upgrade existing facilities, services, and utilities to serve existing development at rural service standards. New facilities, services, roads, and utilities which support planned rural growth shall meet rural service standards.

policy 3A-3.2 Continue to work with water providers such as Skagit PUD to extend public water service in rural areas where ground water supplies are limited, with the greatest emphasis being on areas already identified as pre-existing higher density rural areas with corresponding Comprehensive Plan designations and zoning, specifically Type 1 LAMIRDs.

policy 3A-3.3 Standards and plans for structures, roads, utility systems, and other public services and facilities shall be consistent with rural densities and uses. Such facilities and services shall be such designed, constructed, and provided to minimize the alteration of the landscape and the impacts to rural residents and community character, to preserve natural systems, to protect critical areas, to

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protect important land features such as ridgelines, to retain historic and cultural structures/landscapes, and scenic amenities.

policy 3A-3.4 The County's public health responsibility for ensuring adequate wastewater treatment includes the determination of failing on-site septic systems, technical assistance to property owners, and actions to require necessary improvements. These services may include community plans and other strategies for creating area-wide solutions when surface waters or groundwater is threatened.

policy 3A-3.5 On-site wastewater systems are preferred to treat and dispose of effluent in rural areas. Community on-site systems or decentralized treatment systems may be used in land divisions or to LAMIRDs.

(a) The size of a community or large on-site sewage system for a designated LAMIRD shall be limited to the build-out potential of all development within the LAMIRD's designated boundaries, unless it is also needed to addresses existing public health, safety, or welfare issues of properties outside of the LAMIRD.

(b) The size of a community or large on-site sewage system for a land division shall be limited to the number of residential units allowed under the land division. The system may not be used for development that is not part of the proposal land division unless it is found to be needed, in the land division review process, to address existing public health, safety, and welfare issues of existing development.

policy 3A-3.6 Consistent with the Countywide Planning Policies, urban services shall not be extended into or expanded in rural areas except in those limited circumstances shown to be necessary to protect basic public health and safety and the environment, and only when the urban services are financially supportable at rural densities and their extension or expansion does not allow urban development.

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Limited Areas of More Intensive Rural Development

The Rural Area provides a choice of living environments and rural- and natural resource-related economic activities through a mix of large lots, CaRD land divisions, and limited areas of more intensive rural development. Amendments to the GMA adopted in 1997 as part of Engrossed Senate Bill (ESB) 6094 established that *"the rural element may allow for limited areas of more intensive rural development…"* or LAMIRDs (RCW 36.70A.070(5)(d)). These limited areas include the infill, development, or redevelopment of existing commercial, industrial, residential, or mixed-use areas; the intensification of development on lots containing or new development of small scale recreational or tourist uses; and the intensification of development on lots containing isolated nonresidential uses or new development of isolated cottage industries and isolated small-scale businesses that are not principally designed to serve the rural population but that provide job opportunities for rural residents.

The identification of the Rural Village and Rural Intermediate designations as Limited Areas of More Intensive Rural Development (LAMIRD) does not by its name, label or designation automatically confer any increased development potential to these areas. The LAMIRD label is only intended to indicate that Rural Villages and RI areas are designated consistent with the requirements of RCW 36.70A.070(5)(d). The LAMIRD label itself does not grant any increased land uses, intensities, or densities not already allowed for in the Comprehensive Plan policies and development regulations applicable to the RVR or RI designations.

Goal 3B Allow Limited Areas of More Intensive Rural Development, consistent with the GMA, to recognize historic rural residential, commercial, and industrial development patterns, rural recreational and tourism uses, and provide employment opportunities for rural residents.

policy 3B-1.1 Designate various rural land uses in the following LAMIRD categories authorized by RCW 36.70A.070(5)(d): 1. Existing commercial, industrial, residential, or mixed-use areas; 2. Small scale recreation and tourism use areas; 3. Intensification of development on lots containing nonresidential uses.

policy 3B-1.2 Establish the logical outer boundary of an area of more intensive rural development as follows:

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(i) Ensure preservation of the character of existing natural neighborhoods and communities;

(ii) Follow physical boundaries such as bodies of water, streets and highways, and land forms and contours;

(iii) Prevent abnormally irregular boundaries;

(iv) Provide public facilities and public services in a manner that does not permit low-density sprawl; and

(v) Shall not extend beyond the existing areas or uses as described above is one that was in existence on July 1, 1990.

policy 3B-1.3 Allow Type 1 LAMIRDs consisting of commercial, industrial, residential, or mixed use areas in the following land use designations:

(a) Rural Village Residential (RVR).

(b) Rural Intermediate (RI).

(c) Rural Village Commercial (RVC), which must fall within the Rural Village Residential (RVR) boundary.

(d) Rural Center (RC).

(e) Rural Freeway Service (RFS).

(f) Rural Marine Industrial (RMI).

(g) Some NRI designations also meet these "(d)(i)" LAMIRD requirements, but not all. New natural-resource related uses are also allowed in the rural area under GMA, provided they remain compatible with rural character and do not promote sprawl.

policy 3B-1.4 Minimize and contain Type 1 LAMIRDs, as appropriate, to avoid additional low-density sprawl in the rural area in accordance with RCW 36.70A.070(5)(d):

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(a) Lands included in such existing areas or uses shall not extend beyond the logical outer boundary of the existing area or use, thereby allowing a new pattern of low-density sprawl.

(b) Existing areas are those that are clearly identifiable and contained and where there is a logical boundary delineated predominantly by the built environment, but that may also include undeveloped lands if limited as provided in RCW 36.70A.070(5)(d).

policy 3B-1.5 Apply SRT designation as a Type 2 LAMIRD, which allows:

(a) The intensification of development on lots containing, or new development of, SRT uses, including commercial facilities to serve those recreational or tourist uses, that rely on a rural location and setting, but that do not include new residential development.

(b) An SRT use is not required to be principally designed to serve the existing and projected rural population.

(c) Public services and public facilities are limited to those necessary to serve the recreation or tourist use and shall be provided in a manner that does not permit low-density sprawl.

policy 3B-1.6 The County's SSB and RB designations are based on a third type of LAMIRD allowed under GMA. There are distinctions between the two designations: SSB may be applied to a new use in the rural area, whereas an RB must have existed on June 1, 1997. Both designations are consistent with RCW 36.70(A).070(5)(d)(iii) which permits:

(a) The intensification of development on lots containing isolated nonresidential uses or new development of isolated cottage industries and isolated SSBs that are not principally designed to serve the existing and projected rural population and nonresidential uses, but do provide job opportunities for rural residents.

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(b) Rural counties may allow the expansion of SSBs as long as those SSBs conform with the rural character of the area as defined by the local government according to RCW 36.70A.030(14).

policy 3B-1.7 Expand the type of housing units allowed in LAMIRDs where public facilities and services provide sufficient capacity, to include middle housing types such as townhouses, triplexes, and fourplexes; and manufactured and tiny homes.

policy 3B-1.8 Consider a demonstration program within LAMIRDs to encourage and incentivize more affordable housing types, where it can be demonstrated that public facilities and services provide sufficient capacity.

policy 3B-1.9 Certain other land uses are allowed in the Rural Area. These are MPRs and Major Industrial Developments, both of which are a type of urban use that may take place under certain circumstances in the rural area; and Open Space uses. Land use designation policies for agricultural, forest, rural resource, and Mineral Resource Lands are included in the Natural Resource Lands Element.

Rural Residential Designations

Goal 3C Provide for a variety of rural residential land use densities while retaining the rural landscape, character, and lifestyles.

policy 3C-1.1 **Rural Reserve (RRv).** The RRv designation applies to all rural areas outside of the following designations: NRL, RI, RVR, any of the various Rural commercial/industrial designations, OSRSI, or UGA. The maximum allowed residential gross density is one residence per five acres in CaRD land divisions, and one residence per 10 acres in standard land divisions.

policy 3C-1.2 Apply RI and RVR Type 1 LAMIRDs under RCW 36.70A.070(5)(d)(i).

policy 3C-1.3 **Rural Intermediate (RI).** The RI designation applies to rural areas where the average existing and/or surrounding parcel density is predominantly more than or equal to one parcel per 2.5 acres or 1/256th of a section, not including any lands within a UGA. If rural lands proposed to be added to the RI designation

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have a density of less than one parcel per 2.5 acres, these lands must be included in any calculation of "average existing and/or surrounding parcel density." These RI designations are intended to balance property rights in the legally vested lots and the built environment that is reflected in certain rural areas of the county with the GMA requirements to minimize sprawl and concentrate growth in urban areas. (There are many pre-existing lots in the RI designation that are significantly smaller than the 2.5 acre minimum parcel size that applies to new land divisions in RI.)

Areas may be considered for designation as RI by identifying clearly-contained logical boundaries that are delineated predominantly by the built environment existing on July 1, 1990, per policy 3B-1.2 above. However, in some cases, where lots were legally created since that time, but prior to adoption of the Comprehensive Plan and have either been developed, or have vested rights to develop at those densities, RI designation may be appropriate on those lots as well. Finally, as described in more detail under the Rural Study Areas policies in the Plan Implementation and Monitoring Element, some RI density may be appropriate in one or more of those study areas, but only after completion of the necessary community plan.

(a) The RI designation does not necessarily apply to every existing lot smaller than 2.5 acres in the county since, to do so, could result in a pattern of scattered and unconsolidated areas of more intense rural development.

(b) Within the RI designation, the minimum lot size that may be created through a land division is 2.5 acres, resulting in a maximum residential gross density of one dwelling unit per 2.5 acres.

policy 3C-1.4 The purpose of the RI designation is to provide and protect land for residential living in a rural atmosphere, taking priority over, but not precluding, limited non-residential uses appropriate to the density and character of this designation. Long-term open space retention and critical area protection are encouraged.

policy 3C-1.5 **Rural Village Residential (RVR).** RVRs shall be located only in designated Rural areas. Rural Village designation and densities are based on existing rural

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residential and commercial development patterns and uses, environmental constraints, presence of critical areas, proximity to designated NRL, and adequate capacity to maintain existing rural levels of service.

policy 3C-1.6 Areas designated RVR represent historical communities throughout the county with future development limited to infill within designated boundaries.

Residential densities for land designated as RVR are:

(a) One residential dwelling unit per acre, with public water and an approved on-site septic system;

(b) Up to four dwellings per acre for housing types which may be more affordable including accessory dwelling units (ADUs), duplexes, triplexes, fourplexes, manufactured homes, and tiny homes, when the following criteria are met:

(i) Public water is provided, and

(ii) Public sewer is provided for middle housing types

(iii) Public sewer or an approved on-site septic system is approved for ADUs

(iv) Confirmation is provided from all existing providers of public facilities and public services of sufficient capacity to serve the development.

(c) One dwelling unit per 2.5 acres, with private water and an approved on-site septic system.

policy 3C-1.7 Subdivisions of undeveloped parcels on the east side of the Big Lake Rural Village are allowed with lot sizes of 5 acres or greater unless those parcels are divided through conservation and reserve developments (CaRD), utilize public utilities, and protect Big Lake Water quality. Prior to the adoption of a Big Lake Rural Village Plan, property that is commonly referred to as the Overlook Golf Course may be subdivided according to provisions contained in the Unified Development

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Code in order to fulfill the terms of a settlement agreement which was resolved by the Board of County Commissioners passing Ordinance #O20030012.

policy 3C-1.8 The Board of County Commissioners will work with the PDS Department to prioritize community planning efforts for Rural Villages and other areas of more detailed rural planning, as further discussed in the Plan Implementation and Monitoring Element.

Rural Commercial and Industrial Designations

Goal 3C-2 Support the rural economy by fostering opportunities for rural-based employment, home businesses, natural resource-related industries, and economic diversification in tourism and recreation, of an appropriate size and scale to maintain rural character.

policy 3C-2.1 New rural commercial and industrial uses should be located principally within designated commercial areas to avoid the proliferation of commercial businesses throughout the rural area. However, certain limited commercial uses, resource-related uses, HBBs, and other non-residential uses may be permitted if carefully reviewed, conditioned and found to be compatible with rural areas. To encourage efficient use of the land, the broadest range of commercial and industrial uses should be allowed in areas already accommodating such use and development, with greater limitations placed upon such uses within areas devoted predominantly to residential use (i.e., RI, RVR, and RR areas). Comprehensive Plan and Zoning designations devoted principally to commercial and industrial uses in the unincorporated portions of the county are:

(a) Rural Village Commercial (RVC)

(b) Rural Center (RC)

(c) Rural Freeway Service (RFS)

(d) Small-Scale Recreation and Tourism (SRT)

(e) Natural Resource Industrial (NRI)

(f) Rural Marine Industrial (MRI)

(g) Major Industrial Developments

(h) Master Planned Resorts (MPRs)

(i) Small-Scale Business (SSB)

(j) Rural Business (RB)

policy 3C-2.2 Comprehensive Plan Amendment applications to any of the rural commercial or industrial designations must meet the following criteria in order to be found consistent with the Comprehensive Plan. The proposed designation and use must:

(a) be consistent with the existing rural character of the area;

(b) not create conflicts with surrounding Agricultural, Forest, and Mineral Resource lands and practices; and

(c) provide for the protection of critical areas, frequently flooded areas, and surface water and ground water resources, including sole source aquifers.

policy 3C-2.3 An applicant for any of the rural commercial or industrial designations available under this plan must submit, at the time of application, a development proposal that is consistent with the appropriate designation criteria.

policy 3C-2.4 Public services and public facilities necessary for rural commercial and industrial uses shall be rural in nature, limited to those necessary to serve the use, and provided in a manner that does not permit low-density sprawl. Uses may utilize urban services that previously have been made available to the site.

The following policies describe the various rural commercial and industrial designations, and provide guidance on the types and scale of permitted uses within them.

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Rural Village Commercial (RVC)

policy 3C-2.5 The RVC District provides for a range of commercial uses and services to meet the everyday needs of rural residents and natural resource industries, and to provide goods, services, and lodging for travelers and tourists to the rural area.

policy 3C-2.6 Generally, there should be only one contiguous area designated RVC in each Rural Village. New uses should be clustered around the existing RVC district, unless the particular nature of the new use justifies an alternative location within the Rural Village.

policy 3C-2.7 Typical uses in the RVC district include small retail and service businesses that primarily serve the needs of the surrounding population or support natural resource businesses and industries, art and performance galleries and studios, overnight lodging and related services for visitors to the rural area, and minor public uses.

policy 3C-2.8 Maximum size limits for uses within the RVC district are intended to retain the rural character of the Rural Villages and are based on the size of existing commercial uses within the Rural Villages. A community plan may modify the dimensional standards for a particular RVC district, provided that the newly developed standards are consistent with existing commercial uses within that Rural Village.

policy 3C-2.9 Land within a Rural Village may be redesignated to one of the other rural commercial or industrial designations, based on the appropriate land use designation criteria, and subject to a Rural Village community plan if one has been adopted.

Rural Center (RC)

policy 3C-2.10 RCs are small-scale commercial clusters at selected locations in the rural portion of the county. They are smaller in size and intensity than Rural Villages and generally serve the population residing within a 2 ½-mile radius.

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policy 3C-2.11 Typical uses in RCs are small retail and service businesses that primarily serve the needs of the surrounding rural population and visitors to the rural area. Examples include retail food, drug, feed, nursery, and hardware stores; specialty shops; restaurants; bed and breakfasts; service stations; and personal care services.

policy 3C-2.12 RCs may not include new residential uses other than business-owner or operator residences and loft living quarters over store fronts, unless such residential uses are specifically authorized through a community plan.

policy 3C-2.13 RCs are designated at specific, limited sites in the following areas: Allen, Birdsview, Day Creek, Dewey Beach, East Edison, and Guemes Island.

policy 3C-2.14 RCs of sufficient number and size will be designated to meet existing and projected rural commercial needs for retail and service businesses serving the surrounding rural population and visitors.

policy 3C-2.15 Substantial infill, development, and redevelopment shall occur within existing RC and RVC districts before any new RCs may be designated.

policy 3C-2.16 Before additional acreage may be added to an existing RC, the County shall conduct an analysis of the logical outer boundaries of that RC, in accordance with RCW 36.70A.070(5)(d)(iv).

Rural Freeway Service (RFS)

Goal 3C-3 Serve local rural populations and the traveling public with appropriate commercial goods and services at certain I-5 interchanges already characterized by more intensive rural development.

policy 3C-3.1 RFS areas provide freeway-oriented goods and services at certain I-5 interchanges in Skagit County that meet the GMA definition of “limited areas of more intensive rural development” in RCW 36.70A.070(5)(d)(i). The following portions of the Bow Hill, Conway, Alger, and Cook Road interchanges are designated RFS:

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(a) Conway: the approximately 1.3-acre parcel in the southeast quadrant where there was commercial development as of July 1, 1990.

(b) Bow Hill: the approximately 2.4-acre parcel at the northwest quadrant, and approximately 10 acres in the southwest quadrant that has existing urban sewer service (pre-1990) and water service.

(c) Alger: four parcels totaling approximately five acres in the southeast quadrant that are served by, or are prepared to be served by, water, sewer and power, and are bounded by elements of the built or natural environment which create logical boundaries to any future commercial sprawl.

(d) Cook Road: approximately nine acres at the northeast quadrant, and approximately six acres at the southeast quadrant. Both areas are surrounded by logical boundaries consisting of the built or natural environment, have paid sewer commitments dating back to the late 1970s and are served by public sewer and public water.

policy 3C-3.2 New development at these locations is subject to development regulations and design guidelines intended to maintain the rural character of the area, and to minimize impacts to rural residential areas, resource lands, critical areas, and other sensitive natural features of the environment. Such development shall not be expanded into designated NRLs or create conflicts with natural resource practices.

Small-Scale Recreation and Tourism (SRT)

Goal 3C-4 Use the county's abundant recreational opportunities and scenic and natural amenities to diversify the economy of rural Skagit County by allowing small-scale recreational and tourist uses in an environmentally sensitive manner.

policy 3C-4.1 The SRT designation is intended to provide opportunities for businesses that create recreational or tourist-oriented jobs for rural residents. Proponents may

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apply for a Comprehensive Plan/Zoning Map amendment and rezone to the SRT designation and zone demonstrating that the proposed location or use:

(a) Relies on a particular rural location and setting;

(b) incorporates the scenic and natural features of the land; and

(c) would be inappropriate or infeasible in a Rural Village, RC, or UGA.

policy 3C-4.2 SRT areas shall not be created from lands designated Ag-NRL or IF-NRL.

policy 3C-4.3 Typical uses within SRT areas may include but are not limited to: cabins, cottages, campgrounds, recreational vehicle (RV) parks, and other forms of overnight lodging that are rural in scale; outdoor recreational equipment rental and/or guide services; outdoor recreational facilities; recreational, cultural, or religious retreats; and accessory uses such as restaurants and small retail shops. Owner or caretaker housing is also permitted. Other residential uses are not permitted.

policy 3C-4.4 SRT areas and uses are limited in size and scale so as to be rural in nature and compatible with the surrounding rural area as follows:

(a) Up to 20 acres of developable land may be located within an SRT designation. Additional land used for passive recreation purposes only may be included provided it remains substantially undeveloped.

(b) The maximum number of units of overnight lodging permitted within an SRT area is 35. This limit does not apply to the number of camping sites or RV hook-ups within a campground or resort.

policy 3C-4.5 Proposed amendments to the Comprehensive Plan for new SRT designations shall include site plans as further specific in the Legislative Actions section of the Unified Development Code.

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Natural Resource Industrial (NRI)

Goal 3C-5

Facilitate the production of agricultural, forestry, and aquatic products by allowing related processing facilities, limited direct resource sales, and limited natural resource support services that support local natural resource activities.

policy 3C-5.1 The NRI designation applies to agricultural, forestry, and aquatic industries and products. Mineral processing activities are generally guided by separate policies found in the Land Use and Resource elements of the Comprehensive Plan.

policy 3C-5.2 Permitted uses include natural resource processing facilities; wholesaling and storage of products associated with natural resources; limited direct resource sales; and limited natural resource support services.

policy 3C-5.3 New NRI designations may be located on lands currently in one of the other Rural designations. In certain circumstances designated NRLs may be redesignated to NRI, subject to the following provisions and the specific policies for each NRL or NRI contained below.

(a) The NRI designation may generally be located on land currently in an NRL designation for uses directly involved in the extraction, sorting, and primary processing of natural resources.

(b) NRI uses that are not directly involved in the extraction, sorting, and primary processing of natural resources should generally locate on rural lands. These activities include support services, and certain storage and processing uses that serve natural resource industries but are not directly involved in the on-site extraction or primary processing of natural resources.

(c) Development of the proposed NRI site would have minimal adverse impacts on nearby primary natural resource activities.

policy 3C-5.4 In considering NRI designation requests, priority consideration will be given to properties that have had prior industrial activity and site improvements, but that may now be vacant or under-utilized, rather than to entirely undeveloped sites.

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Policies Specific to Ag-NRL

policy 3C-5.5 The County should designate an area (or areas) in which to concentrate agriculture-related industrial uses and agricultural support services in an "agricultural industrial park." This would allow for these services and their impacts to be concentrated, rather than dispersed throughout the rural area. Designation of an agricultural industrial park is the only instance where Ag-NRL land may be converted to a NRI designation, and only based on a finding that the agricultural sector is better served by having the land in NRI designation to permit an agricultural industrial park.

Policies Specific to Forest-NRL

policy 3C-5.6 Certain forestry-related industrial activities are permitted outright through the IF-NRL, SF-NRL, and RRc-NRL zoning districts and do not require a Comprehensive Plan designation to NRI.

policy 3C-5.7 Certain forestry-related industrial activities are not permitted, or are only permitted on a temporary basis, in the IF-NRL, SF-NRL, and RRc-NRL zoning districts. The NRI designation is an appropriate place for these uses to occur on a permanent basis.

Policies Specific to Aquatic Industries

policy 3C-5.8 Aquatic and marine uses permitted through the NRI designation shall only be located on non-NRL designated lands.

policy 3C-5.9 Additionally, the proposed site should be close to:

(a) the natural resource or natural resource activities it intends to serve;

(b) major transportation facilities associated with the proposed use (highway, rail, water, or air); and

(c) non-urban or existing urban services necessary for the proposed resource-related industrial use.

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Rural Marine Industrial (RMI)

Goal 3C-6 Provide a land use designation that recognizes existing industrial facilities that are directly linked to an existing rural marine location and that serve the county's rural marine industrial needs; permits expansion of existing rural marine industrial activities that are water or shoreline dependent; and provides for limited changes of use.

policy 3C-6.1 The RMI designation is intended to recognize existing rural marine industrial facilities and to permit expansion of existing RMI activities that are water or shoreline dependent, and to provide for limited changes of use. The term "rural marine industrial facilities" includes harbors, marinas, docks, moorages, and other existing or permitted facilities that support and enable marine industry and commerce.

policy 3C-6.2 Areas or facilities are designated RMI based on their history of marine industrial use, or regulatory approval and related site improvements for marine industrial use, prior to July 1, 1990. The RMI-designated properties were reviewed under, and found to comply with, the GMA criteria for limited industrial areas of more intensive rural development, as outlined in policy 3B-1.2. The existing areas or facilities identified as RMI areas on the Comprehensive Plan/Zoning Map, are:

(a) Twin Bridge Marine Park, on the east side of the Swinomish Channel north of SR-20 and Josh Green Lane.

(b) The former "Western Lime" property on the Swinomish Channel directly north of the Twin Bridge Marine Park.

(c) Property on Turner's Bay at the north end of Similk Bay, which has served historically as a marine terminal for logs and other natural resource materials, as a log storage site, and for other marine-industrial uses.

(d) Rozema Boat Works, located in the Bay View Rural Village, on the eastern shore of Padilla Bay.

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policy 3C-6.3 Permitted uses within the RMI designation are those that are "water and shoreline dependent or related," and are rural in nature, as consistent with the County's Shoreline Master Program (SMP).

Major Industrial Developments

Goal 3C-7 Ensure adequate site opportunities for Major Industrial Developments that have land needs that cannot be met in UGAs.

policy 3C-7.1 A "major industrial development" is a master planned site for a business that requires a parcel of land larger than is available in the UGA or is a natural resource-based use requiring a location near Agricultural land, Forest land, or Mineral Resource land upon which it is dependent. The siting of Major Industrial Developments outside of a UGA shall comply with the framework agreement between the County and the cities and the criteria contained in RCW 36.70A.365 and Countywide Planning Policy 2.6. The Major Industrial Development designation requires the development of additional Comprehensive Plan policies and development regulations pursuant to those criteria, before any properties may be so designated.

Master Planned Resorts (MPRs)

Goal 3C-8 Provide for the siting of MPRs, consistent with the requirements of the GMA, in locations that are appropriate from both an economic and environmental perspective.

policy 3C-8.1 MPRs are self-contained and fully integrated planned unit developments, in settings of significant natural amenities, providing short-term visitor accommodations including a range of indoor or outdoor recreational facilities and visitor services.

policy 3C-8.2 MPRs are larger in scale, and involve greater potential impacts on the surrounding area than uses permitted under the SRT designation. MPRs may

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constitute urban growth outside of UGAs as limited by RCW 36.70A.360 and RCW 36.70A.362.

policy 3C-8.3 Designation of MPR requires amending the Comprehensive Plan and Zoning Maps, prior to, or concurrent with an application for master plan review. The Comprehensive Plan amendment process should evaluate all the probable significant adverse environmental impacts from the entire proposal, even if the proposal is to be developed in phases, and these impacts shall be considered in determining whether any particular location is suitable for an MPR. Review and approvals will be conducted using the following criteria:

(a) Development Agreements, as authorized by RCW 36.70B.170, may be used to implement these policies.

(b) The development and its impacts should be buffered and mitigated from the adjacent rural areas. MPRs should be of sufficient size to mitigate the potential impacts from the development on site. Where located in a rural area, the MPR should also be of sufficient size to screen the development and its impacts from the adjacent rural areas.

(c) MPRs are not allowed on designated Ag-NRL lands. Location on other NRLs requires a County finding that the proposed site is better suited and has more long-term importance for the MPR than for the commercial harvesting of timber or production of natural resource products, and will not adversely affect adjacent NRL activities.

(d) The MPR must be developed consistent with the County's development regulations established for critical areas and consistent with lawfully established vested rights, and approved development permits.

(e) The MPR shall consist of predominantly short-term visitor accommodations, with associated indoor and outdoor recreational facilities; conference facilities; and commercial and professional activities that support and are integrated with the resort. In addition, permanent residential uses, including caretakers' or employees' residences and vacation home properties may be

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included, provided they must be integrated into the resort and consistent with the on-site recreational nature of the resort. Some goods and services for the surrounding permanent residential population may also be included.

(f) Where supported by historic use of the property and where such historic uses are intended to be integrated into the overall MPR concept, commercial or industrial uses not typically associated with resort or recreational activities may be included, such as on-going natural resource industrial activities.

(g) MPRs may be developed using clustering design, setbacks, and lot sizes that vary from those provided in the Rural or NRL designations. MPR commercial facilities necessary to serve the resort may be larger than those otherwise permitted in rural commercial areas, but nevertheless limited to primarily serving the needs of the resort.

(h) Capital facilities and services, including wastewater, water, storm water, security, fire suppression, and emergency medical provided on-site shall be limited to meeting the needs of the resort and may be provided by outside service providers, provided that the resort pays all costs associated with service extension capacity increases, or new services that are directly attributable to the resort, and provided that the nature of the facilities and services provided are adequate to meet the increased needs of the resort.

(i) Resort traffic mitigation should not require the construction of additional traffic lanes on State routes except in the immediate vicinity of or within the boundaries of the MPR where necessary to accommodate increased traffic and turning movements generated at the site.

(j) The MPR shall contain sufficient portions of the site in undeveloped open space for buffering and recreational amenities to help preserve the natural and rural character of the area.

(k) MPRs may be sited within or adjacent to existing UGAs or within or adjacent to an existing area of more intense rural development, such as an existing Rural Village or an existing RI designation.

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Small-Scale Business (SSB)

Goal 3C-9 Recognize the land use needs of existing and new SSBs that are beyond the size and scale of Home-Based Businesses (HBBs).

policy 3C-9.1 The SSB designation is intended to provide for commercial or industrial uses involving the provision of services or the fabrication or production of goods, primarily for clients and markets outside of the rural area. The SSB designation may be applied to existing or new businesses, whereas the RB designation applies only to businesses that were established as of June 1, 1997.

policy 3C-9.2 Typical uses within the SSB zone include the small-scale production or manufacture of goods; the production, repair and servicing of specialized tools and equipment; and the provision of services, including professional, management, consulting, construction, and repair services. The business may have customers visit the site, but retail sales are limited to products primarily produced on site.

The scale of activities within an SSB is typically greater than can be accommodated through a HBB. Nothing in these policies is intended to create a presumption that the property on which a HBB is located should be re-designated to SSB if that business outgrows its home-based status. There is no automatic progression from HBB to SSB.

policy 3C-9.3 Caretaker residences may be located on site in a SSB.

policy 3C-9.4 An SSB may have up to 20 full-time equivalent (FTE) employees, meaning an employee that visits the business site more than two times per week, including visits solely for purposes of vehicle transfer.

policy 3C-9.5 The SSB designation is consistent with the GMA's allowance for the "intensification of development on lots containing isolated nonresidential uses or new development of isolated cottage industries and isolated small-scale businesses that are not principally designed to serve the existing and projected

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rural population and non-residential uses, but do provide job opportunities for rural residents." (RCW 36.70A.070(5)(d)(iii))

policy 3C-9.6 Rural policy 3C-2.1 regarding priority consideration to siting of new uses in areas of existing development, shall be applied when considering new SSB designations. A HBB shall not be considered as an already developed site for the purposes of this policy.

policy 3C-9.7 An SSB designation should not be located on designated NRLs, nor create the potential for conflicts with the use of agricultural, forest, and Mineral Resource lands of long-term commercial significance.

Home-Based Businesses (HBBs)

Goal 3C-10 Provide opportunities for rural entrepreneurs to establish work places within their homes that are compatible with surrounding uses.

policy 3C-10.1 HBBs are intended to provide increased rural economic opportunities by providing the ability to supplement a family income, start a business, or establish a work place at home. The three classes of HBB are progressively larger in size or impact on neighboring land uses.

policy 3C-10.2 All HBBs are located inside single-family homes or a permitted accessory outbuilding and remain clearly incidental and secondary to the primary residential use. HBB activities may consist only of business activities that are compatible with the primary use of a property as residential or resource based. The activities must support and may not diminish rural character.

policy 3C-10.3 Home-Based Business 1 (HBB1) consists of a business that is carried out exclusively by household residents and does not involve client or customer visits.

policy 3C-10.4 Home-Based Business 2 (HBB2) consists of a business that is carried out exclusively by household residents. Clients or customers may visit the site.

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policy 3C-10.5 Home-Based Business 3 (HBB3) consists of a business that is carried out by household residents but may also employ a small number of employees. Clients or customers may visit the site.

policy 3C-10.6 For any type of HBB, there may be no indications of a commercial or industrial enterprise visible off-premises, and auto and truck traffic, noise, and pollutant emissions shall not exceed that normally associated with a residential property. No outside storage is allowed.

policy 3C-10.7 Within resource lands of long-term commercial significance, care must be paid to protection of the primary resource activity and code requirements may limit the use in a manner to avoid conversion of resource lands and promote the primary resource-based uses. On lands of long-term commercial significance (Ag-NRL, IF-NRL, SF-NRL and RRc-NRL), HBB2 and HBB3 may be conditionally permitted only if no conversion of resource land is required to accommodate the business activity; except that HBB3 is not allowed in Ag-NRL under any conditions. Limitations on new structures may also be conditions.

Rural Business (RB)

Goal 3C-11 The RB designation is intended to accommodate significant commercial and industrial uses that existed as of July 1, 1997 but do not qualify for other rural commercial and industrial Comprehensive Plan designations.

Generally

policy 3C-11.1 Commercial and industrial uses not designation RB or other rural commercial/industrial designation – for instance those operating under a special use permit – may apply for designation as Rural Business through the annual Comprehensive Plan amendment process.

policy 3C-11.2 The designation shall be evaluated based on whether the use is similar in nature and location to other uses designated RB; and whether the granting of the designation would be compatible with the rural character of the area, would conflict with the conduct of natural resource activities of long-term commercial

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significance; and would be consistent with any adopted Community Plan for the area.

Expansion of Use

policy 3C-11.3 All uses designated RB may expand by up to 50 percent of the existing building footprint and/or up to 50 percent of the existing outdoor working area, provided that the total expansion does not exceed a total of 1,500 square feet of gross floor area. The expansion must occur on the same lot upon which the existing use is located. The total square footage of allowable expansion is determined on a one-time basis, based on the area of use as of June 1, 1997.

policy 3C-11.4 Uses that were established as of July 1, 1990 may expand beyond the 1,500 square feet limitation with an approved Hearing Examiner Special Use Permit, subject to criteria contained in the Unified Development Code.

policy 3C-11.5 Uses that support natural resource industries should not be subject to the expansion limitations.

Change of Use

policy 3C-11.6 Properties with a RB designation may change uses provided that the new use is rural in nature and does not result in a substantial change to rural character or create substantially greater impacts on surrounding properties, critical areas, NRLs, and other factors as further identified in the development regulations. A change to a new use does not create a new expansion opportunity.

(a) Changes from one use to an identical or "substantially similar" use are subject to Administrative review only. The Administrative Official will determine if the new use is an identical or substantially similar use based on a definition contained in the development regulations.

(b) A Hearing Examiner special use permit is required to change from one use to another use that is determined not to be identical or substantially similar to the prior use. The Hearing Examiner shall grant a special use permit for change of use only if is determined that the change of use would not result in

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significantly adverse impacts or be inconsistent with an adopted community plan.

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Introduction

NRLs are the cornerstone of Skagit County's economy, community, and history. As such, their protection and enhancement is of paramount importance to Skagit County and its citizens. The Natural Resource Lands Element establishes the purpose and intent of land use policies for Agricultural, Forest, and Mineral NRLs. These policies guide long-range planning, programs, and regulations to conserve NRLs. In cases where some residential use is allowed on NRLs,

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development will occur in a manner that minimizes both the amount of land converted to non-resource uses, and the associated impacts to long-term management of the natural resources.

The goals and policies set forth in the Natural Resource Lands Element represent a commitment to a viable natural resource economy in Skagit County, including NRL industries and healthy natural resource systems. This section supports the goals and policies in the Natural Resource Lands Element by summarizing current conditions and describing the desired management of NRL that the County will be addressing throughout the 20-year planning period.

This Element supports long-term commercial uses on NRLs and allows for support services and businesses that are compatible with these uses. Other uses such as residential and recreational uses on NRLs, if allowed, are to be compatible with the long-term commercial resource use of these lands.

Natural Resource Land Designations

The NRL designation indicates areas where County land-use plans, regulations, and incentives are intended to promote long-term, commercially significant resource use. These natural resources provide valuable products and raw materials that support jobs, create tax revenues, and are an important component in regional and local economies and markets. Farmlands and forests also provide aesthetic, recreational, and environmental benefits to the public, while contributing to a diverse community lifestyle and character. The land use zoning designations for NRLs are:

- Agricultural – Natural Resource Lands (Ag-NRL)
- Industrial Forest – Natural Resource Lands (IF-NRL)
- Secondary Forest – Natural Resource Lands (SF-NRL)
- Rural Resource – Natural Resource Lands (RRc-NRL)
- Mineral Resource Overlay (MRO)

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Agricultural Natural Resource Lands (Ag-NRL)

Ag-NRLs are those lands with soils, climate, topography, parcel size, and location characteristics that have long-term commercial significance for farming. The County designates agricultural lands primarily based on the presence of prime agricultural soils. These lands are concentrated in the fertile floodplain of the Skagit River as it flows into the Puget Sound. There are also agricultural lands designated along the upper Skagit Valley in areas of rich alluvial soils. Based on the designation criteria presented in Element 4, Natural Resource Lands, the County has designated an estimated 88,506 acres of land as Agricultural lands, although significantly fewer acres are in full agricultural production in any given year. Designating valuable agricultural soils protects the resource for future use, regardless of current farming conditions. Designating also ensures a cohesive and distinct agricultural area within Skagit County, and limits the extent to which non-agricultural uses can conflict and interfere with farming.

Primary crops and agricultural products in Skagit County include apples; berries; floriculture and sod; potatoes; peas and other vegetables; vegetable seeds; dairy; and ornamental nursery stock. Skagit County's annual Tulip Festival brings in over $60 million in economic activity, adding to the over $300 million in gross farm income annually – making agriculture a major contributor to the health of both the regional and Skagit County economies.

Despite the current strength of the agricultural industry in Skagit County, there are some significant challenges facing agriculture, primarily in maintaining the land base and ensuring long-term viability. Pressures to convert agricultural lands to residential, wildlife habitat, and other uses, conflicts with neighboring non-resource uses, regulatory limitations on farming, and fluctuating economic conditions all add to the industry's challenges.

The Natural Resource Lands Element promotes preservation of the agricultural land base, reduction of land use conflicts, and support for a diverse and economically strong agricultural industry. Conservation strategies are critical for preserving and strengthening the agricultural land base. These include a strong Purchase of Development Rights (PDR) program, and the development of a geographic information system (GIS) database for NRLs. Right-to-Manage Natural Resource Lands goals, policies, and ordinances promote a clear mandate for agricultural production as a priority on agricultural lands. The strength of the agricultural industry is promoted in the Natural Resource Lands Element by integrating support and information services in a Natural Resource Lands Clearinghouse, promoting the agricultural industry and supporting

services and businesses that sponsor the development and diversification of agricultural products.

Industrial and Secondary Forest Resource Lands

Forest Resource lands are those lands with soils, parcel size, and location characteristics that have long-term commercial significance for forestry. Based on the designation criteria presented in Element 4, Natural Resource Lands, the County has designated an estimated 321,410 acres of land as IF-NRL and 37,700 acres as SF-NRL. Industrial Forest lands form the bulk and core of the commercially significant forest resource, with a surrounding Secondary Forest designation which provides a transitional density between that of Rural areas and Industrial Forest. Secondary Forest also offers the potential for smaller-scale commercial timber operations, supporting natural resource industries, and limited residential uses. These lands are concentrated in the slopes and foothills of the Cascade Mountains in the eastern and northern portions of the county.

Primary forest products in Skagit County include raw logs, primarily for the domestic market, with some exports; lumber, both green and kiln dried; wood chips; and hog fuel (a mix of bark, sawdust, and planer shavings). Production of the latter is expected to increase due to the increased development of cogeneration plants as energy sources for industry. Value-added products and industries include local cabinet making shops, engineered wood products, such as beams, and small fine wood product shops producing anything from custom wood furniture to musical instruments.

Aside from wood products, forestry is a significant contributor to the economy, environment, and lifestyle in Skagit County. Support industries include logging, trucking, and equipment sales and service; small trucks; fuel; supplies; and repair services. Spin-off services, such as retail grocery, clothing, restaurants, and other services also rely heavily on a healthy NRL industry. An often overlooked benefit of good forest management is the industry's contribution to and protection of clean air; water; fish and wildlife habitat; and recreational activities.

Currently, there are significant challenges facing the industry, primarily in maintaining the land base and promoting a viable, long-term forest industry. The industry and the County have seen a decline in the strength and role of forestry in the Skagit County economy over the past 20 years – much of this due to declining harvests on federal and State lands. Other challenges result from pressures to convert forest lands to other uses; regulatory requirements, economics, and market

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factors. At the same time, forestry is estimated to generate approximately 1,500 jobs in Skagit County and forest excise tax distributions to the County (based on the value of harvested timber) more than doubled from $749,609 in 2010 to $1,601,896 in 2015.

The Natural Resource Lands Element promotes preservation of the forest land base, reduction of land use conflicts, and support for a diverse and economically strong forest industry. Conservation strategies are critical for preserving and strengthening the forest land base and include incentives to conserve, and disincentives to convert, forest land to other uses. Right-to-Manage Natural Resource Lands goals, policies and ordinances promote a clear mandate for forest management as a priority on forest lands. Strength of the forest industry is promoted in the Natural Resource Lands Element by integrating support and information services in a Natural Resource Lands Clearinghouse to promote the diversification of forest products and encourage development of value-added products.

Rural Resource Lands

Rural Resource lands are, generally, areas that have the combined land and land-use characteristics of long-term agricultural, forest or mineral lands, and have the potential for multiple use or smaller scale resource management. Because of this mixture, the goals, objectives and policies applicable to both Agricultural and Forest Resource lands are applicable to the Rural Resource lands. Rural Resource lands generally are not managed for industrial-scale farming or forestry but nevertheless contribute to the NRL base. Where the MRO designation is also applied, industrial-scale mining can occur, however. Based on the designation criteria presented in Element 4, Natural Resource Lands, the County has designated an estimated 26,522 acres of land as RRc-NRL.

The challenges facing owners of Rural Resource land generally relate to the economic viability of managing small parcels of resource lands, and pressures to develop other uses, such as residential. This is particularly true where Rural Resource lands are located between larger NRL parcels and Rural designated areas.

The Natural Resource Lands Element promotes flexibility of uses on Rural Resource lands, while providing for incentives and support for small agricultural, forest, and mining uses. Rural Resource lands allow for a range of uses that are complementary to NRL preservation. The

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Natural Resource Clearinghouse will provide further direction and guidance for owners of Rural Resource lands.

Mineral Resource Overlay (MRO)

The MRO is an overlay to Forest and Rural Resource lands, where geologic deposits and land use characteristics have long-term commercial significance for mineral extraction. Based on the designation criteria presented in Element 4, Natural Resource Lands, the County has designated an estimated 61,682 acres as MRO. The predominant resources mapped in the MRO are sand and gravel construction materials. These resources are typically associated with alluvial and glacial deposits. Quarry rock and valuable minerals such as olivine-rich dunite and limestone have also been designated.

The challenges facing the mineral resource industry primarily relate to conflicting use concerns with neighboring residential uses. With increasing demands for construction materials in developing urban areas, especially in the Puget Sound region, it becomes increasingly important to identify and preserve access to the mineral resources of Skagit County. However, access to much of the county's minable resources has already been precluded by residential development. The County's approach to designating mineral lands is to protect what is remaining, now and for the future. Doing so requires that mineral lands of long-term commercial significance be designated in areas where the impacts from mining, when it occurs, can be reduced to the greatest extent possible.

During the 2005-2007 update of the MRO, the County conducted an in-depth review of geologic formations and potential mineral resource deposits. This mapping update confirmed many known mineral resources and identified new mineral resources. A very few currently conforming mining operations did not meet the criteria for MRO designation as applied during this mapping review. Due to the economic conditions of these operations and their beneficial access to markets, the County will consider these existing operations as conforming uses within the provisions of the MRO.

It is important to ensure that mining policies and regulations, in addition to protecting the resource and its related activities, also protect public health, safety, and the environment. These policies and their implementing regulations work in concert with other federal and State laws to ensure that mining operators and surrounding land owners remain good neighbors.

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The Natural Resource Lands Element also establishes Right-to-Manage Natural Resource Lands goals and policies to promote a clear mandate for mineral extraction activities as a priority on lands designated as MRO. The vitality of the mineral industry is also promoted in the Natural Resource Lands Element by integrating support and information services in a Natural Resource Lands Clearinghouse and allowing support services and businesses to encourage development of 'value-added' products. For more resources regarding geologic planning or mineral overlay information visit the State Department of Natural Resources (WA DNR) Aggregate Resources website (https://www.dnr.wa.gov/aggregate-resources), geologic information portal (https://www.dnr.wa.gov/geologyportal), or geologic planning website (https://www.dnr.wa.gov/programs-and-services/geology/geologic-planning).

Natural Resource Land Support Mechanisms

Right-to-Manage Natural Resource Lands

Where non-NRL uses (primarily residential uses) extend into natural resource areas or exist side-by-side, natural resource management operations are frequently subject to nuisance complaints. When complaints relate to the undesired effects of properly regulated and conducted NRL activities, NRL managers are required to set aside time and financial resources in order to respond.

Right-to-Manage Natural Resource Lands policies are intended to promote a good neighbor policy between NRL and non-NRL property owners by advising purchasers and users of property adjacent to or near NRL management operations of the inherent potential difficulties associated with such purchase or residence. It is essential that neighbors and residents of NRLs better understand and be prepared to accept attendant conditions and the natural result of living in or near NRLs and Rural areas. The Right-to-Manage Natural Resource Land goals and policies together with supporting regulations establish mandatory disclosures for purchasers and users and provides authority to the County Assessor's Office to track these disclosures for the long-term protection of productive use of Skagit County's valuable resource lands.

4: Natural Resource Lands: Natural Resource Lands
Soils Used in Designating Agricultural and Forest Resource Lands

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Natural Resource Lands Information Clearinghouse

The Natural Resource Lands Element introduces the concept of a Natural Resource Lands Clearinghouse to integrate the support and information services for natural resource landowners and industries. The goal of the Clearinghouse is to efficiently provide the following information and support: Information on resource land conservation, including loans and grants, and conservation easements;

- Information and support for alternatives to land conversion;
- Information on sustainable management approaches;
- Promote sustainable management practices;
- Encourage economic and market opportunities;
- Promote Skagit County products and branding; and
- Educate and inform public on NRL values.

Soils Used in Designating Agricultural and Forest Resource Lands

The Natural Resource Lands Element uses soil classifications from the United States Department of Agriculture (USDA) Soil Conservation Service (SCS) and the State Department of Revenue's Private Forest Land Grading (PFLG) system in designating Agricultural Resource, Forest Resource, and Rural Resource lands, abbreviated as follows:

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Agricultural Lands Soils

Designation of Agricultural land relies, in part, on the presence of various "Prime Alluvial" soil types indicated below. Descriptions of these soil types can be found, by SCS map unit number, in the Soil Survey of Skagit County Area, Washington, USDA Soil Conservation Service, 1998.

SCS Map Unit #	Soil Description
Prime Alluvial Soils	
21	Briscot fine sandy loam
87	Larush fine sandy loam
88	Larush silt loam
89	Larush variant silt loam
92	Minkler silt loam
123	Skagit silt loam
96	Mt. Vernon very fine sandy loam
130	Snohomish silt loam
136	Sumas silt loam
157	Wickersham silt loam, 0-8% slopes
Prime Alluvial Soils (if artificially drained)	
10	Bellingham silt loam
11	Bellingham mucky silt loam
34	Cokedale silt loam
97	Mukilteo muck
101	Nookachamps silt loam
102	Norma silt loam
114	Samish silt loam
141	Tacoma silt loam
142	Tacoma silt loam, drained
Prime Alluvial Soils (if protected from flooding)	
56	Field silt loam
57	Field silt loam, protected
98	Mukilteo Variant muck
118	Sedro-Woolley silt loam

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Forest Resource Land Soils

The soil criteria for designating Industrial Forest and Secondary Forest lands in Skagit County is derived from the PFLG. PFLG was a five-year mapping program completed in 1980 for the purpose of forest land taxation. It was funded by the State Department of Revenue in cooperation with WA DNR, SCS, USDA Forest Service, and Washington State University. State and private lands which had the potential of supporting commercial forest lands were surveyed. The Site Index Range is a measurement of the anticipated height of commercial timber species within a particular time span. For Skagit County, located in Western Washington, the site-class codes are based on a 50-year site index. The site-classes for Skagit County as derived from the PFLG soil survey are as follows:

Site Class	Site Index Range
PFLG I	137 feet +height
PFLG II	119-136 feet
PFLG III	97-118 feet
PFLG IV	76-96 feet
PFLG V	1-75 feet

Rural Resource Land Soils

Designation of Rural Resource lands is determined, in part, by the application of both systems, using PFLG classes 1 – 3, and the SCS units listed below:

SCS Map Unit #	Soil Description
Prime Upland Soils	
59	Giles silt loam
60	Giles Variant silt loam
61	Gilligan silt loam
100	Nargar loam, 0-8% slopes
116	Sauk silt loam
119	Sehome loam, 0-8% slopes
146	Tokul gravelly loam, 0-8% slopes

Mineral Resource Overlay

The County designates, as MRO, the following geologic formations, subject to consistency with other land-use designation criteria. Exclusionary criteria may result in some, otherwise qualified mineral resources undesignated. Refer to U.S. Geological Survey and WA DNR survey maps for explanations of the classifications used below. These maps are available for viewing at County Planning and Development Services. For WA DNR and Washington Geological Survey maps you can also cite the Washington Geological Survey's Geologic Information Portal.

Sand and Gravel Deposits	
Qa	Quaternary Alluvium
Qa(s)	Holocene Alluvium – Sand
Qaf	Holocene Alluvial Fan Deposits
Qga	Advance Glacial Outwash
Qgas	Advance Glacial Outwash – Sand
Qgdm(e)	Everson Glaciomarine Drift
Qgo	Glacial Outwash
Qgo(e)	Everson Interstade – Glacial Outwash
Qgo(es)	Everson or Sumas – Glacial Outwash
Qgo(i)	Ice-Contact – Recessional Outwash
Qgo(s)	Glacial Outwash – Sumas Stade
Qgoc	Glacial Outwash, silt and clay – Vashon Stade
Qgom(s)	Glacial Outwash, marine – Sumas Stade
Qoa	Older Alluvium
Qoa(s)	Older Alluvium – Sand Facies
Bedrock Formations	
JTRu(ts)	Dunite
JMV(u)	Greenstone
JI(f)	Greenstone
PMPms(c)	Limestone

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Goals and Policies

Element Organization

Agricultural Resource Lands. The Agricultural Resource Lands section establishes policies that ensure the long-term stability and productivity of the county's agricultural lands and industries. These policies are intended to provide clear guidelines for land use planning and implementation in agricultural areas. Also included are policies to establish programs and other measures that promote and protect the current and future needs of agriculture within Skagit County.

Forest Resource Lands. The intent of the Forest Resource Lands section is to ensure that forest lands of long-term commercial significance are conserved and managed to provide for sustainable forest yields, job stability, ecological values, and the continuation of a viable commercial forest industry in Skagit County. Conservation of forest land will maintain the land base needed to produce the timber for the long-term economy. Conservation of these resources must be assured through measures designed to prevent incompatible development on or adjacent to NRLs.

Rural Resource Lands. Rural Resource Lands are a mixture of NRLs that include the productive characteristics and uses of Agriculture, Forest, or Mineral Resource lands and as such, the goals, objectives, and policies for each of those designations are applicable to the Rural Resource lands designation. Natural resource uses on these lands are generally smaller in scale than on other resource lands, but Rural Resource lands are nonetheless designated lands of long-term commercial significance for resource purposes. Conservation of these lands is an important component in the long-term economic viability of countywide NRLs.

Mineral Resource Overlay. The County supports environmentally responsible and safe mineral resource extraction and processing activities. Mineral lands of long-term commercial significance are to be designated to conserve the mineral resource. These designations apply to areas within other NRLs where mining and processing activities are economically and environmentally feasible and where conflicts with other land uses can be minimized. Because mineral resources cannot be replaced or relocated, the County designates all commercially significant mineral resources to ensure that these lands are available for resource production far into the future.

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Right-to-Manage Natural Resource Lands. A variety of NRL management activities may not be compatible with non-resource uses and may be inconvenient or cause discomfort to those residing in or near designated NRLs. Through mandatory disclosure policies, this section seeks to minimize nuisance complaints regarding normal and necessary NRL operations.

Natural Resource Lands Clearinghouse. The County operates a number of programs for the preservation of NRL and related economic activities. This section provides ways in which these programs and their staffing can be organized and function as a coordinated clearinghouse for the on-going delivery of research, services, and education that are needed to achieve the goals of this Element.

Agricultural Resource Lands

Goal 4A Agricultural Resource Lands.

Agricultural Resource lands are those lands with soils, climate, topography, parcel size, and location characteristics that have long-term commercial significance for farming. The County is committed to preserving and enhancing the agricultural land base and promoting economic activities and marketing support for a strong agricultural industry. The agricultural community faces significant challenges in preserving the agricultural land base and a viable agricultural industry, including: conversion of agricultural lands to development and inappropriate habitat restoration; conflict with neighboring residential uses; drainage impacts; and other disruption of agricultural lands functions and values. The following policies are intended to ensure the stability and productivity of agriculture in Skagit County.

Agricultural Resource Designation Criteria

Goal 4A-1 Maintain land use designation criteria and densities for Ag-NRLs. Designate and map long-term commercially significant Agricultural Resource land accordingly.

policy 4A-1.1 **Agricultural Resource Lands Designation Criteria:** The following criteria, together with the State Department of Commerce Minimum Guidelines to Classify

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Agricultural lands in Washington Administrative Code (WAC) 365-190-050, shall be considered when designating Agricultural Resource lands:

(a) Generally, all lands in unincorporated Skagit County which are parcels five acres or greater, and that contain "prime farmland soils" as determined by the USDA Natural Resource Conservation Service (NRCS), shall be identified (see the narrative for a description of prime farmland soils). The County may also consider unique farmland soils and farmlands of statewide importance.

(b) Parcels meeting both (a) and (b) above shall be further evaluated for inclusion or exclusion in Agricultural Resource lands based upon the following additional factors:

(i) The land is in a current-use tax assessment program derived from the Open Space Taxation Act, RCW 84.34 as it pertains to agriculture.

(ii) The land is currently in agricultural use or has been in agricultural use within the preceding 10 years.

(iii) Existing land uses are primarily agricultural and minimal financial commitment to non-farm uses has been made.

(iv) The area includes special purpose districts (such as irrigation, diking and drainage districts) that are oriented to enhancing agricultural operations, including drainage improvement and flood control.

(v) Adjacent lands are primarily in agricultural use.

(vi) Land use in the area demonstrates a pattern of landowner capital investment in agricultural operation improvements such as irrigation, diking and drainage, manure storage, barn refurbishing, enhanced livestock feeding techniques, agricultural worker housing, etc.

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(c) The land is not already characterized by urban growth, and designation considers the effects of proximity to population areas. Parcels that may not meet any of the criteria described in (a), (b), and (c) above may nonetheless be included to provide logical boundaries to the Agricultural Resource lands designation and to avoid small "islands" or "peninsulas" of conflicting non-resource land uses in the midst of resource lands. Similarly, parcels that meet some or all of the criteria described in (a), (b), and (c) above may be excluded to provide logical boundaries to the Agricultural Resource lands designation and to avoid conflict with existing land uses.

(d) Conduct a comprehensive countywide analysis with WAC-365-190-040(10), and do not review Agricultural Resource lands on a parcel-by-parcel basis. Ag-NRLs are also subject to standards in WAC 365-190-050.

policy 4A-1.2 **Agriculture Resource Land Density Policy:** Residential gross densities for new land divisions in lands designated as Agriculture Resource shall be one (1) residential dwelling unit per 40 acres or 1/16 of a section.

Guiding Principles: Agricultural Resource Lands

Protect the agricultural land resource and farming in Skagit County; endeavor to minimize the loss of the resource; mitigate unavoidable losses; and replace lost resources whenever possible. These principles shall guide the County's actions to:

- *Preserve agricultural land for agricultural uses;*
- *Limit new non-agricultural uses and activities on Agricultural Resource lands;*
- *Provide education and support services that maintain the farming industry and lifestyle;*
- *Promote the economic benefits of farming;*
- *Resolve conflicts between agricultural and environmental objectives; and*
- *Monitor the long-term achievement of the goals and policies.*

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Agricultural Support Programs

Goal 4A-2 Support the Agricultural Advisory Board and other programs such as the Farmland Legacy Program for the purpose of promoting a viable agricultural land base and a healthy agricultural industry.

policy 4A-2.1 **The Agricultural Advisory Board** shall represent agricultural producers; reflect the diversity of agriculture; advocate sound agricultural policies and programs for Skagit County and promote economic opportunities for agriculture.

policy 4A-2.2 **The Conservation Futures Program Advisory Board** shall promote the preservation of agricultural land for use as farmland, including through its role in recommending purchases of permanent conservation easements on agricultural land and other lands of strategic significance.

policy 4A-2.3 **The Farmland Legacy Program** shall continue to lead and coordinate agricultural policy efforts and farmland protection. The Farmland Legacy Program shall coordinate both the Agricultural Advisory Board and the Conservation Futures Advisory Committee.

policy 4A-2.4 **Agricultural Resource Lands Database**: The County shall maintain a database of current information on land uses, farming activities, conversions of agricultural lands for development or habitat, soils, drainage systems, and other quantifiable factors for the purpose of monitoring and conserving agricultural lands.

policy 4A-2.5 **Agricultural Lands Status Report:** The County, through the Farmland Legacy Program, shall prepare a periodic report on the "state of Skagit County agriculture" using the US Census of Agriculture and other sources. The report shall include case studies and other information describing successes in implementing conservation easements, PDR, and other strategies. The report shall make recommendations for actions and steps for improvement based on the viability of the agricultural land base and strength of industry.

policy 4A-2.6 **Farmland Preservation Incentives:** The Agricultural Advisory Board, Conservation Futures Advisory Committee, and Farmland Legacy Program shall work to

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formulate strategies for improvements to agricultural production, marketing, processing, and farm labor practices and to develop and maintain programs which offer financial and other incentives to farm owners to preserve farmland for agricultural uses and to reduce their reliance on subdivision of land to raise operating capital.

policy 4A-2.7 **Agricultural and Critical Areas:** Consistent with the GMA, the County will a convene a watershed group to prepare a Voluntary Stewardship Work Plan for the Samish and Skagit watersheds in order to protect critical areas and promote the viability of agriculture.

policy 4A-2.8 **Natural Resource Lands Information Clearinghouse:** The County should develop a Natural Resource Information Clearinghouse to collect and disseminate information to benefit long-term productive management of NRL, including Agricultural Resource lands. Functions of the Natural Resource Lands Clearinghouse are described under Goal F of this Chapter.

policy 4A-2.9 **Financial and Estate Planning:** Encourage appropriate agencies to sponsor a variety of continuing educational and technical assistance programs to help farmers with financial planning. Such programs should emphasize options to protect farmland; business planning; farm transition planning; estate planning, and conservation programs, techniques, and strategies.

policy 4A-2.10 **Sustainable Agricultural Practices:** Information will be made available to landowners about sustainable agricultural practices, best management practices, and generally accepted management practices.

policy 4A-2.11 **Promote Agricultural Products:** Create and facilitate opportunities to promote and market agricultural products grown or processed in Skagit County through local branding.

policy 4A-2.12 **Promote Public Awareness:** Encourage public awareness of the value of agriculture to the county. Develop printed materials or other media that illustrate the contributions of agriculture to the county, the challenges facing agriculture, and that promote agricultural lifestyle.

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policy 4A-2.13 **Promote Education:** Encourage educational programs for public schools as part of the basic education of the county's youth. Emphasize the contributions of agriculture in the county and the need to protect and preserve this valuable resource base.

Preserve Agricultural Land Base and Use

Goal 4A-3 Promote preservation of agricultural land for agricultural uses, minimize non-farming uses on agricultural lands; and develop incentive programs to promote farming.

policy 4A-3.1 **Long-Term Designation of Agricultural Lands:** Designation of Agricultural lands is intended to be long-term. De-designation is discouraged, but may be considered only when compelled by changes in public policy, errors in designation, new information on resource lands or critical areas, circumstances beyond the control of the landowner, or an overriding benefit to the agricultural industry. Evaluate de-designation requests with the same criteria under policy 4A-1.1 used for designation of Ag-NRL, after a comprehensive countywide analysis is completed following requirements under WAC 365-190-040 (10).

policy 4A-3.2 **Development Rights Program:** Maintain and continue to fund the voluntary PDR through the Farmland Legacy Program to limit potential conversions or development in agricultural lands.

policy 4A-3.3 **Conservation Easements**: Where legally subdivided land would promote incompatible residential development, encourage the voluntary donation of conservation easements or other development restrictions to Skagit County or to a qualified private nonprofit organization for the purpose of preserving the perpetual agricultural use of the land.

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Allowable Land Uses

Goal 4A-4 Land uses allowed on designated agricultural land shall promote agriculture, agricultural support services, and promote diverse agricultural industries.

policy 4A-4.1 **Agricultural Production:** Agricultural production is the highest priority use in designated Agricultural Resource lands.

policy 4A-4.2 **Agricultural Support Services:** Facilitate agricultural production by allowing agricultural processing facilities, direct farm sales, and agricultural support services that support long term agricultural use.

policy 4A-4.3 **Farm-Based Business:** Farm-based businesses shall be allowed as an accessory use in Agricultural Resource land. Farm-based businesses are an accessory use, secondary to the primary agricultural use of a farm property, and shall not interfere with adjacent farming operations, cause nuisances for nearby residences, or generate large amounts of traffic.

policy 4A-4.4 **Residential Uses**: Residential uses shall be allowed only as an accessory use in Agricultural Resource land per Policy 4A-1.2 Agricultural Resource Land Density Policy.

policy 4A-4.5 **Special Events and Activities**: Special events and activities on agricultural lands shall be conducted in ways that reduce potential impacts resulting from the activity. Those impacts include but are not limited to traffic, litter, trespass, and sanitation.

policy 4A-4.6 Prohibit habitat restoration projects are a permitted use on agricultural lands except through a hearing examiner special use permit process to ensure the restoration project does not have an adverse impact on hydrologic functions, drainage infrastructure, or the ongoing agricultural use of adjacent properties.

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Minimize Land Use Conflicts

Goal 4A-5 Minimize land use conflicts and promote mitigation of conflicts on the lands adjacent to Agricultural Resource lands.

policy 4A-5.1 **Right-to-Manage Agricultural Resource Lands**: Goal E, Right-to-Manage Natural Resource Lands, applies to all lands designated Agricultural Resource lands to protect agricultural landowner rights to manage their lands for agricultural uses.

policy 4A-5.2 **Deed Restrictions**: All real estate transactions involving residential development on or within one mile of Agricultural Resource lands shall contain recorded documentation of the residential owners' acknowledgment of the potential farming activities and receipt of the Right-to-Manage Natural Resource Lands information.

policy 4A-5.3 **Cluster Development**: Clustered lots within or adjacent to an NRL designation shall be placed to minimize potential impacts to NRL production on both the subject property and any adjacent resource lands.

policy 4A-5.4 **Residential Setbacks**: All residential development adjacent to Agricultural Resource lands shall be set back from common property lines in order to protect agriculture from the impacts of incompatible development and to mitigate against the effects of agricultural operations on the residential developments.

policy 4A-5.5 **Skagit Drainage and Fish Initiative**: Within the Drainage Districts, identified in the Skagit Drainage and Fish Initiative, the agreements for maintenance, fish protection, and habitat restoration outlined in the Memorandum of Understanding (MOU) will predominate over local regulations. The MOU, developed by the Western Washington Agricultural Association (WWAA) and Washington Department of Fish and Wildlife (WDFW) is designed to reduce conflicts between different users in the Skagit and Samish River Deltas. The Skagit River Systems Cooperative (SRSC) participated in meetings and this Initiative represents movement toward overall reduced conflicts. This policy supports this movement.

policy 4A-5.6 **Drainage Plans:** Minimize and mitigate flooding and drainage impacts on agricultural lands. County Public Works shall develop criteria to review development proposals for drainage impacts on agricultural lands. Drainage plans for minimizing impacts of development shall be circulated to the affected Drainage District for comment prior to issuance of permits by Public Works.

Forest Resource Lands

Goal 4B Forest Resource Lands.

Forest Resource lands are those lands that due to soils, climate, topography, parcel size, and location have long-term commercial significance for forestry. The County is committed to preserving and enhancing the forest land base and promoting a strong forestry industry. The intent of these goals and policies is to ensure that forest lands of "long-term commercial significance" are conserved and managed to provide for sustainable forest yields, job stability, ecological values and the strengthening of a viable commercial forest industry in Skagit County. Conservation of forest land resources must be achieved through measures designed to preserve the land base, reduce the conversion of forest lands to other uses, prevent incompatible development on or adjacent to resource lands, and provide incentives to managing forest lands of all sizes for forestry.

Designation and Density Policies

Goal 4B-1 Establish land use designation criteria and densities for Forest Resource lands.

policy 4B-1.1 **Industrial Forest Land Designation Criteria**: The following criteria together with the State Department of Commerce Minimum Guidelines to Classify Forest Resource lands in WAC 365-190-060, shall be considered when classifying Industrial Forest lands:

(a) All lands in unincorporated Skagit County shall be screened for Industrial Forest designation based on an average parcel size of 40 acres or greater, with one or more of the following characteristics:

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(i) The area contains State Department of Revenue PFLG soils 1-5.

(ii) The area includes lands which are primarily devoted to and used for growing and harvesting timber.

(b) Lands meeting (a), located in blocks of contiguous parcels approximately 160 acres and larger, shall be designated Industrial Forest.

(c) Parcels meeting both (a) and (b) above shall be further evaluated for inclusion or exclusion in Industrial Forest lands based upon the following additional factors:

(i) The parcel is enrolled in a current-use tax assessment program under the provisions of RCW 84.33 and 84.34 as it pertains to forestry. Such current-use tax assessment status is not, by itself, a sufficient determining factor for inclusion or exclusion, but is only part of the relevant characteristics to be considered.

(ii) The area has limited public services and facilities (although the area may be located within a public water district).

(iii) The land is not already characterized by urban growth, and designation considers the effects of proximity to population areas.

(d) Parcels not meeting any of the criteria above in (a), (b), or (c) may still be included to provide logical boundaries to the Industrial Forest lands designation and to avoid small “islands” or “peninsulas” of conflicting non-resource land uses in the midst of resource lands. Similarly, parcels that meet some or all of the criteria above in (a), (b), or (c) may be excluded to provide logical boundaries to the Industrial Forest lands designation and to avoid conflict with existing land uses. For example, areas with pre-existing conditions such as vested subdivisions and rural development, other than isolated pre-existing single-family homes, where commercial forestry is not being practiced, and islands surrounded by multiple sized parcels with existing residences, shall not be classified as Industrial Forest lands. However,

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isolated, pre-existing residences shall not preclude the adjacent forest land areas from being classified Industrial Forest.

(e) Conduct a comprehensive countywide analysis with WAC 365-190-040(10), and do not review Forest Resource land designations solely on a parcel-by-parcel basis. Forest NRLs are also subject to standards in WAC 365-190-060.

policy 4B-1.2 **Industrial Forest Resource Land Parcel Density Policy**: Residential gross densities for new land divisions in lands designated as Industrial Forest shall be one residential dwelling unit per 80 acres or 1/8 of a section.

policy 4B-1.3 **Secondary Forest Resource Land Designation Criteria**: The following criteria shall be considered when designating Secondary Forest lands:

(a) Secondary Forest lands are derived from initially designated Industrial Forest lands, and are located primarily within a ¼-mile band at the perimeter of Industrial Forest lands which contain one or more of the following characteristics:

(i) The area contains State Department of Revenue PFLG soils 1-5.

(ii) The area includes lands which are primarily devoted to and used for growing and harvesting timber.

(b) The above-described parcels shall be further evaluated for inclusion or exclusion based on the following additional factors:

(i) The parcel is enrolled in a current-use tax assessment program under the provisions of RCW 84.33 and 84.34 as it pertains to forestry. Such current-use tax assessment status is not by itself a sufficient determining factor for inclusion or exclusion, but is only part of the relevant characteristics to be considered.

(ii) The area has limited public services and facilities (although the area may be located within a public water district).

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(iii) Secondary Forest lands need not be designated adjacent to Agricultural lands.

(c) Parcels that do not meet any of the criteria described above in (a) or (b) may still be included or excluded to provide logical boundaries to the Secondary Forest land designation and to avoid small "islands" or "peninsulas" of conflicting non-resource land uses in the midst of resource lands. Isolated, pre-existing residences shall not preclude the adjacent forest land areas from being classified Secondary Forest. (e) Conduct a comprehensive countywide analysis consistent with WAC 365-190-040(10), and do not review Forest Resource land designations solely on a parcel-by-parcel basis.

policy 4B-1.4 **Secondary Forest Parcel Density Policy**: Residential gross densities for new land divisions in lands designated as Secondary Forest shall be one (1) residential dwelling unit per 20 acres or 1/32 of a section.

Guiding Principles: Forest Resource Lands

Protect the forest resource; promote forestry, minimize the loss of the resource land base, mitigate unavoidable losses, and replace lost resources whenever possible. These principles shall guide the County's actions to:

- *Limit new non-forestry uses and activities on Forest Resource lands;*
- *Provide education and support services that strengthen and diversify the forestry industry;*
- *Promote the economic and regulatory stability of the forest industry;*
- *Resolve conflicts between forestry activities and non-forestry activities; and*
- *Carry out adopted policies and programs, and enforce regulations.*

Forestry Support Programs

Goal 4B-2 Support the Forestry Advisory Board (FAB)and establish other support programs for the purpose of promoting a viable forest land base and healthy forest products industry.

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policy 4B-2.1 **Forestry Advisory Board:** A FAB comprised of forest industry representatives, agency representatives, and sustainable forestry advocates shall advise the County in achieving these goals and policies.

policy 4B-2.2 **Forestry and Critical Area/Habitat Goals**: The FAB will develop a County-coordinated working group of non-profit organizations, industry groups and County agencies to reconcile, where possible, conflicts between the goals of protecting critical areas and habitat with those of preserving forest land for commercial forestry purposes.

policy 4B-2.3 **Natural Resource Information Clearinghouse:** Establish a Natural Resource Lands Information Clearinghouse to provide information and technical assistance to the forest industries and forest landowners to conserve forest lands, promote sustainable management practices, encourage economic and market opportunities.

policy 4B-2.4 **Promote Sustainable Forestry Practices:** Provide information to landowners about sustainable forestry practices, best management practices, and industry standards to promote sound forestry practices.

policy 4B-2.5 **Healthy Forest Initiative:** The County should continue to support a countywide initiative to promote fuel-reduction and forest restoration projects in cooperation with the USDA, DNR, and other federal and State agencies.

policy 4B-2.6 **Right-to-Manage Forest Resource Lands:** Goal E, Right-to-Manage Natural Resource Lands of this Element, applies to all lands designated Forest Resource lands to protect forest landowner rights to manage their lands for forestry uses.

policy 4B-2.7 **Fire Prevention and Protection:** Residential development allowed on Industrial Forest Resource lands shall be limited to those areas located within an existing fire protection district and within 200 feet of a county road or state highway. The County shall require owners of all structures built in the designated forest lands to address forest fire prevention, reduction, and control. The FAB shall review the implementation of this policy annually to ensure its performance.

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policy 4B-2.8 **Promote Public Education and Awareness:** Educate the public on forestry issues, policies and programs regarding forestry in Skagit County. Encourage community awareness of and commitment to an economically and environmentally healthy forest industry, forestry achievements, and challenges faced by the industry in Skagit County.

policy 4B-2.9 **Promote Educational Programs:** Encouraged educational programs for public schools and extended education programs as part of the basic education of the county's youth. Emphasize the contribution of forestry in the county and the need to protect and preserve this valuable industry.

policy 4B-2.10 **Promote Economic Stability and Diversity:** Promote and foster new opportunities to achieve a stable and diversified forest products industry in Skagit County. Encourage and support programs to help the forest products and related industries expand into new market niches.

policy 4B-2.11 **Wildfire Planning Program:** Continue the National Fire Protection Association's "Firewise Communities Program" consistent with the Natural Hazards Mitigation Plan and with agency partners such as the Skagit Conservation District, fire districts and state agencies.

policy 4B-2.12 Develop a county-wide comprehensive wildfire resilience strategy planning program to increase public safety and awareness regarding forest fire dangers, and establish the means of managing, reducing and suppressing catastrophic wildfires.

policy 4B-2.13 Identify and implement strategies for reducing residential development pressure in the Wildland Urban Interface.

Preserve the Forest Land Base

Goal 4B-3 Preserve and enhance the forest land base as an essential component of a healthy forest economy.

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policy 4B-3.1 **Conserve Forest Lands:** Implement conservation and management measures that retain commercial forestry activities in designated Forest Resource lands.

policy 4B-3.2 **Consolidated Ownership:** Forest resource landowners are encouraged to consolidate forest ownership through land trades, or other means, to ensure consistent and effective management within the Forest Resource land base.

policy 4B-3.3 **Long-Term Designation of Forest Lands:** Designation of Forest lands is intended to be long-term. De-designation is discouraged, but may be considered only when compelled by changes in public policy, errors in designation, new information on resource lands or critical areas, or other circumstances beyond the control of the landowner, or an overriding benefit to the forest industry. Evaluate de-designation requests with the same criteria under 4B-1.1 and 4B-1.3 used for Industrial Forest Resource lands and Secondary Forest Resource lands. Consider the development of mitigation measures and criteria for the loss of productive lands.

Encourage Commercial Forestry

Goal 4B-4 Encourage active forest management in designated Forest lands and other NRL.

policy 4B-4.1 **Develop Forestry Incentive Options Program:** The County will work with the FAB and other entities to develop an incentive program to promote preservation of forest land for forestry. Consideration will be given to:

- The loss of land base due to the protection of environmentally sensitive areas;
- Compensation for development rights;
- The promotion of healthy forests; and
- The loss of land base to habitat conservation areas.

The County will make a determination of the state of the forestry economy, the land base, the actual threats and opportunities, types of available, practical and

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appropriate to the local economy, and the implications to local taxpayers and fiscal health of the County.

policy 4B-4.2 **Forestry in Agricultural and Rural Designations:** Growing and harvesting of trees shall be supported in designated Agricultural and Rural land designations.

policy 4B-4.3 **Qualification For Current Use Tax Status:** Land owners participating in a current-use tax deferral program may be required by the County Assessor to certify, on an annual basis, that the conditions required for eligibility in the tax program are still being met, and further, that the owner acknowledge the requirement to pay any applicable penalties and back taxes should the owner fail to comply with program requirements.

policy 4B-4.4 **Discourage Tax Districts and Local Improvement Districts (LIDs):** Special purpose taxing districts and LIDs that plan to expand into Industrial Forest lands, allowing as a result new residential or commercial development, shall be required to provide an analysis of impacts and related mitigation of such new, non-resource development on established commercial forestry operations.

Allowable Land Uses

Goal 4B-5 Allow land uses on designated Forest land that conserve forest practices, provide essential forestry support services, and promote diverse forest-based industries.

policy 4B-5.1 **Intended Use of Industrial and Secondary Forest Lands:** The principal uses of Industrial Forest and Secondary Forest lands are the practice of commercial forestry, forestry support services, and forest-based businesses. Secondary Forest lands are intended to provide a transitional density between Rural-designated lands and Industrial Forest lands. Secondary Forest lands also offer the potential for smaller-scale commercial timber operations, supporting natural resource industries, and limited residential uses. Secondary Forest lands may include low-density residential use if consistent with the goals and policies of this element. Mining is also allowed in Industrial Forest and Secondary Forest on parcels located within an MRO designation.

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policy 4B-5.2 **Support and Ancillary Structures and Uses:** Temporary and permanent support uses that are related to forestry are allowed in Forest lands. Festivals, logging shows, and demonstration areas, mining uses where designated, limited residential development, and non-residential structures subordinate to forest management may be allowed if it is demonstrated that there is compatibility with the goals and policies of this Element.

policy 4B-5.3 **Residential Development:** Residential development on all Forest Resource land shall have limited impact on forest resource management operations and minimize conflicts. CaRD land divisions are encouraged in all Forest lands with the residences sited as far as possible from adjacent Industrial Forest lands.

policy 4B-5.4 **Recreational and Park Uses:** Recreational opportunities on Forest Resource land shall be permitted uses where they will not conflict with forest practice activities on these lands or when such impacts can be fully mitigated. Proposed acquisitions of Forest land for public recreational, scenic, and park purposes shall be evaluated to determine the potential impacts on the economic viability and sustainability of forestry. Lands removed from forestry production for recreation and park uses shall be included in the Converted Natural Resource Lands Database (Policy 4F-1.4).

policy 4B-5.5 **Natural Resource Conservation Areas (NRCA) and Natural Area Preserves (NAP)**, as defined by RCW 79.71, shall be considered compatible with Industrial Forest. However, the County strongly encourages that these lands be maintained in forest production. If NRCA or NAP lands are taken out of forestry production, they shall be included in the Converted Natural Resource Lands Database (Policy 4F-1.4).

policy 4B-5.6 **Special Events and Activities:** Special events and activities on Forest Resource lands shall be conducted in ways that reduce potential impacts resulting from the activity. Those impacts include but are not limited to traffic, litter, trespass, and sanitation.

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Minimize Land Use Conflicts

Goal 4B-6 Minimize land use conflicts and promote mitigation of conflicts on the lands adjacent to Forest lands.

policy 4B-6.1 **Deed Restrictions:** All real estate transactions involving development on or within ¼-mile of Forest Resource lands shall contain recorded documentation of the owners' acknowledgment of the potential forestry activities and receipt of the Right-to-Manage Natural Resource Land information.

policy 4B-6.2 **Land Use Buffers:** Land use buffers or setbacks intended to mitigate for critical areas or potential conflicts between residential and forestry uses shall be located on the area proposed for residential, or other non-resource use or development.

policy 4B-6.3 **Law Enforcement Support:** The County shall provide an officer from the Sheriff's Department to protect against damage to private property, materials, and equipment, and to improve investigation and prosecuting efforts on behalf of protecting Forest NRLs, land owners, and their contractors.

Effective Regulatory Environment

Goal 4B-7 Establish, in all aspects of forest management regulations, support for the forest product industry and its ability to keep and economically manage Forest lands.

policy 4B-7.1 **Local Regulations:** Maintain efficient, effective local forest policies, ordinances, and programs.

policy 4B-7.2 **Coordinated Review with WA DNR:** The County will work with the WA DNR to formally establish a coordinated review process designed to transfer the processing of Forest Practice Act (FPA) conversion applications from the WA DNR to the County as required by Chapter 76.09 RCW and Title 222 WAC. A Memorandum of Agreement with the WA DNR shall address:

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(a) A coordinated and efficient review process for all forest practices applications where the County has jurisdiction;

(b) Conditions of approval by the County for such forest practice applications consistent with Chapter 76.09 RCW and Title 222 WAC;

(c) A facilitation process for landowners wishing to utilize the conversion option harvest plan as outlined under WAC 222-20-050; and

(d) Criteria for permitting only those recreational activities that are compatible with resource management. The proposed recreational uses shall not adversely affect the intent of these forest resource policies.

policy 4B-7.3 **Building and Land Use Moratorium:** A six-year moratorium on all building permits and land use approvals shall be mandatory for all forest practice activities involving those portions of land harvested under the provisions of a Forest Practice application, where the landowner has not indicated that the land will be converted. If applicable, measures will be taken to exclude cedar salvage and work to carry out a Road Maintenance and Abandonment Plan (RMAP); and

policy 4B-7.4 **Alternative Conversion Option Harvest Plan Process:** The County will work with forest landowners to establish an alternative Conversion Option Harvest Plan (COHP) process for the purpose of expediting and minimizing the cost of certain non-conversion forest practice activities as follows:

(a) Salvage operations as defined in WAC 222-16-010.

(b) Forest Practices on partially converted or vacant property (over two acres) which was platted after January 1, 1960, where the landowner does not have immediate intent to convert the timbered portion thereof.

Forest Carbon Sequestration and Storage

Goal 4B-8 Establish, in all aspects of forest management regulations, support for the forest product industry and its ability to keep and economically manage Forest lands.

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policy 4B-8.1 Promote and encourage sustainable forest management actions that consider the life cycle of carbon storage over time, across all pools, including but not limited to, soil, green biomass, harvested wood products, reuse, recycling, and end of life fate.

policy 4B-8.2 Acknowledge the vital role that forest management plays in wildfire risk reduction, carbon storage, and carbon sequestration.

policy 4B-8.3 County actions should conform to and support RCW 70A.45.090, which stipulates, “Washington's existing forest products sector, including public and private working forests and the harvesting, transportation, and manufacturing sectors that enable working forests to remain on the land and the state to be a global supplier of forest products.

policy 4B-8.4 Retain the value of working forests by ensuring the long-term maintenance of an intact and synergistic industrial sector, as an integral component of the State’s contribution to the global climate response and efforts to mitigate carbon emissions.

policy 4B-8.5 Promote and encourage forest management and forest sector practices that do not result in substitution, leakage, or negative environmental outcomes.

policy 4B-8.6 Support local, State, and federal programs that promote sustainable forest management practices to reduce greenhouse gas emissions by minimizing wildfire risk.

policy 4B-8.7 Support local mills using regional wood supplies minimizing the carbon footprint from outsourced wood products.

policy 4B-8.8 Continue to review best available science on working forests as an effective method of carbon sequestration and update policies as needed to support sustainable forest management as a method of carbon sequestration.

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Rural Resource Lands

Goal 4C Conserve Rural Resource lands that have characteristics of long-term Agricultural, Forest or Mineral lands of long-term commercial significance and have the potential for multiple use or smaller scale resource management.

Rural Resource lands are, generally, areas that have the combined land and land-use characteristics of long-term Agricultural, Forest or Mineral lands of long-term commercial significance, and have the potential for multiple use or smaller scale resource management. Rural Resource lands generally are not managed for industrial-scale farming or forestry but nevertheless contribute to the NRL base. Where the MRO designation is also applied, industrial-scale mining can occur.

Rural Resource Designation Criteria

Goal 4C-1 Establish land use designation criteria and residential densities for Rural Resource lands.

policy 4C-1.1 **Rural Resource Land Designation Criteria:** All lands in rural unincorporated Skagit County not designated as Agriculture, Industrial Forest, or Secondary Forest are subject to Rural Resource lands designation according to the following criteria:

(a) All parcels approximately 40 acres or greater that contain one or both of "Prime upland farmland soils" as determined by USDA SCS (see the narrative), or State Department of Revenue PFLG 1–3.

(b) Lands meeting (a) above that comprise contiguous areas of approximately 160 acres and larger; provided that any parcel 40 acres or larger that is located contiguous to any land designated Agriculture, Industrial Forest, or Secondary Forest generally may be designated Rural Resource regardless of whether it is contained within such a large area.

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(c) Parcels meeting both (a) and (b) above shall be further evaluated for inclusion or exclusion in Rural Resource lands based upon the following additional factors:

(i) Participation in a current-use tax assessment program. Such current-use tax assessment status is not, by itself, a determining factor for inclusion or exclusion, but is only part of the relevant characteristics to be considered;

(ii) Whether the area is currently in small-scale agriculture or forestry use or has been in agricultural or forestry use within the preceding 10 years, and minimal improvements or financial expenditures have been made to non-resource related uses in the area as a whole. Construction of a single-family residence on any parcel of land shall not be deemed a sufficient non-resource related expenditure for purposes of this subsection; and

(iii) Whether the area has limited availability of public services and facilities (although the area may be located within a public water district).

(d) Parcels that do not meet any of the criteria described above in (a), (b), or (c) may be designated as Rural Resource to provide logical boundaries to the Rural Resource lands designation and to avoid small “islands” or “peninsulas” of conflicting non-resource land uses in the midst of resource lands. Similarly, parcels that meet some or all of the criteria described above in (a), (b), or (c) may be excluded to provide logical boundaries to the Rural Resource lands designation and to avoid conflict with existing land uses.

policy 4C-1.2 **Rural Resource Land Density Policy:** The standard maximum residential density in Rural Resource land for new land divisions shall be one dwelling unit per 40 acres, or 1/16 of a section. One dwelling unit per 10 acres may be allowed if a condition, covenant, restriction, or a conservation easement is executed that is designed to encourage long-term forest and agricultural land conservation consistent with the CaRD land division regulations.

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Guiding Principles: Rural Resource Lands

Allow a range of natural resource related uses on Rural Resource land and provide for reasonable uses of the land that will be compatible with the long-term production of agricultural and forest products. These principles shall guide the County's actions to:

- *Preserve Rural Resource lands primarily for agricultural and forestry uses;*
- *Promote the rural qualities that characterize Skagit County; and*
- *Resolve conflicts between natural resource related activities and non-resource activities.*

Resource Lands Support Programs

Goal 4C-2 Establish programs to provide information and technical assistance to Rural Resource lands managers and planners.

policy 4C-2.1 **Natural Resource Information Clearinghouse:** Establish a Natural Resource Lands Information Clearinghouse to provide information and technical assistance to owners of Rural Resource lands to conserve NRLs, promote sustainable management practices, encourage economic and market opportunities, and provide other vital information.

policy 4C-2.2 **Rural Resource Lands Database:** Develop a Rural Resource lands database including information on soil types, land use, productivity, and ownership to promote appropriate future land use planning on these lands.

Allowable Land Uses

Goal 4C-3 Allow uses in Rural Resource lands that further the use of the lands for the production of agricultural, forest, and mining products and uses.

policy 4C-3.1 **Principal uses** of Rural Resource lands include natural resource production and businesses that support or are compatible with agriculture, forestry, and mining activities.

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policy 4C-3.2 **Accessory uses** allowed on Rural Resource lands include agricultural and forest-based businesses and small businesses that support or are compatible with natural resource production.

policy 4C-3.3 **Residential uses** are allowed on Rural Resource lands consistent with the density policies of this Element.

Minimize Land Use Conflicts

Goal 4C-4 Minimize land use conflicts and promote mitigation for potential conflicts on the non-rural resource property.

policy 4C-4.1 **Right-to-Manage Rural Resource Lands:** Goal 4E, Right-to-Manage Natural Resource Lands, applies to all lands designated Rural Resource to protect landowner rights to manage their lands for natural resource production.

policy 4C-4.2 **Deed Restrictions:** All real estate transactions involving development on or within ¼-mile of Rural Resource lands shall contain recorded documentation of the residential owners' acknowledgment of the potential natural resource management activities and receipt of the Right-to-Manage Natural Resource Lands information.

policy 4C-4.3 **Special Events and Activities:** Special events such as festivals and fairs proposed for Rural Resource lands shall only be permitted when impacts such as traffic, litter, trespass, and sanitation are mitigated.

Mineral Resource Overlay (MRO)

Goal 4D Conserve Mineral Resource lands of long-term commercial significance where mining and processing activities are economically and environmentally feasible and where conflicts with other land uses can be minimized.

The County supports environmentally responsible and safe mineral resource extraction and processing activities. Mineral Resource lands where mining and processing activities are

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economically and environmentally feasible and where conflicts with other land uses can be minimized are to be identified and designated as MRO to conserve Mineral Resource lands of long-term commercial significance. Because mineral extraction sites can take 20 to 40 years or longer to excavate, identifying and protecting opportunities for mineral extraction operations requires a long-term planning horizon.

Extraction and processing of construction material such as sand and gravel make up most of the mining activity in Skagit County, although there is significant hard-rock mining and processing of such resources as olivine, various other “green rock,” and limestone. Protection of these mineral resources from competing land uses ensures the availability of basic building materials, and helps to reduce costs, as producers would otherwise be forced to transport low value, high volume commodities over long distances.

The potential for mining without adverse impacts is greatest in relatively undeveloped areas. Valuable and non-replaceable resources in these areas are preserved, to the extent possible, by indicating that mining will be the preferred land use for these areas, and by establishing guidelines for adjacent land uses that will help reduce potential conflicts with mining. Extractive industries can conflict with residential uses in several ways, including potential noise, dust, and hazards from blasting, rock crushing, and heavy truck traffic. Therefore, it is important to establish firm policies and regulations to protect public health and safety, while also preserving a valuable part of Skagit County’s economy, now and into the future.

Concerns and issues related to mining activities in riverine areas are addressed in the Skagit County SMP. Concerns and issues related to metal mining are addressed at the state level. The WA DNR and Ecology have previously codified the State metal mining law. This element proposes not to allow chemical leach mining in Skagit County until State laws are enacted to allow such activities.

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Goal 4D-1 Designate and map long-term commercially significant Mineral Resource lands as an overlay to the Comprehensive Plan Map. In classifying, designating and de-designating Mineral Resource lands, counties and cities must conduct a comprehensive countywide analysis consistent with WAC 365-190-040(10), with the exception of owner-initiated requests for designation. The County should not review Mineral Resource land designations solely on a parcel-by-parcel basis. The County may de-designate Mineral Resource lands without a comprehensive countywide analysis if mining operations have ceased and the site reclaimed.

policy 4D-1.1 **Mineral Resource Designation Criteria:** Designate MRO based on geologic, environmental and economic factors, existing land uses, land ownership, surrounding parcel sizes, and additional criteria specified in this Element and in the Minimum Guidelines to Classify Mineral Lands in WAC 365-190-070. Designating mineral resources of long-term commercial significance is not limited by a projection of need. Like Agricultural and Forest lands, mineral resources are protected for the long-term. The following first tier of criteria relies primarily on geologic information to identify commercially significant Mineral Resource lands and shall be considered when designating MRO areas.

(a) **Marketability**. Lands containing minerals that are minable, recoverable, and are historically, and therefore anticipated to be, commercially traded are considered marketable.

(b) **Minimum Threshold Volume**. Construction materials (sand and gravel) and quarry rock are considered for mining when the estimated volume is such that establishing, maintaining, and reclaiming the mine would be practical. For the minerals below, minimum threshold volumes are relatively constant compared to market values and are used in the mining industry as predictors of commercial significance. The application of these criteria is approximate using the estimated area and depth of the identified resource.

(i) **Construction materials**: A minimum threshold volume of 1,000,000 cubic yards shall be used to identify commercially significant

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deposits of sand, gravel, and pit run rock, capable of being used in construction, that normally require minimal processing (commonly washing and grading).

(ii) **Quarry rock**: A minimum threshold volume of 1,000,000 cubic yards shall be used to identify commercially significant deposits of quarry rock products, such as shot rock meeting all strength and durability specifications of WSDOT's 2004 Standard Specifications for Road, Bridge, and Municipal Construction (or later editions).

(c) **Minimum Threshold Value**. All other mineral resources shall use a minimum threshold value to identify commercially significant mineral resource deposits. The values in 2000 equivalent dollars shall be met or exceeded. Threshold value is the projected value (gross selling price) of the first marketable product from an individual mineral deposit, upon completion of the extraction and any required mineral separation and processing. The threshold values are intended to indicate in a general way the approximate minimum size of a mineral deposit that will be considered significant for designation. The values are not intended, nor in practice could they be, for use as precise threshold values.

(i) **Industrial and Chemical Mineral Materials**: Minimum value $1,000,000. Non-metallic mineral materials, such as building and dimension stone, limestone, or specialty sands, which normally receive extensive processing.

(ii) **Metallic and Rare Minerals**: Minimum value $500,000. Metallic elements and minerals, gemstones, and minerals that possess special properties valuable to science or industry, including dunite and other olivine-rich rock.

(iii) **Non-fluid Mineral Fuels**: Minimum value $1,000,000. Non-hydrothermal mineral fuels occurring in sedimentary rocks such as coal bed methane, bituminous coal, lignite, peat, organic shale, tar sand, uranium, and thorium.

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policy 4D-1.2 **Standards for Geologic Information:** Adequate information for the purpose of designating areas within the MRO shall consist of, but not be limited to, site-specific information prepared by a licensed geologist, U.S. Geological Survey maps, and/or information on file with the WA DNR.

policy 4D-1.3 **Mineral Resource Designation Considerations:** All lands meeting the criteria in Policy 4D-1.1 shall be further reviewed considering the following additional criteria. Certain limited pre-existing designated MRO lands that may not meet the criteria below may retain their MRO status to address unique economic circumstances or access-to-market.

(a) General land use patterns in the area;

(i) Designate MRO only on lands designated as Industrial Forest, Secondary Forest, or Rural Resource.

(ii) Designate MRO lands outside National Park Service lands, National Forest Service lands, Wild and Scenic corridors, Agricultural Resource lands, and OSRSI.

(iii) Residential gross densities for land designated as MRO shall be no greater than one residential dwelling unit per 10 acres.

(iv) The preferred land uses adjacent to designated mining sites are open space, forestry, or industrial uses.

(b) Surrounding parcel sizes and surrounding land uses. Designate MRO lands in areas with surrounding land uses that have a maximum designated density of one residence per 10 acres. Appropriate surrounding land use zoning for MRO lands include: Industrial Forest, Secondary Forest, Rural Resource, Rural Reserve, Natural Resource Industrial, and other industrial uses;

(c) Availability of public roads and other public services. Although mining within one to two miles of public roads is preferred, designation of mineral resources beyond this range may be necessary to preserve resources for future use;

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(d) Division or zoning for urban or small lots. Designate MRO areas ¼-mile away from Rural Villages, RI, and, UGAs, except in limited cases where pre-existing mineral extraction areas may be retained to address unique economic circumstances or proximity-to-market. Conservation and Reserve Developments are acceptable on and within ¼-mile of MROs, provided that the allowed density (with or without a density bonus) does not exceed one dwelling unit per 10 acres.

(e) Accessibility and/or distance from point of use. Although mining is preferred within two hours driving distance from incorporated cities or other points of use, designation of mineral resources beyond this range may be necessary to preserve resources for future use;

(f) Physical and topographic characteristics of the site or area do not preclude mining;

(g) Depth of the resource or its overburden does not preclude mining;

(h) Physical properties (such as strength or durability) and quality of resource (such as the percentage of fines in the resource) is sufficient to be marketable;

(i) Life of the resource is sufficient to be marketable;

(j) Resource availability in the region. All mineral resources of long-term commercial significance are designated. This helps to ensure that resources are available, and local industry can be responsive to future demand; and

(k) Policies and regulations are in place to mitigate the potential effects of sediments and pollutants on public drinking water.

policy 4D-1.4 **Mineral Resource Overlay Density Policies:** Residential gross densities on or within ¼-mile of an MRO shall be no greater than one residential dwelling unit per 10 acres. New subdivisions with densities greater than one unit per 10 acres may be permitted only if the additional development rights can be transferred to

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and clustered on that portion of the same property lying outside of ¼-mile from the MRO, consistent with the CaRD land division regulations.

Guiding Principles: Mineral Resource Overlay

Maintain and enhance conservation of long-term commercially significant Mineral Resource lands so that use of, and access to these lands is not precluded by conflicting land uses through the designation of an MRO. These principles shall guide the County's actions to:

- *Maintain and enhance conservation of long-term commercially significant Mineral Resource lands.*
- *Maximize compatibility between mineral extraction operations and other land uses.*
- *Reduce conflicts between mining operations and adjacent land uses so that access to mineral lands is not precluded by conflicting land uses; and*
- *Promote the economic and regulatory stability of the mining industry.*

Conserve Mineral Resource Lands

Goal 4D-2 Protect and conserve Mineral Resource lands of long-term commercial significance.

policy 4D-2.1 **Designate Mineral Resource Overlay:** Areas meeting the criteria for mineral lands of long-term commercial significance shall be identified as Mineral Resource Overlay on the Comprehensive Plan Land Use and Zoning Map. Designations and de-designations of Mineral Resource lands are subject to WAC 365-190-070.

policy 4D-2.2 **Allowable Mineral Extraction Activities:** Activities associated with mineral extraction operations are those activities that further develop the base product of the mineral being extracted. Examples of these activities include washing, crushing, asphalt plants, and concrete batch plants. Associated activities shall be allowed as a hearing examiner special use within the MRO or in areas designated NRI. Those associated activities must meet the requirements of the Special Use Permit specific to those areas and must be listed as permitted uses in those

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Districts. Temporary activities associated with construction projects may be permitted as part of the related construction permit review and may be conditioned as necessary to address applicable mining regulations.

policy 4D-2.3 **Natural Resource Lands Information Clearinghouse:** Establish a Natural Resource Information Clearinghouse to collect and disseminate information to benefit long-term productive management of NRLs, including Mineral Resource areas. Functions of the Natural Resource Lands Clearinghouse are described under Goal F of this Element, but should include: information on mining practices, reclamation, promotion of mining products and public awareness, and education regarding mining activities.

Reduce Land Use Conflicts

Goal 4D-3 Discourage incompatibility and reduce conflicts between mineral extraction operations and other land uses.

policy 4D-3.1 **Exclusive Mineral Resource Overlay:** The MRO adds additional uses and related requirements to the Industrial Forest, Secondary Forest, Rural Resource, and NRI districts of the Comprehensive Plan and Zoning Map. New mining is limited to the MRO, subject to applicable permits. However, pre-existing, permitted mining operations outside the MRO may operate subject to the terms of the existing approval(s). Such operations may expand beyond the scope of the original permit but within the existing parcel provided that they receive a mining special-use permit.

policy 4D-3.2 **Right-to-Manage Mineral Resource Lands:** The provisions of Right-to-Manage Natural Resource Lands shall apply to all lands designated MRO to protect Mineral Resource landowner rights to manage their lands for mining uses.

policy 4D-3.3 **Deed Restrictions:** All real estate transactions involving residential development on or within 1/4-mile of Mineral Resource lands shall contain recorded documentation of the residential owners' acknowledgment of the mineral

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extraction activities and receipt of the Right-to-Manage Natural Resource Lands information.

policy 4D-3.4 **Development Regulations:** Development regulations for the MRO shall identify permitted uses in MRO lands.

policy 4D-3.5 **Siting Adjacent Residential Development:** New residential development adjacent to a designated MRO should be sited to help minimize potential conflicts between residences and mining operations.

policy 4D-3.6 **Mining Site Buffer Standards:** Mining buffer standards shall maintain the purpose and functions of Mineral Resource lands. These standards shall require equivalent buffers on mining sites and on adjacent properties with the exception of mines adjacent to mines. Excavation shall not occur within the buffer of any mine except during reclamation and on mines adjacent to mines. Storage of topsoil and excavation associated with reclamation area may be allowed in buffers.

policy 4D-3.7 **Mining Activities Buffer Standards:** Buffers and setbacks should be provided for all activities associated with mineral extraction operations in addition to those required for mineral resource areas.

policy 4D-3.8 Incorporate MRO education and resources to the Planning and Development Services Natural Resource Lands website that provides education on Mineral Resource lands.

policy 4D-3.9 Utilize existing statewide resources for natural resource administration like the WA DNR Geologic Information Portal (https://www.dnr.wa.gov/geologyportal).

Effective Regulatory Environment

Goal 4D-4 Coordinate and implement administrative procedures that encourage consistency among permitting jurisdictions and simplify permitting procedures for the applicants and the County.

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policy 4D-4.1 **Coordinate State and Local Regulations:** Development regulations for Mineral Resource lands in the county shall be consistent with applicable State mining regulations, including the WA DNR rules. Overlap in the regulatory authority between the County and the WA DNR may occur to ensure public health and safety in matters not under the WA DNR's jurisdiction.

policy 4D-4.2 **Improve Local Permit Process:** Consider a process to allow certain mining operations by administrative special-use permit, if certain defined criteria are met. Such a process should include a requirement to upgrade the level of review to a hearing examiner special-use permit, if information relating to potential adverse environmental impacts or other factors warrant additional public review. Also establish criteria for appeal and public notification requirements.

Safe Operations

Goal 4D-5 Ensure safety and minimize off site disturbances associated with operating equipment, noise, dust, glare, vibrations, and truck traffic.

policy 4D-5.1 **Noise Impacts:** Sound levels, as measured on properties adjacent to the mining site, shall conform to the provisions of WAC Section 173-60-040, Maximum Permissible Environmental Noise Levels.

policy 4D-5.2 **Traffic Impacts:** Potential effects of truck traffic from mining operations shall be reviewed as part of the permitting process.

policy 4D-5.3 **Roads and Bridges:** New public roads and bridges accessing designated MRO shall be designed to sustain the necessary traffic for mineral extraction operations. Existing roads and bridges shall be improved as needed as each new extraction operation is developed. Cost sharing for the improvement of roads and bridges shall be negotiated between the permitting authorities and the applicant.

policy 4D-5.4 **Operation Hours:** Standards for hours of operations, appropriate for the underlying land-use designation, shall be established for mineral extraction operations. In determining appropriate hours of operation, consider traffic impacts and requirements, nearby uses, and noise impacts. Project-specific

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circumstances that demand non-standard or 'off-peak' hours may also be considered.

policy 4D-5.5 **Blasting Timing:** Vibrations from blasting operations and underground blasts causing noticeable vibrations shall be limited to daylight hours when adjacent to residential areas. Blasts should be scheduled for regular and predictable times except in the case of emergencies. Blasting shall be conducted in accordance with the state permit.

policy 4D-5.6 **Noise and Blasting Mitigation:** Site-specific studies shall be conducted to determine appropriate mitigation or noise and blasting for new operations and expansion areas of existing operations. Standards shall be maintained to implement existing and accepted methods by which vibrations and noise shall be measured and appropriate mitigation established to alleviate incompatibilities.

policy 4D-5.7 **Pre-Existing Mining Operations:** Pre-existing, legally operating commercial mining operations outside the MRO may continue to operate subject to the terms of the existing approval(s). Such operations may expand beyond the scope of the original approval and within the existing parcel boundary provided that they receive a mining special-use permit.

policy 4D-5.8 **Chemical Leach Mining:** Chemical leach mining shall not be allowed until State laws are enacted which address their impacts.

Water Quality

Goal 4D-6 Ensure that water quality protection standards associated with mining operations comply with best management practices.

policy 4D-6.1 **Reclamation Plan:** Support the WA DNR requirement that reclamation plans specify how overburden and spoil material is to be handled and placed in a manner which will control erosion, dust, sedimentation or leaching of material and hazardous substances into surface or ground waters.

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policy 4D-6.2 **Storage Ponds:** Storage pond systems for holding mineral processing waters should be designed to preclude untreated discharge as required by federal and State laws.

policy 4D-6.3 **Erosion Prevention:** The flow of natural or process runoff from mineral extraction sites shall be dispersed or regulated such that soil erosion on receiving lands is prevented. Natural runoff includes any water that runs on disturbed ground, including stormwater and 'process water' that flows through operation.

policy 4D-6.4 **Aquifer Barriers:** Surface mining shall be vertically limited to only one aquifer unless specifically approved by Ecology. Hydrological barriers separating aquifers shall not otherwise be destroyed.

policy 4D-6.5 **Aquifer Reclamation:** Reclamation of disturbed aquifers shall be in accordance with federal, State and local law. Disturbed aquifers should be reclaimed as ponds or lakes. On-site material is preferred where an aquifer has been breached.

policy 4D-6.6 **Aquifer Protection:** Activities related to mineral extraction and processing operations in the vicinity of open aquifers must provide safeguards including containment, to prevent contamination to the open aquifer.

policy 4D-6.7 **Grading Adjacent to Water Bodies:** Post-mining slopes in an aquifer shall be reclaimed at a grade that allows for easy access in and out of ponds and lakes.

policy 4D-6.8 **Groundwater Study:** Before a new sand and gravel mine is permitted, the area ground water shall be characterized by a licensed geologist, hydrogeologist, or engineer.

policy 4D-6.9 **Aquifer Monitoring:** Where a proposed mine will breach an aquifer, monitoring shall be established to measure the impact of the mining activity on water quality and supply to wells relying on the aquifer to be breached.

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Public Lands

Goal 4D-7 Recognize and identify scientific resource sites as educational and recreational opportunities.

policy 4D-7.1 **Preserve Scientific Resource Sites:** On public lands, scientific resource sites shall be protected and preserved for educational and scientific use when possible. Examples of such sites may include unique or rare occurrences of rocks, minerals, or fossils that are of outstanding scientific significance.

policy 4D-7.2 **Recreational Interests:** When feasible, access to local recreational activities, such as fishing, boating, hiking, and camping shall be preserved.

Right-to-Manage Natural Resource Lands

Goal 4E Right-to-Manage Natural Resource Lands.

Natural resource management operations are frequently the subjects of nuisance complaints and on occasion have been forced to cease or curtail operations. Such nuisance complaints discourage investments in NRL improvements to the detriment of adjacent NRL uses and the economic viability of the county's natural resource land industry as a whole.

Right-to-Manage Natural Resource Lands policies are intended to promote mutual understanding and good neighbor relationships between NRLs and non-NRL property owners. This starts by advising purchasers and users of property adjacent to or near NRL management operations of the inherent potential difficulties associated with living on or near natural resource lands. These may include, but are not limited to, hours of operation, the use and spraying of chemicals, pruning, harvesting, and mining activities, which occasionally generate traffic, dust, smoke, noise, and odor. Through mandatory disclosures purchasers and users will be better prepared to understand and accept the consequences of living near natural resource lands and operations.

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Guiding Principles: Right-to-Manage Natural Resource Lands Policies

Ensure that the uses of lands adjacent to natural resource lands do not interfere with the continued use, in the accustomed manner, for farming, forestry, mining, and related uses.

Provide Skagit County residents notification of the County's recognition and support of the Right-to-Manage Natural Resource Lands.

Reduce the loss to Skagit County of its NRLs by limiting and defining the circumstances under which NRL management operations may be considered a nuisance.

Right-to-Manage Natural Resource Lands Notification

Goal 4E-1 Provide notice, through a disclosure statement, of the potential incompatibilities, inconveniences and discomforts, which may arise from NRL management activities.

policy 4E-1.1 **Right-to-Manage Natural Resource Lands Regulations** shall be implemented that limit and define the circumstances under which NRL management operations may be considered a nuisance. Such regulations shall not limit the Right-to-Manage Natural Resource Lands operations when such operations are conducted or maintained for commercial purposes, and in a manner consistent with current best management practices.

policy 4E-1.2 **Right-to-Manage Natural Resource Lands Disclosure Statements:** Right-to-Manage Natural Resource Lands regulations shall set forth a disclosure statement, and under what circumstances and to whom such a disclosure statement shall be disseminated. The disclosure statement shall inform land owners of the potential incompatibilities, inconveniences, and discomforts which may arise from NRL management activities.

policy 4E-1.3 **Recording with Property Deed:** A standard disclosure form shall be recorded with deeds for all real estate transactions involving development on or within ¼-mile

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of NRLs. The disclosure form shall include recorded documentation of the residential owners' acknowledgment of the potential natural resource management activities and receipt of the Right-to-Manage Natural Resource Lands information.

Natural Resource Lands Information Clearinghouse

Goal 4F Natural Resource Lands Information Clearinghouse.

The County operates a number of programs for the preservation of NRLs and related economic activities. The following goals and policies articulate ways in which these programs can be organized into a clearinghouse function to provide information relating to research, services, and education that are needed to achieve NRL management goals and objectives.

Goal 4F-1 Develop a Natural Resource Lands Information Clearinghouse to collect and disseminate information to benefit conservation and management of natural resource lands.

policy 4F-1.1 **Clearinghouse Team:** The Natural Resource Lands Information Clearinghouse work program may involve the Farmland Legacy Program, Agricultural Advisory Board, FAB, representatives from MRO and Rural Resource landowners, and other interested contributors.

policy 4F-1.2 **Clearinghouse Work Program:** The Clearinghouse work program should include: conducting coordinated research, monitoring, training, marketing, education, and funding activities related to:

(a) Agricultural land conservation and sustainable agricultural practices, and promoting and marketing Skagit County farm products.

(b) Forest land conservation, sustainable forest practices, developing and promoting diverse forestry products.

(c) Rural Resource land chapter, defining natural resource activities on Rural Resource lands, and assessing economic viability of natural resource production on Rural Resource lands.

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(d) Mineral resource development, safe mining practices, reclamation planning and execution, diversification and promotion of mineral resource products.

(e) Implementing the Right-to-Manage Natural Resource Lands goals and policies and ordinances.

(f) Promoting public awareness of NRL values and challenges.

(g) Promoting educational programs in public schools that emphasize the contributions of NRLs to the county, and the need to protect these valuable lands.

policy 4F-1.3 **Natural Resource Lands Database:** Maintain a database management system to provide current information on NRL uses and activities, soils, conversions, and other quantifiable factors for the purpose of monitoring and conserving NRLs.

policy 4F-1.4 **Converted Natural Resource Lands Database:** The Natural Resource Lands Database should identify and map, where known, those parcels of land that, although designated as a NRL, are not available for productive resource use because of some easement, covenant, or other restriction that converts the primary use of such land to the preservation of habitat, open space, or some other non-resource-land use. This information should contribute to a more accurate assessment of the natural resource land base available for agriculture, forestry, or mining uses.

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Introduction

The Environment Element provides the policy basis for the protection and regulation of critical areas as required by the GMA. Growth management, NRL conservation, and critical areas protection are interwoven in the framework intended to eliminate or minimize sprawl and the loss of environmental resources as well as to protect persons and property from unsafe conditions and sustain the quality of life. It is more costly to remedy the loss of critical areas than to conserve and protect them from loss or degradation. The inherent economic, social, and cultural values of critical areas should be considered in the development of strategies designed to conserve and protect lands.

In recognition of these common concerns, classification, and designation of critical areas is intended to preclude land uses and developments that are incompatible with critical areas. There are qualitative differences between and among critical areas. Not all areas and ecosystems are critical for the same reasons. Some are critical because of the hazard they present to public

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health and safety, some because of the values they represent to the public welfare. In some cases, the risk posed to the public by use or development of a critical area can be mitigated or reduced by engineering or design; in other cases that risk cannot be effectively reduced except by avoidance of the critical area. Hence, classification and designation of critical areas is intended to recognize the differences between these areas, and to provide appropriate regulatory and non-regulatory actions.

Preparing development regulations that preclude uses and development incompatible with critical areas does not mean a prohibition of all uses or development. Rather, it means governing changes in land uses, new activities, or development that could adversely affect critical areas. For each type of critical area, the classification system and associated development regulations should prohibit inappropriate uses and provide a basis for the review and approval of other uses and activities in keeping with these goals and policies.

Critical areas designations overlay other land use designations. Best management practices should be utilized where critical areas are designated. Future operations or expansion of existing operations should be done in consideration of protecting critical areas or reducing risks to public health, safety, and welfare.

There is a clear, positive association between strong environmental policies and a strong economy. It is the County's intent to enforce environmental policies that will conserve the natural environment and support appropriate growth and economic development.

The basis for the goals and policies is a complicated and overlapping web of federal and State laws. The GMA mandate is the umbrella through which this regulatory web is applied to the County. The GMA requires that local plans and regulations use *best available science* in establishing how they manage growth and development while protecting people, facilities, and natural environmental features from harm. An analysis of the applicable science meeting the GMA mandate is currently being prepared in order to support the Comprehensive Plan policies and the associated development regulations for wetlands, aquifer recharge areas, fish and wildlife habitat conservation areas, geologically hazardous areas, and frequently flooded areas.

Skagit County’s agriculture, forestry, fisheries, tourism, and outdoor recreation assets are unparalleled in providing a holistic set of opportunities for sustaining the quality of life. Environmental protection and a strong economy have many direct linkages. It is the County's intent to maintain environmental policies that will conserve natural resources and responsibly

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support population growth and economic development while at the same time protecting the environment and keeping people from harm's way.

Since these objectives are so interwoven, the Comprehensive Plan includes references to environmental protection in many of the elements. For example, drainage of surface water in agricultural areas is critical to farming operations, but also affects habitat conditions and flood controls. And, the location and sizing of UGAs is complicated by the historic locations of cities and towns which were first sited in flood prone areas. Consequently, the goals and policies for critical areas in the Environment Element relate closely to many other adopted plans, policies, and regulations. The following is intended to highlight some of these important relationships.

Shoreline Master Program (SMP)

As part of the 2026 Comprehensive Plan Update, Skagit County is updating its MSP, in compliance with recent changes to the rules and guidelines for the state Shoreline Management Act. The new SMP includes goals and policies for shoreline protection, and updated shoreline development regulations in the County's Unified Development Code (SCC Title 14). GMA policies and regulations will be comparatively reviewed to shoreline policies and regulations.

Natural Hazards Mitigation Plan

In 2014, the County, the cities and towns, the Upper Skagit Indian Tribe, the Swinomish Indian Tribal Community, and the Samish Indian Nation adopted an updated countywide plan for addressing natural hazards such as avalanches, droughts, earthquakes, fires, floods, tsunamis, severe storms, and volcanic events. The Natural Hazards Mitigation Plan was approved by the Federal Emergency Management Agency on March 4, 2014. The basis for this planning is federal legislation in the Disaster Mitigation Act of 2000 that establishes the means for states and local governments to anticipate and reduce the impacts of disasters caused by natural hazards. This plan includes vulnerability assessments of the jurisdictions' exposure to the hazards and their capacities and proposed strategies for mitigation. The Natural Hazards Mitigation Plan provides the jurisdictions with opportunities for future federal funding to implement the strategies and reduce the exposure to hazards. It must be evaluated each year and updated every five years.

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The adopted Natural Hazards Mitigation Plan (2014) includes goals and policies from the Comprehensive Plan (2007) and building code references. It proposes strategies for earthquake, fire, and flooding hazard mitigation including facility improvements that could be incorporated into the Capital Facilities Element, and others that relate to policies. For example, the Natural Hazards Mitigation Plan suggests implementing the Firewise public education program, a policy reflected in the Natural Resource Element and elsewhere in the Comprehensive Plan. The Comprehensive Plan has identified additional fire prevention planning as a priority for the rural portions of the county as well. The County's Emergency Management Department has addressed tsunami responses; tsunamis are considered to be a low risk based on the Natural Hazards Mitigation Plan.

Another strategy suggests enacting additional regulations to restrict future residential and non-agricultural construction in the 100-year floodplain. The County's Flood Damage Prevention Ordinance (2011) has taken important steps in this direction, and the County may make other amendments as appropriate based on Federal Emergency Management Agency (FEMA) and other agency input. The County's Critical Areas Ordinance implements regulations based on "best available science" for wetlands, aquifer recharge areas, geologically hazardous areas, fish and wildlife habitat conservation areas, and frequently flooded areas.

Regional Water Resource Plans

Other programs that produce plans, policies and strategies related to the environment include Watershed Planning based on Water Resource Inventory Areas (WRIAs). This planning effort is sponsored by Ecology and involves inter-jurisdictional watershed planning to address water quantity, with the option to address habitat and water quality. In addition, in-stream flows are regulated by Ecology and affect the amount of groundwater available for future domestic, municipal, commercial/industrial, agricultural uses. In 2001, Ecology adopted the Skagit River Basin Instream Resources Protection Program Rule (WAC 173-503). Water and sewage rules are regulated by the County and State Departments of Health and Ecology. Aquifer recharge areas are addressed through the goals and policies in the Comprehensive Plan and subsequent development regulations found in the Unified Development Code. Flood control and flood plain management is a responsibility of the U.S. Army Corps of Engineers, FEMA, and Ecology as well as local jurisdictions. Habitat protection requirements within the floodplain have become more

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stringent since the publication of the Biological Opinion by the National Marine Fisheries Service (NMFS) relating to FEMA's National Flood Insurance Program.

Air Quality

Although not identified as a critical area under the GMA, air quality is a crucial component of a healthy environment. The livability of Skagit County is dependent upon good air quality, which is affected by the interrelationship of land use and the activities of people, industries, and natural resource enterprises.

The County seeks to maintain a high level of air quality by working cooperatively with the Northwest Clean Air Agency to minimize individual and industrial impacts on air quality. The County will work with Northwest Clean Air Agency to minimize public exposure to airborne pollutants and nuisance odors by assuring regulatory accountability. The County will accomplish this by supporting transportation policies that reduce air pollution; encouraging alternatives to outdoor burning; promoting environmentally sound heating methods; and ensuring that industrial growth utilizes environmentally sound processes.

Goals and Policies

Types of Critical Areas

The GMA requires local governments to designate and protect critical areas including wetlands, aquifer recharge areas, frequently flooded areas, geologically hazardous areas, and fish and wildlife habitat conservation areas. Further, the GMA requires counties and cities to develop policies and regulations that are based on "best available science".

Wetlands

Wetlands are fragile ecosystems that serve a number of important beneficial functions. Wetlands assist in the reduction of erosion, siltation, flooding, ground, and surface water pollution, and provide wildlife, plant, and fisheries habitats. Wetlands destruction or impairment may result in increased public and private costs or property losses.

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Aquifer Recharge Areas

Potable water is an essential life-sustaining element. Skagit County's potable water comes from groundwater and surface water. Once the source of potable water is contaminated, it is difficult, costly, and sometimes impossible to clean up. Preventing contamination is necessary to avoid exorbitant costs, hardships, and potential physical harm to people.

Frequently Flooded Areas

Flood hazard areas and other areas subject to flooding perform hydrologic functions and may present a risk to persons or property.

Geologically Hazardous Areas

Geologically hazardous areas include areas susceptible to the effects of erosion, sliding, earthquake, or other geologic events. They pose a threat to the health and safety of citizens when incompatible residential, commercial, industrial, or infrastructure development is sited in areas of a hazard.

Fish and Wildlife Habitat Conservation Areas

Fish and wildlife habitat conservation means maintaining species in suitable habitats within their natural geographic distribution through cooperative and coordinated land use planning beyond political boundaries.

Critical Areas

Goal 5A Preserve and protect wetlands to maintain no net loss of wetland functions and values..

Encourage the voluntary restoration and enhancement of lost or degraded wetlands.

Protect critical aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use and groundwater support

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for base stream flows.

Protect hydrologic functions, plan for changing climate conditions, and reduce the potential for physical injury and property damage associated with flooding.

Minimize risk to life, property, infrastructure, and resources caused by naturally hazardous geologic processes.

Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats, including corridor connections and tree canopy.

Classification and Designation of Critical Areas

Classification and designation of critical areas establishes the general distribution, location, extent, and quality of critical areas. In the circumstances where critical areas (e.g., aquifer recharge areas, wetlands, significant wildlife habitat, etc.) cannot be readily identified, these areas should be designated by performance standards or definitions, so they can be specifically identified during the processing of a permit or development authorization. Classifying, inventorying, and designating lands or areas does not imply a change in a landowner's right to use his or her land under current law.

Goal 5A-1 In cooperation with local, State, federal, and Tribal agencies and jurisdictions, and regional partners, the County should collaborate on continued health and protections of critical areas.

policy 5A-1.1 Critical areas, as defined by RCW 36.70A.030, shall be identified based on the best available science. Publicly available maps and inventories must be referenced and verified through site-specific assessment by a qualified professional.

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Education

Goal 5A-2

Utilize existing programs, grants, and other funding opportunities to provide educational outreach and the involvement of a citizenry in developing programs, voluntary stewardship, and regulations for the conservation and protection of critical areas.

policy 5A-2.1 Educational opportunities should be encouraged that increase public and governmental understanding of the economic, social, cultural, and environmental values of critical areas.



(a) Public access to publicly owned critical areas for scientific, educational, and limited recreational use should be encouraged.

(b) Educational programs should: (i) improve the understanding of storm water management, groundwater recharge, and groundwater and surface water quality and quantity issues, (ii) encourage citizens to be water resource stewards, and

(ii) increase public understanding of stream hydrology and the potential for major flooding in the Skagit River Basin, and the landscape-scale interactions between impervious surfaces, tree canopy, and wetlands relative to flood management

policy 5A-2.2 Readily available information should be assembled and distributed to educate and inform the public about risks of known frequently flooded areas and geologic hazards; development practices that increase the risks to lives, property, infrastructure, resources and measures to minimize these risks.

Incentives

Goal 5A-3

Utilize economic incentives, such as density credit transfers, transfer of development rights, tax incentives, cluster housing, conservation easements, and public benefit rating systems, as appropriate, to encourage citizens to conserve, protect and restore critical areas.

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policy 5A-3.1 Wildlife corridors and connections between areas of native vegetation and riparian corridors that connect wetland systems, and open space should be conserved and protected whenever feasible through incentive programs.

policy 5A-3.2 Public and private programs should be encouraged and utilized to support the ability of wetlands to function naturally and provide landscape diversity.

policy 5A-3.3 Public and private acquisition of critical areas should be encouraged for permanent conservation.

Critical areas of local and regional uniqueness and significance should be prioritized for acquisition.

policy 5A-3.4 Economic incentive programs should be implemented to encourage private participation in protecting and enhancing aquifer recharge and surface and ground water quality and quantity following best available science.

policy 5A-3.5 Incentives should be developed to protect critical areas in agriculture and forestry land.

policy 5A-3.6 The protection of Habitat Conservation Areas should be encouraged through acquisition, incentives, and other techniques.

policy 5A-3.7 Native plant communities and fish and wildlife habitat enhancement shall be promoted through voluntary incentive programs.

Intergovernmental Coordination / Cooperation

Goal 5A-4 Improve communication and seek cooperation and coordination among county, city, state, tribal, federal agencies, and the public to avoid duplication and achieve efficiency and effectiveness in development of standards, policies, regulations, programs, projects, planning and funding efforts that conserve and protect critical areas.

policy 5A-4.1 The use of inter-agency agreements among county, city, state, federal and tribal agencies shall be encouraged for conservation and protection of critical areas

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when developing regulations, incentives, and monitoring/enforcement strategies.

(a) Local, state, federal and tribal governments shall be consulted in the development of land use plans and development review to identify and protect habitat networks on an inter-jurisdictional basis.

(b) Local, state, federal agencies, tribes and private interests shall be encouraged to plan and implement methods to protect and enhance water quality at commercial, recreational, and subsistence shellfish beds, including controlling potential new pollution sources, reducing pollution from existing sources, and establishing shellfish protection districts.

(c) Coordinate with state and tribal programs to protect plant species and communities listed in the Natural Heritage Program, the Priority Habitats and Species (PHS) Program and plant species of cultural (tribal) significance.

policy 5A-4.2 Critical area conservation and protection strategies should be coordinated with watershed planning efforts and watershed implementation plans.

policy 5A-4.3 To promote a consistent and efficient regulatory framework, all existing county land use regulations should be reviewed and, where appropriate, modified to eliminate redundancies or conflicts with other county, state or federal requirements for critical areas.

policy 5A-4.4 Annual evaluations and prioritized recommendations for non-point source pollution control (such as from Watershed Action Plans and Water Quality Management Plans) should be implemented where found to be feasible and most cost-effective.

policy 5A-4.5 Work cooperatively with the cities, towns, state and federal agencies and tribes as needed in flood hazard mitigation planning, including climate change projections, and projects to minimize potential for flood damage throughout Skagit County.

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policy 5A-4.6 Encourage the restoration of appropriate degraded critical areas through coordinated cooperative public and private efforts.

Protection and Conservation Measures

Goal 5A-5 Skagit County shall, protect and conserve critical areas in cooperation with federal, state, local, and tribal jurisdictions.

policy 5A-5.1 Critical areas shall be designated and protected to maintain no net loss of wetland functions and value. Priority shall be given to the avoidance of impacts to Critical Areas, followed by the minimization of impacts and compensatory mitigation, in that order.

(a) Wetlands

(i) The greatest level of protection should be provided to wetlands of exceptional resource value, based on the Washington State Wetland Rating System for Western Washington (2014 Update).

(ii) Measures should be taken to protect the natural ability of wetlands to improve the quality of surface water runoff, hold and gradually release stormwater, provide habitat for fish and wildlife, provide recreational opportunities, and provide historical and cultural values.

(iii) Mitigation projects should, whenever feasible, achieve no net loss of wetland area.

(iv) A wetland buffer zone of adequate width should be maintained between a wetland and any adjacent development to protect the functions and integrity of the wetland. Required buffers and buffer functions must be protected and managed to sustain the buffer functions.

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(v) Wetland buffer zones should be retained in their natural condition to the greatest extent possible. Re-vegetation may be required to restore the functional value of the buffer zone.

(vi) Regulated wetlands and their associated buffer zones should be protected from adverse wetland impacts to their overall functions unless it can be shown that the impact is unavoidable and that the adverse impacts are offset by deliberate restoration, creation or enhancement of wetlands and buffer zones.

(b) Aquifer Recharge Areas

(i) Water resources should be protected using natural systems and non-structural methods wherever possible.

(ii) Ground Water Management Areas (according to WAC 173-100), Wellhead Protection Areas and Significant Use Zones should be established to further protect the quality and quantity of ground and surface water.

(iii) Skagit County will identify and implement strategies in its Saltwater Intrusion Policy to prepare for and mitigate the effects of saltwater intrusion into its aquifers and drainage systems for the most vulnerable islands and coastal areas.

(iv) Skagit County will continue to work to address instream flow, mandated sewage code changes and water code changes. Aquifer recharge areas will be evaluated and protected under the revisions to the Critical Areas Ordinance.

(v) Consistent with State law (RCW 19.27.097), Skagit County will not issue a permit for a building requiring potable water unless the applicant can demonstrate they have a legal and adequate source of water and the source meets drinking water standards.

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(vi) Develop a centralized data collection, storage, retrieval, and analysis system for ground water data on Guemes Island.

(c) Frequently Flooded Areas

(i) Undisturbed natural rivers, streams, lakes, wetlands, and floodplains shall be protected to avoid increases in flood elevations, to reduce flood damage, and to allow proper conveyance of flood flows.

(ii) When reviewing proposed developments or designing infrastructure, consider the potential effects of tsunami, high tides with strong winds, sea level rise, and extreme weather events, including those potentially resulting from global climate change, and apply conditions of approval to ensure adaptation to future conditions and mitigation of potential impacts.

(d) Fish and Wildlife Habitat Conservation Areas

(i) Stream and wetland buffers must be set so as to protect habitats associated with riparian dependent species.

(ii) Habitat fragmentation must be minimized to enhance wildlife diversity by protecting important wildlife areas, open space, and interconnecting corridors that form a continuous habitat network.

(iii) Protective measures will be required in all areas that have the potential to introduce sediments into fish bearing streams, unless the applicant can adequately demonstrate that other mitigating measures will avoid impacts to instream resources.

(iv) Habitats or species that have been identified as priority species or priority habitats by the state, federal or tribal governments should not be reduced and should be preserved through regulation, acquisition, incentives and other techniques. The County should determine which habitats are of local importance.

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(v) The level of protection for HCAs shall be commensurate with the resource population status and management objectives as determined by appropriate resource managers.

(vi) Native vegetation shall be preferred and retained over exotic species in Fish and Wildlife Conservation Areas.

(vii) Native plant communities should be integrated with land uses wherever possible.

(viii) Give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries.

policy 5A-5.2 Land uses that are incompatible with critical areas should be discouraged.

(a) Frequently Flooded Areas

(i) Low intensity land use activities such as agricultural, forestry, and recreational land uses should be encouraged in floodplain areas and other land uses in these areas should be discouraged.

(ii) Land uses, densities, and development activities in the floodplain and coastal high hazard areas should be limited to protect public health, safety, and welfare, to minimize expenditure of public money and costly flood control projects, and to maintain hydrologic systems, and to protect habitat for threatened and endangered species consistent with the National Marine Fisheries Service Biological Opinion (September 2008).

(b) Geologically Hazardous Areas

(i) Low land use densities and intensities or open space should be preferred in geologically hazardous areas where this practice can provide site specific mitigation.

(ii) Land use regulations and practices for geologically hazardous areas must be established so that development does not cause or

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exacerbate natural processes that endanger lives, property, infrastructure, and resources on or off site.

(c) Fish and Wildlife Habitat Conservation Areas

(i) Fish and Wildlife Habitat Conservation Areas should be protected against habitat degradation to the fullest extent possible while allowing reasonable use of property.

(ii) Urban density development in the County and adjacent to Habitat Conservation Areas shall be sited such that HCA functions and values are protected.

policy 5A-5.3 Development allowed in critical areas should be conducted without risk to lives, and with minimum risk to property, infrastructure, and resources.

(a) Wetlands

(i) Development adjacent to wetlands should be sited such that wetland and buffer functions are protected and an adequate buffer around the wetland is left undisturbed.

(ii) Alterations to wetlands that are allowed in order to maintain or enhance specific wetland functions and values, must consider all quantitative and qualitative functions of the wetlands and required buffers.

(b) Aquifer Recharge Areas

(i) Consistent with state and federal laws and regulations, the County should maintain performance standards and regulate uses for activities which can adversely impact water quality or quantity in aquifers, watersheds, and surface waters.

(ii) Maintain aquifer recharge and protection standards and require that new developments meet these standards and that existing facilities be retrofitted, where feasible, to meet the standards.

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(c) Frequently Flooded Areas

(i) Adopt development regulations that prohibit intensive uses such as urban subdivisions, multi-family dwellings, commercial buildings, and industrial parks in the floodplain.

(ii) The construction of critical facilities (i.e. schools, hospitals, police, fire, emergency response installations, nursing homes, and installations which produce, use or store hazardous materials or hazardous waste) should be prohibited within the 100 year floodplain.

(iii) Development must protect water quality and minimize run-off by limiting impervious surfaces, grading and filling, as well as maximizing vegetative cover and other best management practices.

(iv) Flood-proofing of substantial improvements and new structures in frequently flooded areas must be required.

(v) Where the effects of hazards can be mitigated, appropriate design standards should be required for site development and livestock sanctuary areas within the 100-year floodplain.

(vi) Best management practices should be required for maintaining the river channel configurations during dredging and gravel removal.

(vii) Compensatory storage and a "no net loss" land use approach to maintaining flood water storage capacity and conveyance is required in frequently flooded areas.

(d) Geologically Hazardous Areas

(i) Critical facilities (i.e., schools, hospitals, police, fire, emergency response installations, nursing homes, and installations which produce, use or store hazardous materials or hazardous waste) should be prohibited in geologically hazardous areas.

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(ii) Development proposals in designated geologically hazardous areas, where applicable, shall include a geotechnical report and a mitigation plan for development activities, with the amount of information required based on the severity of the geologic hazard and the susceptibility of the development on or off site.

(iii) Independent third party review of geotechnical reports for development in designated geologically hazardous areas may be required by the planning director when the report is found to be deficient with the review to be paid for by the applicant as a way of expediting development permits.

(iv) Any development should be carried out in a way that will not cause or exacerbate hazardous geological conditions.

(v) Public or private utility service or extensions (sewer, water, natural gas, and electric) should be discouraged in geologically hazardous areas and carefully sited to avoid potential damage to the utility or properties.

(vi) When residential development is proposed in areas subject to geologic hazards it should be clustered and the development designed to minimize risk to human life, property, and the natural environment.

(e) Fish and Wildlife Habitat Conservation Areas

(i) New development within or adjacent to HCAs should incorporate design elements that protect wildlife habitat values.

(ii) All development that may significantly adversely impact HCAs shall require a mitigation plan, prior to any permit approval. A threshold shall be established on a case by case basis by a qualified professional.

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(iii) Storm water runoff, flow rates, flow volumes and pollution caused by site development shall be managed so that detrimental impacts to water resources and property are maintained at pre-development levels.

(iv) Clearing and grading ordinances shall be developed to avoid impacts of erosion on critical areas.

(v) Impacts to fish and wildlife resources associated with instream flows shall be considered in the Comprehensive Plan and development regulations.

(vi) Areas important for local and ecoregional biodiversity, as determined through regional ecological assessments, should be considered priorities for conservation and protection.

policy 5A-5.4 Impacts to critical areas should be monitored to ensure the long-term success of mitigation measures.

(a) Performance standards shall be adopted through appropriate codes and administrative procedures for development in critical areas; including, but not limited to:

(i) Critical area report information and analysis;

(ii) Site inspections and development review of construction within critical areas;

(iii) The use of critical area designations to prohibit, restrict, or otherwise control land uses within short subdivisions, subdivisions, and residential cluster developments;

(iv) The use of protective covenants or conservation easements to protect critical areas in non-land division developments.

(b) Land used for critical area mitigation should be preserved in perpetuity.

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(c) A minimum monitoring period should be established to ensure successful establishment of approved mitigation plans.

(i) Applicants should demonstrate sufficient scientific expertise, supervisory capability and financial resources to complete and monitor mitigation projects and address cumulative impacts to the surrounding area.

(ii) Applicants should restore critical areas that are temporarily impacted by development upon project completion.

(iii) During development review, applicants should identify potential erosion and sedimentation impacts and submit appropriate mitigation plans that shall be monitored during construction and assessed periodically thereafter.

(d) Critical area mitigation proposals should provide equivalent or greater critical area functions, recognizing that it may be inappropriate to impact certain critical areas. All critical area functions shall be considered.

policy 5A-5.5 Critical areas and their buffers should be avoided, maintained, restored, acquired, replaced or enhanced.

(a) Mitigation for proposed alterations to critical areas or associated buffers should be sufficient to maintain the function and values of the critical area or to prevent risk from a critical area hazard. Proposed mitigation should follow the mitigation sequence of:

(i) Avoid the impact altogether.

(ii) Minimize the impact utilizing appropriate technology and design.

(iii) Rectify the impact by restoring, repairing or rehabilitating the affected environment to the conditions existing at the time of initiation of the project or activity.

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(iv) Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the project.

(v) Compensate for the impact by replacing, enhancing or providing substitute resources or environments.

(b) On-site replacement of critical area impact is preferred. Where on-site replacement is not feasible or practical due to characteristics of the existing critical area location, replacement should occur within the same watershed and proximity.

(c) Critical area restoration, creation, and enhancement projects should be completed prior to alteration, where possible. In all other cases, replacement should be completed prior to use or occupancy of the development.

(d) The County shall place a high priority on the proper placement or other correction of all identified county road culverts causing blockage of fish passage.

(e) Acquiring additional natural water storage areas, drainage systems and conveyance capacity should be accomplished through public means.

(f) Protection of aquifer recharge areas and potable water resources is preferred, and restoration should be supported where warranted by cost-benefit analysis or limited water supply.

policy 5A-5.6 Continue to implement enforcement procedures to ensure compliance with applicable Skagit County ordinances.

(a) Enforcement action should be taken whenever a person has violated the provisions of any applicable Skagit County ordinance used for critical area protection.

(b) The choice of enforcement action and the severity of any penalty should be based on the nature of the violation, the damage or risk to the public or the public resources.

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(c) (c) Work with property owners to resolve critical area code violations through voluntary compliance measures as feasible.

policy 5A-5.7 With the exception of activities that are exempt under the Critical Areas Ordinance (CAO), any proposed alteration that adversely affects a critical area or its standard buffers' functions shall comply with the substantive and procedural requirements of the CAO regardless of whether such alteration requires a County development permit or approval.

policy 5A-5.8 All activities that are exempt under the Critical Areas Ordinance (CAO), shall be carried out in ways that cause the least impact on critical areas and their buffers.

(a) If any damage is caused to a critical area or buffer, in connection with an exempt activity, the critical area and its buffer should be restored the pre-disturbed condition or a condition that provides greater buffer functions.

Goal 5B Address climate hazards and GHG reductions through protection, enhancement, and restoration of the natural environment.



policy 5B-1.1 Enhance urban tree canopy to support community resilience, mitigate urban heat, manage stormwater, conserve energy, improve mental and physical health, and strengthen economic prosperity.

policy 5B-1.2 Protect and restore natural resources that sequester and store carbon such as forests, farmland, wetlands, estuaries, and urban tree canopy.

policy 5B-1.3 Identify and address the impacts of climate change on the region's hydrological systems.

policy 5B-1.4 Work cooperatively to meet regulatory standards for floodplain development as these standards are updated for consistency with relevant federal requirements including those related to the Endangered Species Act, and to accommodate long-term climate change projections.

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6 Shoreline Master Program

The existing Chapter 6 Shoreline Master Program policies, most recently adopted by Ordinance O20070009, remain in place and are being updated through a parallel process. See www.skagitcounty.net/smp for more information.

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Introduction

The Housing Element contains information describing the demographic and economic conditions pertaining to housing needs for the next 20 years. In particular, the Housing Element creates the planning foundation for housing by providing insight into existing trends in the community, including building permits, location of growth, and demographics. In addition, it highlights existing and anticipated housing needs that are present in Skagit County, such as rural densities, senior housing, farmworker housing, affordable housing, and others.

Population and Community

Housing demand is a function of population growth and the demographic characteristics of the population. Additionally, a growing and diverse population may have different housing needs and preferences, such as housing units for smaller or larger families, housing near important cultural or social centers, access to services, access to employment, and other needs.

Population and Diversity

Skagit County's population is projected to reach 160,830 by 2045, with an average annual growth rate of 0.9% over the next two decades. About 80% of this growth is expected in incorporated cities and their UGAs. Additionally, the county is becoming more diverse: from 2017 to 2022, the percentage identifying as White alone, not Hispanic or Latino, decreased from 75% to 72%. As the county becomes more diverse, housing needs and associated supportive amenities and services may differ for different cultural groups and communities. The senior population is also expected to grow significantly, from 29,373 residents aged 65 and older in 2020 (23% of the population) to 45,022 by 2045 (28%). Housing is needed to fit each stage of life in terms of size, design, and affordability. Additional details are in the technical appendix.

Most of the population in Skagit County speak English only, but there has been an increase in those speaking Spanish since the year 2000 and a general decrease in the English only percentage. See Table 6.

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Table 6: Language Spoken at Home (percent)

Language	2000	2010	2013	2023
English Only	88.3	84.8	85.5	83.8
Spanish	8.6	11.5	11.2	13.1
Other Indo-European	1.8	2.1	1.9	1.6
Asian and Pacific Islander	1.1	1.4	1.1	1.3
Other	0.2	0.10	0.40	0.30

Source: US Decennial Census 2000 and 2010 DP-2; 2011-2013 American Community Survey 3-Year Estimates DP02 and 2023 American Community Survey 5-year estimates DP02 . The 3-Year Sample Estimate was used for this table to eliminate overlap with the 2010 data.

Population and Household Profile

In 2022, the average household size in Skagit County was 2.51. An aging population is expected to contribute to a gradual decline of average household size over time, assuming adequate housing supply to meet needs. Elderly residents often live alone or with just one other person and are less likely to have children at home. By 2045, the average household size is projected to be approximately 2.42.

The growing number of elderly households highlights the need for housing policies supporting diverse options, such as accessory dwelling units for caregivers or family members and smaller housing units near services for those downsizing.

White, non-Hispanic households (64%) are more likely to own their homes compared to People of Color (48%), indicating a homeownership gap and equity considerations. Additional details are in the technical appendix.

Incomes

Almost 80 percent (92,593) of the total 2010 population was 16 years and older and considered in the workforce. As described in the Economic Element, since 1990, the county has experienced higher unemployment rates than the state with some years over 3 percent higher. The present unemployment rate in July 2013 is 8.4 percent, above the average for the state and other I-5 corridor counties.

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Community Housing Needs

Housing needs may differ for households over a lifetime; housing styles and types differ for single persons versus families. Housing needs may vary for individuals in different economic situations, such as those living in poverty, large families, aging individuals with mobility impairments, people with disabilities, the homeless with urgent housing needs, social service needs, and farmworkers. In 2023, around 3,373 individuals experienced homelessness or unstable housing in Skagit County. Farmworkers represent another particularly vulnerable group. In 2019, 461 seasonal beds were available for seasonal farmworkers, and 240 permanent housing units were designated for year-round farmworker households. Despite this, up to 1,376 farmworker households were left searching for both seasonal and year-round housing in the local market. This suggests a gap between the available housing options and the needs of vulnerable households, highlighting the ongoing need for affordable housing solutions. Additional details can be found in the technical appendix.

Farmworkers

Skagit County, Washington, has over 84,000 acres of farmland and is a major producer of flowers, milk, and potatoes. The county employs around 1,378 year-round farmworkers and 699 seasonal workers. Agricultural work makes up a small part of the local economy compared to manufacturing.

Farmworker housing in the area includes permanent units for year-round workers and temporary beds for migrant workers. However, many farmworker households, about 1,376, still struggle to find housing in the local market. Around 17% of this need comes from migrant workers, who have specific housing requirements.

For more detailed information please reference the Housing Needs Assessment; Housing Action Plan; and Skagit County Farmworker Housing Action Plan.

Recent Initiatives to Create More Affordable Housing

Skagit County and its four cities have worked together to develop the North Star, a collaborative approach to build a pipeline of affordable housing and ensure pathways to housing are faster and predictable. North Star's leadership team includes the mayors of Skagit County's four cities and three Skagit County Commissioners. A multi-sector advisory group and several work groups of

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technical experts and community members provide guidance to this leadership team. Below are some of the key activities that North Star are working on to build a pipeline for affordable housing:

- *Align timing and processes of city and county funding processes serving target populations, setting projects up for success with other competitive funding processes.*
- *Identify publicly owned parcels suitable for affordable housing; make recommendations to respective planning commissions and councils.*
- *Secure funding for technical real estate and due diligence consultants to expediting planning and property dispositions.*
- *Work with developers, advocates, and others to develop a pipeline of affordable housing projects and position them to compete for State resources.*
- *Work with Skagit Council of Governments to update Countywide Planning Policies to reflect a shared North Star vision and urgency of housing production.*

Housing Supply & Demand

In Skagit County, rental housing costs have risen steadily since 2018, reducing the availability of affordable housing options and likely contributing to an increase in households experiencing housing insecurity since 2020. Home sale prices also continue to climb, creating challenges for first-time homebuyers attempting to purchase a home under $500,000. As of 2020, approximately 6,000 households in Skagit County were spending more than half their income on housing costs. This leaves families and individuals with limited resources to cover other essential expenses such as food, transportation, and education. Many are at risk of losing their homes if housing costs continue to rise, deepening the county's housing insecurity. Additional details can be found in the technical appendix.

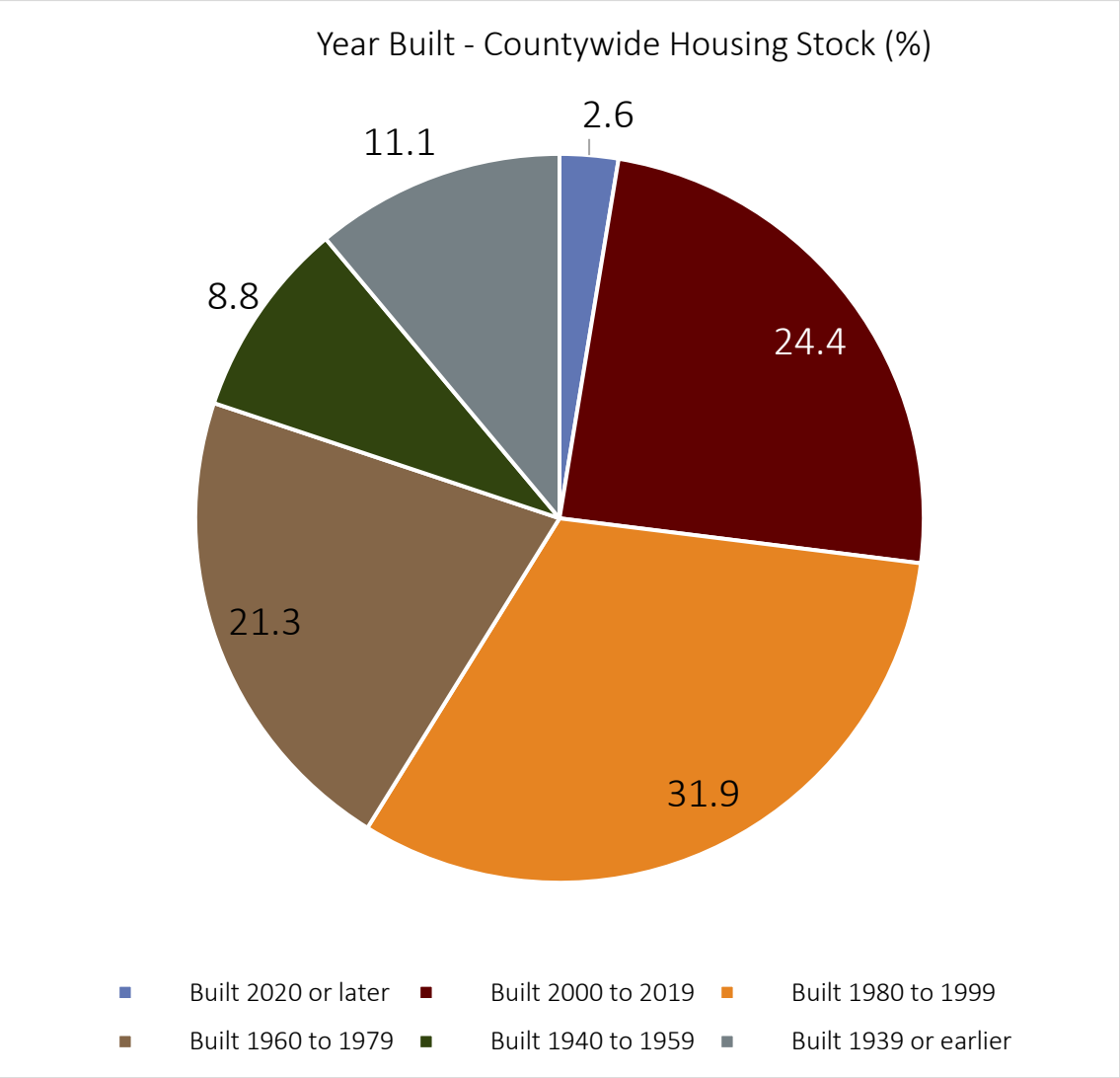
About half (2,625) of the remaining 6,141 vacant units were considered "seasonal, recreational or occasional use." About 925 units were vacant but rentable, and 763 units were vacant due to being on the home sales market.

The County's overall housing stock shows more than one third (38 percent) of the housing stock was built in the last thirty years, nearly one third was built between 30-50 years ago (29 percent),

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and another third is greater than 50 years old (33 percent). See **Figure 1**. Housing stock that is past 50 years old may exhibit more quality conditions over time depending on the ability of households to maintain them.

Figure 1: Year Built – Countywide Housing Stock

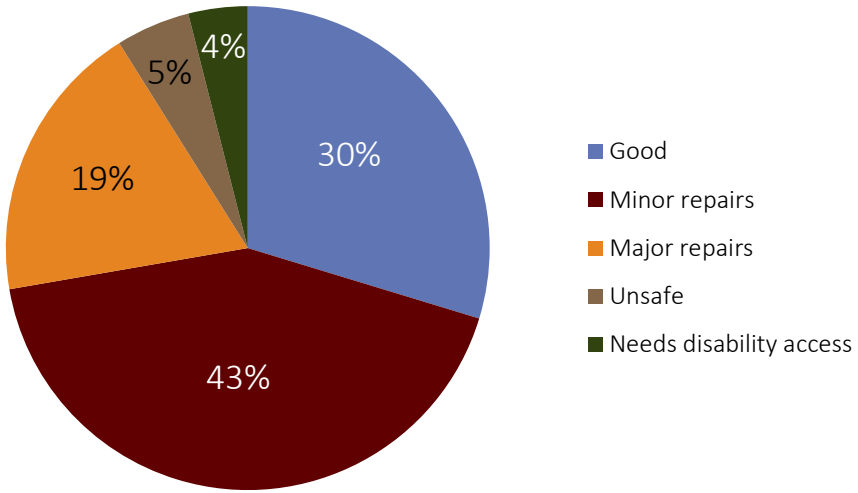


Source: American Community Survey, 2023 1-Year Sample Estimates, Selected Housing Characteristics.

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Respondents to the Skagit County Community Action 2013 Community Needs Assessment survey indicated that only 30 percent of their housing was in "good" condition, with a majority of housing needing either minor or major repairs. **Figure 2** shows the results of the survey.

Figure 2: Skagit County Housing Conditions, 2013



Source: Skagit County Community Action, *2013 Community Needs Assessment.* Of the survey respondents, 568 answered the question about housing conditions.

Priority Housing Needs

Existing conditions indicate a variety of specific priority housing needs in Skagit County:

- **General and Affordable Housing Stock Production and Preservation** – To meet the housing needs of a growing population and affordable housing needs of low income households, both single family and multifamily housing production will need to increase beyond recent permit levels in cities and their UGAs and to a lesser extent rural areas. Land capacity for housing in all density ranges is necessary to meet the demand. Preservation of aging housing units that need repair is important for long-term affordability; over one-third of the county's housing stock is over 50 years old today and

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over the 20-year life of the Comprehensive Plan, this will increase. As housing is created or preserved the following trends should be considered: the increase in small non-family households and the need for bigger housing units for larger families. These trends represent the continuing need for diverse housing choices. Collective action to increase housing production and preserve dwellings will be needed such as through implementation of Affordable Housing Advisory Committee's Housing Affordability Strategy (2013).

- Farmworker Housing - As one of the prominent employment sectors in Skagit County, agriculture creates the need for a focus on farmworker housing. The *Skagit Valley Farmworker Housing Action Plan*, completed by the Washington Farmworker Housing Trust in 2011 found an immediate need for over 800 units of farmworker housing.
- Aging Populations and Persons with Disabilities – The population is aging. Those with disabilities make up more than 13 percent of the total population and more than one third of those over 65 years of age have a disability. Housing options allowing people to age in place or to move to housing suited for assisted living would be needed. The County's Community Services Department programs may become more important to general housing stability as the population ages and disabilities emerge.
- Homelessness – Recent counts of homeless persons show over 1,000 are homeless and due to the lack of affordable rental housing others are at risk. As part of collective actions, addressing homelessness through appropriate locations of housing in cities and their UGAs and through supportive services offered by the County and social service agencies will continue to be necessary[8].

Barriers to Production

The technical appendix includes a detailed analysis of residential production trends in rural Skagit County with comparison to the rate of housing production needed to meet allocated housing targets by the year 2045. It also breaks down production trends by housing types to determine if

[8] https://skagitcounty.net/HumanServices/Documents/Housing/FINAL%20-%20digital%20-%202019%20Homeless%20Housing%20Plan.pdf

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there may be barriers to meeting housing needs at specific income levels. A summary of findings follows.

Projected Housing Needs by Income Level

In 2023, the Skagit Council of Governments (SCOG) conducted analysis to forecast future countywide population and housing needs in the year 2045. This work is documented in the Skagit County Population, Housing and Employment Growth Allocations Methodology (2023) and adopted in SCOG Resolution 20023-01. It reports that the County, inclusive of all jurisdictions, will need to add 17,450 net new housing units between 2020 and 2045 to address all current and projected housing needs countywide. **Table 7** shows how these countywide housing needs were allocated to individual UGAs and rural county areas, with breakdowns by income level served.[9]

[9] Note, following the adoption of these allocations, the Swinomish Tribe determined it would be infeasible to accommodate the allocation for the Swinomish UGA due to trust land.

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Table 7: Final Allocations of Net New Housing Needed (2020-2045)

Urban Growth Areas	0-30% AMI*	31-50% AMI	51-80% AMI	81-100% AMI	101-120% AMI	Above 120% AMI	Total
Anacortes	943	604	422	226	201	546	2,942
Burlington	911	584	408	218	194	528	2,843
Mount Vernon	1,659	1,064	743	398	353	963	5,180
Sedro-Woolley	848	544	380	203	180	491	2,646
Concrete	35	22	15	8	7	20	107
Hamilton	0	0	0	0	0	0	0
La Conner	40	26	18	10	8	22	124
Lyman	0	0	0	0	0	0	0
Bayview Ridge	0	0	0	0	0	0	0
Swinomish	38	24	17	9	8	22	118
UGA Subtotal	**4,474**	**2,868**	**2,003**	**1,072**	**951**	**2,592**	**13,960**
Rural (outside of UGA's)	0	0	501	268	238	2,483	3,490
Grand Total	4,474	2,868	2,504	1,340	1,189	5,075	17,450

Notes:
1.) Figures may vary from Skagit County Population, Housing and Employment Growth Allocations Methodology findings due to rounding.
2.) UGA is "Urban Growth Area"
3.) AMI is "Area Median Income"
4.) Emergency housing needs are documented in the Skagit County Population, Housing and Employment Growth Allocations Methodology.
5.) Allocations for the Swinomish Urban Growth Area provided for informational purposes only, Skagit County did not conduct a land capacity analysis for this UGA due to jurisdictional challenges on tribal lands.
*0-30% AMI includes permanent supportive housing and non-permanent supportive housing.

Table 8 presents net housing needs by income level and housing type for just rural Skagit County. See the Housing Land Capacity Memo for an assessment of land capacity in rural Skagit County to accommodate the production of new housing in types appropriate to meet these housing needs.

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Table 8: Housing Needs by Income Level and Housing Type for Rural Skagit County (2020-2045)

Housing Type / Income Level Served	Net Units Needed 2020-2045
Emergency Housing*	57
0-30% Permanent Supportive Housing	0
0-30% Other	0
31-50%	0
51-80%	501
81-100%	268
101-120%	238
Above 120%	2483

Sources: Department of Commerce, 2023; Office of Financial Management, 2023; SCOG GMATAC Committee, 2023; Community Attributes, 2023.
Note: *Emergency Housing Needs are expressed as beds rather than housing units like Non-PSH and PSH housing need. Additionally, Emergency Housing Needs are not adjusted based on the GMATAC member recommendation and reflects the results of the HAPT Method A alone.

Land Capacity to Meet Projected Housing Needs

Not all housing types are appropriate to meet all housing needs. Due to differences in land and construction costs per unit, the affordability of new housing depends in part on housing type. For instance, a new single-family home on a large lot is the most expensive type of home to produce per unit. New homes often require an income of over 150% Area Median Income (AMI) to afford. Multifamily homes, such as apartment buildings, can be produced at a much lower cost per unit.

Table 9 lists five housing types for rural Thurston County and the Grand Mound UGA. It also shows the lowest income level that can be served, assuming the new housing is either market-rate or a subsidized affordable project. These housing types and affordability assumptions are consistent with Commerce guidance for updating housing elements.

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Table 9: Housing Types and Potential Income Levels Served in Skagit County

Housing Type	Definition	New Market Rate Housing	Subsidized Affordable Housing	Assumed Affordability Level for Capacity Analysis
Low-Rise Multifamily	Walk up apartment buildings or condominiums (up to 3 floors).	>80%-120 AMI	0-80% AMI	Low-Income (0-80% AMI)
Moderate Density	Also known as "middle housing". Includes townhomes, duplexes, triplexes, quadplexes.	>80%-120 AMI & >120% AMI	*Not typically feasible at scale*	Moderate-Income (80-120% AMI)
Manufactured Homes	Homes that are constructed in a factory and then assembled at the building site in modular sections	>80%-120 AMI[10]	*Not typically feasible at scale*	Moderate-Income (80-120% AMI)
Low Density	Detached single family homes.	>120% AMI	*Not typically feasible at scale*	Higher Income (>120% AMI)
ADUs	Accessory dwelling units associated with a detached single-family home.	>50-80% AMI & 80-120% AMI	*Not typically feasible at scale*	Low-Income (50-80% AMI)

Sources: Washington Department of Commerce Guidance for Updating Your Housing Element, 2023; BERK, 2024.

Capacity to accommodate housing targets

The technical appendix provides a detailed analysis of buildable land capacity by housing type under both current and proposed zoning compared to the allocated housing targets by affordability level. The key takeaways are summarized below.

[10] BERK collected data from Zillow on July 17, 2024, about the asking prices for all manufactured homes in Thurston County that were built after 2014. It included only homes sold with the land and excluded units in manufactured home communities or mobile home parks. We also excluded one home located on a waterfront, which added significant amenity value. Among the remaining homes, the average asking price was $311,000, with a range from $190,000 to $388,000. These prices are potentially affordable to a moderate-income household based on current mortgage rates and access to a modest downpayment.

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Skagit County plans to accommodate new housing within its existing land use designations by focusing on limited areas of more intense rural development, specifically the rural village residential zone. The rural village residential zone, which is part of the County's land use and zoning regulations, has been revised to allow for new housing types that are affordable to moderate- and low-income residents. By concentrating on new housing in these areas, Skagit County ensures that housing development is aligned with the necessary infrastructure and services required by the Growth Management Act (GMA), including transportation, water, sewer, and other essential facilities.

The rural village residential zone is intended to offer a balance between accommodating new housing and maintaining the rural character of the County. By focusing new affordable housing development in these areas, Skagit County can provide opportunities for moderate- and low-income residents without contributing to urban sprawl. This approach allows the County to address the affordable housing challenges it is currently facing, as outlined in the community engagement data from the 2025 comprehensive planning process.

Concentrating housing in these more intense rural development areas is a critical part of Skagit County's strategy to meet the growing demand for affordable housing while also preserving the natural beauty and rural landscape of the region. It provides a practical solution to housing shortages and creates more sustainable, well-serviced communities, all while preventing the spread of urbanization into undeveloped rural lands.

Adequate Provisions

The Growth Management Act requires that communities ensure that their Comprehensive Plan policies and regulations are designed to achieve housing availability for all community members at all income levels. The county does this by reviewing programs and actions, and then identifying gaps in local funding, barriers in development regulations, and other limitations with a course of action to correct.

Programs and Actions to Achieve Housing Availability

Based on a review of regulatory barriers and other limitations to new housing production, the county will pursue the following programs and actions to achieve housing availability.

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Skagit County, in partnership with Island and Whatcom Counties, is actively working through the Skagit County HOME Consortium to address local housing needs and improve affordable housing availability across the region. These efforts are focused on using available resources to support housing development and provide more options for residents within the County.

A key initiative is the HOME Investment Partnerships Program (HOME), where Skagit County plays a leading role in coordinating funding for affordable housing projects. This program allows the County to work with nonprofit organizations and developers to bring new housing projects to life. For example, the 2024 HOME Housing Development funding supports the creation of affordable housing units right here in Skagit County, helping to meet the needs of local residents for safe, accessible, and affordable living spaces.

In addition to the HOME program, the HOME-ARP (American Rescue Plan) funding will significantly enhance local efforts to tackle homelessness and housing instability. Skagit County will receive a share of these funds, with a focus on creating rental housing for vulnerable residents, including those experiencing homelessness or at risk of losing their housing. This funding directly benefits the County by providing more resources for housing solutions that prioritize the needs of Skagit's most vulnerable populations.

Skagit County is also supporting specific housing projects like the Volunteers of America (VOA) North Housing Development, which is addressing the need for housing in key areas, including floodplain zones. This project, and others like it, are part of the County's larger strategy to ensure that new developments are safe, sustainable, and accessible to the growing population.

Ultimately, these housing initiatives are helping to increase the supply of affordable housing throughout Skagit County. They provide vital opportunities for families, workers, and other residents to find stable, affordable homes while supporting the long-term growth and sustainability of the community. By working together with neighboring counties and local partners, Skagit County is making significant strides in addressing housing needs and improving quality of life for its residents.

Consideration for Housing in Relation to Employment

Skagit County's comprehensive plan emphasizes a strategic approach to housing and employment distribution, aligning growth within Urban Growth Areas (UGAs) to foster balanced development. The housing and employment concentrations are proportional, with the exception

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of employment for natural resource industries, such as agriculture and forestry, which require additional planning for worker housing needs.

The County's employment allocations for 2045 show significant growth across the UGAs, with Burlington and Sedro-Woolley projected to experience the most substantial increases in both total employment and percentage of growth. Employment growth within these areas is designed to match housing development, ensuring that workers can access housing close to their places of employment. This strategy supports regional economic vitality while minimizing the need for long commutes.

However, natural resource industries, particularly in agricultural and forestry sectors, necessitate special considerations for housing. To address these needs, Skagit County is collaborating with cities to provide housing options in UGAs near concentrations of employment in these industries. This joint planning effort ensures that farm workers, both year-round and seasonal, have access to suitable housing, which is a key component of the County’s broader housing initiative.

A major ongoing initiative for the County is the development and provision of farmworker housing, which is critical to the local economy. This initiative will continue to progress through 2045 to accommodate the growing demand for housing in these specialized sectors.

In summary, Skagit County’s comprehensive plan focuses on aligning housing growth with employment opportunities within UGAs, while also addressing the unique needs of workers in natural resource industries through targeted housing initiatives. This balanced approach is aimed at fostering sustainable growth that benefits both residents and employers alike.

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Table 10: Final 2045 Employment Allocations in Skagit County

Urban Growth Areas	2022 Employment Estimates	2045 Initial Employment Allocations	2022-2045 Projected Employment Growth		
			Amount	Percent of Total Growth	Percent of Growth by Area
Anacortes	9,503	12,648	3,145	15.3%	33.1%
Burlington	11,640	17,410	5,770	28.1%	49.6%
Mount Vernon	18,781	23,559	4,778	23.3%	25.4%
Sedro-Woolley	4,640	7,040	2,400	11.7%	51.7%
Concrete	391	506	115	0.6%	29.4%
Hamilton	466	489	23	0.1%	4.9%
La Conner	1,020	1,905	885	4.3%	86.8%
Lyman	56	76	20	0.1%	35.7%
Bayview Ridge	2,962	4,901	1,939	9.4%	65.5%
Swinomish	1,140	1,579	439	2.1%	38.5%
UGA Subtotal	**50,599**	**70,113**	**19,514**	**95.1%**	**N/A**
Rural (outside of UGA's)	8,972	9,987	1,015	4.9%	11.3%
Grand Total	59,571	80,100	20,529	100.0%	N?A

Consideration for the Role of ADUs

Skagit County plans to allow Accessory Dwelling Units (ADUs) throughout all zones that permit single-family housing. This initiative is part of the County's strategy to address the need for affordable housing while providing property owners with new opportunities to generate income and accommodate family members or new residents.

By enabling ADUs, the County aims to offer more affordable housing options, particularly for those seeking smaller, more affordable living spaces. At the same time, property owners can benefit from the potential rental income that ADUs provide. This flexibility also supports long-term housing solutions for families and individuals, whether it's for extended family members, new residents, or other community members in need of housing.

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Overall, the provision of ADUs is an important step in supporting the County's goal of increasing affordable housing availability while empowering property owners to take advantage of new opportunities for growth and community support.

Affordable Housing Strategy

Skagit County's Affordable Housing Strategy is designed to address both the immediate and long-term housing needs of the community, focusing on increasing housing inventory and maintaining affordable housing availability through a combination of programs and partnerships.

A key component of this strategy is the Skagit County HOME Consortium, which is a collaboration between Skagit, Island, and Whatcom Counties. This program helps increase the supply of affordable housing by leveraging federal funds and working with nonprofit and housing development partners. The HOME Consortium ensures that funding supports the development of new affordable housing projects and that existing affordable housing units remain available for low-income residents.

In addition to the HOME Consortium, Skagit County has launched the North Star Project, a multi-year initiative aimed at transforming homelessness, housing, and behavioral health services in the County. This project addresses the growing crisis of homelessness and behavioral health issues, which are often interconnected by creating a coordinated, countywide approach. Through the North Star initiative, Skagit County is developing a shared vision and framework to integrate services across multiple sectors, from housing to behavioral health, and leverage resources more effectively.

The North Star Project includes several phases. In its initial phase, it focused on gathering input from local leaders and mapping the current state of resources and gaps. In later phases, the project aims to implement a governance structure for behavioral health and homelessness services, allowing for better coordination and outcomes. A critical aspect of this project is its ability to attract and leverage significant funding. Over the next decade, Skagit County expects to access over $150 million in behavioral health and homelessness funding, which will directly support housing and support services for residents in need.

One of the tangible outcomes of the North Star Project is the creation of Martha's Place, Skagit's first permanent supportive housing development, which is already providing long-term housing for individuals experiencing homelessness. In addition, the County has secured $17 million from

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the Washington State Legislature to expand the Skagit STAR Center, enhancing treatment services for adults with substance use and mental health disorders.

These programs work together to address the root causes of housing instability and homelessness, offering a comprehensive approach to housing affordability. By increasing housing inventory through the HOME Consortium and improving access to supportive housing and services through the North Star Project, Skagit County is making significant progress in providing affordable housing solutions for low-income residents, with a focus on sustainable support until 2045.

Skagit County's affordable housing strategy is designed to make the most of the County's existing land capacity while providing new housing opportunities within its current land use boundaries as of 2025. The strategy focuses on three main approaches: expanding housing types in certain rural areas, promoting accessory dwelling units (ADUs), and concentrating high-density housing within Urban Growth Areas (UGAs) in coordination with cities.

At the beginning of the comprehensive plan update process, Skagit County worked closely with cities to direct high-density housing to UGAs, where urban services and infrastructure are already in place. This focus on high-density housing in urban areas is intended to accommodate a portion of the demand for affordable and low-income housing. By targeting development within these areas, the County can ensure that growth is efficient, and that affordable housing is available where services like transportation, water, and sewer systems are already established.

In addition to concentrating development in UGAs, Skagit County is also providing opportunities for new housing types in limited areas designated for more intense rural development. These areas allow for slightly higher density housing options, which helps meet the demand for housing while maintaining the rural character of Skagit County.

The strategy also encourages the use of accessory dwelling units (ADUs), which offer a flexible solution for affordable housing. ADUs can be built on existing properties, providing additional housing options for family members, renters, or other residents in need, without requiring major land use changes or expansion into undeveloped areas.

Through these approaches, Skagit County's affordable housing strategy aims to increase housing availability within the County's existing land use designations, while preserving rural areas and ensuring that growth is directed toward areas with the necessary infrastructure. This strategy is

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designed to support the development of affordable housing, reduce housing costs, and create sustainable communities for current and future residents.

Role of the County

Skagit County has the opportunity to play a role in shaping policies around housing issues in the region and to work alongside cities to achieve a vision of securing housing for all residents that is affordable, encourages preservation of existing housing stock, and provides a variety of options.

The County has allocated growth to all jurisdictions in accordance with GMA provisions to provide adequate land for housing to meet the anticipated population growth. The County and cities apply zoning at appropriate densities to promote a variety of housing types. The County and cities authorize land use and building permits for single-family and attached housing, where appropriate. While the County's share of rural growth is appropriately limited and the majority of housing will be in Urban Growth Areas, the County can play a role in providing diverse rural housing choices through zoning and incentives for manufactured homes, accessory dwelling units or duplexes, farmworker housing such as temporary housing that would not remove long-term productive agricultural lands, and a range of rural single family densities including CaRDs and infill and adaptive reuse in Limited Areas of More Intense Rural Development. State agencies, counties and cities may also surplus lands no longer needed for public purposes as a potential source of land for housing.

Skagit County has also served as a convener of housing and human service providers and strategies such as through the formation of the Skagit County Affordable Housing Advisory Committee authorized by Skagit County Commissioners' Resolution R2010-0206. This Committee has prepared an affordable housing strategy with city- and county-specific roles and recommendations, and makes recommendations on leveraging collective action. Recent efforts at collective actions include establishing a HOME Consortium as an annual grant source, for municipalities in Skagit, Island, and Whatcom Counties. Future County actions may include allocating a share of certain revenue sources for incentives to construct affordable housing. More information on the County's affordable housing strategy is provided above.

The North Star Collaborative was established in July 2022 by Skagit County Commissioners and city mayors to tackle issues like housing and behavioral health crises through a collaborative

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approach. It is led by a Leadership Team of county commissioners and mayors, supported by advisory groups and technical task forces. The North Star Vision is All Skagit Thriving;

- No one in our communities as to live in their car or on the street.
- Everyone can get the services they need when they need them.
- Our key partners know what North Star is and want to be a part of it.

North Star has prioritized three strategic pillars to guide their work. These include:

- Securing the necessary, sustainable resources and community support to build a resilient infrastructure that empowers us to be successful.
- Creating an effective, coordinated community-based system of care.
- And ensuring communities throughout Skagit County have access to more supply and diversity of housing options North Star will continue to work with the County and cities to influence regulatory changes across jurisdictions to promote faster housing production and help increase the supply and diversity of housing in addition to their work with exploring additional funding resources, enhance existing mechanisms for input and decision-making process, strengthen collaboration among cities and the county, and expand the North Star network, and expanding behavioral health and recovery services.

The Skagit County Health Department provides services for those with special needs (home repair program, elder meal services, mental health services, etc.). Therefore the County will support the social service needs of households throughout the county, which can contribute to housing stability.

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Goals and Policies

Housing Quantity

Goal 7A Ensure that the supply of housing types are diverse and there is sufficient land capacity to keep pace with population projection for all income groups in the County.

policy 7A-1.1 Identify sufficient land countywide for existing and projected residential needs for moderate, low, very low, and extremely low income households including, but not limited to, middle housing, ADUs, manufactured housing, multifamily housing, group homes, emergency housing, emergency shelters, and permanent supportive housing.

Housing Affordability

Goal 7A-2 Maintain a progressive program of financial, regulatory, and development measures that will produce opportunities for a full range of housing affordability countywide for all income groups.

policy 7A-2.1 Work with housing producers and stakeholders in urban and rural areas to apply creative solutions to infill and development using techniques and housing options such as attached dwelling units, co-housing, home-sharing, accessory dwelling units, tiny homes, clustering, planned unit developments, lot size averaging, and middle housing consistent with the community's vision for urban growth areas and rural character.

policy 7A-2.2 Develop explanatory materials, offer pre-application conferences, and employ other measures to facilitate the review and approval of building permit and land use applications.

policy 7A-2.3 Support low income housing programs with tools such as tax increment financing, public bond issues, grants, and low interest loan programs.

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policy 7A-2.4 Collaborate with cities by exploring incentivizes and programs that support the construction of a variety of housing types that are affordable to target income bands.

policy 7A-2.5 Promote homeownership through various programs such as education, technical support, self-help housing efforts, and working with financial institutions.

policy 7A-2.6 Collaborate with cities and other organizations on programs that assist residents with the ability to afford housing.

policy 7A-2.7 Ensure zoning and subdivision regulations provide for the efficient use of lands for residential development where appropriate to increase available land supply and opportunities for affordable housing to match the demographic and economic housing needs of the County's current and projected population.

policy 7A-2.8 Work with cities, towns, and special purpose districts, to reduce impact fees and utility fees for low income housing projects, when such fees are required.

policy 7A-2.9 Maintain an ongoing monitoring and evaluation program to improve the process of permit review and approval, save time, and decrease costs.

policy 7A-2.10 Work with the Skagit Council of Governments to establish a program for regular updating of the Housing Needs Assessment, including provisions to monitor and assist in providing affordable housing opportunities. The Assessment should be updated on a regular basis, several years in advance of each periodic GMA-required Comprehensive Plan update.

policy 7A-2.11 Develop growth strategies and housing and human service programs to plan for affordable housing within the regional context. In collaboration with the cities and housing providers, address the countywide need for ownership and rental housing affordable to households with moderate, low and very-low incomes. Work towards a common goal of allocating adequate countywide housing stock affordable at or below 80 percent of the area median income (AMI), with an intentional focus on expanding the supply of housing affordable at or below 50

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percent of the AMI. ~~Develop objectives for housing affordable to different income ranges and special needs populations.~~

Housing Quality

Goal 7B Strive to preserve, conserve, and enhance the existing housing stock, including historic structures and sites.

policy 7B-1.1 Support programs and regulations that encourage the rehabilitation of housing deemed inadequate due to conditions posing a risk to human health and safety.

policy 7B-1.2 Facilitate the rehabilitation and reuse of existing structures for housing by allowing reduced permitting fees and legal nonconforming structures to be improved within existing building footprint.

policy 7B-1.3 Allow reuse of formerly non-residential structures for housing in mixed use developments in Limited Areas of More Intense Rural Development and Urban Growth Areas.

policy 7B-1.4 Establish clear and objective development standards for Urban Growth Areas, Limited Areas of More Intense Rural Development, and large CaRD developments, to promote efficient, and pedestrian friendly communities.

policy 7B-1.5 Ensure that standards or requirements for design review for ADUs are not more restrictive than those for principal units. Additionally, ensure that development regulations for middle housing are not more restrictive than those required for detached single-family residences.

policy 7B-1.6 Manage regulatory, administrative, funding and information programs that contribute to the development and maintenance of high quality housing throughout the County.

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Housing Distribution and Accessibility

Goal 7C Strive to ensure that a variety of housing types, densities, and values can be produced in the rural area, Urban Growth Areas, and LAMIRDs appropriate to the character of the individual communities. Additionally, ensure sufficient infrastructure capacity is available to accommodate growth and provide housing opportunities for all economic segments of the population.

policy 7C-1.1 Allow mixed residential and commercial uses in Urban Growth Areas and LAMIRDs commercial districts to promote housing affordability and availability.

policy 7C-1.2 Allow a variety of housing types including middle housing and affordable housing options in the UGAs and LAMIRDs where public services can be made available to address changing housing needs.

Housing for Special Needs

Goal 7D Ensure the availability of housing for people with special needs.

policy 7D-1.1 Allow specialized housing facilities in terms of cost, size, design, and suitability for various household types, e.g., families, people of all ages and levels of mobility, couples, single persons, and persons with disabilities or special needs. These include but are not limited to senior housing, group homes for children and adults with special needs, in appropriate zoning districts.

Farmworker Housing

Goal 7E Strive for an adequate supply of housing to meet the needs of farmworkers and the agricultural industry.

policy 7E-1.1 Work in partnership with other public agencies and the private sector to ensure an adequate supply of farmworker housing.

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(a) Support strategic actions of the Skagit Valley Farmworker Housing Trust Advisory Council to develop new farmworker housing.

(b) Recognize farmworker housing would occur primarily in urban areas where services are available and secondarily in rural areas when sensitively designed to minimize loss of agricultural lands of long-term commercial significance.

(c) Consider the seasonal nature of farming and potential options to accommodate seasonal housing that does not permanently convert agricultural lands of long-term commercial significance.

policy 7E-1.2 Review permit applications for farm-worker housing developments in consideration of proximity to job locations and necessary public facilities and services consistent with the Washington State Temporary Worker Housing Health and Safety Regulations (RCW 70.114A).

Manufactured Housing

Goal 7F Allow manufactured housing, manufactured home parks, tiny homes, and accessory dwelling units, as affordable housing solutions.

policy 7F-1.1 Ensure that regulations regarding manufactured housing are consistent with federal and state laws.

policy 7F-1.2 Allow manufactured housing in the same locations and at the same density as other housing. Apply development and standards in each residential zoning district equally to manufactured homes as they would apply in other residences.

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Housing Equity

Goal 7G Prevent discrimination, address displacement, and mitigate past harm in the development and maintenance of housing.

policy 7G-1.1 Collaborate with community groups, organizations, non-profits, and businesses to help vulnerable groups obtain and maintain housing.

policy 7G-1.2 Evaluate the potential for displacement on lands proposed for rezone or redevelopment for public use.

policy 7G-1.3 Consider the drivers of displacing low-income households and marginalized populations as a result of planning, public investments, redevelopment, and market pressures. Use strategies to mitigate displacement of these communities.

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Introduction

Transportation is an important issue that affects daily life for people living in the Skagit Valley and influences the local, regional, and state economy, overall quality of life, and the environment. Other factors, such as land use, functional classification, and development patterns, influence the overall design, funding and efficiency of the transportation system. A safe, efficient, and cost-effective transportation system is a priority for Skagit County. The periodic Comprehensive Plan update provides an opportunity to analyze the existing system, identify needs, develop funding and strategies for implementation improvements, and establish goals and policies that meet the needs and desires of the County.

The Growth Management Act (GMA) has very specific requirements for comprehensive plan transportation elements, including a transportation inventory, travel forecasts based on land use assumptions, Multimodal Level of Service (MMLOS) standards, active transportation, current and future transportation improvement needs, and a transportation financial plan in addition to other GMA requirements. In this chapter, the transportation goals and policies are presented. The goals and policies provide the basis for transportation infrastructure decisions pursuant to the GMA. Since transportation infrastructure and services are also provided by the state and the area's cities and towns, the Skagit County Transportation Element is intended to complement those other systems and networks.

The Transportation Element is associated with the Skagit County Capital Facilities Plan (CFP). The CFP contains information and policies regarding financing, level of service, and implementation of capital improvement projects. The following three aspects of the Transportation Element have a direct bearing on transportation project programming and funding through the Six-Year Transportation Improvement Program (Six-Year TIP):

- *Transportation goals and policies;*
- *Existing and future transportation needs (based on Level of Service); and*
- *The 20-year transportation financial plan.*

The transportation goals and policies are used to give general direction for transportation improvement investments. Along with the County's Priority Array, which prioritizes road segments primarily based on physical deficiencies, Level of Service based transportation needs,

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Annual Bridge Report, County Safety Plan, and other factors are used to select potential projects. The Transportation Element's 20-year transportation financial plan is used to produce a financially feasible six-year transportation program. Thus, the Transportation Element provides a framework for use in making transportation investment decisions.

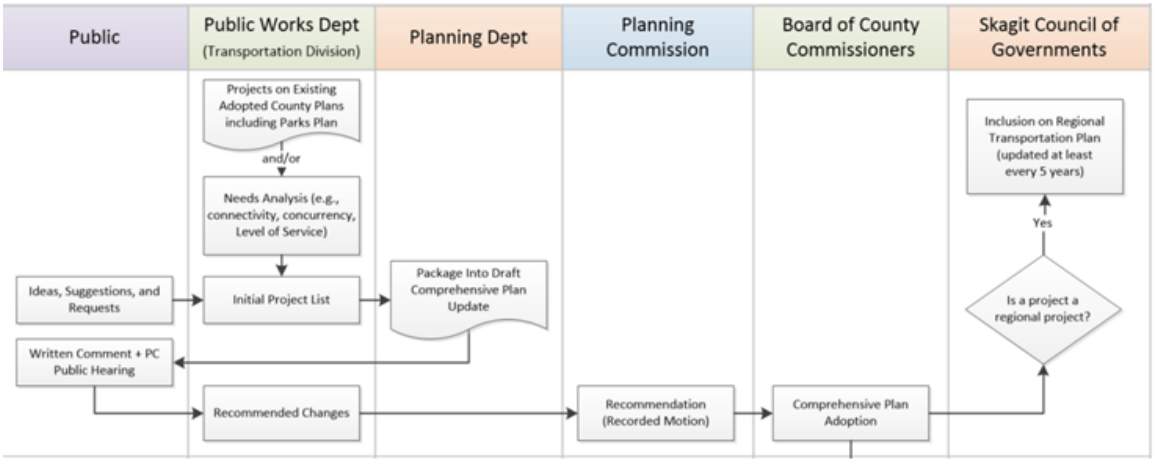
The Comprehensive Plan's Transportation Element reflects the County's long-term transportation vision and plan, and travel demand model forecasts are based on the same 20-year population and employment projections used in other portions of the Comprehensive Plan. The Transportation Element must include a list of proposed projects – for both motorized and active transportation – that illustrates how the County intends to meet anticipated future transportation needs. The 20-year project list is typically more conceptual in nature than projects in the County's Six-Year TIP but must include enough detail to allow the County to generate cost estimates, and a reasonable 20-year transportation financial plan.

Projects proposed for inclusion in the Comprehensive Plan can come from a variety of sources, including input from members of the public, the Board of County Commissioners, the Public Works Department or other County departments, and adopted County plans such as the Comprehensive Parks and Recreation Plan. Projects may be added to the Comprehensive Plan through annual or periodic updates. Proposed projects are released for public review and comment and a public hearing before the Planning Commission along with other proposed Comprehensive Plan amendments. The Planning Commission forwards a recommendation to the Board of County Commissioners on the proposed amendments including proposed transportation projects. The Board of County Commissioners makes the final decision on inclusion. Once adopted into Skagit County's Comprehensive Plan, transportation projects that are regionally significant are forwarded to the Skagit Council of Governments for inclusion in the Regional Transportation Plan.

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Figure 3: Multimodal Transportation Project Planning Flow Chart:

Comprehensive Plan (20-Year Planning Period, 10-Year Updates)

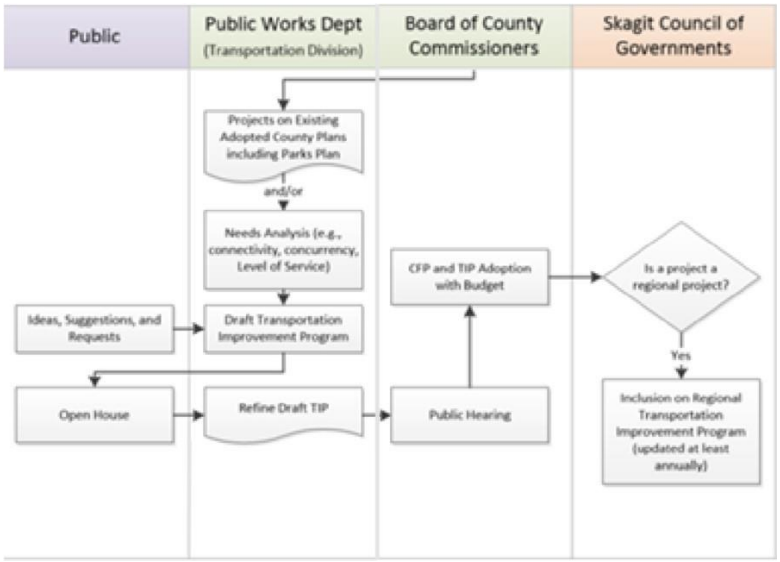


The Comprehensive Plan's Transportation Element forms the basis for the County's Six-Year Transportation Improvement Plan (TIP). Pursuant to RCW 36.81.121, the Six-Year TIP is updated annually. The Public Works Department produces a draft TIP that includes projects retained from the previous year, plus any additions or deletions, and a short description of each project. Projects are drawn from the Comprehensive Plan and other adopted County plans, including the adopted 14-Year Ferry Capital Improvement Plan and Parks and Recreation Plan, or are generated from staff needs analysis. Public Works holds an informational meeting for the public to comment on the draft plan, makes any revisions, then the Board of County Commissioners holds a public hearing on the proposed TIP and adopts the TIP prior to adoption of the County budget. The TIP is then sent to the Skagit Council of Governments (SCOG) where regionally significant and/or federally funded projects are compiled from the TIPs of other municipalities into the Regional TIP (RTIP). SCOG sends the RTIP to the Washington State Department of Transportation where it is combined into the State TIP.

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Figure 4: Multimodal Transportation Project Planning Flow Chart:

Transportation Improvement Program (6-Year Planning Period, Annual Updates)



This section summarizes the key aspects of current and projected transportation conditions and needs for which Skagit County is obliged to plan. GMA requires that transportation plan elements include the following:

- *An inventory of the existing multimodal transportation system*
- *Adoption of multimodal level of service (MMLOS) standards*
- *Land use assumptions used in estimating future travel demand*
- *Forecast of impacts to local and state-owned multimodal transportation facilities*
- *Future improvements needed to maintain an adequate multimodal transportation system*
- *An assessment of funding resources and options available*
- *A commitment to intergovernmental coordination*
- *Strategies available for transportation demand management*

Each of these major requirements is described below. The method used by the County to comply with the GMA requirements involves managing a complex and inter-related group of

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complementary studies, plans, inventories, and standards. In addition to the analyses and documentation prepared by the County, the State of Washington, the cities and towns and the Skagit Council of Governments also maintain similar plans that need to be acknowledged. While the rural road network is the primary transportation mode that the County is responsible for managing, the County through its Comprehensive Plan also acknowledges and addresses the needs for active transportation, public transportation, aviation, and marine transportation. Outreach efforts for the Comprehensive Plan Update in 2007, 2016, and 2024 have all indicated a concern for increased vehicle traffic congestion, as well as active transportation needs within the urban areas of the County. Over the next 20 years, the County will need to increase investment in multimodal transportation projects within or connected to the urban areas, in partnership with the cities and towns, state, and federal governments.

Transportation System Inventory

Existing Facilities and Services

Skagit County's transportation system is comprised of a variety of transportation facility types which were inventoried in conjunction with the update of this Transportation Plan. The inventory summarizes the key components of the existing transportation system serving Skagit County and covers elements of the road network, traffic controls, traffic volumes, traffic operations, transportation safety, freight movement, transit service and facilities, pedestrian and bicycle facilities, and air travel. The inventory is presented using maps, figures, and descriptions to provide a foundation for identifying and prioritizing transportation improvement projects and programs to support the County's vision.

The County's transportation network consists of highways and streets, pedestrian and bicycle facilities, and transit service, as well as the Guemes Island Ferry. Freight and goods, which are vital to the region's economic development, are carried by trucks and rail lines. Following a description of the street system, subsequent sections describe freight, public transit, active modes, and air travel within Skagit County. The County maintains an ongoing database of current conditions of the County roadway network and the Guemes Island Ferry system, including an inventory with extensive information on the condition, utilization, and shortfalls that exist. In

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addition to supporting planning, this information is used to program on-going maintenance of the system.

Roadway Network

The roadway network provides mobility and access for a range of travel modes and users. The functional classification system, traffic volumes, transportation safety, and traffic operations at key intersections are summarized within this section. This inventory and analysis of the roadway network's existing conditions provides background for identifying potential transportation improvements and programs. Figure 8-2 shows the existing transportation system serving the County.

The roadway network in unincorporated Skagit County includes approximately 800 miles of publicly owned and maintained County roads and approximately 275 miles of private roads. Additional road miles are in incorporated cities that are not maintained by the County. Traffic on County roads outside of the highways and arterials is fairly moderate. Nearly half of the roads carry fewer than 250 vehicle trips per 24-hour day on average (AADT). About 10% of the roads carry more than 2,000 AADT, and fewer than 2% carry more than 5,000 AADT.

Federal Functional Classification

Skagit County follows the federal functional classification system to organize its roadways into a hierarchy, depending on the roadways traffic volume and intended function. The federal government's functional classification system further divides Counties into "urban" and "rural" designations and provides a classification framework to categorize all the streets, roads, and highways within each. Cities within "urban" areas over 5,000 in population are required by the federal government to functionally classify their streets based on the urban classifications. Streets in the smaller cities and towns are included in the "rural" functional classification that covers all areas outside of "urban" areas. All but one of the rural functional classifications have equivalent classifications in the urban functional classification system.

Skagit County uses the Federal Functional Classification System for roadways, as listed in Table 1. Roadway types serve different functions, ranging from prioritizing mobility versus prioritizing access to adjacent land uses. Higher classifications (e.g. freeways and arterials) provide a high degree of mobility, serve to facilitate regional travel and the transport of freight and goods, and

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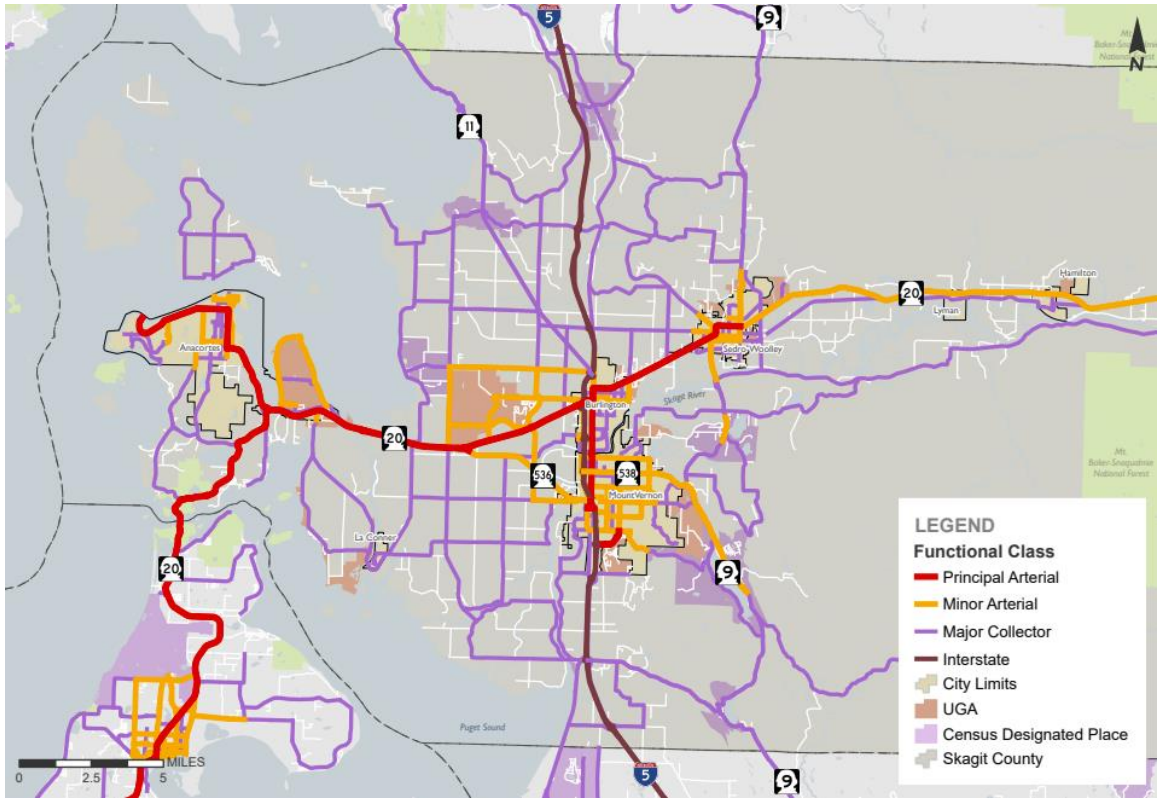
generally have limited access to adjacent land uses, accommodating higher traffic volumes and travel speeds. Conversely, lower classifications (e.g. local access streets) provide a high degree of access to adjacent land uses and are not intended to serve through traffic, carrying lower traffic volumes at lower speeds. Collector roads, both major and minor, provide a more balanced emphasis on traffic mobility and access to destinations, and provide critical linkage between higher and lower classes of roadways. Table 11 provides an overview of the existing roadways in unincorporated areas of Skagit County classified as freeways and expressways, primary arterials, minor collectors, and collectors. The County's roadway network also includes local access roads, over half of the road miles in Skagit County are local access roads.

Table 11: Federal Functional Classification (FCC) of County Roadways

FCC Description	FCC Code	County Miles
Rural Classifications		
Rural Other Principal Arterial	02	0
Rural Minor Arterial	06	9.4
Rural Major Collector	07	157.4
Rural Minor Collector	08	153.1
Rural Local Access	09	371.5
Rural	**Total**	**691.4**
Urban Classifications		
Urban Other Freeway/Expressway	12	0
Urban Other Principal Arterial	14	0.5
Urban Minor Arterial	16	17.5
Urban Major Collector	17	13.9
Urban Minor Collector	18	5.0
Urban Local Access	19	71.7
Urban	**Total**	**108.6**
Combined	**Total**	**800.0**

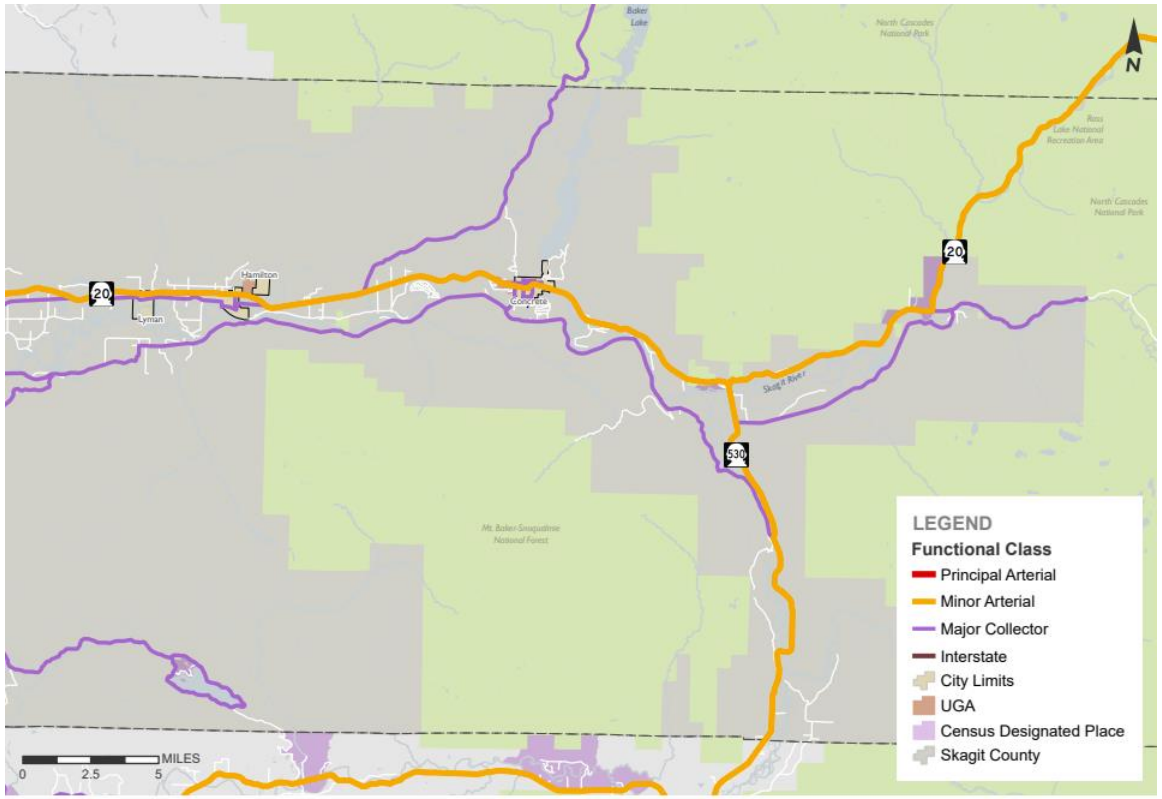
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Figure 5: Roadway Functional Classification – West County



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Figure 6: Roadway Functional Classification – East County



There are different factors that come into play in the designation of an appropriate classification for a specific roadway. The most important is the nature of the traffic that is served. For instance, a large portion of traffic that is served by SR-20 west of I-5 has an origin or destination outside of the County. Thus, the facility should receive a high classification. Other considerations when selecting the appropriate roadway designation include the physical characteristics of the existing facility, the volume of traffic served, and the distance to the next roadway of the same classification or overall distribution of roadway classifications throughout the network. There are also parameters as to the percentage of the total county system that should fall under each classification.

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Table 12: State Highway Federal Functional Classification (FCC)

Highway	FCC Description	FCC Code	WSDOT Miles
I-5	Interstate		24.97
SR 9	Minor & Major Collector	01/11	29.15
SR 11	Major Collector	07/17	14.11
SR 20	Other Freeway; Other Principal; Minor Arterial	12/02/12/06	74.59
SR 20	Minor Arterial	06/16	11.94
SR 20 Spur	Other Freeway; Other Principal Arterial	12/14	7.78
SR 530	Major Collector	07/17	14.96
SR 534	Major Collector	07/17	5.08
SR 536	Minor Collector	06/16	5.38
SR 538	Minor Collector	06/16	3.67
	Total		**191.63**

Freight and Goods Network

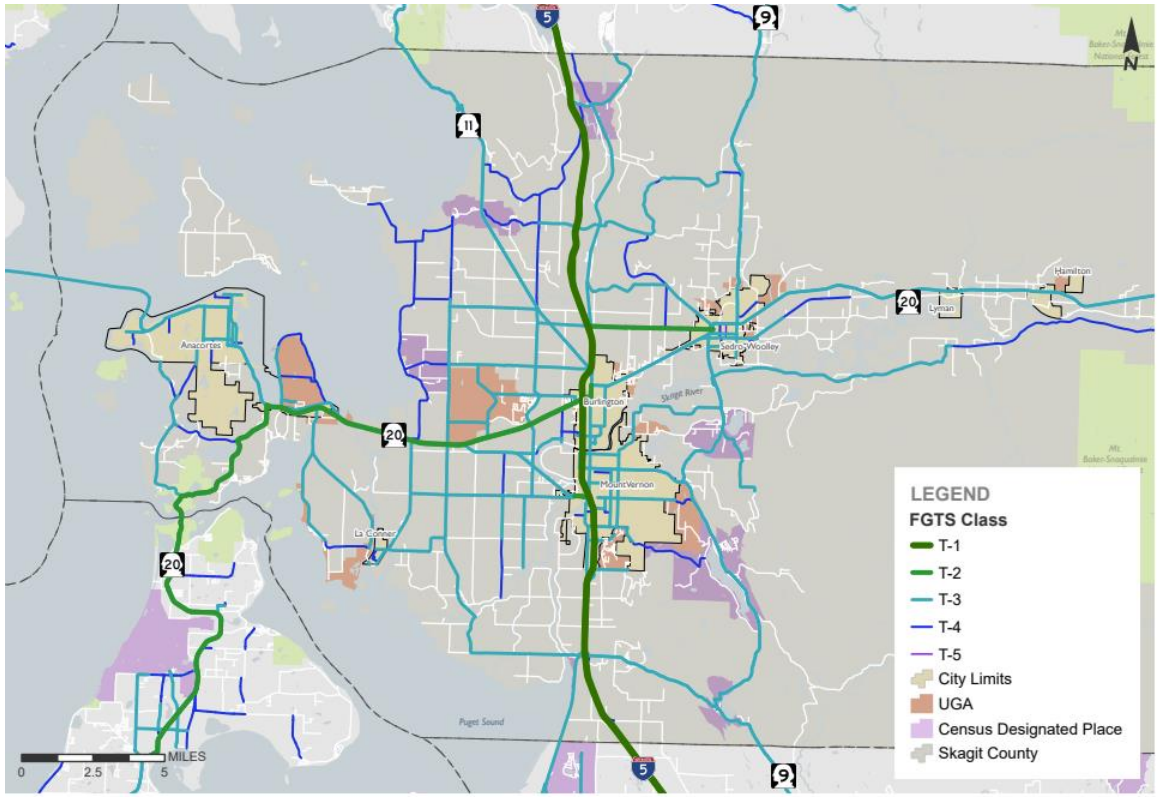
Trucks

Skagit County has designated freight corridors within the Freight and Goods Transportation System (FGTS), as depicted in **Figure 7** and **Figure 8**, and include:

- T-1: more than 10 million tons per year
- T-2: 4 million to 10 million tons per year
- T-3: 300,000 to 4 million tons per year
- T-4: 100,000 to 300,000 tons per year
- T-5: at least 20,000 tons in 60 days and less than 100,000 tons per year.

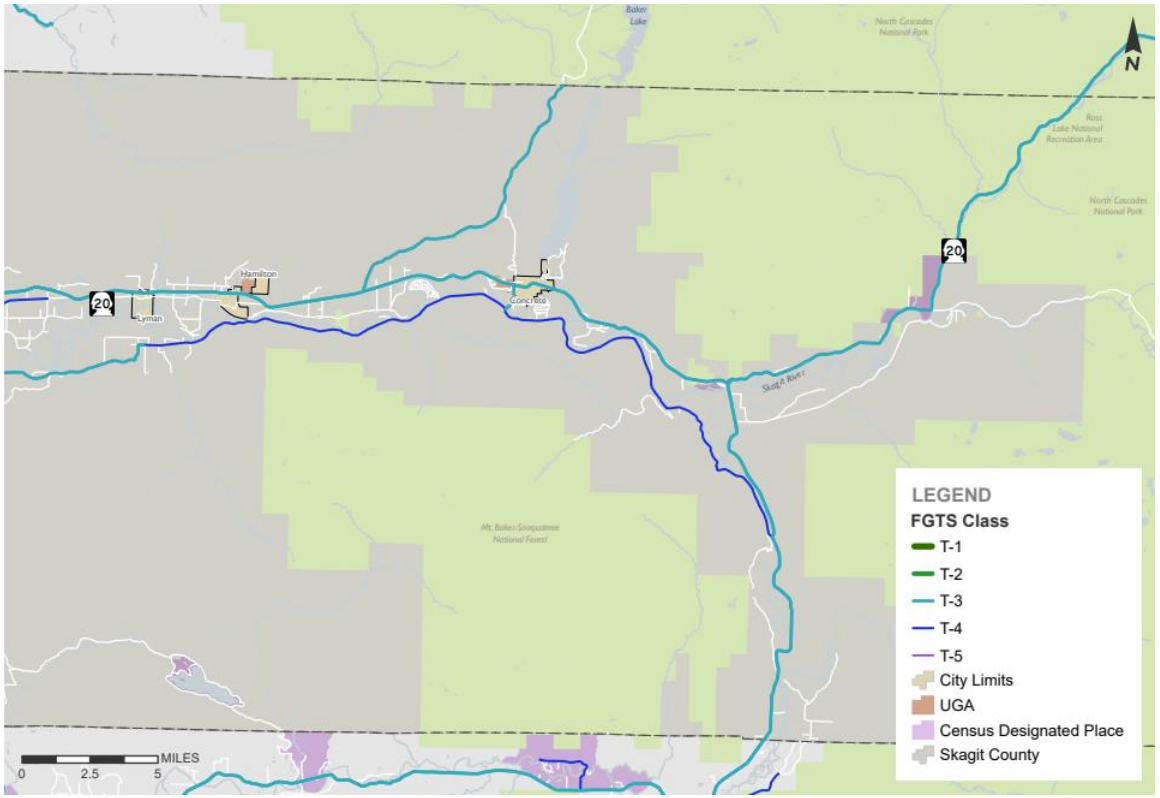
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Figure 7: Designated Truck Routes – West County



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Figure 8: Designated Truck Routes – East County



For rural Skagit County, the facilities with the highest FGTS designations include the entire length of I-5 (Tier 1), and SR-20 from I-5 to Anacortes (Tier 2 to Anacortes, Tier 3 for the SR-20 Spur). SR-20 from Burlington to Anacortes carries an estimated 10,000,000 annual tonnage and is considered Tier 2. Cook Road from I-5 to Sedro-Woolley is designated as Tier 2. The majority of Skagit County's FGTS designations are within the range of 3,000,000 to 4,000,000 tons per year. The remaining state highways in the County along with a number of County roads are not included in the FGTS system. In the cities, the streets receiving FGTS designation tend to be those with the highest functional classifications.

Freight Rail

The Burlington Northern Santa Fe (BNSF) Railroad is the one major railroad serving the County. BNSF is an international company with a vast network of tracks throughout the western and

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midwestern United States that owns a large fleet of rolling stock with which to serve its customers. In Skagit County, BNSF operates one mainline, two branch lines, and numerous active spurs that provide freight rail service with regional, national and international connectivity. The main switching yards for the BNSF Railroad in Skagit County are in Burlington.

The north/south BNSF mainline generally follows the I-5 corridor connecting the urban centers of Seattle and Vancouver, British Columbia. Like trucking routes, the FGTS designates rail lines according to the volume of freight carried annually. The BNSF segment running from Burlington to Everett is designated as an R1 freight railway which at more than 5 million tons of goods per year, carries the highest volumes of freight. This line is expected to be at 100 percent capacity by 2035. From the Snohomish County line, the railroad runs north along Pioneer Highway to Conway. From Conway, it runs more or less parallel to I-5, veering northwest at Cook Road and eventually running parallel to SR-11 (Chuckanut Drive) to the Whatcom County line. An east/west branch follows SR-20 connecting the refineries at March's Point to the mainline in Burlington. A second branch line runs along SR-20 from Burlington to Sedro-Woolley, then turns north and eventually parallels SR-9 to and beyond the Whatcom County line, eventually crossing the Canadian border at Sumas.

Commuter Train Service

Passenger rail service is provided in Skagit County by Amtrak. Commuters can access the service at Skagit Station, a multimodal facility in downtown Mount Vernon that provides inter-county connectivity via services provided by Skagit Transit, Island Transit, Whatcom Transportation Authority, and Greyhound. Tickets for Amtrack services can be purchased online or from the vending machine inside Skagit Station.

Transit Service

Skagit Transit provides public transit bus service to most of Skagit County. Service originates from two primary locations: Skagit Station in Mount Vernon and the Chuckanut Park and Ride in Burlington. From these two locations, the bus lines branch out to serve the rest of the Skagit Valley in linear and circuitous routes. Skagit Transit also owns and operates several park and ride facilities.

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Fixed Route Service

Skagit Transit's fixed route services include 19 routes, made up of 11 local, four commuter routes (to Alger/Bellingham, Everett, Anacortes, and Concrete), and three rural routes. Route service span and frequency differs across routes, with routes running between 5-7 days per week with frequencies as low as 30 minutes and as high as 180 minutes. ADA paratransit service is available within ¾ of a mile of fixed-route services and operates the same hours as fixed-route service.

Paratransit Service

Skagit Transit provides Paratransit to eligible riders who are unable to access the nearest fixed-route bus stop or use a fixed route bus. Paratransit services operate within the same geographic range and during the same hours as Skagit Transit's local, non-commuter fixed routes. Hours of availability vary depending on the service schedule for the area routes. Weekend service is provided in Burlington, Mount Vernon, and Sedro-Woolley on both days, and limited service is extended to Anacortes on Saturday. Upon review of applications, approved riders may be eligible for curb-to-curb service, curb to fixed-route service or door to door service. Skagit Transit provides a PDF of its Paratransit Rider Guide, and instructions to apply for services on its website.

Rideshare (Vanpool)

Skagit Transit's Rideshare Program allows commuters travelling to common destinations to pay Skagit Transit a monthly fee and per mile charge to use a Skagit Transit-owned and maintained van to vanpool to work as long as the trip begins or ends in Skagit County. Among users of this service, 70 percent are traveling to Boeing in Snohomish County.

Park-and-Rides

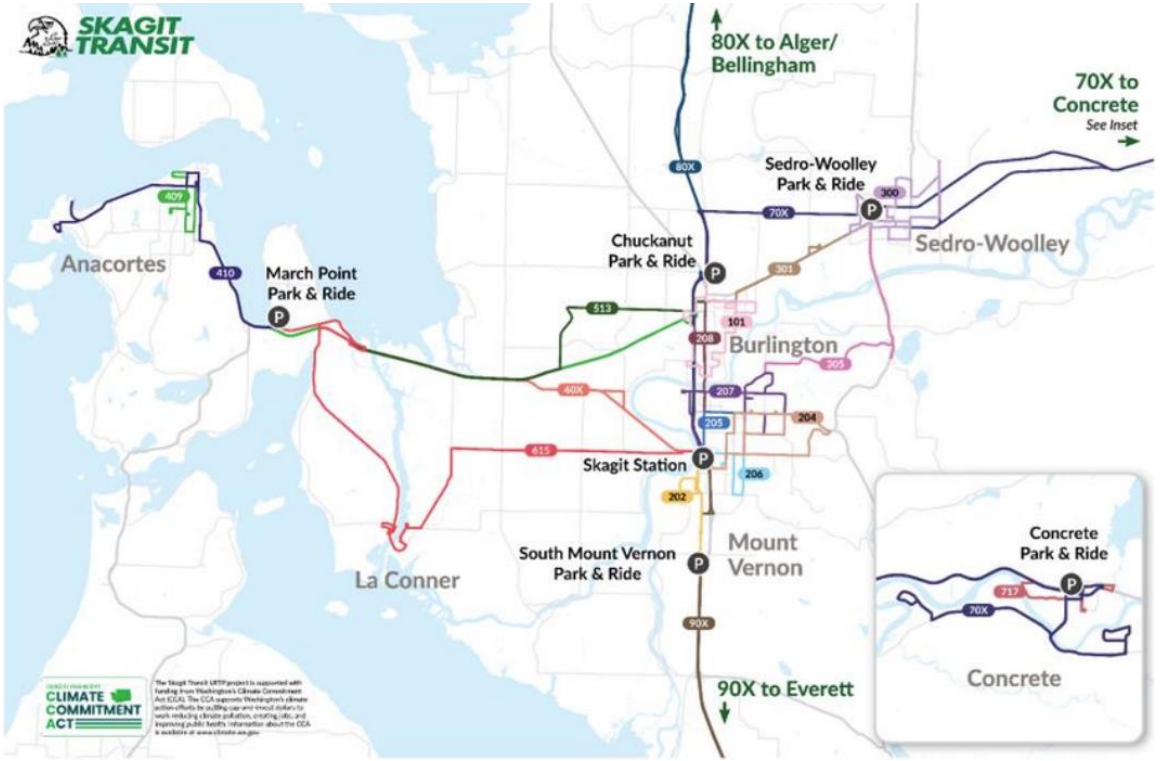
Skagit Transit operates and maintains five park and ride facilities and serves several others. The table below provides locations, ownership and capacity information for park and ride facilities operated by Skagit Transit.

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Table 13: Park and Ride Parking Lots Served by Skagit Transit

Location	Ownership	Capacity	Served by Routes
Chuckanut Near I-5 exit 231	WSDOT	369	208, 301, 409, 513, 80x, 90x Vanpool, Carpool
March's Point Highway 20 at Christianson Rd	Skagit Transit	133	410, 411 (Island Transit), 513, 615, 40x Vanpool, Carpool
South Mount Vernon I-5 and Old Hwy 99	Skagit Transit	382	202, 90x Vanpool, Carpool
Alger I-5 exit 240	Skagit Transit	54	80x
Sedro-Woolley Cook Rd and Hwy 20	Skagit Transit	25	Vanpool, Carpool

Figure 9: Skagit Transit Fixed Route Bus Service in Skagit County in 2025



(Source: Skagit Long-Range Transit Plan 2025)

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Air Travel

There are three municipal airports in Skagit County, the Skagit Regional Airport, Anacortes Airport, , and the Concrete Airport, described in the following section. Skagit Regional Airport is operated by the Port of Skagit County and is located adjacent to the Bayview Business and Industrial Park west of Burlington. This airport is used for general aviation and has runways of 5,475, and 3,000 feet in length which can accommodate small aircraft with passenger capacities of 30 or less. The airport also provides a charter service, primarily to the San Juan Islands. As shown below, general aviation activity has been increasing over the years.

Table 14: Skagit Regional Airport Aviation Activity

Skagit Regional Airport

Year	Based Aircraft	Operations			
		General Aviation	Commercial	Military	Total
2004	158	55,300	2,000	100	57,400
2005	166	58,100	3,280	100	61,480
2010	182	63,680	3,704	100	67,484
2015	203	70,875	3,993	100	74,968
2020	211	73,804	4,295	100	78,199
2025	219	76,732	4,630	100	81,462
CAGR	**1.57%**	**1.57%**	**4.08%**	**0.00%**	**1.68%**

CAGR: Compound Annual Growth Rate

Source: 2007 Airport Master Plan - Century West Engineering/David Evans and Associates.

Anacortes Airport is operated by the Port of Anacortes located 2 miles west of downtown Anacortes. The airport is used for general aviation purposes and has a runway of 3,018 feet in length. The airport provides charter flights to and from Sea-Tac and Boeing Field for business travelers as well as to the San Juan Islands to support tourism. Concrete Airport, also known as Mears Field, is located approximately 1 mile southwest of downtown Concrete. The airport is used for general aviation by the eastern portions of the County. The runway is 2,600 feet long. This airport is used sparsely throughout the year except during summer for the annual Concrete Fly-In event.

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Marine Travel

Passenger and Vehicle Ferry Service

Skagit County Guemes Island Ferry Terminal

Skagit County is one of four counties in Washington state that owns and operates its own ferry system, which runs between Anacortes and Guemes Island. A round-trip crossing of the nearly ¾ mile channel takes approximately 20-25 minutes. During non-peak seasons the ferry makes 139 round-trip scheduled crossings per week. The sailing schedule allows for additional runs to accommodate heavy traffic volumes as needed during certain times. Hazardous materials are permitted on specified crossings, to the exclusion of other vehicles for safety reasons. Scheduled crossings may also be canceled for emergency purposes.

The current vessel, MV Guemes, was built in 1979 and has been in operation 7 days per week, 365 days per year, since entering service in 1980. The vessel is 124 feet long and can carry 22 cars, 99 passengers and 3 crew members. In addition to the vessel, the ferry system includes docks, transfer spans and machinery, dolphins, wingwalls, terminal buildings, parking lots, and loading approach facilities. The current dock and facilities were built in 1980 when the M/V Guemes was put into service. The bridge, mechanical, electrical and hydraulic systems have been well maintained. The mechanical and electrical systems were last upgraded in 2014.

Washington State Ferries Anacortes Ferry Terminal

In addition to the Skagit County Ferry, WSDOT provides ferry service to the San Juan Islands through its terminal facility in Anacortes. This service provides crucial travel connection to the mainland for residents of the San Juan Islands in addition to serving the needs of recreational tourism in the area.

The Anacortes Ferry Terminal is the gateway for State ferry service to the San Juan Islands and Sidney, BC, and is one of the busiest terminals in the Washington State Ferry system. It is located at Ship Harbor at the end of SR 20 Spur in the west end of the City of Anacortes. Much of the facility was built in the 1960s and 1970s, including the terminal building. Four toll booths serve 16 holding lanes with a total capacity for 540 vehicles. There are also three holding lanes for

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offloading traffic waiting to clear U.S. Customs, with a total capacity of 100 vehicles. Parking is spread throughout the site with 4 lots for ferry riders and at least 5 employee parking spots.

In 2003 the WSDOT replaced the tollbooths, adding ADA accessible tolling and restroom facilities, storage and technology connections to the booths, and a canopy over the transaction area to protect customers and employees from inclement weather during transactions. Building and site design utilized native materials and vegetation, with overall design elements similar to other WDSOT ferry facilities in the region (WSDOT, 2024).

Marine Port Activities

Port facilities are integral to the functioning and growth of the local and regional economy. The marine ports in Skagit County include 15 commercial piers, wharfs and docks located along Guemes Channel, Swinomish Channel, March's Point and along the west shore of Fidalgo Bay.

Port of Anacortes

The Port of Anacortes marine terminal facilities and services include a natural deep-water port with two piers and a wharf. Dakota Creek Industries Inc., a long-time tenant of the Port, operates a major shipbuilding and repair facility on Pier 1. Curtis Wharf provides periodic moorage for a variety of commercial, private, and government vessels (Port of Skagit, 2024). Pier 2 is primarily used for exporting dry bulk cargos and short-term moorage for barges and other vessels.

March's Point

The two petroleum refineries at March's Point, Shell Puget Sound Refinery and Tesoro, both have deep water terminals which can accommodate ocean going oil tankers. At this intermodal location, crude oil, refined petroleum products, and byproducts from the refinery process are transported by ships, rail, trucks, and pipeline.

Other Marine Terminal Facilities

Several other marine terminal facilities provide substantial economic benefits to the region including the Dakota Creek Shipyard; the City of Anacortes's barge dock, boat launch and boat ramp on Fidalgo Bay; Dunlop Towing's log-rafting facility in Swinomish Village; and the Swinomish Indian Tribe's Industrial District pier at the north end of the Swinomish Channel.

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Marinas and Boat Harbors

Of the 14 marinas and boat harbors in Skagit County, the 5 largest are in Anacortes and La Conner, with 3 of the largest in Anacortes. The Cap Sante Boat Haven located on the east side of Fidalgo Bay is owned and operated by the City of Anacortes. It offers 950 slips and is one of the largest marinas in the state. It accommodates a large group of commercial fishing vessels as well as recreational boating. Anacortes Marina, and Flounder Bay on the west side of Fidalgo Bay are privately owned and offer a capacity of 466 rental slips. The Flounder Bay facilities include the Skyline Marina, Flounder Bay Yacht Club, Condominium 18, and individual residential moorages. La Connor Marina is owned and operated by the Port of Skagit County and accommodates recreational boating on both sides of Fidalgo Island through the Swinomish Channel. It accommodates large tourist vessels, especially during the Tulip Festival. A privately owned marina at Shelter Bay with 366 covered moorage slips, 131 open slips, and 2,400 lineal feet of dock space for overnight moorage is also located in the immediate area (Port of Skagit, 2024).

Active Transportation Network

Active transportation (aka non-motorized transportation) refers to human-powered travel, such as walking, biking, and rolling for wheelchairs, scooters, skateboards, and other mobility devices. A network of facilities for active transportation travel enhances community access, promotes healthy lifestyles, and provides residents with the option to not drive for some trips, which can help to reduce vehicle miles travelled and greenhouse gas emissions. The GMA requires that the Transportation Element include an active transportation component that includes collaborative efforts to identify and designate planned facility improvements for ADA, pedestrian, and bicycle travel that address and encourage enhanced community access, promotion of healthy lifestyles, and reduction of vehicle miles traveled and greenhouse gas emissions.

ADA Transition Plan

Skagit County has completed a comprehensive evaluation of its ADA facilities and policies related to the public rights-of-way to determine what types of access barriers exist for individuals with disabilities. The ADA Transition Plan will be used to help guide future planning and

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implementation of necessary accessibility improvements to remove physical barriers in the public right of way.

Walking and Biking

The two modes of travel which have traditionally been considered for active transportation networks and facility improvements are walking and bicycling. In rural, recreational, and low-density areas, equestrian travel is sometimes included as well. GMA requires that jurisdictions adopt ADA Transition Plans to ensure that ADA access and compliance is integrated into active transportation plans. Skagit County completed a 2024 ADA Transition Plan, which will be implemented with all new transportation projects.

Active transportation modes represent important travel options, but the planning for and development of facilities to accommodate them has generally not been a priority in the past. Future transportation decisions in Skagit County must include consideration for the accommodation of active transportation needs and GMA requires multimodal LOS standards to gauge the connectivity and completeness of active transportation networks.

The Skagit County Non-Motorized Transportation Plan

In 2004, the Skagit County Non-Motorized Transportation Plan (NMTP) was adopted into the Transportation Systems Plan by the Board of County Commissioners (Ordinance O20040009). The Skagit NMTP addresses and makes recommendations for walking, biking, rolling, and to a lesser extent, travel on horseback. The long-term goal is to complete a safe, connected, convenient, cost-efficient, and countywide non-motorized transportation network.

The County has also invested in two unused railroad corridors that provide opportunities for the development of some major active transportation facilities in the County. One includes parts of an abandoned Burlington Northern Railroad (BNRR) line running north-south along SR 9 between Snohomish County and Sedro-Woolley, which links up to the Centennial Trail in Snohomish County. Currently a ½-mile section of the Centennial trail is open for public use in Skagit County. The trail head is off State Route 9 in south Lake McMurray. The trail ends at the Snohomish County line and is posted. The other railroad corridor includes a 23-mile stretch of an unused BNRR line between Sedro-Woolley and Concrete which is under a rail banking agreement under rails to trails conservancy as per federal legislation. (Through rail banking, the right of way is

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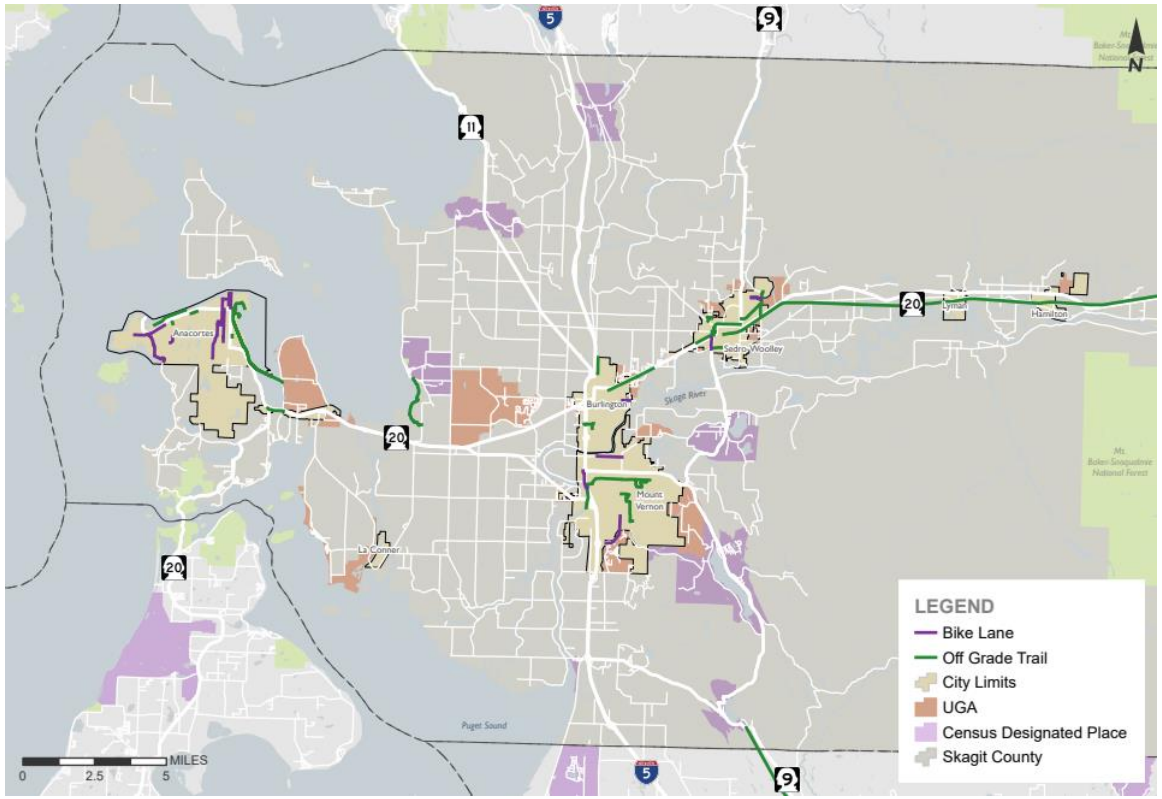
retained, intact, by one jurisdiction. The railroad then retains the right to reacquire the line for rail use in the future.) The Cascade Trail is located on this railroad corridor.

The 2024 Skagit County Bike Map was created and approved by local agencies other than Skagit County and was published by SCOG. This Bike map identifies existing on and off-street bike routes in the County including regional bike routes. The map classifies routes based on shoulder width and traffic volumes. Major bike routes include the Coast to Salish Route, the Coast to Cascades Route, the Coast Millennium Route, and the Cascade Trail. The existing system of bike routes provides major connections east to west and north to south with links to adjacent counties. It is important to clarify that a bicycle "route" may not include designated bicycle "facilities." Similarly, the 2021 Skagit County Walking Trail Guide, was created and approved by local agencies other than Skagit County and published by SCOG, maps and identifies existing walking and trail opportunities in Skagit County and provides basic information for users to locate and use them. The map also highlights trail systems in Anacortes, Burlington, Mount Vernon and at the Port of Skagit.

As shown in **Figure 10** and **Figure** 11, there are currently only a few facilities in unincorporated Skagit County that are built or specifically designated for active transportation usage. Except for the Cascade Trail parallel to SR 20 and the Padilla Bay Trail, active transportation facilities for use in unincorporated Skagit County are limited to paved shoulders along State highways and shoulders along County roads, some of which are paved while others are unpaved. Many of these roads have higher traffic volumes, higher vehicle speeds, and no physical separation between vehicle lanes and shoulders to make them feel safe or comfortable for use by people walking, biking, or rolling.

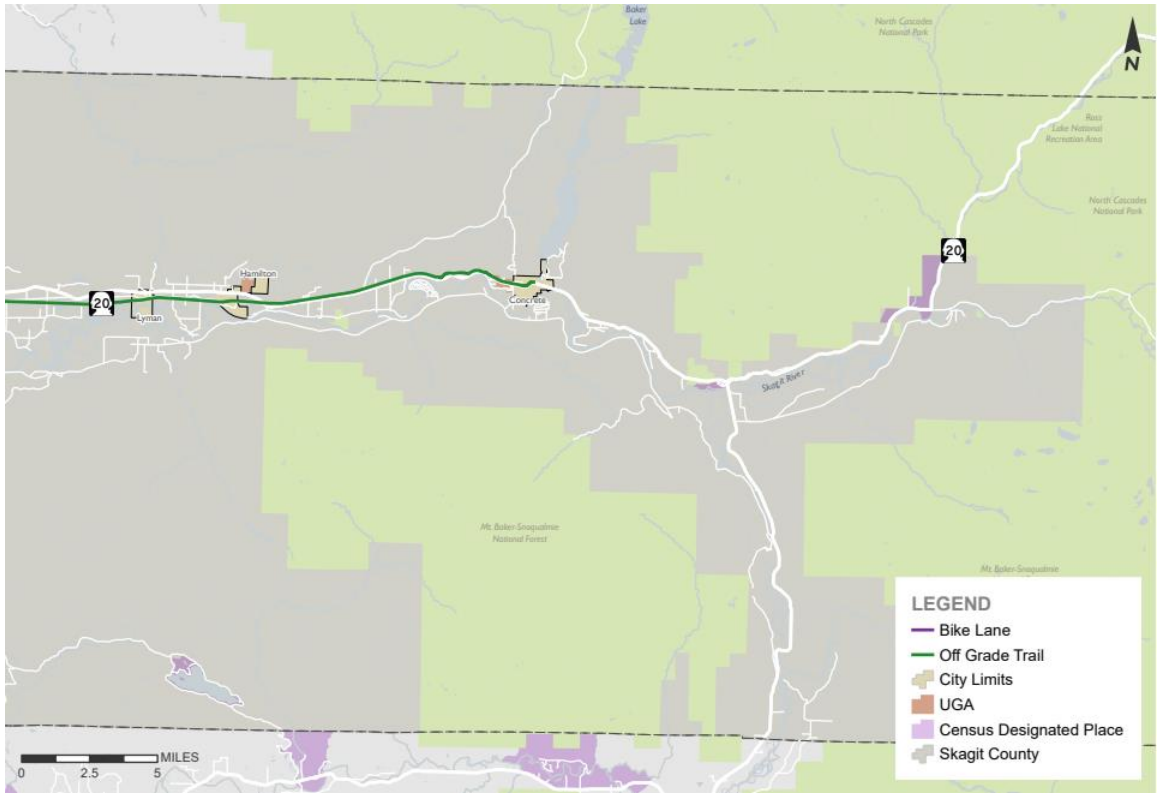
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Figure 10: Existing Dedicated Bicycle Facilities – West County



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Figure 11: Existing Dedicated Bicycle Facilities – East County



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Figure 12: U.S. Bike Route 10 (USBR 10) through San Juan County via WSDOT Ferry and Skagit County, Washington*



*Note: USBR 10 generally follows SR 20, but many portions of this bike route do not provide dedicated bicycle facilities.

Multimodal Level of Service Standards

The GMA requires that the Transportation Element of the Comprehensive Plan contain regionally coordinated Multimodal Level of Service (MMLOS) Standards for all arterial streets, transit routes, and active transportation networks to serve as a gauge to judge performance of the system. MMLOS is both a quantitative and a qualitative measure used to assess various aspects of transportation system performance and completeness.

Vehicle LOS

County Roads

Vehicular LOS is commonly used in transportation planning and engineering to evaluate how well a road or transportation facility is operating in terms of traffic flow, design capacity, and congestion. Vehicular LOS is typically measured during peak traffic demand (evening rush hour) periods and assessed on a scale from “A” to “F”, with “A” representing free-flow traffic conditions and “F” indicating heavy traffic congestion.

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Table 15: Volume to Capacity (v/c) Ratio for Vehicular LOS Designations

Vehicular LOS Designation	V/C Range
A	0-0.59
B	0.60-0.69
C	0.70-0.79
D	0.80-0.89
E	0.90-0.99
F	>1.00

The vehicular LOS standard for Skagit County roads is **LOS C**, however, **LOS D** is acceptable for all road segments that:

- Have Annualized Average Daily Traffic (AADT) greater than 7,000 vehicles; and
- Are NOT federally functionally classified as a Local Access Road; and
- Are designated as a County Freight and Goods Transportation Systems Route (FGTS).

Existing Roadway and Intersection LOS

As stated in the findings of the Skagit County 2023 and 2024 Annual Concurrency Reports and as shown in **Figure 12** below, all County Roads are currently meeting adopted vehicle LOS C or D. The two County-operated traffic signals are also concurrent, with funded improvements being constructed at the Cook Road signal in 2025-2026. As expected, traffic volumes generally increase on County roads approaching cities, UGAs, state highways, and the interstate. Figure 11 shows that in 2023, vehicle traffic congestion and LOS issues are limited to the streets, state highways, and I-5 within the cities of Burlington, Mount Vernon, and Sedro-Woolley.

When the Priority Array evaluation identifies road segments, intersections, and other facilities that are performing below their assigned LOS, it must prepare improvement plans and funding strategies for addressing these needs. The Six-Year Transportation Improvement Program (TIP) is a financially feasible project listing that must be updated every year to look out to the next six years. It includes cost estimates and funding for each project. The TIPs for all county jurisdictions are compiled into the regional TIP and coordinated with WSDOT.

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For roadway facilities that may be threatened by projected growth beyond the six-year TIP horizon, the County and other jurisdictions can update their plans to identify solutions that may include system improvements, different funding strategies, or changes to land use densities and intensities that are the basis for the demand forecasts. GMA also allows agencies to amend LOS standards to allow more traffic congestion during peak travel periods, which may be the most financially feasible alternative for Skagit County at the edges of cities and in UGAs.

State Highways

There are seven (7) Washington State Routes (SR), and one interstate (I-5) located in Skagit County. As noted previously, I-5 and SR 20 have been designated as Highways of Statewide Significance (HSS) with LOS standard set by WSDOT while SR 9, 11, 530, 534, 536, and 538 are Highways of Regional Significance (HRS) with LOS standards set by both WSDOT and SCOG.

I-5 is the only interstate route in Skagit County and it runs north-south from Canada through Washington, Oregon, and California to Mexico.

Standards = **LOS D** in the Urbanized Area and **LOS C** for the rest of the Skagit region.

SR 9 runs generally north-south through Skagit County, from SR 522 in King County to SR 546 in northern Whatcom County.

Standards = **LOS D** in the Urbanized Area and **LOS C** for the rest of the Skagit region.

SR 11 (aka Chuckanut Drive) runs north-south, connecting I-5 in Bellingham to Skagit County.

Standard = **LOS C** throughout the Skagit region.

SR 20 runs north-south from Deception Pass in Island County to Sharpe's Corner and then generally east-west through Marblemount before turning briefly northward and into Whatcom County, eventually resuming a southeast course and terminating in the northeastern part of the state at Newport on the Washington-Idaho border.

SR 20 Spur runs east-west from Sharpe's Corner through Anacortes and terminates at the WSDOT San Juan Island ferry terminal. SR 20 is also classified as a Washington State Scenic Byway for the entire alignment through the Skagit region.

Standards = **LOS D** in the Urbanized Area and Anacortes Urban Area (including the SR 20 spur through Anacortes) and **LOS C** for the rest of the Skagit region.

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SR 530 runs generally north-south within Skagit County, providing connection from SR 20 near Rockport to Darrington in Snohomish County.

Standard = **LOS C** throughout the Skagit region.

SR 534 runs generally east-west connecting I-5 in Conway to SR 9 at Lake McMurray.

Standard = **LOS C** throughout the Skagit region.

SR 536 (W Division Street) provides generally east-west connectivity from S 2nd Street in Mount Vernon to SR 20 at Fredonia.

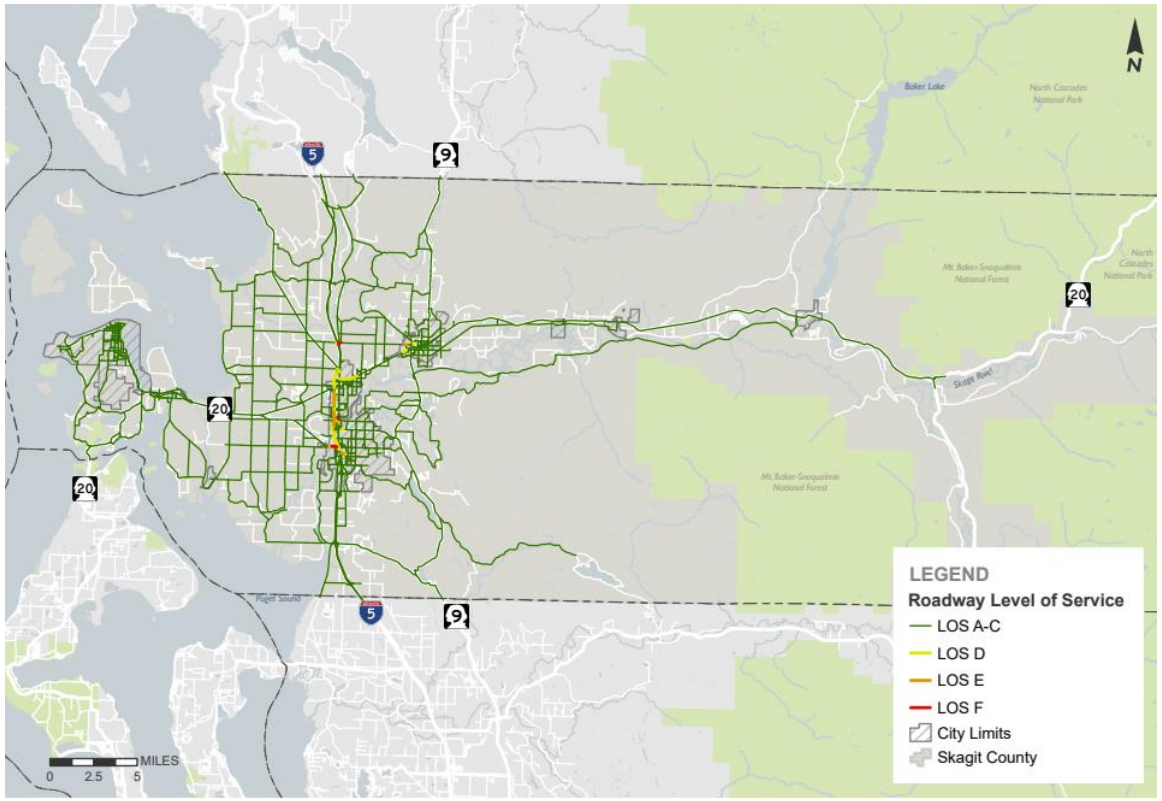
Standards = **LOS D** in the Urbanized Area and **LOS C** for the rest of the Skagit region.

SR 538 (aka College Way) provides east-west connectivity between I-5 in Mount Vernon to the SR 9 roundabout in Big Rock.

Standard = **LOS D** throughout the Skagit region.

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Figure 13: Existing (2024) Roadway LOS Conditions



Active Transportation Network and LOS Standard

The 2024 Transportation Element supplements the 2004 NMTP, the 2021 Walking Trail Guide, and the 2024 Bike Map to meet current policy direction from the GMA, Skagit County Comprehensive Plan, SCOG, and WSDOT by establishing an active transportation network, performance measures, and MMLOS standards.

For active (aka non-motorized) transportation, performance and prioritization measures focus on safety and comfort while LOS standards focus on network connectivity and completeness rather than design capacity or user counts. People walking, biking, and rolling in wheelchairs and mobility devices and are the most vulnerable users of the transportation system because they:

- Do not have a vehicle structure to protect them

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- Are smaller and lighter than larger and heavier vehicles
- Travel at slower speeds (10-15 mph) than vehicles
- Are exposed to vehicle passing and turning conflicts
- Are at higher risk of injury in collisions with vehicles

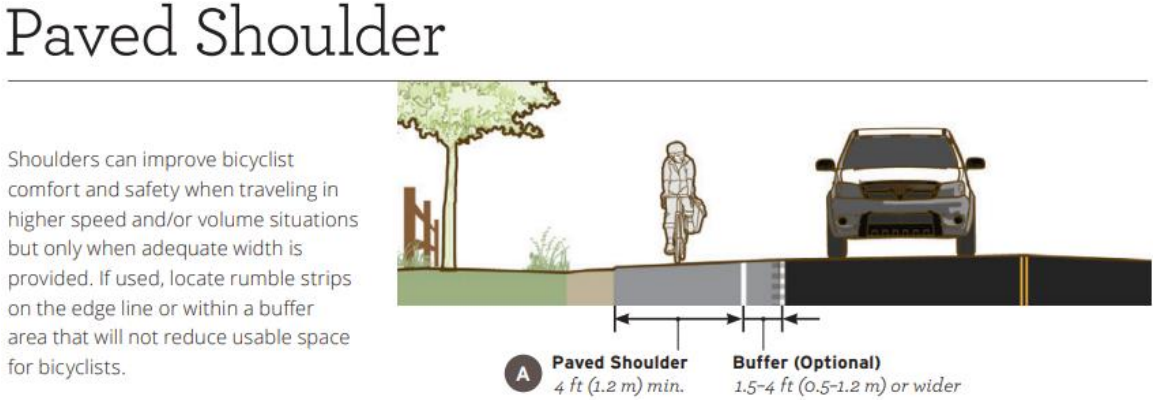
A person's choice to walk, bike, roll, or ride transit is primarily influenced by the availability of well-connected sidewalks, bikeways, ADA ramps, crosswalks, streetlights, and user perception of safety and risk of conflict. Skagit County Public Works receives assistance in active transportation planning from the SCOG Non-Motorized Advisory Committee (NMAC), which advocates for sidewalks, bikeways, and trail facilities, consistent with the 2004 NMTP and has helped SCOG to update the 2024 Skagit County Bike Map and the 2021 Skagit County Walking Trail Guide. It is important to clarify that a bicycle "route" may not include designated bicycle "facilities."

This Transportation Element establishes a long-term countywide Active Transportation Network of existing and planned designated walking and bicycle facilities. The portion of this network that can realistically be constructed over the 20-year planning period will depend on the amount of funding available for improvements to County roads, as well as WSDOT funding for improvements to State Routes.

Establishing an Active Transportation Network can be very challenging for an unincorporated rural geography. The land use context and reality of living in a rural environment demands a different societal expectation for what type of walking and bicycle facilities can be provided. The first step is to take an inventory of regional walking, biking, and multiuse facilities that currently exist. The next step is to examine the physical space and constraints of the existing countywide roadway system to determine if there are opportunities to enhance what already exists, such as roadway shoulders. Some roads currently have paved shoulders, which may not be ideal for comfort and safety, but can serve as places to walk and bike outside of the vehicle travel lane. In a rural environment, a 4-foot paved shoulder is considered the minimum standard for a designated bicycle facility (Source: FHWA Small Town and Rural Design Guide, 2017; Paved Shoulder illustration below).

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Figure 14: Minimum Active Transportation LOS Standard



Source: FHWA Small Town and Rural Design Guide, 2017

There are currently several County roads and State Routes that have shoulders equal or greater than 4-feet in width, as depicted on the 2024 Skagit County Bike Map and shown in **Figure 15** and **Figure** 16, below.

As mentioned above, traffic volume, speed, and physical separation are the roadway variables that determine whether a person walking, biking, or rolling feels safe and comfortable. These variables, applied to the Active Transportation Network, establish a measure of Level of Traffic Stress (LTS). As the volume, speed, and proximity to traffic decreases, so does the level of stress that a person bicycling feels while riding along a roadway. A physically separated facility for walking, biking, and rolling has the lowest stress of all.

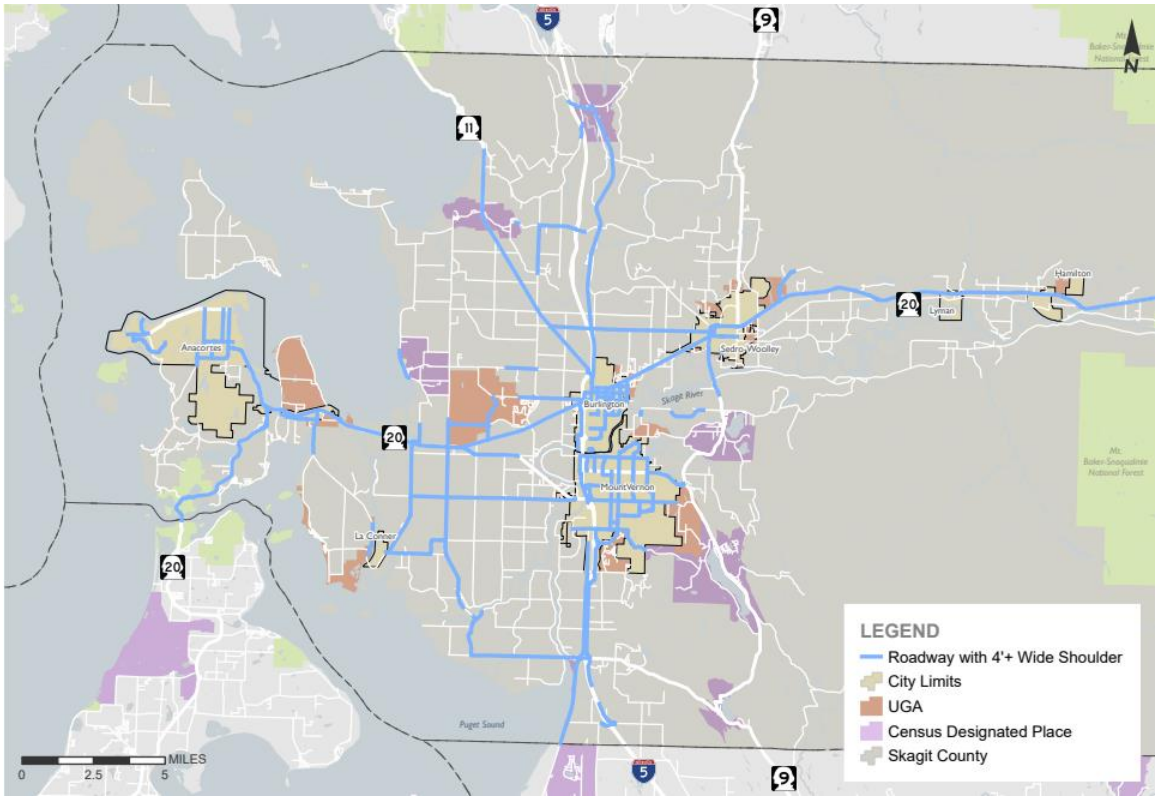
LTS is not part of the MMLOS standard for walking and biking facilities but is intended for use as a measure of user experience to help with the prioritization of active transportation investments on the countywide multimodal surface transportation system during the annual six-year TIP process.

The Active Transportation Network map in **Figure 17** and **Figure** 18 establishes a countywide network of walkways and bikeways, some with dedicated facilities, and some without. Each network segment can be measured as complete, partially complete, or incomplete according to County or WSDOT roadway standards for walking and biking facilities. The Active Transportation Network map will be updated each year in the Annual Concurrency Report to provide a baseline

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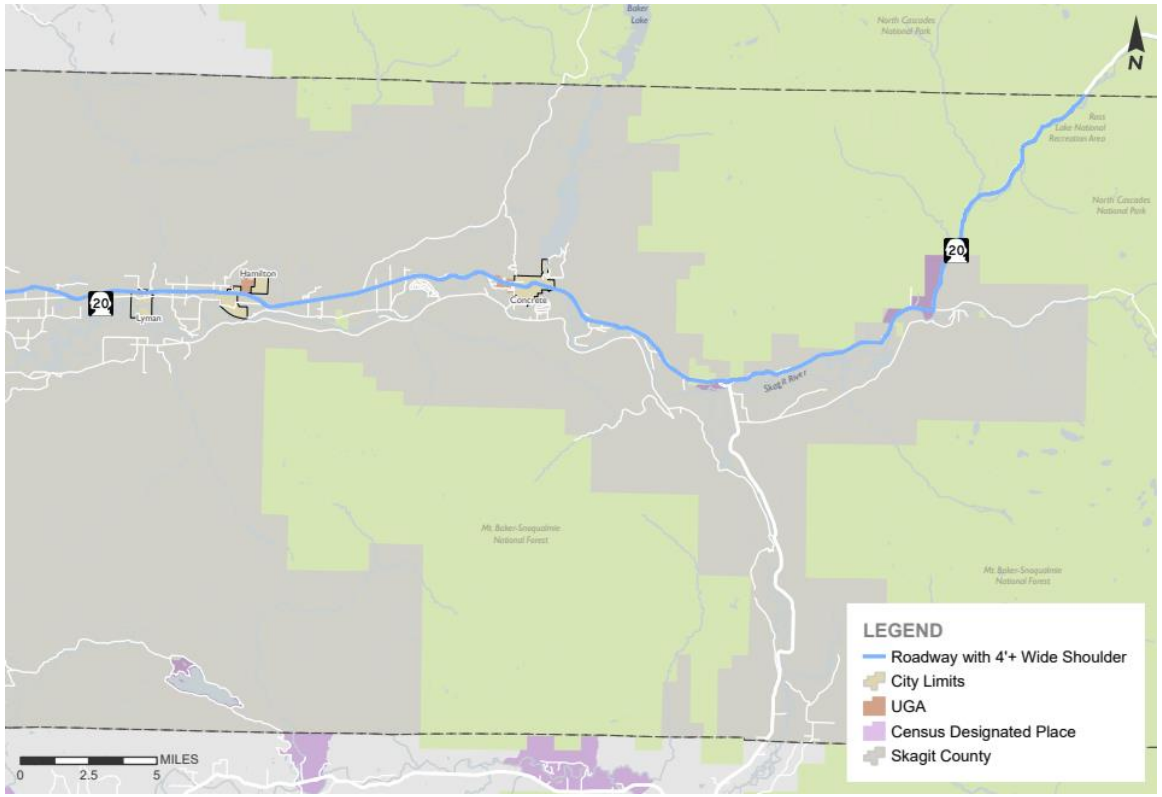
measure for Skagit County to consider funding opportunities to upgrade or complete missing network segments in the six-year TIP.

Figure 15: County Roads and State Highways with Shoulders = or > 4 Feet – West County



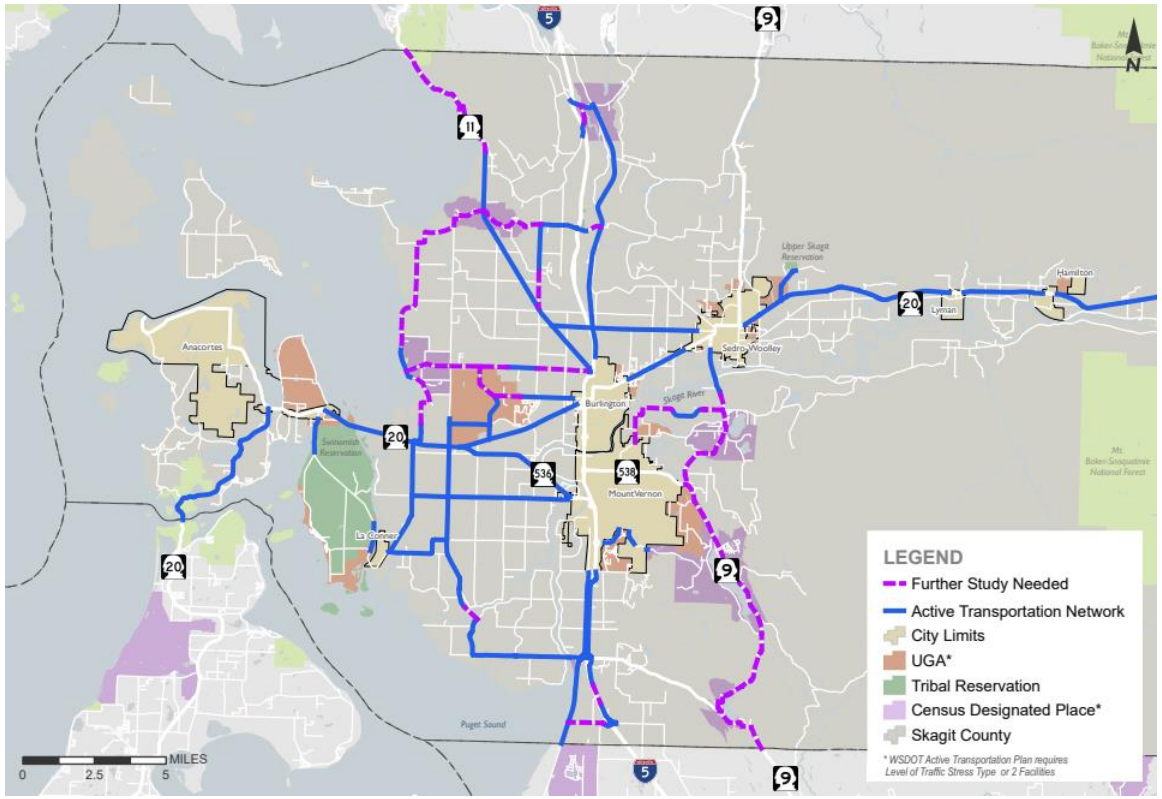
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Figure 16: County Roads and State Highways with Shoulders = or > 4 Feet – East County



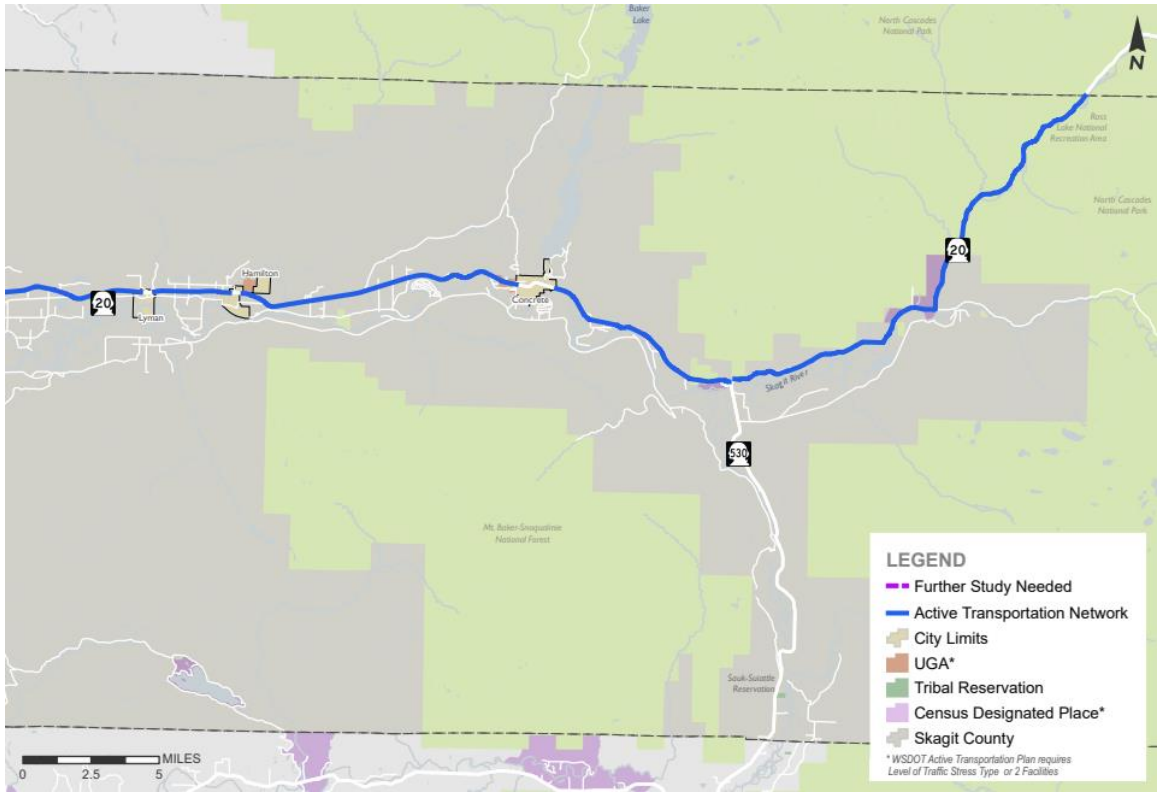
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Figure 17: Skagit County Active Transportation Network - West



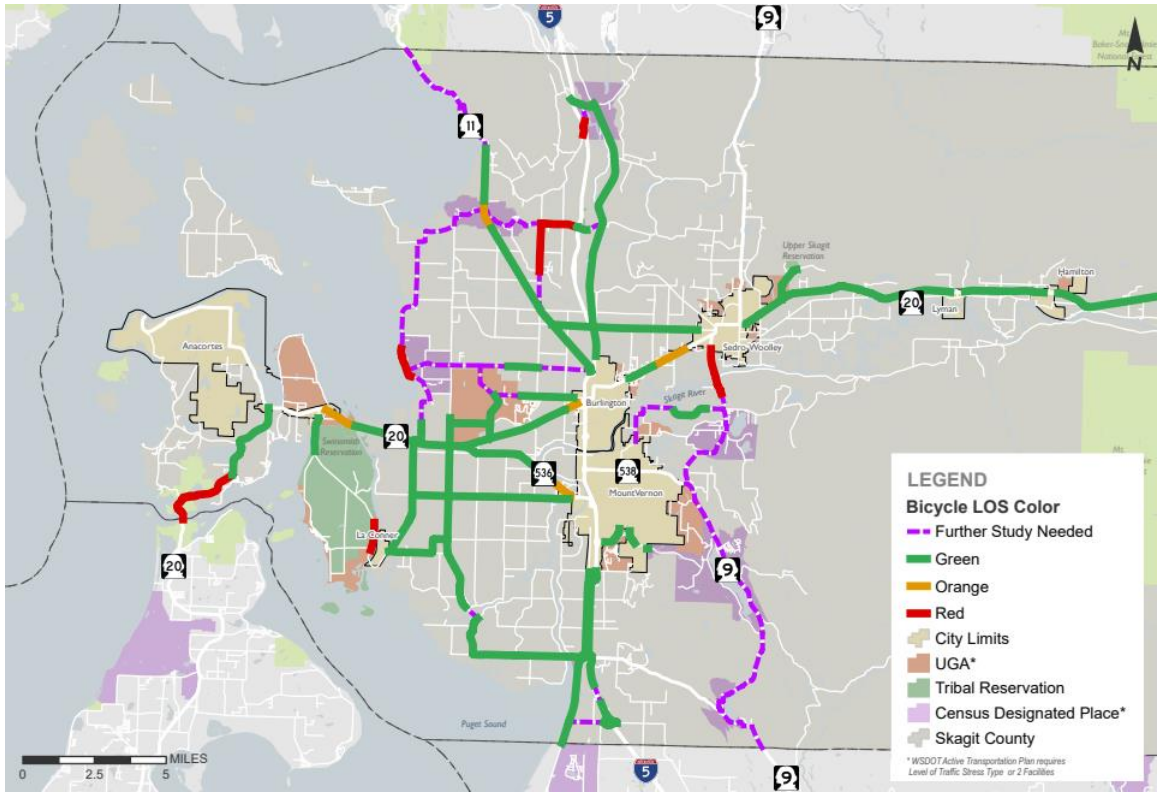
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Figure 18: Skagit County Active Transportation Network - East



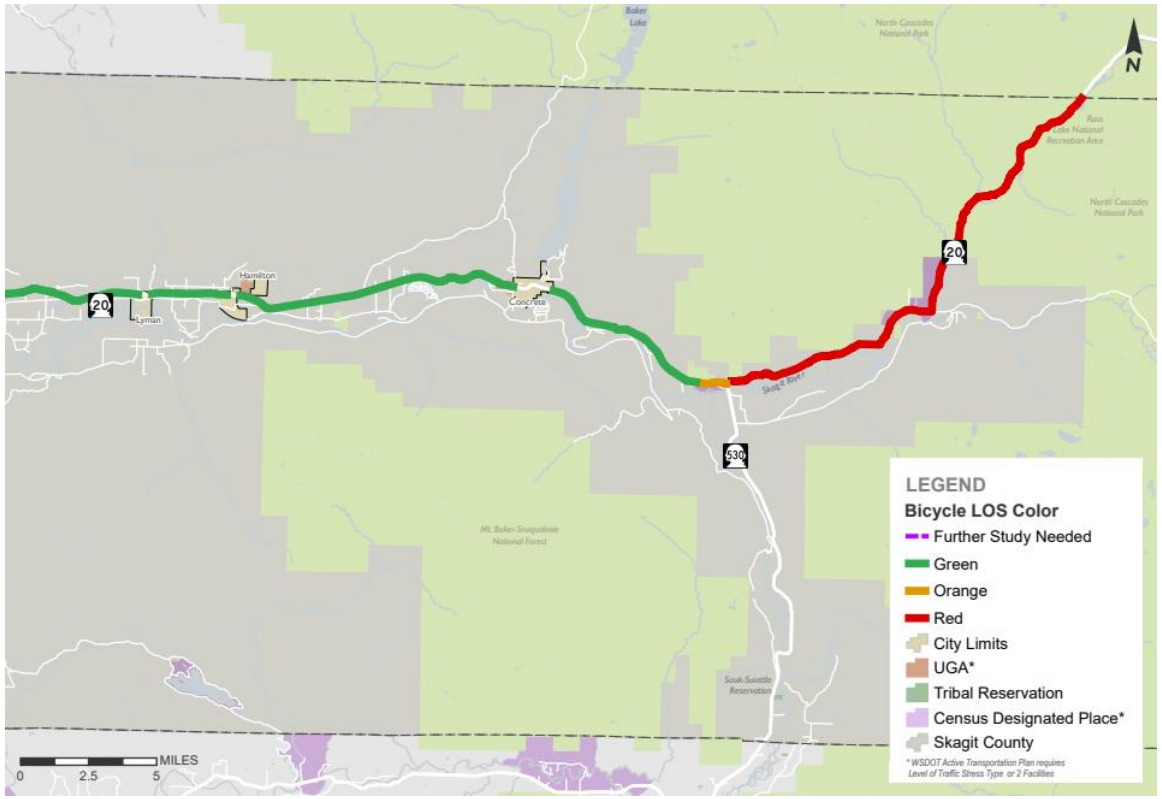
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Figure 19: Skagit County Active Transportation Network – LOS Status 2024 - West



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Figure 20: Skagit County Active Transportation Network – LOS Status 2024 - East



Funding and constructing pedestrian, bicycle, and multiuse trail facilities in low-density rural areas can be expensive, challenging, and may require partnerships with cities and WSDOT. Given the large geographic area of Skagit County, the mileage extent of the network, and the significant cost of construction, it may not be reasonable to expect this network to be completed by 2045, but establishing the countywide active transportation network, the LOS standard for network completeness, and the LTS performance measures along State highways is a critical step.

Active Transportation LOS Standard = Network completeness, prioritized with LTS performance measures for safety, and comfort for vulnerable road users.

> The LOS standards below emphasize system completion of sidewalks, pathways, or multiuse trails on arterial and collector roadways. The LOS designations are shown in green, orange, and red.

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A green LOS indicates that an ATN link meets adopted MMLOS standards and has facilities on both sides of the street or a two-way multiuse pathway on one side of the street.

An orange LOS indicates that an ATN link partially meets MMLOS standards with facilities on only one side of the roadway, when both sides would be preferred.

A red LOS indicates that no designated facilities are provided for active transportation users and is considered unacceptable.

LOS	Active Transportation Standard
	Meets MMLOS standards and has facilities on both sides of the road or a two-way multiuse pathway on one side
	Partially meets MMLOS standards with facilities on only one side of the roadway, when both sides would be preferred
	No designated facilities are provided for active transportation users and is considered unacceptable

ATN links colored Orange and Red indicate the need for full or partial active transportation facility improvements. The maps and tables below identify active transportation improvements that Skagit County and WSDOT will need to fund and construct to complete the countywide ATN.

WSDOT Active Transportation Network Links

When WSDOT conducts any work that costs $500,000 or more on State highways abutting cities, UGAs, or census designated places, the active transportation facilities identified by local agencies must be incorporated into the WSDOT work, consistent with RCW 47.04.035 Street access – Principles of Complete Streets – Requirements. In addition, the WSDOT Active Transportation Plan – 2020 and Beyond calls for **Level of Traffic Stress (LTS) Type 1 or Type 2 active transportation facilities on State highways**, where feasible, to ensure that locally identified needs for connectivity and completeness are accommodated. LTS Type 1 and 2 facilities require separation from moving vehicle traffic either with a substantial physical barrier or by literally separating the facility from the roadway, such as a paved multiuse pathway. Adequate WSDOT public right-of-way must be available for either treatment and any environmental impacts, such as crossings of streams, wetlands, or buffers must be mitigated.

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Transit LOS Standard

GMA also requires Skagit County to adopt a LOS standard for transit, which is not planned, funded, or controlled by County staff or decision-makers. The County does control the public right-of-way where transit buses operate and provide service to County residents, however. The Skagit County transit LOS standard is a blend of the ADA Transition Plan, the active transportation network, and the Skagit Transit service network to measure the completeness of ADA accessibility and sidewalk connectivity to bus stops.

Skagit Transit route bus stops served by complete ADA-compliant sidewalks or walking paths, curb ramps, and safe street crossings to destinations or other ADA ramps and sidewalks are measured each year to determine if they are complete, partially complete, or incomplete. ADA accessibility and connectivity become increasingly important in County UGA areas where higher densities and more frequent transit service exist.

Transit LOS Standard = Transit Network accessibility and sidewalk connectivity to Skagit Transit bus stops.

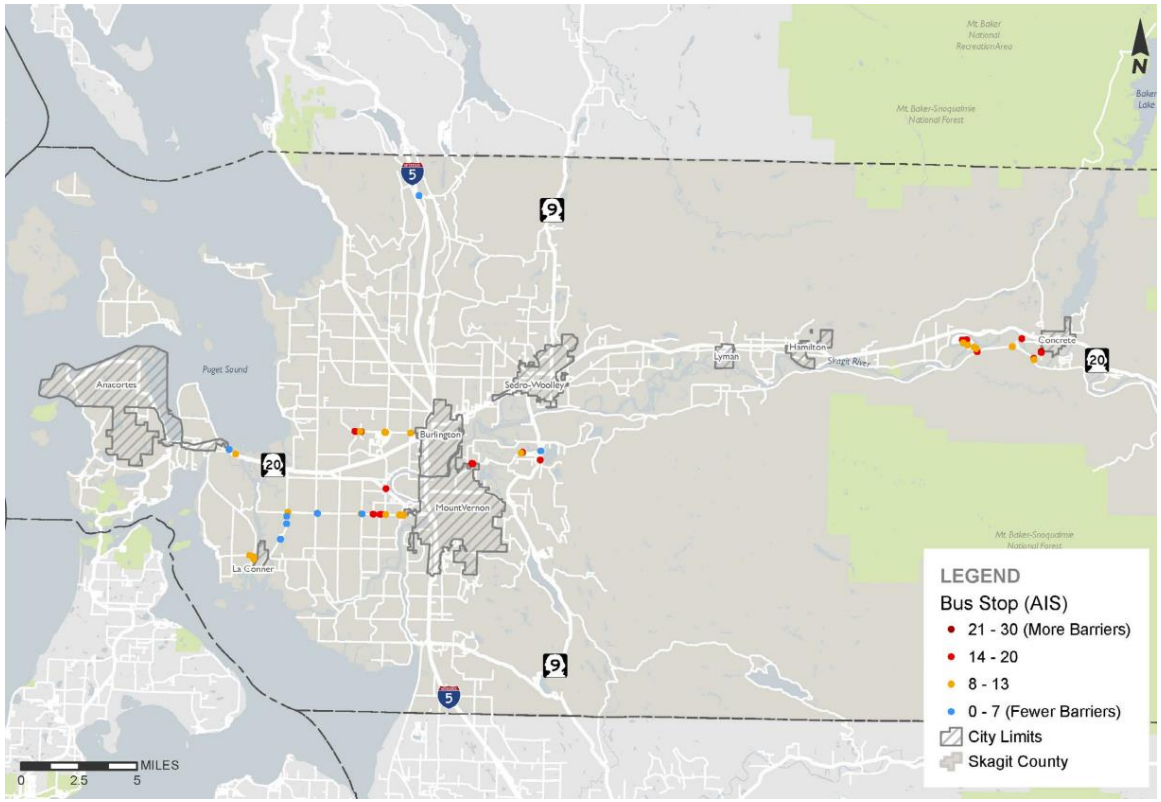
LOS	Transit Standard
	ADA Compliant Pedestrian Connection to Transit Stop
	Non-compliant Pedestrian Connection to Transit Stop
	Missing Pedestrian Connection to Transit Stop

Marine Ferry Performance Measures

Discussion of service levels for both the Skagit County-funded Guemes Island Ferry, as well as WSDOT-funded San Juan Island ferries is included in the Marine Transportation section below, but formal LOS standards are not adopted for the County ferry system.

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Figure 21: Skagit Transit Bus Stop ADA Upgrades Needed (2024 Skagit County ADA Transition Plan)



Multimodal Transportation Safety

For the Transportation Element update, WSDOT records were reviewed for all collisions reported in roadways in Skagit County, including federal and state routes, for the period of January 1, 2018, through December 31, 2022. A review of the collision history was then conducted to identify some higher risk locations and potential safety issues for vehicles, pedestrians, and cyclists.

During the 2018-2022 review period, Skagit County experienced 10,938 total crashes, of which:

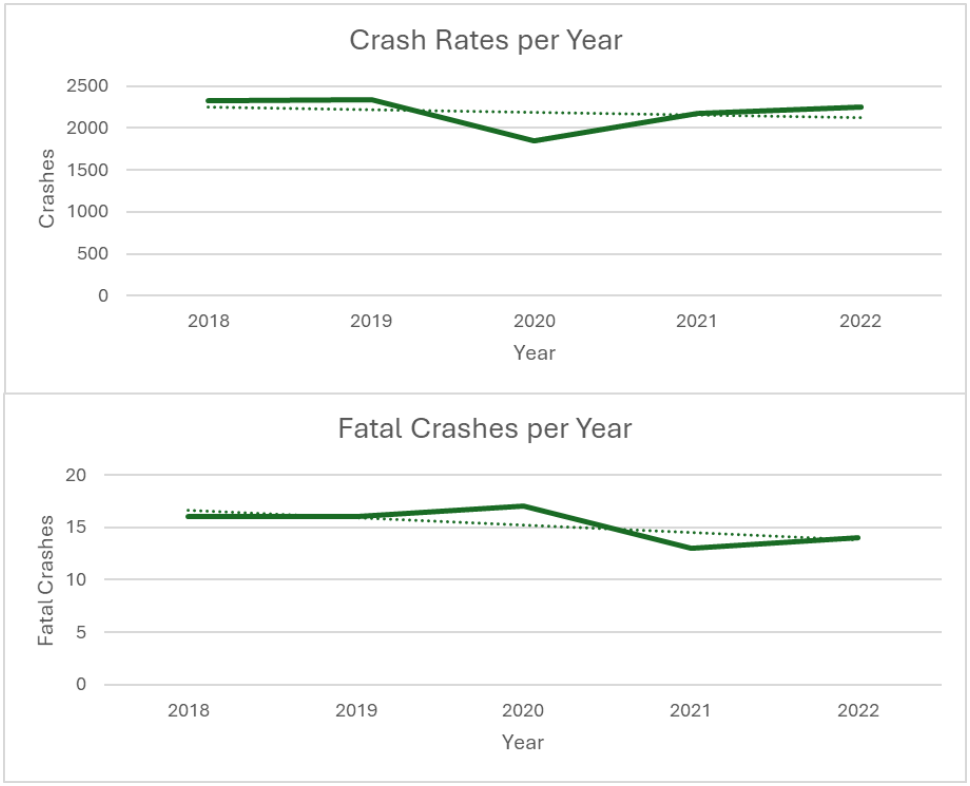
- 76 (< 1 percent) resulted in a fatality
- 264 (2 percent) resulted in a serious injury

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- 2,679 (24 percent) resulted in injury of any severity, and
- 8,183 (75 percent) resulted in property damage only.

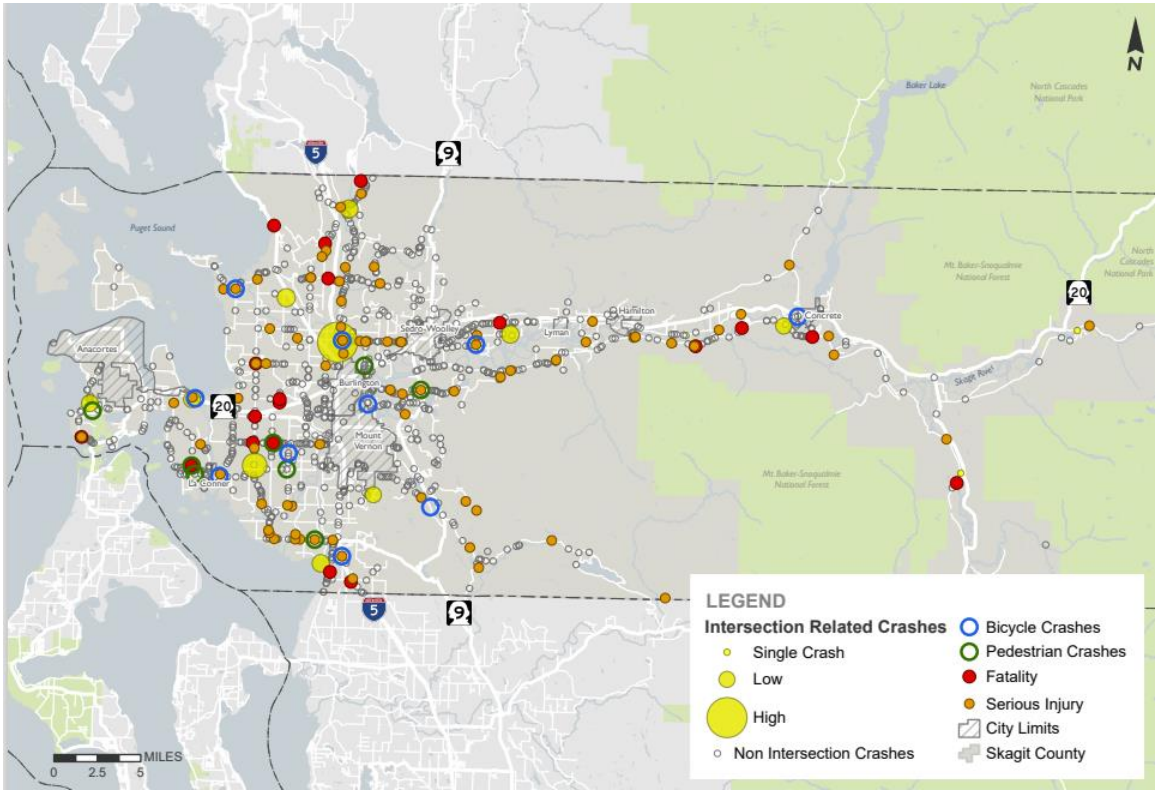
As shown in **Figure 22** below, the annual rate of total crashes, fatal crashes, serious injury crashes, and injury-related crashes in Skagit County has remained constant with a slight decline over the past five years (2018-2022).

Figure 22: Skagit County total and fatal crash rates per year.



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Figure 23: Crashes (2019-2023) Involving Vehicles, Pedestrians, Bicyclists, Fatalities, and Serious Injuries on County Roads.



Vulnerable Roadway Users: Pedestrian and Bicycle Safety

Unfortunately, vulnerable transportation system users in Skagit County are disproportionally at risk of being involved in fatal or injury-related crashes. During the 2018-2022 evaluation period:

- 2 percent (187) of the total 10,938 crashes involved pedestrians or cyclists
- 25 percent (46) of pedestrian or bicyclist-involved crashes were fatal or had serious injuries
- 70 percent (131) of pedestrian or bicycle crashes involved minor or suspected injuries

Road corridors with higher crash concentrations (> 1 per year) that involved people walking, biking, or rolling included:

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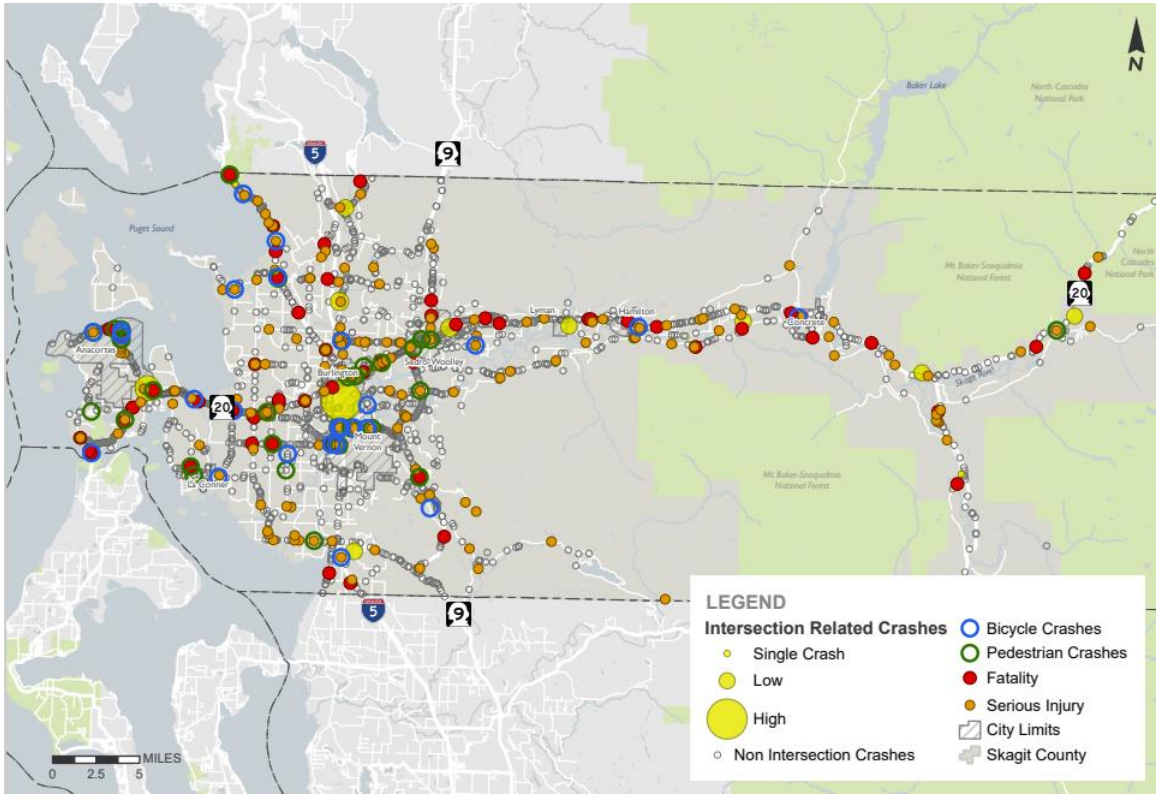
- Freeway Drive, City of Mount Vernon (6 crashes)
- East Division Street, City of Mount Vernon (9 crashes)
- South Burlington Boulevard, City of Burlington (15 crashes)
- SR 538 (East College Way), City of Mount Vernon (20 crashes) and
- SR 20 and SR 20 Spur, County, Sedro-Woolley, Burlington, Anacortes (29 crashes).

The most common contributing circumstances in the vehicle/pedestrian and vehicle/bicyclist-involved collisions were driver not yielding to the non-motorist and driver distraction. All the corridors listed above are within incorporated cities or are State highways, not County roads.

There are certainly crashes that have occurred on Skagit County roads, but those are documented and analyzed in greater detail in the 2025 Local Road Safety Plan (LRSP) produced by Skagit County Public Works. The LRSP is required to be eligible for the WSDOT County Safety Program, which administers grants funded by the federal Highway Safety Improvement Program (HSIP). Skagit County has been successful in securing several HSIP grants to fund safety improvements to County roads.

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Figure 24: Crashes 2019-2023 Involving Vehicles, Pedestrians, Bicyclists, Fatalities, & Serious Injuries - County & State Routes



Intersection Crash Rates

Intersection crash rates (**Table 16**) identify potentially problematic locations and can be analyzed to identify the average crash frequency based on the number of vehicles traveling through the intersections. The typical measure for intersection crash rates is the number of crashes per million entering vehicles (MEV). Based on this metric, two intersections listed in the table below were flagged for further review, Cook Road/ Old Highway 99, and Josh Wilson Road/ Pulver Road. Transportation improvement projects at both locations are adopted in the 2025-2030 Skagit County Transportation Improvement Program (TIP).

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Table 16: Intersection Annual Collision Rates

Location	Number of Collisions 2018	2019	2020	2021	2022	Total	Annual Average	Collisions per MEV[1]
Old Hwy 99/ Alger-Cain Lake Rd	0	0	1	0	2	3	0.60	0.10
Old Hwy 99/ Bow Hill Rd (Prairie Rd)	0	2	5	2	2	11	2.20	0.33
Cook Rd/ Old Hwy 99	3	1	4	5	3	16	3.20	0.53
Cook Rd/ Collins Rd	2	0	2	0	0	4	0.80	0.12
Josh Wilson/ Farm to Market Rd	3	1	3	2	2	11	2.20	0.35
Josh Wilson/ Avon Allen Rd	0	0	0	0	2	2	0.40	0.06
Josh Wilson/ Pulver Rd	5	2	1	3	1	12	2.40	2.76
Peterson Rd/ Pulver Rd	0	1	1	2	0	4	0.80	0.13
Rosario Rd/ Marine Dr	0	0	1	2	0	3	0.60	0.10
Mc Lean Rd (Downey Rd)/ La Connor Whitney Rd	0	0	1	0	0	1	0.20	0.03
Mc Lean Rd/ Best Rd	1	1	2	0	1	5	1.00	0.21
Mc Lean Rd/ Bradshaw Rd	0	1	1	4	0	6	1.20	0.27
Mc Lean/ Beaver Marsh Rd	0	3	0	2	3	8	1.60	0.19
Best Rd/ Chillberg Rd (Calhoun Rd)	2	2	0	0	0	4	0.80	0.67
SR 534 (Pioneer Hwy)/Fir Island Rd	0	0	0	0	0	0	0	0

Source: WSDOT November 2022
1. MEV = Million Entering Vehicles

Planning for the Future (2045)

Land Use Assumptions

The operation of the County multimodal transportation network must be adequate to meet the travel demands created by residents, businesses, and visitors over the 20-year planning period with land use designations as the basis for estimating future travel. Each agency is responsible for developing its own transportation plan, but facilities in one jurisdiction may affect demand created from growth in neighboring jurisdictions so regional coordination and consistency is important.

In the Skagit Council of Governments (SCOG) regional travel demand model, the County is divided into transportation analysis zones (TAZ). These are geographic areas based on census tracts, city limits, physical features, and other boundaries. TAZs are smaller in urbanized areas than in rural

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areas due to the relative concentration of population. Land use, housing, and employment data for the TAZs inform the assessment of future transportation demands that result from growth.

The analysis for the 20-year forecast or travel demands and growth impacts to transportation facilities requires assumptions to be made about multimodal travel behavior and land use context, as well as the realities of maintaining multimodal LOS standards within anticipated funding resources and the feasibility of implementing construction programs within the context of other public policies.

The Countywide Planning Policies allocate the adopted population and commercial/industrial employment targets among the various Skagit County jurisdictions. Comprehensive plan policies distribute growth to urban and rural areas using residential densities and non-residential land use intensities for each jurisdictions adopted zoning. This provides the starting point for estimating how future residents and employees will use the multimodal transportation system.

Regional Travel Demand Model

The Skagit Council of Governments (SCOG) regional travel demand model was used for this update with a base year of 2018 and a future horizon year of 2045. SCOG staff provided documentation outlining land use control totals for both the 2018 and 2045 model years (See Table 7).

2024 Travel Demand Model Update Process

As part of the next round of comprehensive plan updates in the Skagit region, new land use control totals by area were developed and adopted late in Fall 2024. **Table 17**, below, shows the new 2022 and 2045 control totals by area and were provided by SCOG staff. The model update process focused on updating the trips generated in the original model based on a conversion factor for each region of the County. At the time of the model update, only the control totals by area were established, and any further land use information was not available for specific transportation analysis zones (TAZs).

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Table 17: Adopted Land Use Control Totals by Area

	Adopted Totals for Original SCOG Model[1]		Fall 2023 Adopted Totals[2]		
Area	2018	2045	2022	2024[3]	2045
Households					
Anacortes	7,522	10,896	7,921	8,177	10,863
Burlington	3,916	5,671	4,295	4,542	7,138
Mount Vernon	12,976	18,608	13,132	13,582	18,312
Sedro-Woolley	4,674	6,851	5,184	5,414	7,830
Concrete	397	578	414	423	521
Hamilton	119	176	117	117	117
La Conner	475	691	495	506	619
Lyman	165	241	154	154	154
Bayview Ridge	746	782	657	657	657
Swinomish	1,107	1,600	1,067	1,077	1,185
Rural (outside UGAs)	14,471	17,730	14,892	1,5195	18,382
Total	46,568	63,824	48,328	4,9844	65,778
Employment					
Anacortes	9,477	11,501	9,503	9,776	12,648
Burlington	11,028	14,101	11,640	12,142	17,410
Mount Vernon	17,864	22,935	18,781	19,196	23,559
Sedro-Woolley	4,921	9,259	4,640	4,849	7,040
Concrete	427	530	391	401	506
Hamilton	491	564	466	468	489
La Conner	879	1090	1,020	1,097	1,905
Lyman	59	118	56	58	76
Bayview Ridge	2,498	4,240	2,962	3,131	4,901
Swinomish	1,384	1,717	1,140	1,178	1,579
Rural (outside UGAs)	7,541	8,944	8,972	9,060	9,987
Total	**56,569**	**74,999**	**59,571**	**61,356**	**80,100**

Source: SCOG, 2024; Transpo Group, 2024

1. From *Skagit 2045 Regional Transportation Plan* documentation "Methodology for Estimating Population and Employment for Regional Travel Demand Model 2018-2045" (Provided by SCOG, April 2024). See page 10 for households and page 14 for employment.

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2. From "Initial Growth Allocations Tables 2023-12-20.xlsx" (Provided by SCOG, April 2024) and represents the totals adopted in Fall 2023 for each area for 2022 and 2045.
3. The numbers shown for the year 2024 are based on straight-line interpolation from the 2022 and 2045 numbers.

The conversion factors as shown in **Table 18**, were applied to each TAZ within the 11 areas within the SCOG Model. In other words, the trips generated in the SCOG Model were factored higher (or lower) based on the land use changes adopted for each area. Conversion factors were first developed separately for the number of households and for employment. The final conversion factor used in the SCOG Model was an average of the household and employment conversion factors. It should be noted that two items were left unchanged:

1. Trip generation for external TAZs were left unchanged. It was assumed that the land use updates would not trigger major changes in external assumptions, so external assumptions would be effectively the same for the purposes of agency planning needs.
2. Existing and future model networks were left unchanged from the original model, keeping overall assumptions about future projects the same for analysis purposes.

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Table 18: Model Trip Generation Conversion Factors by Area

	Conversion Factors from 2018 to 2024 SCOG Model Trip Generation[1]			Conversion Factors from 2045 (Old) to 2045 (New) SCOG Model Trip Generation[1]		
Area	Households	Employment	Combined[2]	Households	Employment	Combined[2]
Anacortes	1.0871	1.0316	1.0593	0.9970	1.0997	1.0484
Burlington	1.1599	1.1010	1.1304	1.2587	1.2347	1.2467
Mount Vernon	1.0467	1.0746	1.0606	0.9841	1.0272	1.0057
Sedro-Woolley	1.1583	0.9854	1.0718	1.1429	0.7603	0.9516
Concrete	1.0655	0.9391	1.0023	0.9014	0.9547	0.9281
Hamilton	0.9832	0.9532	0.9682	0.6648	0.8670	0.7659
La Conner	1.0653	1.2480	1.1566	0.8958	1.7477	1.3218
Lyman	0.9333	0.9831	0.9582	0.6390	0.6441	0.6415
Bayview Ridge	0.8807	1.2534	1.0670	0.8402	1.1559	0.9980
Swinomish	0.9729	0.8512	0.9120	0.7406	0.9196	0.8301
Rural (outside UGAs)	1.0500	1.2014	1.1257	1.0368	1.1166	1.0767
Total	**1.0703**	**1.0846**	**1.0775**	**1.0306**	**1.0680**	**1.0493**

Source: Transpo Group, 2024

1. Conversion factors based on a ratio of control totals listed in Table 1. For example, in Anacortes the 2018 total was 7,522 and the 2024 total was 8,177; Conversion factor is 8,177 divided by 7,522, or 1.0871.
2. Combined factors are the average of the household and employment factors.

Vehicle Travel Demand Forecasts

The land use forecasts for Skagit County and local cities were used in the SCOG travel demand model to develop travel forecasts for vehicle trips. As expected based on the land use allocations, the greatest growth in vehicle trips was in or near the urban centers and along Interstate 5 and other state highways that connect these urban centers to other urban centers in the region. Most County roadways did not see the same amount of growth as exhibited in urban centers. The future (2045) forecast for PM peak hour vehicle trips on County roadways is shown below.

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Baseline Assumptions

The 2045 Baseline model was developed based on capacity improvement projects identified in prior plans and project lists prepared by WSDOT, Skagit Council of Governments, Washington State Ferries, and the other adjacent cities. Some of these improvements are funded or are expected to be funded in the next few years. These projects were generally limited in scope, within urban areas, and did not dramatically change County traffic patterns from existing conditions.

Baseline Capacity Needs

A major focus of the GMA transportation planning requirements is on the determination of MMLOS standards, deficiencies, and on funding transportation projects to address them. In Skagit County, traffic volumes on County roads are low and maintenance of the existing County road system takes precedence over road construction. Because of this, road improvements rely more on the annual County priority array, which looks at physical conditions, than on LOS road capacity deficiencies. Projects on the six-year transportation improvement program (TIP) typically reflect needs identified from the priority array, as well as multimodal safety needs and grant funding opportunities.

The travel demand model was reviewed to understand if any roadway segments have volumes that are near the roadway capacities coded in the model and confirmed that only the currently identified High Traffic County Road Segments had volumes approaching capacity. As shown in Figure 23, the County road segments along Cook Road and Pioneer Highway are anticipated to remain at volumes levels consistent with LOS D. However, this LOS does not consider intersection operations or railroad crossing impacts. It is anticipated that existing traffic congestion along Cook Road between I-5 and Green Road will worsen with additional intersection volumes and with increased railroad crossing delays (See SCOG Rail Crossing Study, 2016).

Travel Impacts to State-Owned Facilities

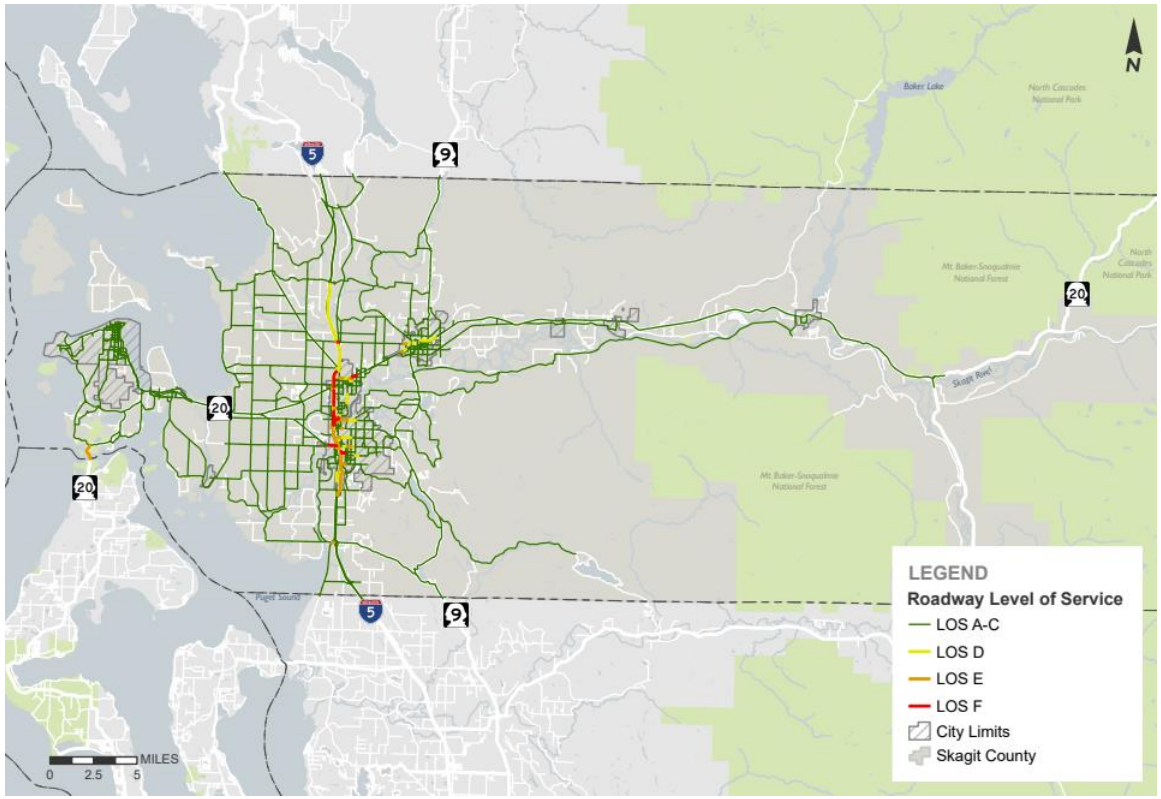
The SCOG 2045 Regional Transportation Plan (RTP) identifies the effects of growth on the regional transportation system including state routes, county roads, and city roads. As described in the SCOG RTP, the plan is a link between the local agency transportation plans and the

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Washington State Transportation Plan (WTP) administered by the Washington State Department of Transportation (WSDOT).

The allocation of land use based on Countywide Planning Policies assigns most of the planned growth within existing urban areas. Vehicular travel demand from Skagit County areas outside cities is expected to have minimal impacts on either County or state-owned transportation facilities, but additional active transportation improvements are needed on both County and State transportation facilities. Local city comprehensive plans also highlight impacts to, and needs on, state routes based on their respective multimodal travel demands. Future operational and safety needs for I-5 are identified below in the summary of the 2023 WSDOT Skagit I-5 Transportation Study.

Figure 25: Future Forecast (2045) Roadway LOS Conditions



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Skagit I-5 Transportation Study

In 2023-2024, WSDOT and consultants completed Phase 1 of the Skagit I-5 Transportation Study, which focused on I-5 through most of Skagit County. The SCOG regional travel demand model was used to evaluate transportation impacts from growth forecasts to the year 2045, as well as traffic operations and safety issues.

The I-5 corridor is about 9 miles long and extends from Old Highway 99 (exit 224) on the south end to Cook Road (exit 232) on the north end. I-5 is a critical transportation link connecting Skagit County to Whatcom, Snohomish, Island and San Juan counties. Average daily traffic (ADT) on I-5 is about 77,000 vehicles in the northern portion of the study area, about 81,000 ADT at the Skagit River Bridge and about 77,000 vehicles in the southern portion of the study area. As is typical on freeways in urban areas, weekday peak hour traffic congestion occurs primarily from 3-7 p.m. As documented in the 2021 baseline study, I-5 nears throughput capacity in the southbound lanes from SR 20 to George Hopper Road and from College Way to Kincaid Street. There are also some congestion issues with merging vehicle volumes from on-ramps to the mainline of I-5.

Study Findings

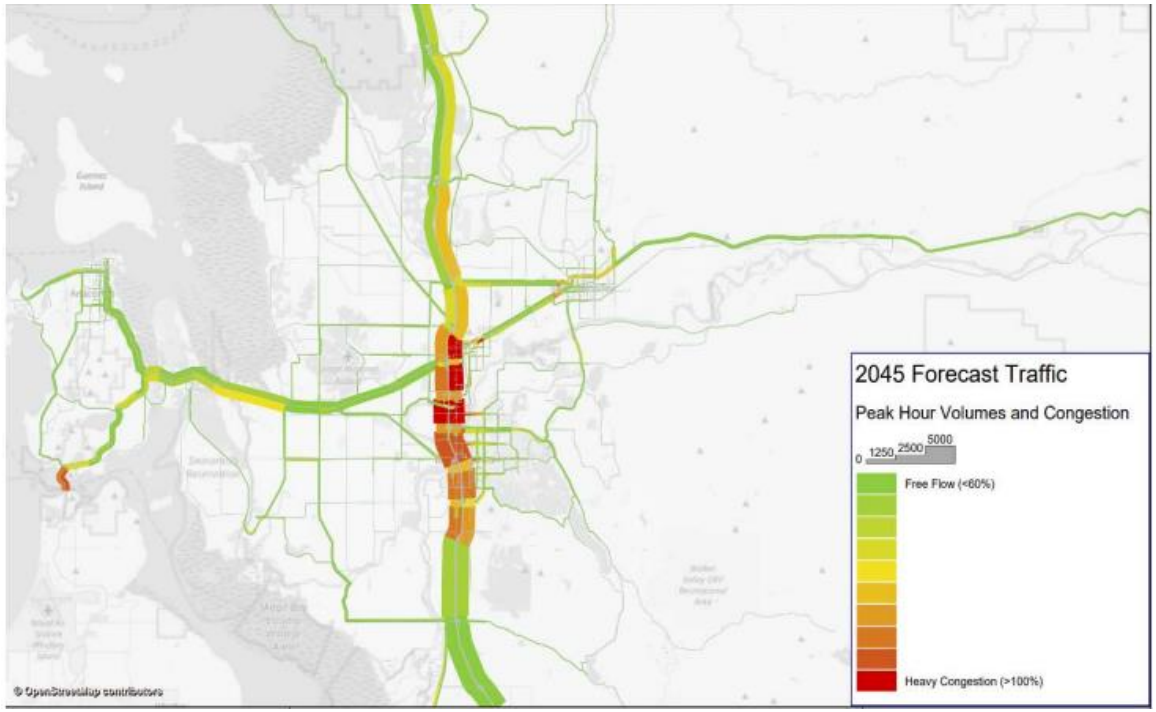
Overall, the Phase I Needs Assessment revealed that some existing and future sections of the I-5 corridor meet performance expectations, but many sections of the corridor are not meeting performance objectives.

- The traffic operations analysis revealed that some segments of the I-5 corridor exceed the throughput design capacity (LOS D) and future forecasts indicate that LOS will continue to deteriorate and expand to other corridor segments.
- The analysis of the on-ramp merge lane operations onto the freeway shows results exceeding the 1,700 vehicles-per-hour threshold in many locations, indicating that existing traffic flow at some on-ramps may create conflicts with I-5 mainline operations. Additionally, future forecast conditions indicate that further on-ramp locations will be impacted and exceed the threshold performance objective in the future.
- The safety analysis revealed that most of the corridor is currently experiencing fewer crashes, on average, than a facility with similar characteristics. However, some locations are experiencing more crashes than facilities with similar characteristics.

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- The origin and destination analysis revealed that many vehicle trips on the I-5 corridor entered or exited from interchanges in the study area. Additionally, most trips were more than 16 miles in length, suggesting that state highways that intersect with I-5 in the study area play a significant role in regional travel. The data also showed a significant amount of north-south local short trips were occurring between College Way and George Hopper Road over the Skagit River, which contributes to traffic congestion, delay, and decreased level of service around the Skagit River Bridge.
- Population, socio-economic and demographic conditions are changing in the Skagit Valley and, according to the SCOG Regional Transportation Plan, the Skagit region is expected to grow by 46,000 residents to a total county population of 177,000 by 2045. Countywide planning policies agreed to by all jurisdictions within Skagit County direct that 80 percent (36,800) of these new residents be accommodated in cities, towns and UGAs.

Figure 26: SCOG Model Forecast of Interstate 5 Traffic Congestion in Skagit County in 2045



Source: I-5 Skagit Transportation Study Report 2023

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Study Recommendations

To address these concerns, it is recommended that WSDOT coordinate with local jurisdictions and agencies in the study area to plan for better integration of land use, housing and transportation facilities with the equity needs during the update of local comprehensive land use and transportation plans.

Forecasts for Other Modes

The SCOG travel demand model is primarily used for forecasting vehicle transportation modes, which is the dominant travel mode in Skagit County. Forecasts and long-range planning for other transportation modes has been developed in separate planning processes and documents, and those findings are summarized below.

Guemes Island Ferry

The Fourteen-Year Ferry Capital Improvement Plan (2025-2038) for the Guemes Island Ferry is a general guide for the effective, efficient, and continuing operation of the Skagit County ferry system. This program will assist the County Engineer and Ferry Division management in planning for capital projects that pertain to replacement and improvement for the Skagit County ferry system. Skagit County has been exploring the feasibility of replacing the diesel-powered MV Guemes with an electric-powered ferry, but costs have been escalating over the past several years. Current information about the status of the ferry replacement can be found on the Guemes Island Ferry Replacement web page.

Skagit Transit

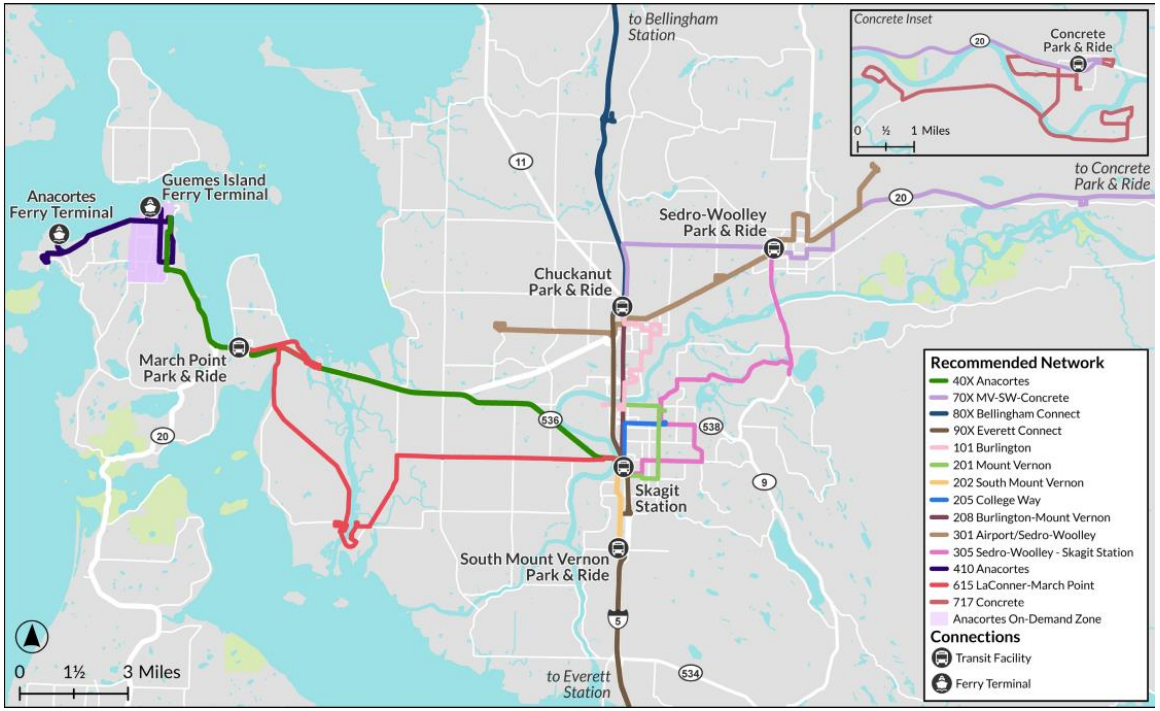
While Skagit Transit has not done any long-term forecasts of ridership, it does have a Six Year Transit Development Plan for 2024-2029 that established the six transportation goals discussed in Section 3.4. Additional information on revenue forecasts and improvements in services, facilities and equipment over the next six years are available in Skagit Transit's Six Year Transit Development Plan.

Skagit Transit's 2024-2029 Transit Development Plan (TDP) guides the development of public transportation in Skagit County. For the 2024-2029 time period, the plan focuses on implementing service recommendations from several planning studies, expanding the vehicle

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fleet and facilities, and investing in new technologies. As of spring of 2024, Skagit Transit is in the process of developing a Long-Range Transit Plan.

Figure 27: Skagit Transit Proposed Future Routes



Source: Skagit Transit Long-Range Development Plan, 2025

Multimodal Transportation Concurrency

The GMA requires local jurisdictions to “adopt and enforce ordinances which prohibit development approval if the development causes the MMLOS for a transportation facility to decline below the standard adopted in the transportation element of the comprehensive plan, unless multimodal transportation improvements or strategies to accommodate the impacts of development are made concurrent with the development."

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Annual Concurrency Report

Skagit County conducts an annual concurrency assessment to determine the status of MMLOS standard compliance. The concurrency assessment requires that, for vehicular LOS, "the Skagit County Public Works Department, under the direction of the County Engineer, shall evaluate the High Traffic County Road Segments and High Traffic County Road Intersections using a Highway Capacity Manual type method (as selected by the County Engineer) to determine whether these road segments and intersections comply with the vehicular level of service standards adopted in the Comprehensive Plan."

The vehicular LOS standard for Skagit County roads is LOS C, however, LOS D is acceptable for all County road segments that:

- Have Annualized Average Daily Traffic (AADT) greater than 7,000 vehicles; and
- Are NOT federally functionally classified as a Local Access Road; and
- Are designated as a County Freight and Goods Transportation Systems Route (FGTS).

The vehicular LOS standard for Skagit County signalized intersections is LOS D.

The Skagit County Public Works Traffic Engineering Unit has selected a vehicular LOS study traffic volume unit threshold of 7,000 AADT. This threshold is an indicator that a road segment may be approaching the LOS C/D threshold and should be studied further. The transportation concurrency focus on vehicular LOS standards is only for the County road system.

The MMLOS standards for active transportation and transit are classified as Category C LOS standards evaluated in the annual concurrency report to document progress on completion of the countywide active transportation network and are used for transportation planning, investment, and partnership purposes, but not for concurrency evaluation in development review. County staff and elected officials use the Annual Concurrency Report to help make informed investment decisions in the annual six-year transportation improvement program (TIP) process.

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Multimodal Transportation System Needs

Current Needs

The County determines current needs in several categories: resurfacing, restoration, rehabilitation, and reconstruction. This is a graduated scale of need ranging from "routine" maintenance to major capital improvement work that is necessary to support significant changes in roadway capacity, active transportation facilities, or multimodal safety. Each year, Public Works publishes the Skagit County Road Segment & Intersection Concurrency Report to document roadway segments that exceed 7,000 ADT measured on an annual basis may exceed the adopted LOS and therefore require improvements beyond normal maintenance and repair. This may include intersection improvements, road widening, traffic controls, active transportation improvements, and other actions. Some of these projects fall into the six-year TIP and others are expected to be needed beyond the six-year horizon. The County generally looks ahead 20 years, but programs transportation improvements as needed in the Six-Year Transportation Improvement Program (TIP).

20-Year Capital Improvement Project List

Transportation improvement projects anticipated for the multimodal transportation system in Skagit County over the next 20 years will include all the following types of projects:

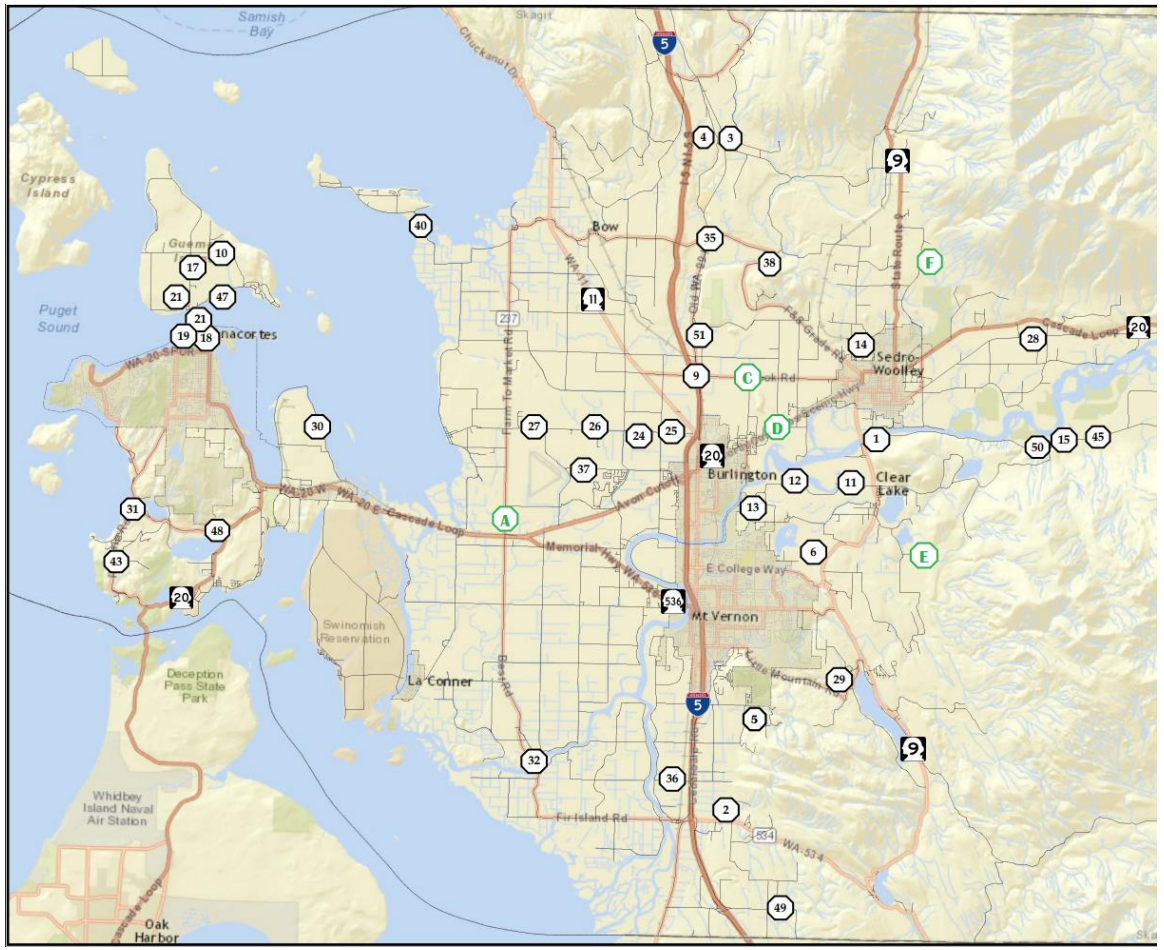
- Capacity/Operations: Projects that are needed to improve the roadway capacity or traffic operations. The 2045 travel forecasts show that there are no vehicle capacity expansion projects needed to meet Skagit County's adopted vehicle roadway LOS standards.
- Maintenance/Repair: Projects that bring the project back up to county design standards, in addition to improving the safety of the roadway. The County will continue to monitor roadway conditions, use the annual priority array to rank project needs, and will program maintenance and repair projects on the six-year TIP as needs arise.
- Safety: Projects related to safety that do not change the structure of the roadway. The County will continue to annually monitor collisions and safety issues and will continue to update the Local Road Safety Plan every two years to apply for safety grant funding.

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- Active Transportation: Pedestrian and bicycle facility improvement projects on County roads and State Highways on the Active Transportation Network (ATN). The County will use the Annual Concurrency Report to program ATN improvements and will consider a comprehensive update to the 2004 Non-Motorized Plan (Ordinance O2004009) for consistency with the ATN and current best practices in transportation planning.
- Feasibility Studies: County studies needed to determine preferred improvement alternatives and costs, as well as SCOG or WSDOT studies for projects of regional significance, such as state highway projects coordinated for potential joint funding and implementation. The County will consider opportunities for multi-agency partnerships to complete feasibility studies to recommend viable alternatives for improvements.
- Bridge Maintenance, Repair, or Replacement: Projects that involve repairing or replacing existing bridges. The County will continue to monitor bridge conditions and will program maintenance, repair, and improvement projects on the six-year TIP as needs arise.
- Ferry/Dock: Capital improvements identified in the 14-Year 2025-2038 Guemes Ferry CIP. The County will strive to fund maintenance, repair, and ferry system improvement projects on the six-year TIP as needs arise.
- Programs: Annual County programs intended to improve transportation safety and educate the public to help achieve County transportation goals and policies. The County will strive to fund safety education, demand management, and traffic calming as needs arise.

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Figure 28: Skagit County 2025-2030 Transportation Improvement Program (TIP) Project Locations – West



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Figure 29: Skagit County 2025-2030 Transportation Improvement Program (TIP) Project Locations – East

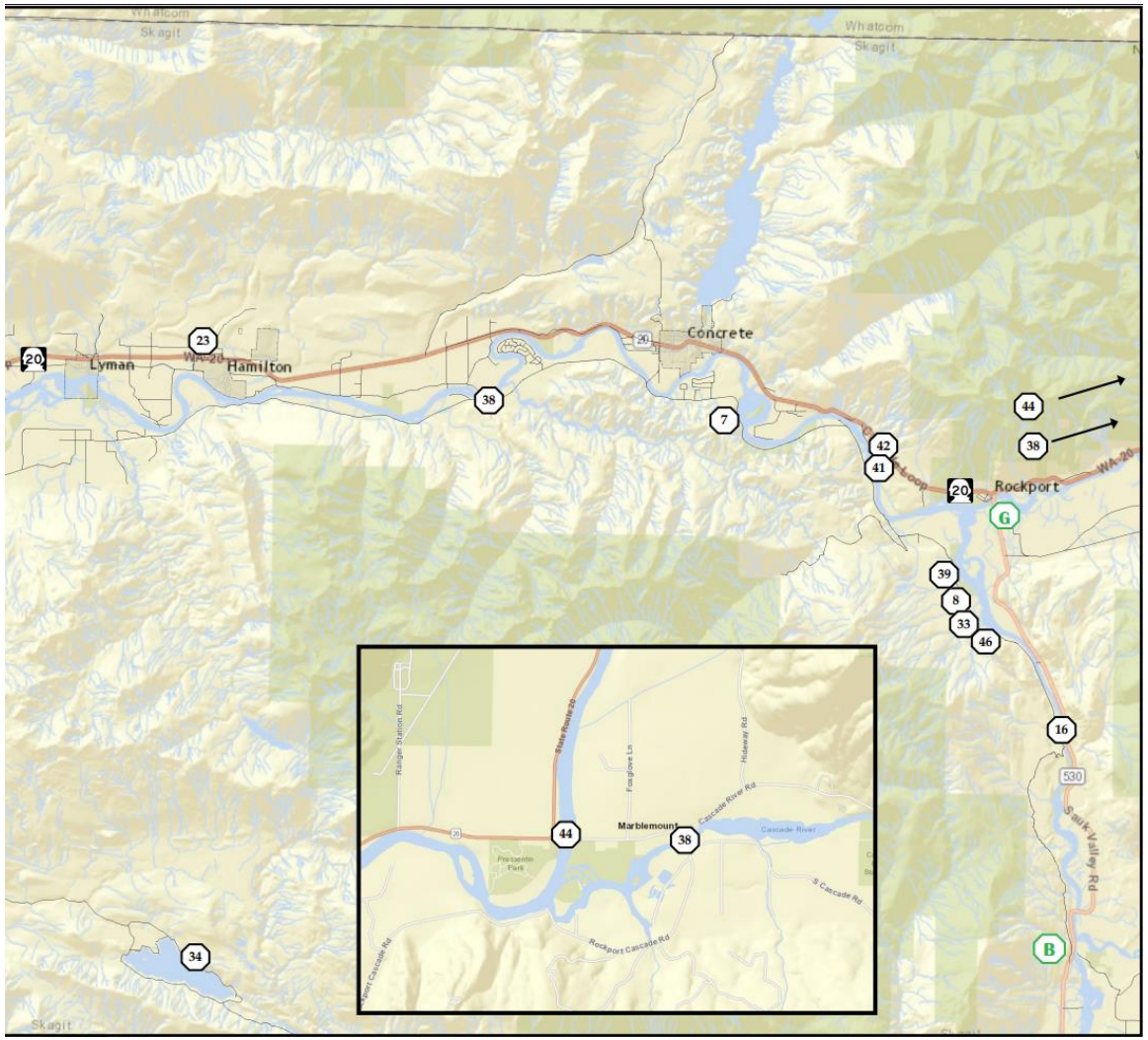


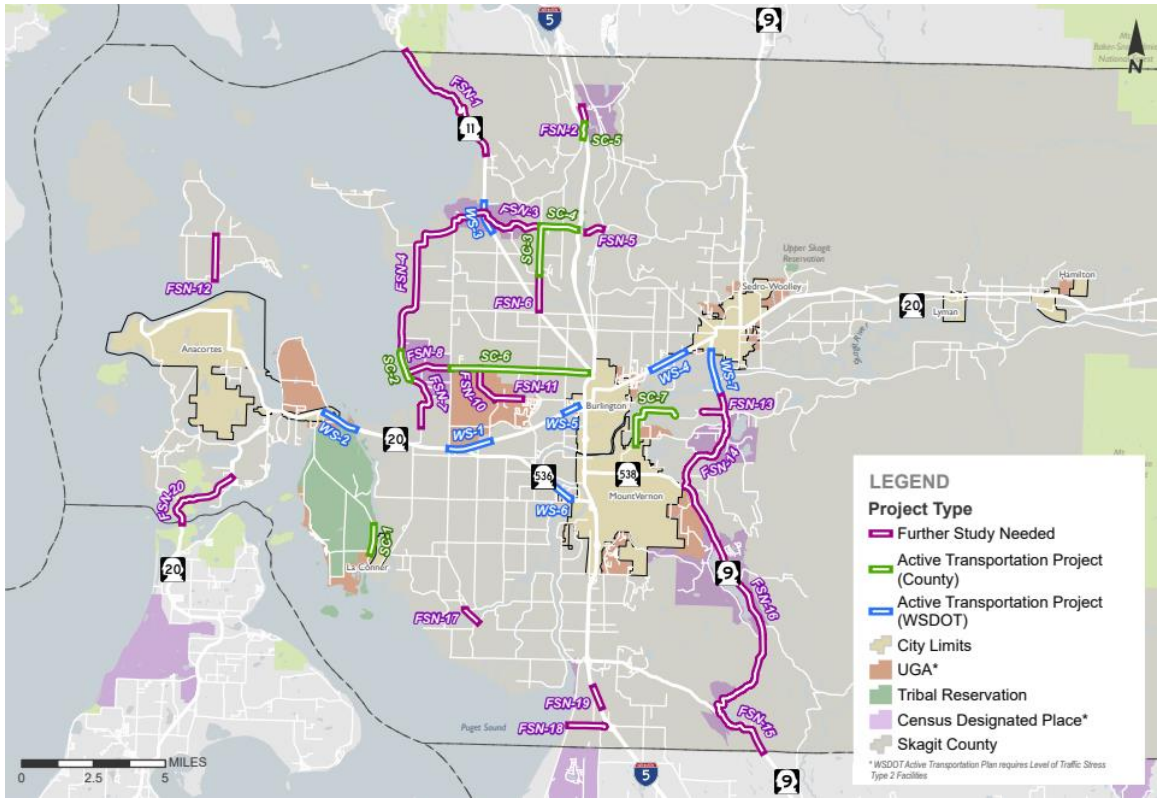
Table 19: Skagit County 2025-2030 Transportation Improvement Projects

Map ID	Bridge Projects	Project Cost
1	Abandon Railroad Bridge Removal	$5,234,005
3	Boulder Creek Culvert Replacement	$4,242,000
15	Gilligan Creek Culvert Replacement - Bridge	$3,595,000
16	Government Bridge - Sauk River (Paint)	$5,617,000
32	North Fork Bridge Replacement	$34,496,212
33	North OstermanCreek Culvert-Concrete-Sauk	$3,235,813
38	Preventative Maintenance - Bridge Deck Repair	$1,290,000
44	Skagit River Marblemount Bridge	$14,874,292
51	Thomas Creek Bridge (Old Hwy 99)	$4,812,000
		$77,396,322
	Road Projects	
A	2025 Hot Mix Asphalt (HMA) Overlay	$356,000
	ADA Barrier Removal - Various Locations	$9,000,000
2	Bulson Road Culvert Replacement	$2,000,000
4	Butler Creek Culvert Replacement (Friday Creek Rd)	$1,095,000
5	Carpenter Creek Culvert Replacement	$1,882,000
B	Christian Camp Road	$2,845,000
7	Concrete Sauk Valley Road Stabilization	$6,810,000
9	Cook Road / I-5 Interchange Vicinity Improvements	$8,954,449
C	Cook Road Overlay Project	$1,676,000
D	District Line Road - Rail Crossing Study	$1,100,000
10	Edens Road	$913,500
E	Fonk Road Culvert Replacement	$2,500,000
11	Francis Road Section 1	$4,051,000
12	Francis Road Section 3	$4,748,365
13	Francis Road Section 4	$5,379,476
14	Garden of Eden Road Culvert Replacement	$633,300
23	Hamilton Cemetery Rd Culver Replacement	$2,500,000
24	Josh Wilson Rd Phase 2	$5,250,045
25	Josh Wilson Rd Phase 2A	$3,652,114
26	Josh Wilson Rd Phase 3	$4,182,511
27	Josh Wilson Rd Phase 4	$5,112,959
28	Little Coal Creek Culvert Replacement (Minkler)	$1,772,398
29	Little Mountain Road (Drainage & Reconstruction)	$3,500,000

30	March's Point Road (Stabilzation & Repairs)	$2,398,844
G	Martin Slough Fish Barrier Removal (Martin Rd)	$2,750,000
31	Marine Dr/Rosario Rd/Marine Wye Dr (Roundabout)	$1,643,000
F	North Fruitdale Rd (Slide Repair)	$2,558,666
34	North Shore Dr (Slide Repair)	$2,337,075
35	Old Hwy 99 North / Bow Hill Rd Intersection	$3,352,601
36	Peter Johnson Rd (Railroad Grade Crossing)	$660,000
37	Peterson Road (Bayview UGA)	$6,046,185
39	Rudd Creek Culvert Replacement (CSV Road)	$4,931,000
40	Samish Island Road - Resiliency Study	$25,000
41	Sauk City Road Culvert Replacement	$125,882
42	Sauk Store Road Culvert Replacement	$1,472,000
45	Sorenson Creek Culvert Replacement	$2,177,000
46	South Osterman Creek Culvert (Concrete-Sauk)	$1,475,000
47	South Shore Road (Guemes Island) PE	$75,000
48	SR 20/Campbell Lake Road Roundabout	$4,180,000
50	S. Skagit Hwy at Steven's Creek (Culvert Replacement)	$1,904,000
49	Starbird Road Culvert Replacement	$2,023,000
		$120,048,370
	Active Transportation (Parks Trails)	
6	Centennial Trail (Stage 1 - 3.5 miles)	$3,738,678
17	Guemes Ferry trail - Ferry Landing to Schoolhouse Park	$1,387,283
43	Sharpe Park to Rosario Beach Park Connector Trail	$1,783,613
		$6,909,574
	Guemes Island Ferry Projects	
18	Anacortes Ferry Parking Lot & Holding Lane Improvements	$1,520,295
19	Electric Ferry Shore-Side Facilities & Terminal Modifications	$18,258,200
	Guemes Island Ferry Operating Costs	$756,205
21	Guemes Island Parking Lot Improvements	$775,806
22	Guemes Island Ferry Terminal Cathodic Protection	$1,200,000
		$22,510,506
	Miscellaneous Projects	
	Emergent Future Projects	**$300,000**
	2025-2030 TIP Project Cost Total	**$227,164,772**

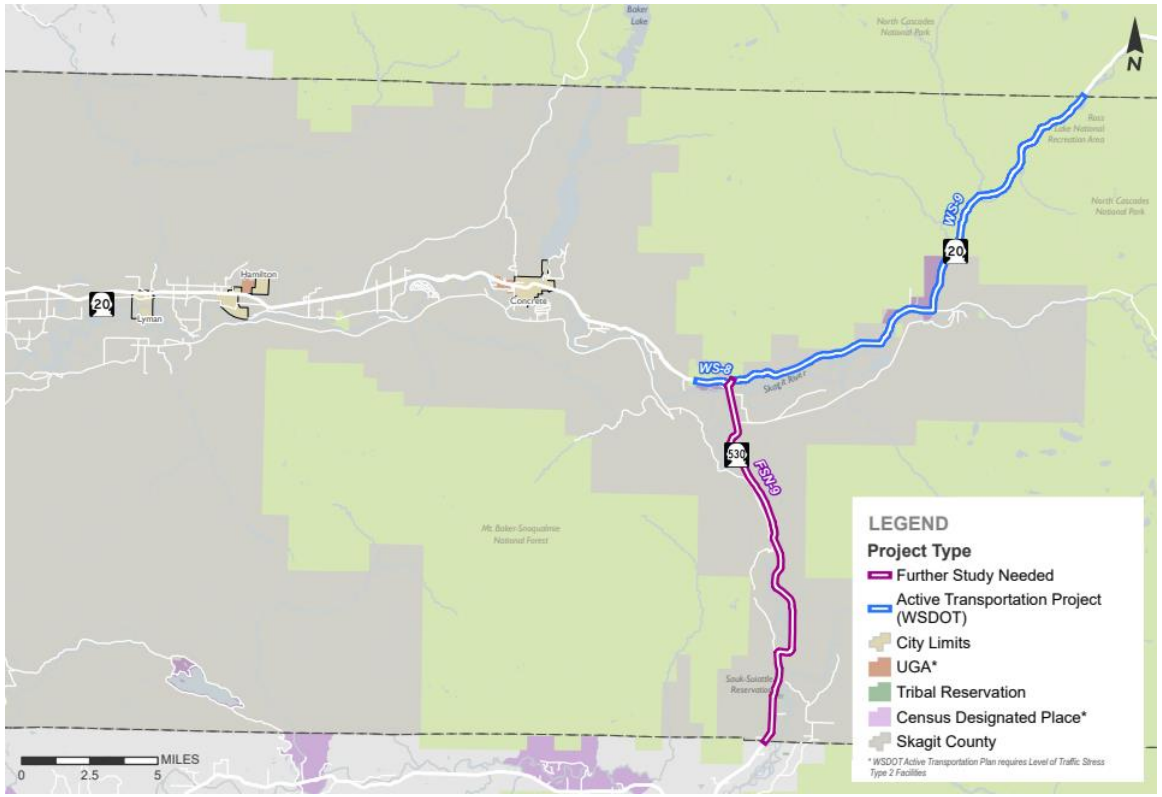
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Figure 30: Active Transportation Network Project Improvements 2026-2045 - West



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Figure 31: Active Transportation Network Project Improvements 2026-2045 – East



Skagit County Active Transportation Network Links

There are several County roads that currently have shoulders that are unpaved or are unusable and not ADA-compliant. The County could pave these shoulders with a less expensive chip seal pavement or a more expensive asphalt pavement. It should be noted that when Skagit County improves roadways, standard practice is to upgrade shoulders to current standards for width and pavement.

Table 20: Skagit County Roads with Unpaved Shoulders Proposed for Active Transportation Improvements

Skagti County Roads With Unpaved Shoulders Proposed for Active Transportation Improvements							
ATN Project Map ID	County Road Name	ExtentTo	ExtentFrom	Bicycle LOS Color	Planned Bicycle Facility	Bike Cost Estimate[1]	Linear Feet
SC-1	Reservation Road	SneeOosh Rd	1 Mile North	Red	Asphalt	$722,299	5,087
SC-2	Bay View - Edison Road	2nd St	1 Mile North	Red	Asphalt	$788,248	5,551
SC-3	Ershig Road	Llama Ln	Bow Hill Rd	Red	Asphalt	$1,250,804	8,808
SC-4	Bow Hill Road	Interstate 5	Eshing Rd	Red	Asphalt	$940,708	6,625
SC-5	Colony Road	Overpass Rd	Btwn I-5 & Fox Hollow Rd	Red	Asphalt	$361,344	2,545
SC-6	Josh Wilson Rd	Burlington	Farm to Market Road	Orange	Asphalt	$3,547,186	24,980
SC-7	Francis Rd	Francis Ln	Mt Vernon	Orange	Asphalt	$1,978,910	13,936
						$9,589,498	**67,532**

1) 2024 Planning-level cost estimates based on unit costs from City of Bellingham Pedestrian and Bicycle Master Plans.

There are several State Routes that are critical links in the Skagit County Active Transportation Network that have paved or unpaved shoulders, which could be improved for active transportation safety and connectivity, as listed below. While these network links are not County facilities, the County could choose to partner with WSDOT to fund and construct active transportation improvements.

Table 21: State Routes Abutting Cities, UGAs, or Census Designated Places Proposed for Active Transportation Improvements

State Routes Abutting Cities, UGAs, or Census Designated Places Proposed for Active Transportation Improvements							
ATN Project Map ID	State Route Name	ExtentTo	ExtentFrom	Bicycle LOS Color	Planned Bicycle Facility	Bike Cost Estimate[1]	Linear Feet
WS-1	State Route 20	Farm to Market Road	Higgins Airport Way	Orange	Buffer Lanes	$2,017,874	7,673
WS-2	State Route 20	Anacortes UGA	Anacortes UGA	Orange	Buffer Lanes	$1,650,336	6,275
WS-3	SR 11 Chuckanut Drive	N Extent Bow Edison	S Extent Bow Edison	Orange	Buffer Lanes	$1,436,820	5,463
WS-4	State Route 20	District Line Rd	Sedro Woolley	Orange	Multiuse Path	$6,504,926	6,679
WS-5	State Route 20	Burlington UGA	Burlington UGA	Orange	Buffer Lanes	$683,934	2,601
WS-6	State Route 536	Mt Vernon UGA	Mt Vernon UGA	Orange	Buffer Lanes	$1,614,522	6,139
WS-7	State Route 9	Sedro Woolley City Limits	Clear Lake	Red	Buffer Lanes	$2,238,382	8,511
WS-8	State Route 20	W Edge of Rockport	SR 530	Orange	Buffer Lanes	$1,554,919	5,912
WS-9	State Route 20	Rockport	Whatcom/Skagit Boundary	Red	Chip Seal	$3,475,765	99,308
WS-10	State Route 20	Whatcom County	Okanogan County	Red	Chip Seal	$2,130,635	60,875
						$23,308,114	**209,435**

1) 2024 Planning-level cost estimates based on unit costs from City of Bellingham Pedestrian and Bicycle Master Plans.

Further Study Needed for Active Transportation Feasibility

While the County roads and State Routes listed above have active transportation improvements identified, there are also several links in the Skagit County network where it is uncertain whether

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or what type of improvements can be completed and what the construction costs may be. These links are labeled Further Study Needed (FSN) and require the City or WSDOT to conduct feasibility studies.

Table 22: County Roads where Further Study is Needed to Determine Active Transportation Feasibility and Cost

County Roads Where Further Study is Needed to Determine Active Transportation Feasibility and Cost							
ATN Project Map ID	County Road/State Route	ExtentTo	ExtentFrom	Bicycle LOS Color	Planned Bicycle Facility	Bike Cost Estimate[1]	Linear Feet
FSN-2	Colony Rd	Overpass Rd	Lake Samish Rd	FSN	FSN	$50,000	3,146
FSN-3	Bow Hill Rd	SR 11	Ershing Road	FSN	FSN	$50,000	12,569
FSN-4	Bow Edison Road	Chuckanut Drive	1 Mile N of Josh Wilson Rd	FSN	FSN	$50,000	37,619
FSN-5	Bow Hill Rd	Bow Ridge Dr	Old Hwy 99 North	FSN	FSN	$50,000	2,893
FSN-6	Ershing Rd	SR 11	Llamma Ln	FSN	FSN	$50,000	6,522
FSN-7	Bay View Edison Road	1 Mile N of SR 20	Bay View	FSN	FSN	$50,000	11,409
FSN-8	Josh Wilson Road	Bay View Edison Road	Jensen Ln	FSN	FSN	$50,000	8,310
FSN-10	Higgins Airport Way	Peterson Rd	Josh Wilson Rd	FSN	FSN	$50,000	6,793
FSN-11	Peterson Road	Ez Road	Higgins Airport Way	FSN	FSN	$50,000	4,950
FSN-12	Guemes Ferry Trail	Ferry Terminal	Schoolhouse Road	FSN	FSN	$50,000	7,784
FSN-13	Francis Rd	State Route 9	Debays Island Rd	FSN	FSN	$50,000	4,243
FSN-17	Best Rd	Fir Island Rd	Summers Dr	FSN	FSN	$50,000	3,188
FSN-18	Milltown Rd	Pioneer Way	Bonnieview Rd	FSN	FSN	$50,000	6,760
FSN-19	Cedardale Rd	1/2-mile N of Conway Hill Ln	1/4-mile S of Conway Hill Ln	FSN	FSN	$50,000	3,749
						$700,000	119,935
1) 2024 Planning-level cost estimates based on unit costs from City of Bellingham Pedestrian and Bicycle Master Plans.							

Skagit County may choose to partner with WSDOT to fund both feasibility studies and construction for these active transportation improvements.

Table 23: State Routes Where Further Study is Needed to Determine Active Transportation Feasibility and Cost

State Routes Where Further Study is Needed to Determine Active Transportation Feasibility and Cost							
ATN Project Map ID	County Road/State Route	ExtentTo	ExtentFrom	Bicycle LOS Color	Planned Bicycle Facility	Bike Cost Estimate[1]	Linear Feet
FSN-1	Chuckanut Drive	Whatcom County	Blanchard	FSN	FSN	$100,000	26,980
FSN-9	State Route 530	Snohomish Couunty line	Rockport/State Route 20	FSN	FSN	$100,000	78,443
FSN-14	State Route 9	Clear Lake	SR 538	FSN	FSN	$100,000	22,098
FSN-15	State Route 9	W Big Lake Blvd	Snohomish County	FSN	FSN	$100,000	31,393
FSN-16	State Route 9	SR 538	W Big Lake Blvd	FSN	FSN	$100,000	31,881
FSN-20	State Route 20	Shrimp Shack	Deception Pass	FSN	Chip Seal	$541,884	15,482
						$941,884	**206,276**

1) 2024 Planning-level cost estimates based on unit costs from City of Bellingham Pedestrian and Bicycle Master Plans.

Bicycle Route Enhancements

In addition to completing the missing gaps in the Skagit County Active Transportation Network, the County and WSDOT can enhance several arterial corridors (below) that already have paved shoulders of 4-feet or more by designating them as bike routes and installing bike route signs. Additional measures, such as applying wider (8”) edge lines and plastic reflective posts between vehicle and bike lanes may also be considered.

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Table 24: Enhancement of Existing Shoulders to Signed Bicycle Routes on County Roads

Enhancement of Existing Shoulders to Signed Bicycle Routes on County Roads						
Road Name	ExtentTo	ExtentFrom	Bicycle LOS Color	Planned Bicycle Facility	Bike Cost Estimate[1]	Linear Feet
Lake Samish Road	I5	Old Hwy 99 North	Green	Signed Route	$9,401	4,700
Bay View - Edison Road	SR 20	1 Mile North	Green	Signed Route	$9,193	4,596
McLean Rd	Mount Vernon City Limits	Laconner Whitney Rd	Green	Signed Route	$57,625	28,813
Little Mountain Road	E Blackburn Rd	Burlington City Limits	Green	Signed Route	$5,080	2,540
Best Road	Chilberg Rd	Summers Dr	Green	Signed Route	$26,297	13,148
Ovenell Road	FM Rd	Higgins Airport Way	Green	Signed Route	$14,803	7,401
Higgins Airport Way	SR 20	Peterson Rd	Green	Signed Route	$17,027	8,514
Pioneer Highway	Skagit/Snohomish County	I5	Green	Signed Route	$35,950	17,975
Bow Hill Road	Bow Ridge Dr	I5	Green	Signed Route	$3,921	1,960
Best Road	SR 20	McLean Rd	Green	Signed Route	$18,497	9,249
Best Road	McLean Rd	Chillberg Rd	Green	Signed Route	$15,912	7,956
La Conner - Whitney Road	Morris St	SR 20	Green	Signed Route	$42,931	21,466
Fir Island Road	Best Rd	Skagit River	Green	Signed Route	$50,023	25,011
Fir Island Road	Skagit River	Pioneer Hwy	Green	Signed Route	$4,495	2,248
Josh Wilson Road	Avon Allen Rd	Jensen Ln	Green	Signed Route	$10,963	5,482
Milltown Road	Cedardale Rd	Silvernail Rd	Green	Signed Route	$4,997	2,499
Old Highway 99 North Road	Bow Hill Rd	Cook Rd	Green	Signed Route	$37,714	18,857
Old Highway 99 North Road	Prarie Rd	Alger Cain Lake Road	Green	Signed Route	$48,594	24,297
Peterson Road	Burlington City Limits	Ez Rd	Green	Signed Route	$19,192	9,596
Farm To Market Road	SR 20	Just North of Ovenell Rd	Green	Signed Route	$10,243	5,122
Helmick Road	Community Plaza Way	SR 20	Green	Signed Route	$13,313	6,657
Chilberg Road	La Conner	Best Rd	Green	Signed Route	$25,890	12,945
Cedardale Rd	south of SR 534	E Hickox Rd	Green	Signed Route	$43,372	21,686
Cedardale Rd	Starbird Rd	North 1 Mile	Green	Signed Route	$9,856	4,928
Conway Frontage Road	Fir Island Rd	E Hickox Rd	Green	Signed Route	$31,838	15,919
Old Hwy 99	Cook Rd	Gear Rd	Green	Signed Route	$10,699	5,349
Francis Road	Francis Ln	500' E of Debays Island Rd	Green	Signed Route	$13,321	6,660
Reservation Road	Snee Oosh Road	Stevenson Rd	Green	Signed Route	$12,408	6,204
South Laventure Road	Blodgett Rd	E Blackburn Rd	Green	Signed Route	$7,102	3,551
Cook Road	SR 11	Burlington City Limits	Green	Signed Route	$53,491	26,746
					$664,147	**332,074**
1) 2024 Planning-level cost estimates based on unit costs from City of Bellingham Pedestrian and Bicycle Master Plans.						

Skagit County may choose to partner with WSDOT to fund both feasibility studies and construction for these active transportation improvements.

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Table 25: Enhancement of Existing Shoulders to Signed Bicycle Routes on State Routes

Enhancement of Existing Shoulders to Signed Bicycle Routes on State Routes						
Road Name	ExtentTo	ExtentFrom	Bicycle LOS Color	Planned Bicycle Facility	Bike Cost Estimate[1]	Linear Feet
State Route 536	SR 20	Mt Vernon UGA	Green	Signed Route	$34,244	17,122
SR 11 Chuckanut Drive	Ershing Rd	I5	Green	Signed Route	$32,728	16,364
SR 11 Chuckanut Drive	Bow Edison	Ershing Rd	Green	Signed Route	$33,919	16,960
SR 11 Chuckanut Drive	Bow Edison	Blanchard	Green	Signed Route	$19,134	9,567
State Route 20	Burlington UGA	Higgins Airport Way	Green	Signed Route	$13,094	6,547
State Route 20	Burlington	District Line Rd	Green	Signed Route	$9,556	4,778
State Route 20	Sedro Woolley	Lyman	Green	Signed Route	$80,197	40,098
State Route 20	Best Rd	Anacortes UGA	Green	Signed Route	$35,519	17,759
State Route 20	Lyman	Hamilton	Green	Signed Route	$29,165	14,582
State Route 20	Hamilton	Concrete	Green	Signed Route	$110,809	55,404
State Route 20	Concrete	W Edge Rockport	Green	Signed Route	$81,198	34,687
SR 20	Anacortes City limit	Shrimp Shack	Green	Signed Route	$31,838	15,919
					$511,400	**249,788**
1) 2024 Planning-level cost estimates based on unit costs from City of Bellingham Pedestrian and Bicycle Master Plans.						

Active Transportation Network Totals

2025-2044 County Active Transportation (ATN + Parks) Cost Estimates = $18,330,148

2025-2044 WSDOT Active Transportation (ATN) Cost Estimates = $24,761,399

Finance

The Growth Management Act (GMA) requires the Transportation Element of the Comprehensive Plan to include a multi-year financing plan based on the identified improvement needs in the transportation systems plan. The 20-year financing plan is to be the basis for developing the required six-year Transportation Improvement Program (TIP). If probable funding is less than the identified needs, then the transportation financing program will have to balance several goals, including financial solvency, maintenance, and operations of the existing system, and supporting an appropriate transportation level of service.

Historic Revenues and Expenditures and Future Projections

The data used to summarize historical revenues and expenditures is for the years 2015 through 2024 and was provided by Skagit County, as reported to WSDOT County Road and City Street Revenues and Expenditures data sets. Attempting to predict future conditions has become increasingly difficult since the last Transportation Element update due to factors beyond the

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control of Skagit County, such as the global COVID-19 pandemic, unanticipated spikes in construction costs, high inflation rates, etc. This financial analysis maintains consistency with the forecast projections made in relevant adopted Skagit County transportation documents, including:

- 2025-2030 Transportation Improvements Program (TIP) (page 19)
- 2025-2038 Guemes Island Ferry Fourteen-Year Capital Improvement Plan

Both documents include mid-range forecast that provide an excellent starting point to project future revenue and expenditures for the 20-year planning period. The 2025-2030 TIP is all inclusive for transportation modes while the 2025-3038 Guemes Island Ferry plan is very specific to the marine ferry system for expenditures, but ferry toll revenue is also used in the overall multimodal transportation budget.

Local Transportation Funding

The County funds transportation operations, maintenance, and the local portion of capital project funding through the County Road Fund. County Road Fund revenues come from a variety of sources including property taxes, the motor vehicle fuel tax (MVFT), federal funds, ferry tolls, and other revenue sources. The largest source of revenue is local property taxes. One-time revenue sources, such as grants, can provide additional revenues during certain years, but grant funding is competitive and funding availability fluctuates. Assumptions based on historic state and federal grant revenue are made for future grant revenue in the summary table below. County Road Fund expenditures include administration, construction (including capital projects), operations, facilities, other maintenance, ferry related expenditures, and traffic policing.

Currently, Skagit County's primary transportation funding sources include:

- Property taxes
- Other local receipts
- State fuel tax distributions
- Other State funds, including grants
- Federal funds, including grants

The County occasionally appropriates General Funds to supplement the transportation budget.

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Each funding source is briefly described below.

Property Taxes

Skagit County assesses private property to generate revenue for the County Road Fund, which provides the bulk of local funds to construct multimodal improvements, which benefits all County residents. The rate of this property tax changes over time, as does its value due to rising property values and increasing construction costs.

Other Local Receipts

This category can include Real Estate Excise Taxes (REET), Leasehold Excise Taxes, Road Permits, and various smaller miscellaneous funding sources. This has been a relatively steady, but small source of overall transportation funding over the years. At the same time, local receipt funds are sensitive to economic conditions and can change in response to state, national, and global factors beyond the control of Skagit County.

State Fuel Tax Distributions

Washington State has one of the highest gas taxes in the U.S. and a portion collected by the State is returned to Skagit County to use for transportation investment purposes. The value of this funding source has been declining as vehicles have become more fuel efficient and construction costs have increased significantly. The State legislature is currently exploring various other user-oriented funding methods to someday transition from the gas tax.

Other State Funds

This category is primarily grant funding from a variety of State funding sources, including the Urban Arterial Board (UAB), Transportation Improvement Board (TIB), Commerce, and WSDOT. Smaller contributions may come from state shared revenues, entitlements, mitigation funding, and partnerships or in-lieu payments. This is a highly variable funding source because grant funding is very competitive and different grant programs offer different levels of funding from cycle to cycle.

Federal Funds

Federal transportation grants are funded through the federal portion of the Fuel Excise Tax, or gas tax, which has remained flat since 1994. Revenue generated from these sources is deposited into the Highway Trust Fund and then disbursed to states through the federal Highway and Mass Transit Accounts. Federal funds are made available to Skagit County primarily through grant programs that, like state grants, are very competitive, which makes this a highly variable funding

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source. This is the largest portion of outside funding that Skagit County has benefited from over the years, largely due to staff success with grant writing for safety, road, and bridge improvements.

Ferry Tolls

Skagit County operates a vehicle ferry between Anacortes and Guemes Island, which is subsidized by County government and has a cost-recovery target from fare box revenue of 65%. The Board of County Commissioners (BOCC) sets the fare rate each year and ferry tolls are used as a dedicated source of revenue for the countywide transportation system.

Financial Capacity for Transportation Capital Investments: 2025-2045

To understand Skagit County's ability to meet its future transportation improvement goals, the financial analysis evaluates Skagit County's projected future revenues against its projected 20-year transportation programs and project needs. As with most local agencies, existing transportation revenues will not allow Skagit County to fund all of its proposed capital improvements on top of ongoing operations and maintenance. The Transportation Element identifies ways to balance the transportation budget, including through prioritization of capital improvement projects and new policies that could generate additional revenue. Any funding strategy must balance the County's transportation goals against its system of sustainable revenue sources. This is even more pressing given the limited policy mechanisms counties have at their disposal for raising revenue.

SIX-YEAR TRANSPORTATION IMPROVEMENT PROGRAM

The County's Six-Year Transportation Improvement Program (TIP) is a strategic planning document used to make investments in the countywide multimodal transportation system and programs the timing of projects with a combination of local, state, and federal funds. The County maintains a detailed funding plan for the six-year TIP including project costs, funding sources, and the year(s) of planned project expenses. The total expenditure for projects listed in the 2025-2030 TIP is $231,143,726 with $69,963,554 (30%) of funding secured, while $160,596,679 (70%) of the TIP projects are unfunded. A breakdown of project categories and local, state, and federal project costs is provided on page 18 of the 2025-2030 TIP.

The total amount of local County funds currently programmed in the 2025-2030 TIP is approximately $23,251,021 or approximately $3.9 million per year. However, the amount of local County funding currently secured for 2025-2030 TIP projects is $6,728,630 (29%) with

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$16,522,391 (71%) needed by 2030. This means that the County will need to allocate more local funding to these projects or will need to find other funding sources before project construction can occur.

Table 26: Skagit County Six-Year TIP

Skagit County Six-Year TIP Project Categories	2025-2030	Percent	Annual Average	2031-2045	20-Year Total	Percent
Bridges	$85,065,220	37%	$14,177,537	$198,485,513	$283,550,733	39%
Road Safety, Culverts, Overlay	$116,358,426	50%	$19,393,071	$271,502,994	$387,861,420	53%
Active Transportation[1]	$6,909,574	3%	$1,151,596	$18,330,148	$25,239,722	3%
Guemes Ferry[2]	$22,510,506	10%	n/a[3]	$12,180,000	$34,690,506	5%
Miscellaneous	$300,000	0%	$50,000	$700,000	$1,000,000	0%
Total TIP Project Costs	**$231,143,726**			**$501,198,655**	**$732,342,381**	
1) 2025-2030 TIP = Trail Projects; 2031-2044 = Minimal Active Transportation Network Costs						
2) 2025-2030 TIP (p18); 2031-2044: Table 3: Capital Facility Improvements - 2025-2038 Guemes Island Ferry Plan (p 9)						
3) Guemes Ferry annual average costs significantly skewed by cost of new vessel.						
4) Estimates based on current data, trends, and assumptions						

For the purposes of this financial capacity analysis, it is assumed that annual funding levels by category will remain similar to those currently adopted shown in the 2025-2030 TIP.

To understand Skagit County's future funding capacity to complete desired capital projects, the annual average costs of historic (2015-2024) expenditures are extrapolated to 2044 (Table F.5.) and then subtracted from total revenues (Table F.6.). This financial forecast is built on several assumptions (Noted in tables), as well as economic factors and processes that are beyond Skagit County's control (Increasing construction costs, inflation rates, state and federal permit review delays, etc.). Changes to any one of these assumptions or factors will also change the outcome of the forecast.

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Table 27: Historic Revenues. 2015-2024

Skagit County Historic Transportation Revenues, 2015-2024 (Source: Skagit County)								
Year	Property Taxes	General Fund Appropriations[1]	Other Local Receipts[2]	Guemes Island Ferry Tolls	State Fuel Taxes	Other State Funds[3]	Federal Revenues[4]	Total Revenues
2015	$13,646,526	$200,000	$2,929,007	$1,211,529	$3,040,513	$2,459,875	$2,250,366	**$25,737,816**
2016	$14,725,372	$0	$2,899,100	$1,164,788	$3,050,000	$1,999,660	$4,332,885	**$28,171,805**
2017	$14,345,061	$0	$1,374,000	$1,115,000	$3,239,789	$6,137,217	$11,760,200	**$37,971,267**
2018	$14,817,082	$0	$1,219,000	$1,300,000	$3,139,428	$2,893,845	$12,681,817	**$36,051,172**
2019	$15,374,566	$0	$912,200	$1,375,000	$3,213,204	$2,675,781	$3,517,100	**$27,067,851**
2020	$15,845,869	$0	$4,441,442	$1,605,000	$3,278,892	$6,098,165	$737,732	**$32,007,100**
2021	$16,602,042	$0	$538,821	$1,605,000	$3,349,015	$8,922,467	$5,526,315	**$36,543,660**
2022	$16,276,524	$0	$1,983,266	$1,608,055	$3,341,199	$4,585,069	$1,570,483	**$29,364,596**
2023	$15,655,000	$0	$709,226	$1,636,574	$3,196,208	$14,141,758	$7,923,519	**$43,262,285**
2024	$18,731,430	$2,000,000	$3,141,639	$1,732,000	$3,091,336	$4,462,616	$10,646,736	**$43,805,757**
Totals	**$156,019,472**	**$2,200,000**	**$20,147,701**	**$14,352,946**	**$31,939,584**	**$54,376,453**	**$60,947,153**	$339,983,309
Notes:	***45.9%***	***0.6%***	***5.9%***	***4.2%***	***9.4%***	***16.0%***	***17.9%***	***100.0%***
1)	Reported as One-Time Transfers In							
2)	Includes Timber Excise, and Other Charges & Revenues							
3)	Includes State transportation grants from RAP, CAPP, CFCIP, TIB, WSDOT, and other state sources							
4)	Includes Federal transportation grants and federal timber and land grants							

Source: Skagit County, 2024; Transpo Group Consulting, 2024.

Table 28: Projected Future Revenues, 2025-2044

Skagit County Projected Revenues, 2025-2030 TIP and Future 2031-2044 Forecast								
Year	Property Taxes[1]	Forest, Timber, & Other Taxes[2]	Other Local Receipts[3]	Guemes Island Ferry[4]	State Fuel Taxes[5]	Other State Funds[6]	Federal Revenues[7]	Total Revenues[8]
2025-2030 TIP	$19,826,358	$421,500	$3,264,834	$7,887,450	$3,140,165	$2,125,000	$6,094,715	**$42,760,022**
Projected 2025-2044	**$396,527,160**	**$8,430,000**	**$65,296,680**	**$157,749,000**	**$62,803,300**	**$42,500,000**	**$121,894,300**	**$855,200,440**
Notes:	***46.4%***	***1.0%***	***7.6%***	***18.4%***	***7.3%***	***5.0%***	***14.3%***	***100.0%***
1)	2025-2030 TIP. Revenue increased by 1% each year, generally consistent with population growth rate.							
2)	2025-2030 TIP. Timber taxes on State and private lands; Federal forest funds, and other taxes. Annual funds constant, per TIP.							
3)	Includes Timber Excise, and Other Charges & Revenues							
4)	Table 4: Projected Revenue, 2025-2038 14-year Guemes Island Ferry Plan (Includes state grants for new ferry)							
5)	2025-2030 Skagit County Transportation Improvement Program 6-Year Projection of Revenues and Expoenditures.							
6)	TIP 2030 Forecast; Includes State grants from RAP, CAPP, CFCIP & other sources.							
7)	2015-2024 annual average. Includes federal transportation grants and federal timber and land grants.							
8)	Projections based on historic 2015-2024 trends, 2025-2030 TIP and on-going policies and procedures, all of which may change.							

Source: Skagit County, 2024; Transpo Group Consulting, 2024.

Table 29: Historic Expenditures, 2015-2024

Skagit County Historical Expenditures, 2015-2024 (Source: Skagit County)								
Year	**Capital Construction**	**Preservation**	**General Maintenance[1]**	**Guemes Island Ferry Maintenance**	**Administration & Operations**	**Other**	**Traffic Policing[2]**	**Totals**
2015	$6,314,608		$12,900,751	$2,531,763	$5,073,561	$0	$1,350,000	**$28,170,683**
2016	$8,834,642	$3,441,884	$648,814	$1,822,780	$10,738,535	$0	$1,350,000	**$26,836,655**
2017	$19,010,795		$11,365,807	$2,722,365	$5,402,776	$99,719	$1,350,000	**$39,951,462**
2018	$12,782,545		$0	$2,602,701	$15,216,502	$4,946,157	$1,350,000	**$36,897,905**
2019	$7,192,164		$0	$2,891,369	$15,358,574	$865,753	$1,350,000	**$27,657,860**
2020	$11,625,252	$540,112	$11,682,657	$3,315,285	$4,934,622	$8,263,836	$1,350,000	**$41,711,764**
2021	$21,169,095		$12,960,201	$3,300,238	$4,091,785	$954,423	$1,350,000	**$43,825,742**
2022	$14,197,100		$12,252,505	$2,734,392	$6,222,251	$396,075	$1,350,000	**$37,152,323**
2023	$22,521,874		$14,536,522	$2,734,392	$4,076,074	$0	$1,350,000	**$45,218,862**
2024	$25,000		$14,864,236	$3,313,310	$14,869,646	$10,916,100	$1,350,000	**$45,338,292**
Totals	**$123,673,075**	**$3,981,996**	**$91,211,493**	**$27,968,595**	**$85,984,326**	**$26,442,063**	**$13,500,000**	**$372,761,548**
Average	**$12,367,308**	**$398,200**	**$9,121,149**	**$2,796,860**	**$8,598,433**	**$2,644,206**	**$1,350,000**	**$37,276,155**
Notes:	***33.2%***	***1.1%***	***24.5%***	***7.5%***	***23.0%***	***7.1%***	***3.6%***	***100.0%***
1)	Does not include maintenance costs for Guemes Island Ferry							
2)	Support for traffic safety enforceent by Skagit County Sheriff							

Source: Skagit County, 2024; Transpo Group Consulting, 2024.

Table 30: Projected Future Expenditures, 2025-2045

Skagit County 20-Year (2025-2044) Projected Expenditures Based on Historic Annual Average (2015-2024)								
Year	**Capital Construction**	**Preservation**	**General Maintenance[1]**	**Guemes Island Ferry Maintenance[2]**	**Administration & Operations[3]**	**Other[4]**	**Traffic Policing[5]**	**Totals**
Annual Average	$12,367,308	$398,200	$16,314,354	$2,796,860	$14,996,281	$2,644,206	$1,350,000	**$50,867,209**
Projected 2025-2044	**$247,346,160**	**$7,964,000**	**$326,287,080**	**$55,937,200**	**$299,925,620**	**$52,884,120**	**$27,000,000**	**$1,017,344,180**
	24.3%	***0.8%***	***32.1%***	***5.5%***	***29.5%***	***5.2%***	***2.7%***	***100.0%***
Notes								
1) 2025-2030 TIP annual average; Does not include Guemes Island Ferry needs.								
2) 2025-2038 annual average from 14-Year Guemes Island Ferry Plan; 2039-2044 = $500,000/year.								
3) 2025-2030 annual average								
4) 2015-2024 annual average								
5) 2015-2024 annual average								

Source: Skagit County, 2024; Transpo Group Consulting, 2024.

Table 31: Skagit County Net Revenue Available for Capital Projects, 2025-2045

Total County Revenue, 2025-2045	**$855,200,440**
Projected County Expenditures, 2025-2045	**$1,017,344,180**
Net Difference in Revenues and Expenditures	**-$162,143,740**

Source: Skagit County, 2024; Transpo Group Consulting, 2024.

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As documented above, Skagit County's capital and non-capital expenditures are estimated at over $1 billion dollars. However, as Table F.6. shows, the County is currently projecting only about $855 million in available revenues for capital projects, leaving a gap of over $162 million dollars in unfunded capital projects between 2025 and 2045.

Summary

Funding for the 20-year projects is anticipated to be consistent with current funding for the six-year TIP including local, state, and federal funds. Detailed funding for 20-year long-range projects will be identified when projects are shifted to the six-year TIP. As documented above in the travel demand forecast analysis, there are no locations where roadway LOS exceeds the adopted Skagit County LOS standard, there are no roadway capacity projects necessary to meet concurrency, although some improvement projects may indirectly result in higher vehicle capacity.

Under current circumstances, the County might only be able to fund about 84% of its desired transportation capital improvement projects for the 2025-2045 period. GMA allows the County flexibility in resolving this situation, but ultimately it requires either fewer projects, additional revenue, or a combination of both. The County may choose to address this long-term funding shortfall in several ways:

1. Prioritizing and Limiting New Capital Projects in the TIP. The County can prioritize its capital projects, such that new projects are only added to the annual TIP on an as-funds-are-available basis or if they are highly competitive candidates for state or federal grant funding programs. This would result in a delay in implementation of some projects, especially lower priority improvements, but as stated above, the TIP is a strategic planning document used to make the County's highest priority transportation investments.

   State and federal grants are cyclical, competitive, and sometimes require local matching funds to even apply. In addition, projects seeking grant funding must be strategically sized for cost, grant availability, and constructability. As an example, there may be a need for improvements along an entire arterial corridor, but the construction cost would be too much for the County or any one grant funding source to complete. Dividing the project into financially feasible phases would be a more strategic approach and more likely to secure grant funding. Some grants are available each year, while others are only available every other year or every few years. Grant funding sources are also focused on

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spreading improvements throughout a state or a region, which means that there are practical limits on how much funding any one grant source can provide. Some grants require up to a 20% local match from the County, which means that only the most viable and competitive project candidates should be placed on the six-year TIP in any given year. The Annual Concurrency Report will be supplemented with recommendations for priority multimodal transportation investments to be incorporated into the annual Transportation Improvement Program adoption by County Commissioners.

2. Generating Additional Revenue. The County could increase funding for capital transportation projects through several policy changes that would generate additional transportation revenues. These may include, but not be limited to:

    - Property Tax Increase
    - Create a Transportation Benefit District
    - Voter Approved Bond or Tax Package
    - Transportation Impact Fees for New Development
    - Complete Streets Ordinance for Grant Eligibility
    - Funding Partnerships with Other Agencies
    - Facilitate Local Improvement Districts

Property Tax Increase

Property tax rates have not kept up with inflation rates over the years. The County could seek voter approval for a “Levy Lid Lift” to raise property tax assessments to provide additional funding to the County Road Fund. While this is never popular, the County could communicate the intended purpose and perhaps even identify a major project or set of projects that would benefit from the additional transportation revenue.

Transportation Benefit District

Skagit County could create a sales tax-based Transportation Benefit District, which requires County voter approval, but could provide significant revenue from visitors to Skagit County.

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Transportation Benefit Districts (TBDs) (Chapter 36.73 RCW) are independent taxing districts that can impose fees and/or taxes to fund transportation improvements. TBDs can be established via ordinance in jurisdictions ranging from a city to multi-county area. TBDs are intended to finance construction and improvements to roadways, high-capacity transportation systems, public transit systems, and other transportation management programs.

- Sales and Use Tax (RCW 82.14.0455). Counties can authorize local TBDs that provide up to a 0.2% local sales and use tax with voter approval. This tax must be authorized by voters, and may not be in effect longer than 10 years unless reauthorized by voters.
- Motor Vehicle Excise Tax (MVET) (RCWs 81.100 and 81.104). TBDs can levy up to a $100 fee for each new vehicle weighing less than 6,000 pounds registered in its jurisdiction. $20 of this fee can be leveraged without a public vote.

At this time, Skagit County has not established a TBD, and, therefore, does not collect any revenue via this mechanism. To generate transportation revenues via a TBD, Skagit County would first need to pass a County ordinance establishing the TBD and then impose a fee or tax (from the options above) on that TBD. Depending on the fee or tax levied in the TBD, Skagit County might have to hold a public election to levy the tax. Four cities within the County, Anacortes, Burlington, Mount Vernon, and Sedro-Woolley, have enacted TBDs.

Voter Approved Bond/Tax Package

Bonds do not result in additional revenue unless coupled with a revenue generating mechanism, such as a voter approved tax. The debt service on the bonds results in increased costs which can be paid with additional tax revenues. Although the County does not anticipate issuing bonds in the near future, it remains an option for generating additional transportation revenues to fund some of the higher cost improvement projects.

Transportation Impact Fees for New Development

The County could adopt Transportation Impact Fees under RCW 82.02 to assess new development a proportionate share of the cost of transportation infrastructure needed

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to accommodate the planned growth over the next 20-years. Projects deemed necessary to accommodate growth may include sidewalks, bikeways, and multiuse side paths for transportation commuting. This would require Skagit County to develop a Transportation Impact Fee program after the adoption of the 2025 Comprehensive Plan and then adopt an ordinance creating a new section of Skagit County Code to apply in the development review process. As of 2025, five counties in Washington charge new development for transportation impact fees. Anacortes, Burlington, Mount Vernon, and Sedro-Woolley all charge transportation impact fees to new development.

Complete Streets Ordinance

Skagit County could develop and adopt a Complete Streets ordinance to become eligible for up to $1 million per year in Transportation Improvement Board (TIB) Complete Streets grant funds. This competitive grant funding program is well-funded, is offered annually, and complements the annual TIB Active Transportation grant program that Skagit County is already eligible for. These grant programs can specifically target all of the active transportation projects identified in the long-term project list.

Facilitate Local Improvement Districts

A local improvement district (LID) (RCW 35.43 to 35.56) is a special assessment area established by a jurisdiction to fund specific public improvements, including transportation improvements, through mechanisms that assess those costs to benefitted property owners. LIDs could be formed to construct sidewalks, upgrade streets, improve drainage, or other similar types of projects. A LID may be in residential, commercial, or industrial areas or combinations depending on the needs and benefits. LIDs can be proposed either by the County or by residents or business/property owners. LIDs must be formed by a specific process which establishes the improvements, their costs, and assessments. The assessments are added to the property tax which helps to spread the costs over time. The amount of money generated through an LID has to be equal to or less than the special benefit generated by the project for the properties being assessed. Due to that funding limiter, this tool works only in certain situations and for certain projects, but if the right opportunity presents itself it could be a useful tool. Many of these situations hinge on development, so it is unlikely that it will be a large funding source for Skagit County moving forward.

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3. Restructure the Ferry System. The Board of County Commissioners may consider restructuring the Guemes Island ferry system to reduce or eliminate the subsidy currently provided by the County's overall transportation program, which would then have additional revenue. Potential methods could include:

   - Establishment of an Enterprise Fund for the Ferry starting on January 1, 2016. The Enterprise Fund would account for all activities of the ferry, including revenues, operational and capital expenditures; or
   - Implementation of a rate setting policy for the purposes of determining the appropriate fare structure based on a current methodology in place; or
   - The creation of a Ferry District per RCW 36.54.110 for Guemes Island and assessing 75 cents per $1,000 in valuation. The proceeds of the assessment would be retained in the Ferry Enterprise fund for capital purposes including the eventual replacement of the current ferry. Estimated revenue from a Guemes Island Ferry District would be over $200,000 per year.

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Intergovernmental Coordination

Regional transportation planning was significantly affected by the adoption of the Growth Management Act in 1990. One of GMA's provisions authorized establishment of Regional Transportation Planning Organizations (RTPOs). In 1991, Skagit County jurisdictions joined with Island County jurisdictions to form the Skagit-Island Regional Transportation Planning Organization (SIRTPO). The SIRTPO existed from 1991 – 2015, until it was dissolved because it no longer met the member requirements for an RTPO. Upon its dissolution, SCOG became the RTPO for Skagit County and Island County is its own RTPO.

SCOG also began serving as a Metropolitan Planning Organization (MPO) in 2003 following designation of a portion of Skagit County as a federal Urbanized Area based on the 2000 Census. The Skagit Council of Governments is the lead agency for coordinating the transportation planning efforts of jurisdictions within the county. The organization is responsible for maintaining a regional transportation plan that frames the policy basis for coordinating transportation planning and improvements within Skagit County, including County, city and town, ports, Indian tribes and public transportation service providers. SCOG maintains the regional transportation forecasting model and facilitates discussion and decision-making among its member agencies.

The regional transportation plan is based on public and agency outreach and addresses the following priorities:

- Economic vitality
- Preservation
- Safety
- Mobility
- Environment
- Stewardship

In addition to the coordination provided by SCOG described above, the County and the cities and towns coordinate transportation planning and improvements that affect common interfaces of roads, non-motorized facilities and transit. In particular, the 2002 Framework Agreement between the County and the cities and towns establishes agreed upon procedures by which

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countywide planning policies will be developed and adopted, including those related to transportation.

Demand Management

Beyond the requirements related to anticipating how physical transportation facilities are capable of accommodating the transportation demands attributed to future growth, the County and other jurisdictions are responsible for identifying possible optional means such as management of services in creative ways that leverage the capacities of the facilities. This includes increased use of active transportation travel, transit and car-pooling, coordination of land use and transportation decisions, and encouraging major trip generators to plan their activities in such a way that peak hour travel demands are minimized.

Active Transportation

GMA requires that the Comprehensive Plan's Transportation Element include a pedestrian and bicycle component "to include collaborative efforts to identify and designate planned improvements for pedestrian and bicycle facilities and corridors that address and encourage enhanced community access and promote healthy lifestyles." This requirement is addressed by non-motorized the active transportation section above and policies 8A-6.1 through 8A-6.12 in this Transportation Element. The active transportation policies in the Transportation Element provide high-level guidance and are drawn from and consistent with the policies in the 2004 Non-Motorized Plan. Because Skagit is a rural county, the active transportation policies and plan address equestrian as well as bicycle and pedestrian needs and goals. It is recommended that the 2004 Non-Motorized Plan be updated to be current and consistent with best practices for transportation planning.

The 2024 Skagit County Bike Map, was created and approved by local agencies other than Skagit County and was published by SCOG. This Bike map identifies existing on and off-street bike routes in the County including regional bike routes. The map classifies routes based on shoulder width and traffic volumes. Major bike routes include the Coast to Salish Route, the Coast to Cascades Route, the Coast Millennium Route, and the Cascade Trail. The existing system of bike routes provides major connections east to west and north to south with links to adjacent

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counties. It is important to clarify that a bicycle "route" may not include designated bicycle "facilities." Similarly, the 2021 Skagit County Walking Trail Guide, was created and approved by local agencies other than Skagit County and published by SCOG, maps and identifies existing walking and trail opportunities in Skagit County and provides basic information for users to locate and use them. The map also highlights trail systems in Anacortes, Burlington, Mount Vernon and at the Port of Skagit.

The Skagit County Health Department promotes healthy communities, including efforts to improve active transportation networks to increase health and activity. Regionally, SCOG has been coordinating with member agencies on the Regional Transportation Plan which identifies regionally significant active transportation projects.

Regional Transportation Policies

The Skagit Council of Governments has adopted policies for regional transportation planning and infrastructure coordination in its capacity as both the Metropolitan Planning Organization (MPO) and the Regional Transportation Planning Organization (RTPO) for Skagit County. These policies, contained in SCOG's Skagit 2045 Regional Transportation Plan (RTP), direct more detailed goals and strategies. The RTP polices are:

Policy 1: Identify, encourage, and implement strategies and projects that will maximize the efficiency and effectiveness of the regional transportation system through a cooperative effort with the public, federal government, state and local governments, tribal government, private sector, and other interested parties.

Policy 2: Provide a Plan that identifies significant transportation facilities and services that support

- local comprehensive plans and ensures ongoing evaluation necessary to remain current with local,
- regional, inter-regional, state, federal, and public needs and requirements, while recognizing the
- interrelationships within the contiguous urban area and areas immediately adjacent to them.

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Policy 3: Protect the integrity of the investment in the regional transportation system by encouraging and prioritizing timely maintenance of the system.

Policy 4: Facilitate cooperation, coordination and information exchange among SCOG member jurisdictions.

Policy 5: Maintain and implement a participation plan to ensure the early, meaningful, and continuous participation of the region's interested parties in the planning process.

Policy 6: Consistent with Skagit County Countywide Planning Policies, encourage efficient multimodal transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans.

For many of these policies, the RTP has goals and strategies that are intended to direct the agencies in coordinating their individual plans, improvement programs, and financing strategies.

Within this framework, the following transportation goals and policies have been adopted by Skagit County.

al governments.

The GMA requires the Transportation Element of the Comprehensive Plan to include a multi-year financing plan based on the identified improvement needs in the transportation systems plan. The 20-year financing plan is to be the basis for developing the required six-year Transportation Improvement Program (TIP). If probable funding is less than the identified needs, then the transportation financing program will have to balance several goals, including financial solvency, maintenance, and operations of the existing system, and supporting an appropriate transportation level of service.

To understand this balance, Skagit County has evaluated its future revenues against its 20-year transportation project list. This comparison is contained in the Transportation Technical Appendix demonstrates the County's ability to implement its Transportation Element.

As with most local agencies, existing transportation revenues will not allow Skagit County to fund all of its proposed capital improvements on top of ongoing operations and maintenance. The Transportation Element identifies ways to balance the transportation budget, including through prioritization of capital improvement projects and new policies that could generate additional revenue. Any funding strategy must balance the County's transportation goals against its system

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of sustainable revenue sources. This is even more pressing given the limited policy mechanisms counties have at their disposal for raising revenue.

as described below.

Goals and Policies

Goal 8A Plan and maintain a safe, and efficient regional transportation system for the movement of people and goods in partnership, where appropriate, with the cities, tribes, transit agencies, Washington Department of Transportation, and the Skagit Council of Governments.

policy 8A-1.1 Review development projects near or adjacent to state facilities to coordinate local access and address transportation needs for all users.

policy 8A-1.2 Review development projects near or adjacent to state facilities to coordinate local access and address transportation needs for all users. Encourage use of existing and new public roads to maximize internal circulation within Skagit County and promote economic development and community connectivity.

policy 8A-1.3 Develop the local internal road network to increase local circulation at the rural service centers/ areas of rural commercial development/LAMIRDs.

policy 8A-1.4 Work with Skagit Council of Governments Non-Motorized Transportation Advisory Committee (NMAC) to coordinate non-motorized transportation projects.

System Management

Goal 8B Maintain and improve the County roadway system consistent with the growth management strategies of the Land Use Element, and respect the unique environmental and economic character of the area, including

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the transportation needs of the agriculture and forest products industries.

policy 8B-1.1 Monitoring for Congestion Relief- Monitor the capacity and completeness of the multimodal transportation system to meet adopted LOS standards -in an effort to manage traffic congestion and provide safe and complete active transportation connections.

policy 8B-1.2 Right-of-Way Preservation – Anticipate and address future transportation needs through strategies for acquiring rights-of-way and limiting of encroachments or ancillary uses that could endanger future roadway improvements.

policy 8B-1.3 Multimodal transportation--Participate in the planning and implementation of multi-modal transportation systems to increase the safety, security and mobility of all users, especially in underserved communities, and provide affordable, accessible, and reliable alternatives to the passenger car, emphasizing the selection of projects that incorporate safety and security and reduce vehicle miles traveled.

policy 8B-1.4 Functional Classification – Designate all county roads according to the functional classification system mandated by federal and state law based on the character of service those roads are intended to provide in urban and rural areas. Arterials should serve as the main routes to move traffic through the county. Collectors should serve as the supplemental routes for traffic within the county.

policy 8B-1.5 Skagit River - The County supports improving the flow of traffic over the Skagit River, including new bridge construction.

policy 8B-1.6 Arterial access - Primary arterial access points should be designed to ensure maximum safety while minimizing traffic flow disruptions.

policy 8B-1.7 Natural Resource Industries – Consider the transportation needs of the agriculture and forest products industries when making decisions about the management and maintenance of the roadway system.

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policy 8B-1.8 To ensure integration of transportation and land use planning, make decisions regarding the location and improvement of transportation facilities and public transit in a manner consistent with the Comprehensive Plan's goals, policies, and land use map. Emphasize climate resiliency, equity, and reduction of greenhouse gas emissions in the planning and design of these projects, ensuring they support sustainable development and provide fair access to all communities.

policy 8B-1.9 Develop and adopt a Skagit County Complete Streets ordinance to ensure that context-sensitive multimodal transportation improvements can be made and, where possible, funded by grants.

policy 8B-1.10 Economic and Eco-Tourism Opportunities - consider opportunities to support economic and eco-tourism (Tulip Festival, bird-watching, etc.) when making decisions about the management and maintenance of the roadway system.

Multimodal Level of Service

Goal 8C Establish multimodal level of service standards recognizing the uniqueness of each mode to gauge the performance of the County transportation system and determine areas where transportation improvements are needed.

policy 8C-1.1 The vehicular Level of Service (LOS) standard for County roads is LOS C. LOS D is acceptable for all road segments that:

(a) Have Annualized Average Daily Traffic (AADT) greater than 7,000 vehicles; and

(b) Are NOT federally functionally classified as a Local Access Road; and

(c) Are designated as a County Freight and Goods Transportation Systems Route (FGTS).

policy 8C-1.2 The vehicular LOS standard for County road intersections is LOS D.

policy 8C-1.3 Vehicular LOS Standards shall not be the overriding factor when the County is considering road improvements. Other factors such as safety, active

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transportation needs, the Priority Array, and the Comprehensive Plan policies shall be given equal consideration with vehicular LOS.

policy 8C-1.4 LOS standards for pedestrian and bicycle facilities are based on the completeness of a defined and planned active transportation network.

GREEN LOS indicates a complete segment.

ORANGE LOS indicates an incomplete or substandard segment.

RED LOS indicates a gap or missing segment.

policy 8C-1.5 LOS standards for transit in the public right-of-way are based on the ADA accessibility and upgrades for connectivity to the Skagit Transit network.

policy 8C-1.6 Design Standards – Maintain urban and rural design standards for structures, roads, and utility systems constructed either by the county or other public or private sponsors. These standards shall reflect the character of the communities as defined in the Land Use, Rural, and Community Planning Elements.

Public Transportation Coordination

Goal 8D Work with other agencies and jurisdictions to plan, coordinate, and secure grant funding for a safe, accessible, and integrated system of public transportation.

policy 8D-1.1 Transit Support- Support Skagit Transit to create incentives to encourage citizens and businesses to participate in transit use over single-occupant vehicles to reduce greenhouse gas emissions and vehicle miles traveled. Enhance the quality of transit systems viability by increasing speed, frequency, coverage, and reliability.



policy 8D-1.2 Transit Schedules – Allow County employees to adopt flexible work schedules that can be coordinated with transit schedules. Encourage similar actions by private and other public employers and employees.

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policy 8D-1.3 Support adequate funds for senior citizen and handicapped transportation systems to provide for those who, through age and/or disability, are unable to transport themselves.

policy 8D-1.4 Encourage public transportation services to serve cities, towns, and Rural Villages, and to link with systems in adjoining counties, when financially feasible and supported by the public.

policy 8D-1.5 Encourage private transit providers to continue to provide services that public transit cannot, including services to the County and State ferry system, and local and regional airports.

policy 8D-1.6 Encourage coordination among public transit service providers, and between the public transit network and the non-motorized transportation system, to promote a more integrated transportation system for those traveling by means other than a private automobile.

policy 8D-1.7 Coordinate road construction projects with Skagit Transit to ensure current and future public transit infrastructure is considered in design and construction.

policy 8D-1.8 Work with large business and industrial employers to ensure that emerging workforce public transportation needs can be addressed by Skagit Transit and other providers.

Passenger Rail Transportation

Goal 8E Support passenger rail service to and through Skagit County as an important element of a balanced transportation system.

policy 8E-1.1 Encourage rail agencies to implement a public education program on railroad safety.

policy 8E-1.2 Work with the Washington State Department of Transportation, local jurisdictions other agencies, and the public to make safety and other improvements to the rail corridors to allow for increased speeds for passenger trains.

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policy 8E-1.3 Work with the Washington State Department of Transportation, local jurisdictions, other agencies and the public to determine the location of potential rail crossing closures and, where possible, to consider alternatives to such closures.

policy 8E-1.4 Road improvement decisions shall be consistent with any plans for rail crossings closures and with other aspects of rail service.

policy 8E-1.5 Plan for commuter rail service to Skagit County at such time it is determined to be economically and socially acceptable.

Ferry Service

Goal 8F Work to maintain county and state ferry services as an important element of the transportation network.

policy 8F-1.1 Encourage the provision of adequate pedestrian, bicycle, transit, vehicle, and freight facilities to accommodate multimodal travel to the County and State ferry terminals in Anacortes.

policy 8F-1.2 Work with the City of Anacortes, property owners, and residents on Guemes Island to develop and maintain adequate parking areas.

policy 8F-1.3 To meet future increases in demand, increase service capacity of the Guemes Island Ferry by: (a) encouraging car-pooling and walk-on passengers; (b) increasing the frequency of ferry runs based on demand; (c) considering additional ferry capacity if the aforementioned procedures fail to accommodate demand; and (d) adding additional runs outside the current schedule.

policy 8F-1.4 In making all decisions related to the Guemes Island Ferry, balance the needs of the Island residents, the non-resident property owners, and the County citizenry as a whole. Decisions that would have significant service or financial impacts should be made after providing ample opportunities for public review and comment.

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policy 8F-1.5 Continue to provide safe and adequate ferry service between Anacortes and Guemes Island, and a fare structure designed to recover operating costs similar to the Washington State Ferries model.

policy 8F-1.6 Support the State's restored provision of ferry service to and from Anacortes-San Juan Islands-Vancouver Island, B.C.

Active Transportation Network

Goal 8G Provide an equitable, resilient, safe and efficient network of trails and bikeways, including both on- and off-road facilities that link populated and historically underserved areas of the County with important travel destinations. Implement inclusive planning, design, construction and maintenance practices. Increase education, information and traffic enforcement efforts associated with active transportation as a means of lowering collision and injury rates associated with these modes.



policy 8G-1.1 The Skagit County active transportation system is comprised of all streets and highways to which access by bicyclists and pedestrians is permitted, separated trails and pathways which have a transportation function as defined in the Active Transportation Plan, and any system or design accommodations meant to serve active transportation users.

policy 8G-1.2 The County's Active Transportation Plan identifies County needs priorities, and potential projects.

policy 8G-1.3 The Active Transportation Plan is a long-term plan to meet County multimodal goals and needs over 20 years. The inclusion of a project in the plan does not constitute a commitment that the County will fund or construct that project. Like all transportation projects, active transportation projects must be added to the Six-Year Transportation Improvement Program (6-Year TIP) in order to be funded.

policy 8G-1.4 Provide for the diverse needs of bicycle, pedestrian and equestrian modes through appropriate routing and the utilization of single-use and shared-use facilities. Encourage public education for motorists and active transportation

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users alike on the importance of "sharing the road," consistent with State and County traffic safety policies.

policy 8G-1.5 Connect neighborhoods and communities with each other and with other important destinations including schools, employment and commercial centers, medical and social service centers, other transportation facilities and modes, scenic and recreational areas, and the active transportation facilities and systems of cities and towns within Skagit County and of adjoining areas.

policy 8G-1.6 Coordinate system planning, funding, and development with other local, regional, state, federal and tribal jurisdictions; and with public transit providers, as most public transit trips begin and end with walking, biking, or rolling.

policy 8G-1.7 Design all multimodal transportation facilities in compliance with federal, state and local accessibility standards.

policy 8G-1.8 Access and trailhead facilities should include adequate parking and sanitation.

policy 8G-1.9 Promote active transportation as a viable, healthy, non-polluting alternative to the single occupancy vehicle.



policy 8G-1.10 Rail Corridors - Rail corridors should be preserved through the use of rail banking programs after affected property owners and their property rights are first adequately and legally addressed.

policy 8G-1.11 Community and subarea plans should be coordinated between state and local government and private enterprises to identify and address the implementation of multimodal facilities that provide recreational transportation opportunities as well as safe, efficient and convenient access to residential neighborhoods, schools, parks and recreation facilities, commercial districts, activity centers, tourist areas and established or planned multi-use trails.

policy 8G-1.12 Emphasize maintenance of existing active transportation facilities, including road sweeping, striping, signing, and debris removal, and the ongoing development of smooth and continuous road shoulders, including asphalt overlays or enhanced chip sealing where appropriate and feasible.

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policy 8G-1.13 Encourage updates to both the 2004 Non-Motorized Plan and the 2009 Open Space Concept Plan to support expansion of the multiuse trail network for transportation, recreation, eco-tourism, and resilience to flooding and adverse climate impacts.



policy 8G-1.14 The County will strive to reduce air pollution and greenhouse gas emissions by promoting the use of alternative transportation modes, reducing vehicular traffic, maintaining acceptable traffic flow, and siting of facilities.



policy 8G-1.15 Encourage Skagit County school districts to consider implementing the US EPA Idle-Free Schools Toolkit for a Healthy School Environment to reduce local impacts to regional air quality.

Freight and Economic Development

Goal 8H Support economic development goals by providing adequate air, rail and surface freight handling routes and facilities throughout the County transportation system.

policy 8H-1.1 Freight and Goods Transport System – Invest in road improvements to create an All-Weather Road System as part of the Freight and Goods Transportation System (FGTS). In conjunction with the state, designate portions of the road system as truck routes.

policy 8H-1.2 Provide roads structurally adequate to handle anticipated commercial traffic demand, particularly on the FGTS.

policy 8H-1.3 Encourage the enhancement and expansion of freight rail service to and from economic activity centers.

policy 8H-1.4 Encourage improvements to air transportation facilities consistent with the ports of Skagit County and the state Aviation System Plan. Improve road and transit linkages to airport facilities.

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Tourism and Recreation

Goal 8I Support the promotion of tourism, recreation, and special events through the County transportation system.

policy 8I-1.1 Involve affected jurisdictions in the planning and design of transportation projects that affect major tourism, park, and recreation facilities.

policy 8I-1.2 Coordinate management of the transportation system during special events with the responsible program organizations, while minimizing the disruption of normal economic operations including agriculture, forestry, and other natural resource industries.

policy 8I-1.3 Encourage the state to consider high-season traffic demand on SR 20 in East Skagit County whenever the state studies the need for improvements.

Scenic Highways

Goal 8J Support the preservation and enhancement of scenic highways and historic, archeological and cultural resources within Skagit County.

policy 8J-1.1 Scenic Roads Program – Encourage the state and federal Scenic Highways and Scenic Byways programs to ensure the preservation of scenic resources along designated highways.

policy 8J-1.2 Interpretive sites - Develop cultural, historic and natural interpretive sites situated on public lands in a way that non-motorized travelers can enjoy them.

policy 8J-1.3 Coordination - Work with the state to implement and maintain highway heritage programs in Skagit County, which integrate scenic resource preservation with the enhancement of access to historic, archeological and cultural resources along the County's highways.

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Traffic Safety

Goal 8K Provide a safe travel environment for county residents and visitors in all modes of transportation. Recognize public safety, education, and law enforcement as integral to the development of non-motorized transportation opportunities in Skagit County.

policy 8K-1.1 Safety Improvements - Include safety improvements as a priority in all capital projects and maintenance decisions relating to the County road system.

policy 8K-1.2 Rules of the Road - Promote the safe use of transportation facilities and conformance with “rules of the road.”

policy 8K-1.3 Education -Encourage educational programs that teach or encourage transportation safety for all non-motorized users. Encourage awareness among motorists of the rights and responsibilities of motorists and cyclists and the importance of “sharing the road.”

policy 8K-1.4 Minimize conflicts - Encourage planning, design and educational programs that help minimize conflicts among users.

policy 8K-1.5 Balance transportation user convenience with safety, preservation of capacity, and access management.

Road Maintenance and Monitoring

Goal 8L Develop a systematic approach for monitoring and maintaining the transportation system in a cost-effective manner. Provide a high level of maintenance to the County transportation system.

policy 8L-1.1 Monitor (count and assess) traffic volumes on all arterial and major collector roads, and other selected roads as needed, to assist in planning and capital facility programs.

policy 8L-1.2 Coordinate monitoring efforts with other County departments as appropriate, and with other state and local jurisdictions and agencies.

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policy 8L-1.3 Operate a road and bridge maintenance management program to ensure that roads and bridges are adequately protected from overloading, meet County and state standards, and are programmed for maintenance and repair on a regular basis.

policy 8L-1.4 Maintain a program for addressing traffic safety problems through monitoring of high incident conditions.

policy 8L-1.5 Encourage WSDOT and WDFW to fund improvements to the collision database to include incidents of wildlife collisions on County roads, using this data to inform and improve traffic safety measures, prioritize mitigation efforts, and reduce risks to both wildlife and motorists.

policy 8L-1.6 Work with the SCOG to enhance transportation accessibility with a regional Intelligent Transportation Systems architecture that includes traveler information as a major component.

policy 8L-1.7 Encourage and support the expansion of electric vehicle charging stations, including communities east of Interstate 5.

Goal 8M Select and build the most efficient mix of transportation modes based on the need to balance accessibility and demand before major capital expenditures are made.

policy 8M-1.1 Implement transportation system management techniques, such as the synchronization of traffic signals and provision of left-turn lanes, as a way to increase the efficiency and safety of the existing transportation system with a minimum of cost.

policy 8M-1.2 Encourage the Skagit Council of Governments to implement transportation demand management strategies, such as increased transit service and flexible work schedules, to reduce the demand for travel in single-occupancy vehicles, especially at peak traffic periods.



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Goal 8N Incorporate multimodal transportation goals, policies, and strategies into all County land use decisions.

policy 8N-1.1 Impacts of Growth – Growth and development decisions shall ensure that the short- and long-term public costs and benefits of needed transportation facilities are addressed concurrently with associated development impacts.

policy 8N-1.2 Directing Growth - Mitigate transportation impacts, wherever possible, by directing new development into areas where long term capacity exists on the arterial and collector system.

policy 8N-1.3 Require new development and redevelopment to provide ADA upgrades and adequate multimodal transportation facilities within and adjacent to the development, and to provide access and connectivity to public transit, where available.

policy 8N-1.4 Airport Expansion - In the vicinity of the Skagit Regional Airport, review development proposals to avoid future conflicts and the foreclosure of opportunities for future airport expansion.

policy 8N-1.5 Coordination with County Engineer - Following major amendments to the Comprehensive Plan, the County Road Engineer shall review the Functional Classification, the Priority Array, and the road standards for consistency and compliance with the Comprehensive Plan. Recommended changes shall be forwarded to the Planning Department and the Planning Commission for comments prior to their submittal to the Board of County Commissioners for action. The review shall take place within the first year after major Comprehensive Plan updates.

policy 8N-1.6 Support for Existing Development – Coordinate efforts to develop infrastructure that improves the efficiency of existing major industrial and commercial areas.

policy 8N-1.7 Right-of-Way Dedication – The County shall require dedication of right-of-way for multimodal transportation improvements needed in conjunction with the approval of development projects.

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policy 8N-1.8 Land Use Compatibility - The planning, design, location and construction of new transportation projects and facilities shall consider and be compatible with adjacent land uses, as indicated in the Comprehensive Plan and development regulations, including natural resource activities and rural residential areas.

policy 8N-1.9 Arterials and collectors - When arterials and collectors traverse residential areas, appropriate traffic controls shall be employed to balance the multimodal transportation needs of both the local residents and the traveling public.

policy 8N-1.10 Incorporate Complete Street standards within the land development regulations to ensure that new development and redevelopment provide adequate multimodal transportation facilities within and adjacent to the development.

policy 8N-1.11 Implement development regulations that allow electric vehicle infrastructure, including battery charging stations, as a use in all areas except those zoned for residential or resource use or critical areas.

policy 8N-1.12 Where on-going maintenance costs can be justified, promote the use of Low Impact Development (LID) techniques, such as permeable pavement, in transportation projects to mitigate the harmful impacts of roadway runoff on critical salmon habitats.

policy 8N-1.13 Promote transportation improvement strategies that support future densification of urban growth areas while transitioning and connecting seamlessly to rural areas.



Goal 8O Ensure that suitable mitigation measures for addressing the impacts of growth are fair and equitable, and that transportation impacts at the project and system levels are mitigated concurrently with the project, consistent with the Growth Management Act.

policy 8O-1.1 When a development project has a particular impact on the safety, structure or capacity of the County's road system, suitable mitigation shall be required in the form of improvements or through the use of adopted impact fees, which may include pedestrian and bikeway projects.

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policy 8O-1.2 The County may, in cooperation with a city, collect impact fees on behalf of that city or town for development within its Urban Growth Area, and may enter into cost sharing arrangements where each shares impact fees collected by the other for impacts to their respective roads.

policy 8O-1.3 As an alternative, the County may agree to participate in joint planning, funding, and construction of mutually beneficial transportation improvement projects for the unincorporated portion of a city UGA and the adjacent area in the county with city willing to enter into a Joint Transportation Planning, Funding, and Construction Agreement with the County.

policy 8O-1.4 The County may consider the use of impact fees and SEPA mitigation fees as a means to ensure that adequate facilities (including but not limited to transit, pedestrian, bikeways, or roadways) are available to accommodate the direct impacts of new growth and development.

policy 8O-1.5 If an impact fee ordinance is not in place, the County may require large developments to make improvements or pay a fee in lieu if the development significantly adds to a road's need for capacity improvement, to a roadway safety problem, or to the deterioration of a physically inadequate roadway. Such traffic impact contributions are in addition to transportation facility improvements required in the immediate area for access to and from the development.

policy 8O-1.6 The County, in cooperation with the development community, may address transportation impacts of growth, through the GMA and the State Environmental Policy Act as a practical solution to meet the intent of Goal 8A-14 above.

policy 8O-1.7 Publish an Annual Concurrency Report for County road segments, intersections, and active transportation network completeness to inform the six-year Transportation Improvement Program (TIP) process.

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Goal 8P Jointly plan, prioritize, and finance transportation improvements with federal, state, regional, and municipal partners for the greatest public benefit.

policy 8P-1.1 Future Plans – Coordinate transportation plans with local, state, and tribal jurisdictions through the Skagit Council of Governments, to identify and provide solutions for anticipated transportation challenges identified over the 20-year life of the Comprehensive Plan.

policy 8P-1.2 Encourage the state to provide facilities for active transportation as part of improvements to all state highways, consistent with RCW 47.04.035 Complete Street Principals.

policy 8P-1.3 Joint Development - Cooperate with the cities and towns in planning for joint development of transportation improvements that support mutual objectives.

policy 8P-1.4 State Highway Improvements - In order to ensure that local efforts to meet GMA concurrency requirements are not undermined by inadequate state highways, support efforts at the state level to adequately fund legitimate highway improvement needs.

policy 8P-1.5 Ensure the early, meaningful, inclusive, equitable, and continuous participation of the region's interested parties in the planning process, and encourage the Washington State Department of Transportation to maintain close coordination with the local jurisdictions and the Skagit Council of Governments in transportation planning and in the transportation project decision-making process.

policy 8P-1.6 The County fully supports the “Americans with Disabilities Act (ADA) of 1990” and will implement the Skagit County ADA Transition Plan for facility upgrades.

policy 8P-1.7 Traffic Impacts - In determining traffic impacts of development projects, the County should consider the impacts to all jurisdictions (county, city/town, and state) and condition such projects as necessary to mitigate the impacts.

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policy 8P-1.8 Promote modal interconnectivity that best serves the users by identifying missing links and connections, and working with partner agencies to provide missing links.

policy 8P-1.9 Provide a County Transportation Element that supports local Town and City comprehensive plans, including unincorporated UGAs.

policy 8P-1.10 Ensure equitable, inclusive, and accessible public engagement opportunities to all Skagit County citizens in the development of transportation plans.

policy 8P-1.11 Collect, consider, and where feasible, incorporate public comments prior to making public funding decisions on transportation decisions.

policy 8P-1.12 Encourage efficient, multimodal transportation systems that are based upon regional priorities and coordinated with county and city comprehensive plans.

Goal 8Q Integrate the Six-Year Transportation Improvement Program (TIP) and the 20-year long range transportation needs assessment with the Capital Facilities Plan consistent with the goals and policies of this Comprehensive Plan.

policy 8Q-1.1 Evaluation Criteria – Evaluate proposed projects according to the Comprehensive Plan goals and policies as well as engineering feasibility, costs and benefits to the public, safety, impacts to the built and natural environment, community support, opportunities for staged implementation, system benefits and maintainability.

policy 8Q-1.2 Funding – Make transportation capital investment decisions in consideration of capacity, safety, economic development, public health, and growth management needs.

policy 8Q-1.3 All transportation capital improvements shall incorporate removal of barriers to fish passage, where applicable. These projects will also consider wildlife habitat connection opportunities, pedestrian recreational connection opportunities, and climate-related adaptation potential.

policy 8Q-1.4 To the extent feasible, all new and expanded County transportation facilities shall be designed, sited, and constructed to protect against adverse climate impacts.

9 Utilities

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Introduction

The Growth Management Act requires comprehensive plans to include utilities elements. Skagit County has elected to describe all public and private utilities in this element. This includes public water, sanitary sewer, surface water management, and solid waste, as well as private electrical power, natural gas and telecommunications utilities. The GMA requires comprehensive plans to address these facilities and services in the following manner:

- *Inventory the general location of existing utilities.*
- *Establish the proposed location of proposed utilities.*
- *Examine the capacity of existing and proposed utilities.*

GMA requires the utility element to describe locations, capacities, and need for utilities. The policies in this element cover private natural gas, telecommunications, electric utilities; and public solid waste, sewer, water, and surface water utilities . The information relating to utility service providers contained in this Plan is a summary only. More detailed discussions of the topics covered in this element are found under separate cover in utility service provider capital functional plans and in the following documents and websites:

- The Skagit County iMap website (available at www.skagitcounty.net/Maps/iMap). This website shows facilities for several types of utilities, including:
  - transmission pipelines;
  - stormwater facilities;
  - Group A Public Water Systems.
- The Skagit County online Map Gallery. This website has an extensive gallery of maps in Adobe pdf format which are free to view and download. For utilities, this includes a Dike District Map and Drainage District Map.
- The Skagit Transit website, located at www.skagittransit.org/routes. This website contains a map of the Skagit Transit system.
- Skagit County Coordinated Water System Plan - Regional Supplement, 2000. This document provides information on existing water facilities, management and

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conservation strategies, a needs forecast through 2040, and the availability of water rights to meet those needs, all within the framework of growth management.

- Anacortes-Fidalgo Island Coordinated Water System Plan
- The Capital Facilities Plan (CFP), an element of the Skagit County Comprehensive Plan that is updated biannually at a minimum. This plan contains information and policies regarding financing, level of service and implementation of capital improvement projects.
- Skagit County Comprehensive Economic Development Strategy (CEDS) (updated 2005) and 2013 CEDS Implementation Plan. These plans contain information on utility infrastructure such as sewer service and treatment projects, surface water projects, and utility corridor improvements, as well as estimated costs and potential funding sources.
- Skagit County Comprehensive Solid Waste Management Plan Update and Environmental Impact Statement, April 1994, December 2005, amended June 2008. Summarizes actions to be taken regarding solid waste management and an implementation schedule showing recommendations and associated costs.
- Skagit County Draft GMA Puget Power Electrical Facility Plan and map updates (November 1992) and system map updates (April 2015).

Water

A large portion of rural Skagit County (an estimated 5,700 lots) is affected by the Skagit River Basin Instream Resources Protection Program Rule (WAC 173-503) adopted in 2001. Owners of these lots may not rely on permit exempt wells as an approved water source for new development unless the landowners can demonstrate a legal uninterruptable water source. Skagit County is working with the Department of Ecology, PUD, and other water purveyors, Tribes, and affected property owners to develop and implement water supply projects and solutions in those areas affected by the Skagit River instream flow rule.

Skagit County Coordinated Water System Plan

Under state law, water utilities are required to establish procedures for coordinated planning under the framework of a “coordinated water system plan” (CWSP). Skagit County’s CWSP was

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updated in 1999 and 2000 (Regional Supplement) and describes the characteristics of the public water service providers in the county. These include "Group A" systems that serve 15 or more connections or 25 or more people per day for 60 or more days per year. They must meet state and federal Safe Drinking Water Act requirements. In addition, there a number of "non-expanding" and "Group B" water systems that serve smaller areas and are not required to meet federal standards. The federal and state statutory requirements for water system planning and coordination overlap the GMA.

The Skagit County Coordinated Water System Plan was jointly developed by all of the major Skagit County water utilities, in cooperation with the County and State agencies consistent with the Public Water System Coordination Act (RCW 70A.100).

The Urban Service Areas for the Skagit County water purveyors are defined, as well as the rural service areas. The CWSP incorporates a level of service standard for rural public water service and related fire protection. An agreement on level of service between the County, water purveyors, cities, and County Fire Marshal is also incorporated in the CWSP.

The water demand projections incorporated in the CWSP were based on state Office of Financial Management (OFM) population projections and further adjusted to reflect OFM and land use criteria to help ensure consistency with the GMA planning procedure. Projections of future water demand are based on a population forecast of 155,257 persons in 2030, 157,741 persons in 2040, and 160,265 persons in 2050. These forecasts are relatively similar to the population forecast in this Comprehensive Plan Update, of 160,830 persons in 2045. Therefore, the CWSP, which plans for water supply through the year 2050, addresses demand projections and needed improvements for a future population similar to that being planned for in this Update.

The evolving land use and water resource management planning programs of Skagit County are reflected in the CWSP's Joint Operating Agreement (JOA) between the City of Anacortes and Skagit PUD. This JOA establishes the CWSP (and GMA) document as the framework for regional water supply and transmission development. It ensures that the two major water supply providers in Skagit County will work cooperatively to ensure that water supply will be available where and when required, in accordance with the County's Comprehensive Plan.

The CWSP and Joint Operating Agreement combine to provide a comprehensive water supply and capital improvement plan for this Comprehensive Plan. The individual Water System Plans are incorporated by reference and by law in the CWSP, and identify priorities for expansion of public

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water systems, including to those rural areas where development is affected by the Skagit River instream flow rule described below.

Instream Flow Rule

In 2001, the Washington State Department of Ecology ("Ecology") adopted the Skagit River Basin Instream Resources Protection Program Rule (WAC 173-503) ("2001 Rule"), establishing minimum river and stream flows for salmon habitat. Although the 2001 Rule in draft form allocated water for rural landowners and agriculture, the published 2001 Rule failed to provide a water allocation for rural landowners or agriculture.

In 2006, Ecology amended the 2001 Rule in an effort to fix this problem, establishing a small allocation for rural landowners and agriculture in the Skagit River Basin and each of its tributaries (the "2006 Amendment").

In 2008, the Swinomish Indian Tribal Community ("Swinomish") filed suit against the State in an effort to invalidate the 2006 Amendment. On October 3, 2013, the Washington Supreme Court ruled in favor of Swinomish, invalidating the 2006 Amendment. Swinomish v. State, Wa. Sup. Ct. Case No. 87672-0.

As a result of the *Swinomish* lawsuit, Ecology provided the following guidance:

> Skagit County is legally required to stop issuing building permits and subdivision approvals in the Skagit Basin that rely on new wells, unless Ecology approves a plan for mitigation (or a plan for reliance on an alternative water source during times when the minimum instream flow requirements set in WAC 173-503 are not met).

Skagit County will work closely with landowners, Ecology, and local water purveyors to seek solutions to the lack of available water due to the 2001 Rule. Options include mitigation, securing alternative water sources, and encouraging water purveyors such as Skagit PUD to extend piped water to affected rural areas. The County may also support legislative solutions to water availability issues created by the 2001 Rule.

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Sanitary Sewer

Sewer service is available in Anacortes, Burlington, Big Lake, Concrete, La Conner, Mount Vernon, and Sedro-Woolley. Public sewer service is generally not provided in rural areas. The Skagit County Health Department and the Skagit Public Utilities District (PUD) have considered the feasibility of providing sanitary sewer service to some areas where public health issues have been raised due to failing on-septic systems, although so far, sewer service has been found to be prohibitively expensive. The Health Department works with these communities to find solutions that utilize improved septic treatment. That process involves testing existing systems and determining solutions to problems, most of which have been resolved.

Within the UGAs, sanitary sewer service is provided by the cities and towns and the PUD. Expansion of these services is implemented as part of the development process. The ability to provide sewer service is considered by the County in proposals to alter UGA boundaries.

Stormwater

Surface water management within the county includes regulation of new development; county planning, design, construction, and maintenance of facilities; and other facilities such as drainage ditches that are the responsibility of special districts. Surface water management is necessary for both water quantity and quality. The State requires that the County ensure that surface water is managed in compliance with the 2012 Stormwater Management Manual for Western Washington, as amended in 2024, and related federal water quality standards.

The Stormwater Manual provides guidance on measures necessary to control the quality and quantity of stormwater produced by new development and redevelopment to comply with water quality standards.

The Washington State Department of Ecology issued the updated 2024-2029 Western Washington Phase II Municipal Stormwater Permit in 2024, which applies to portions of Skagit County. The Phase II Permit requires that permit recipients develop and implement a Stormwater Management Program (SWMP). The Plan must include components relating to:

- *Public Education and Outreach;*

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- *Public Involvement and Participation;*
- *Illicit Discharge Detection and Elimination;*
- *Controlling Runoff from New Development, Redevelopment and Construction Sites; and*
- *Municipal Operations and Maintenance.*

The Permit requires that Skagit County report annually on the progress of its permit program and provide a written plan of activities for the coming year. Skagit County issued its 2024 Stormwater Management Program Plan report in March of 2024. The report is the County's Stormwater Management Program compliance document and describes what the County will do to maintain compliance over the next year of the Permit term.

The County's surface water utility collects annual assessments from property owners to pay for some of its operations. However, most drainage projects are the result of road funds and therefore tend to be included in road improvement projects. This includes culvert replacements and "salmon enhancement" projects that are also funded by state and federal programs.

Solid Waste

The County's solid waste management system consists of the collection and delivery of waste including recyclable materials to transfer stations, from which these materials are shipped to remote landfills and processing centers. According to the Washington State Department of Ecology, in 2021 approximately 139,165 tons of solid waste from Skagit County were landfilled or incinerated. This included 121,029 tons of municipal/commercial solid waste, as well as dredge, soils, industrial waste, construction and demolition debris, and other categories. As of 2003, 27% of solid waste generated in Skagit County was recycled or composted and 23% diverted to energy recovery and other uses, and the remaining 50% shipped to an out-of-county landfill.

The Skagit County Comprehensive Solid Waste Management Plan, completed in 2005 with updates in 2008 and 2017, provides a guide for solid waste activities in Skagit County. It describes county demographics, waste quantities, and the solid waste management system, and includes recommended actions with an implementation schedule and associated costs.

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Electrical Power

Puget Sound Energy (PSE) is an investor-owned utility providing electrical service to approximately 1.2 million residential, commercial, and industrial customers in eight counties in western Washington. (Puget Sound Energy, 2015) This includes approximately 60,000 electric customers in Skagit County. To provide reliable service, PSE builds, operates, and maintains an extensive electrical system consisting of generating plants, transmission lines, substations, and distribution systems. PSE power-delivery facilities in Skagit County include 1,400 miles of overhead facilities and 1,000 miles of underground cables.

PSE generates about 46 percent of the electricity used by customers from its own power plants, and the rest is purchased from utilities, power producers, and energy marketers. Electricity provided by PSE to Skagit County is often produced with the Baker River Dams and is interconnected to the Northwest's regional transmission grid through a network of transmission facilities. PSE will be deploying smart grid technology at each level of infrastructure to enhance and automate monitoring, analysis, control and communications capabilities along its entire grid.

PSE is regulated by the Washington Utilities and Transportation Commission (WUTC) and is obligated to serve its customers subject to WUTC rates and tariffs. PSE is required by the WUTC to complete an Integrated Resource Plan every two years to forecast the resources necessary to meet future demand over a 20-year period. The current plan, filed in 2013, forecasted that PSE would need to acquire approximately 4,900 megawatts of new power-supply capacity by 2033. More than half of this demand can be met by energy efficiency and the renewal of transmission contracts; the remainder is likely to be met with additional natural gas-fired resources.

To meet local electric demand in Skagit County, new transmission lines and substations may need to be constructed, and existing facilities will need to be maintained and possibly rebuilt. Potential major construction anticipated in Skagit County in the next 10 to 20 years includes the following:

- *Rebuilding the Sedro-Woolley to Bellingham #4 Transmission line. This line currently runs from PSE's substation in Sedro-Woolley to the Bellingham Substation in Bellingham. It will be rebuilt within the same corridor as the existing line.*
- *A new substation in South/Central Skagit County and one or two new connecting 115 kV transmission lines between existing substations, such as the Sedro-Woolley substation in Sedro-Woolley.*

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- *A new substation in the vicinity of Fidalgo Bay to enhance capacity and reliability to the major industries in the area.*

Natural Gas

Cascade Natural Gas transmits and distributes natural gas to more than 260,000 customers in 96 communities in Washington and Oregon. This includes 226,000 residential customers, 33,000 commercial customers, and 700 industrial customers. Subsidiary CGC Resources manages the company's pipeline capacity. The utility obtains its gas mainly from Canadian suppliers. Cascade Natural Gas has a pipeline in Skagit County that extends from Anacortes in the west to Sedro Woolley in the east. (WUTC 2015, Skagit County 2015)

The Washington Utilities and Transportation Commission regulates private, investor-owned natural gas utilities in Washington to ensure regulated companies provide safe and reliable service to customers at reasonable rates.

Telecommunications

Frontier Communications Northwest is the primary provider of telecommunications services in Skagit County. The Washington Utilities and Transportation Commission regulates rates and services of telephone companies operating in Washington State, but does not regulate cable, internet, wireless phones, or "voice over internet protocol" (VOIP). Skagit County coordinates provisions of these services through the development permitting process.

Utilities Issues

Other than water rights in the low-flow stream basins and isolated instances of septic failures, the public utility services in Skagit County's rural areas have sufficient capacities to accommodate projected growth. Distribution of these services is addressed concurrently with growth and development. The provision of services within the UGAs is coordinated with the cities and towns. The private utilities have not indicated any capacity or distribution issues that have an effect on forecasted growth in the rural area.

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Utility locations are determined by utility providers based on system needs and planned growth. Some utility projects are important to the County's economic development. The *Comprehensive Economic Development Strategy* 2013 Implementation Plan includes examples of major planned utility infrastructure projects such as major drainage improvements proposed by Skagit County or cities, or municipal sewer improvements.

Goals and Policies

Utilities

Goal 9A Ensure the provision of high quality, cost effective and environmentally sensitive utility services in cooperation with public and private providers.

Systems Coordination

Goal 9A-1 Coordinate and encourage timely, safe, and cost-effective planning and design of utility systems with providers and state and federal agencies.

policy 9A-1.1 **Utility Agreements** - Agreements between the county and utility system providers shall provide for the coordination between functional plans and capital facility plans; address the joint use of corridors, installations, and rights-of-way; ensure that development permit reviews address all affected utilities; and mitigate impacts of utility improvement projects.

policy 9A-1.2 **Human Health and Power Facilities –** In reviewing proposals for new power facilities, the county shall consider whether the latest conclusions of scientific research on extremely low frequency (ELF) electromagnetic fields (EMF) have been used to reduce exposure that might affect human health.

Consistency of Plans and Standards

Goal 9A-2 Ensure the consistency, compatibility, and concurrency of utility functional plans through periodic review.

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policy 9A-2.1 Utility Facility Planning – Utility system plans shall be reviewed for consistency with the County Comprehensive Plan.

policy 9A-2.2 Vegetation Management – The county shall use standards for vegetation management in public rights-of-way in approving utility providers' proposals. Such standards shall be based on similar standards of the state Department of Transportation.

policy 9A-2.3 Critical Areas – Any utility construction including maintenance and repair shall comply with county regulations including the Critical Areas Ordinance and vegetation management standards.

Utility Facility Siting

Goal 9A-3 Site facilities consistent with the policies of the Land Use Element.

policy 9A-3.1 Siting at Critical Areas – The county shall ensure that utility facilities are not sited in designated critical areas unless feasible alternatives are unavailable, in which case suitable mitigation in accordance with the critical areas regulations shall be required.

policy 9A-3.2 Siting of Major Facilities - Outdoor installations of transfer and distribution stations providing electrical power, communications, and natural gas, should, where practicable, be located in industrial or commercially zoned areas. Stations should be reasonably compatible with surrounding uses. Where system design or economics necessitate location of such installations in residential or rural areas, installations shall be suitably screened or enclosed so as to eliminate or substantially reduce the visual impact. This may be achieved through appropriate setbacks and screening, such as, buildings, natural topography, landscaping, and vegetation.

policy 9A-3.3 Land Use - Utility facilities may be permitted in all land use zones when and where utility franchises exist and if they are in compliance with this Comprehensive Plan and related codes and standards.

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policy 9A-3.4 Wireless Communications – Siting of wireless facilities shall minimize visual and noise impacts, through the utilization of existing sites and structures where possible, adequate setbacks, and appropriate landscape screening.

Undergrounding

Goal 9A-4 Encourage underground utility distribution lines to reduce visual and safety impacts of overhead lines where economically feasible.

policy 9A-4.1 **Planning** - Utility providers shall be encouraged to plan for underground installation of utility lines, and private developers shall be required to underground utilities as directed during permit review.

policy 9A-4.2 **Implementation** - Existing overhead utilities shall utilize joint support structures at such time as the system is upgraded if the cost to place lines underground is not reasonable for the rate payer under the rate structure set by state and federal regulation. If a situation exists where underground existing overhead utilities is desired and is technically feasible, a Local Improvement District or some other financial arrangement will be used to have the beneficiaries bear the cost, rather than the general rate payer.

policy 9A-4.3 **Design -** Provisions for future undergrounding of other utilities should be made in the design of initial utility undergrounding projects.

Energy Conservation

Goal 9A-5 Encourage conservation of energy resources, including the reduction of energy consumption in county facilities by prioritizing the use of renewable energy sources and energy-efficient technologies.



policy 9A-5.1 Generating energy from non-renewable resources such as natural gas, should be phased out where possible, and the county shall prioritize the transition to renewable energy sources in both new and existing buildings.

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policy 9A-5.2 Energy conservation should conserve energy resources, reduce air pollution, and delay the need for additional electrical power generating facilities. This may be achieved through methods including, but not limited to: education of the public; insulation and weatherization as specified by building codes; and use of renewable energy, conservation, and efficient technologies and practices.. The county should conduct culturally responsive public outreach to encourage participation in energy efficiency programs, such as the Community Energy Challenge, to support these efforts.

policy 9A-5.3 Encourage Residential, commercial, and industrial development to use energy-efficient, cost-effective, and environmentally sensitive technologies and resources in new construction and retrofits, including prioritizing lower-carbon building materials to reduce embodied carbon.

policy 9A-5.4 The County shall support the prioritization of the use of renewable, low-carbon energy resources, net-zero greenhouse gas emission features in the design, construction, and retrofit of new and existing developments (i.e., residential and commercial structures), such as through programs like C-PACER that provide accessible financing for clean energy projects and Home Repair and Weatherization Programs.

policy 9A-5.5 Encourage commercial and industrial facilities to support the transition to low-carbon systems, including incorporation of co-generation systems whenever possible In parallel, support the transition of high-carbon emitting sectors, including oil refining and industrial gas manufacturing, to low-carbon processes or industries.

policy 9A-5.6 The maximization of renewable energy sources shall be encouraged for the supply of electricity and heat for new and existing buildings and the preservation and weatherization of housing shall be prioritized, particularly in high-density and overburdened communities, to enhance energy resiliency and equity.

policy 9A-5.7 The county shall work with builders and developers to integrate renewable and energy efficiency resources into building and site design, such as through

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incentive programs, green building certification programs, and C-PACER financing programs.

Solid Waste Management

Goal 9A-6 Promote effective solid waste management through waste reduction and recycling initiatives.

policy 9A-6.1 The county shall endeavor to reduce per capita waste production by changing consumer and industrial practices.

policy 9A-6.2 Maintain countywide recycling program.

policy 9A-6.3 Divert food waste from landfill to compost or anaerobic digestion.

Sanitary Sewer

Goal 9A-7 Encourage public sewer services in Urban Growth Areas and limit them in the rural area.

policy 9A-7.1 Community-, and other innovative sewage treatment systems in Conservation and Reserve Development (CaRD) land developments and limited areas of more intensive rural developments (LAMIRDS) - or to address rural public health problems - should be considered on a case by case basis.

Water

Countywide Planning Policies Regarding Water

- *All growth outside the urban growth boundary shall be rural in nature as defined in the Rural Element, not requiring urban government services except in those limited circumstances shown to be necessary to the satisfaction of both the County and the affected city [where applicable] to protect basic public health, safety and the environment, and when such services are financially supportable at rural densities and do not permit urban development. (CPP 1.8)*

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Because of the 2001 Instream Flow Rule, Skagit County would support extension of piped water to certain areas to support rural-level development where access to groundwater via exempt wells is unavailable.

Comprehensive Plan Policies Regarding Water

This Comprehensive Plan recognizes that the need for the provision of piped water in rural areas may occur under limited circumstances such as: the transmission pipeline routing between Urban Growth Areas; where existing developments are providing rural public water service and fire protection in accordance with the CWSP; where groundwater does not meet Safe Drinking Water Act and State Health Department criteria for potable water use; where water quantity issues related to actual yield or where groundwater withdrawal will cause a conflict with the 2001 Rule related to instream flows; and properties that are rural in nature and density and are adjacent to a piped water system.

The provision of piped water service in rural areas should support the combined objectives of the GMA, the CWSP, individual Water System Plans, and state law.

Goal 9A-8 Influence the development and use of the water resources of Skagit County in a manner that is consistent with the Countywide Planning Policies and the Comprehensive Plan.

policy 9A-8.1 Cooperation with water districts and other water providers shall be extended to support them in their responsibility to provide a reliable service to assure an adequate quality and quantity of potable water and high quality water supply within their service areas.

policy 9A-8.2 Water supply infrastructure expansion shall be designed to meet local needs and urban or rural levels of service standards,-and comply with this Comprehensive Plan's land use densities.

(a) Urban Water Service shall mean service provided by a water system(s) that has been designed to provide service throughout the designated urban growth area. The water service shall be designed to meet the water supply needs of the residential, commercial, industrial, and other water needs as

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defined by the Skagit County or City Comprehensive Plan, the Coordinated Water System Plan, and the designated water utility's Water System Plan.

(i) The Utility's Water System Plan shall document a plan to meet urban water service using the design criteria outlined in Section 4 and on Table 4-1 of the Coordinated Water System Plan and in accordance with the schedule required by this Comprehensive Plan.

(b) Rural Water Service shall mean water service provided by an individual well, a stand alone public water system, or extension of a water system from within an urban growth area that is designed to provide rural water service. The water service shall be designed to meet the rural water supply needs of the rural area users as defined by this Comprehensive Plan, the Coordinated Water System Plan, any designated water purveyor's Water System Plan (where applicable), and the criteria established for the water service in Section 4 and on Table 4-1 of the Coordinated Water System Plan and applicable state law.

(i) The design shall be guided by the projected rural area water supply and fire protection associated with the requirements of this Comprehensive Plan, and based on the physical or hydraulic capacity requirements as outlined in the Coordinated Water System Plan and the designated water utility's water system plan.

(ii) Pursuant to RCW 19.27.097 and RCW 58.17.110, Skagit County cannot legally issue a permit for a building requiring potable water or approve subdivision applications unless the applicant has demonstrated a lawful and adequate water supply. See Rural Element policy 3A-2.2.

policy 9A-8.3 Interlocal agreements shall be developed with the cities, towns, and water suppliers in the coordination of water service to urban growth areas.

(a) The Skagit County Public Utility District #1, the cities, the Swinomish Tribal Community, and the County shall meet and enter into an interlocal

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agreement that provides for an increasing local and/or tribal government role in the provision of public water within their designated jurisdictional urban growth areas.

policy 9A-8.4 Water supply development and service shall be consistent with all related plans, including but not limited to, the Coordinated Water Systems Plan, the Anacortes-Fidalgo Island Coordinated Water System Plan, this Comprehensive Plan, and related purveyor plans as they are developed.

policy 9A-8.5 New capital facilities for water-system compliance with state and federal safe-drinking-water rules, and water treatment standards shall be based on rural area densities and a level of service that is consistent with the existing character of the environment.

policy 9A-8.6 Skagit County shall enforce all county, state and federal laws regarding potable water, well head protection and the installation of water systems.

policy 9A-8.7 Connection to a public water system should be encouraged in those areas affected by the Skagit River Basin Instream Resources Protection Program Rule (WAC 173-503) or other low flow areas.

policy 9A-8.8 Limitations on uses and densities should be maintained within areas affected by the Skagit River Basin Instream Resources Protection Program Rule (WAC 173-503) and any other designated low flow stream corridors where necessary to limit individual wells and protect base flows.

policy 9A-8.9 The Coordinated Water Systems Plan should be reviewed to ensure consistency with the adopted Comprehensive Plan.

policy 9A-8.10 Water conservation measures shall be incorporated into water supply development and service plans as a method of addressing future water needs.

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Stormwater

Goal 9B Protect and enhance natural hydrologic features and functions by: maintaining water quality and fish and wildlife habitat; incorporating natural drainage patterns into measures to protect the public from health and safety hazards and property damage; maintaining a sustainable groundwater discharge/recharge budget; and by promoting beneficial uses as well as water resource education and planning efforts.

Risk Avoidance

Goal 9B-1 Reduce risks to public health and safety and the loss of, or damage to public and private property.

policy 9B-1.1 **Solutions:** Nonstructural storm water measures should be preferred over structural measures.

policy 9B-1.2 **Priority:** Protection of existing development should take preference over the protection of undeveloped lands.

policy 9B-1.3 **Planning**: Strategies for surface water management should balance engineering, economic, environmental and social factors in relationship to stated comprehensive planning goals and policies.

policy 9B-1.4 **Community Awareness**: The county shall promote community awareness of the importance of water quality and flood hazard protection through education and outreach in conjunction with planning for water programs.

policy 9B-1.5 **Stormwater Management Program Plan**: The County shall continue to implement its stormwater management program and required compliance reports.

policy 9B-1.6 **Structural Flood Protection:** Dikes, levees, and other structural flood protection facilities should be designed to allow fish passage, protect flows in riparian zones, and complement or enhance the surrounding landscape.

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policy 9B-1.7 **Habitat:** Flood protection measures should not result in a long-term net loss of-, or damage to, fish and wildlife resources, and wherever possible, should result in increased diversity of habitat.

policy 9B-1.8 **Natural Drainage**: Natural drainage shall be preferred over the use of pipelines or enclosed detention systems, where possible.

policy 9B-1.9 **Best Management Practices:** Storm water runoff from impervious surfaces should be treated by utilizing best management practices (treatment BMPs) before the storm water is allowed to enter the natural drainage system, infiltrate into the ground or enter Puget Sound. Examples of treatment BMPs are, but not limited to: detention ponds, oil/water separators, biofiltration swales and constructed wetlands.

policy 9B-1.10 **Coordination of Regulations:** The county shall work with other jurisdictions and agencies toward standardization and monitoring of regulations that affect storm water management.

policy 9B-1.11 Participate in and develop an integrated strategic investment plan in partnership with Skagit tribes and diking/drainage districts to holistically address sea level rise, habitat enhancement, and farmland preservation on the Skagit/Samish Delta downstream of the Wild & Scenic portion of the Skagit River.

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10 Capital Facilities

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Introduction

This element, along with the County's rolling six-year Capital Facilities Plan, constitutes the Comprehensive Plan's Capital Facilities Plan Element for capital facility development, maintenance, and financing. This element implements Goal 12 of the Washington State Growth Management Act ("GMA"), which provides that the County must "[e]nsure that those public facilities and services necessary to support development shall be adequate to serve the

development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards."[1]

The GMA specifically requires that the county's Comprehensive Plan include a Capital Facilities Plan Element consisting of the following:[2]

> *(a) An inventory of existing capital facilities owned by public entities, including green infrastructure, showing the locations and capacities of the capital facilities;*
>
> *(b) a forecast of the future needs for such capital facilities;*
>
> *(c) the proposed locations and capacities of expanded or new capital facilities;*
>
> *(d) at least a six-year plan that will finance such capital facilities within projected funding capacities and clearly identifies sources of public money for such purposes; and*
>
> *(e) a requirement to reassess the land use element if probable funding falls short of meeting existing needs and to ensure that the land use element, capital facilities plan element, and financing plan within the capital facilities plan element are coordinated and consistent. Park and recreation facilities shall be included in the capital facilities plan element.*

Skagit County addresses these requirements in two ways—through policies and Level of Service (LOS) standards in the Skagit County Comprehensive Plan, and through the Capital Facilities Plan (CFP), which is required to be updated biannually at a minimum. The Capital Facilities Plan is divided into county and non-county facilities and then grouped by type of facility within each division. Each grouping includes an inventory, forecast of future needs over the 20-year planning period, and financing plan for projects within the next six years. Skagit County has included all of the required components of the Capital Facilities Plan element into this document.

Definition of "Capital Facility"

Although GMA does not specifically define the term "capital facility," the Growth Management Hearings Board has held that a CFP must include at least the following publicly owned facilities, some of which may be included in other elements:[3]

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- streets, roads, highways, and sidewalks
- street and road lighting systems
- traffic signals
- domestic water systems
- storm and sanitary sewer systems
- parks and recreation facilities
- schools

In addition, the capital facilities element must incorporate planning for "public services," which include:[4]

- fire protection and suppression
- law enforcement
- public health
- education
- recreation
- environmental protection
- "other governmental services"

Skagit County condenses this into a single definition of "capital facility" which is found in policy 10A-1.1.

Since the County's Transportation Element includes an inventory and the six-year Transportation Improvement Program (TIP) includes a financing plan, both are incorporated by reference, rand therefore, roads and non-motorized transportation projects referenced in those plans do not need to be listed in the text of this CFP. Accordingly, trail projects other than those contained wholly within a park must be included in the TIP.

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Why plan for capital facilities?

The Government Finance Officers' Association identifies four major purposes of a capital facilities plan:

- ***Create a formal mechanism for decision-making.*** *A basic function of the CFP is to provide a framework for decision makers. Decisions about what to buy, when to buy it and how to pay for it can all be answered by a comprehensive CFP.*
- ***Provide a link to long-range plans.*** *The CFP can guide the implementation of the community's comprehensive plan, sub area plans, and strategies.*
- ***Serve as an important management tool.*** *A major organizational purpose is served by the CFP. It provides a mechanism to help prioritize capital projects and match projects with existing funding options.*
- ***Function as a reporting document.*** *A CFP communicates to citizens, businesses, and other interested parties the government's capital priorities and plans for implementing capital projects.*

There are numerous benefits of capital facilities planning, including:

- *Focused attention on community goals, needs, and financial capability. It encourages decision makers and the public to connect future plans and the actions needed to achieve them.*
- *Building public consensus for projects and improves community awareness. The process elevates public awareness of the needs and financial resources of the community.*
- *Improved inter/intra governmental cooperation. A CFP enhances coordination between departments and agencies thereby reducing conflicts and overlapping projects.*
- *Assistance in ensuring financial stability. Capital projects are prioritized and scheduled to fit within expected funding levels, thereby limiting the need for dramatic tax increases or unanticipated bond issues in any one year.*

Planning for capital facilities enables Skagit County to:

- *Demonstrate facility needs through adopted level of service standards.*

- *Anticipate capital improvement needs and plan for their costs.*
- *Integrate community capital facility wants/needs into the annual budget process.*
- *Monitor growth and manage development.*
- *Qualify for revenue sources such as federal and state grants and loans, real estate excise taxes and impact fees. This level of planning also enables the county to receive a better rating on bond issues.*

Skagit County is responsible for capital facilities and service levels related to:

- ***Public works**: County roads/ferry (transportation), surface water management and solid waste disposal*
- ***Justice**: sheriff and jail facilities, youth & family services and superior and district courts*
- ***General government**: administration buildings and maintenance facilities*
- ***Community services**: parks and recreation facilities, County fairgrounds and senior services centers*

How do we use the CFP?

In land use planning

A comprehensive plan should balance the relationship between the demand for services triggered by new development and the financing required to pay for capital facilities to assure that the land use commitment made in the plan can be sustained financially over time. The plan can achieve this balance by:

- Adjusting the amount, location, or timing of the land development (demand side);
- Adjusting the amount of public facilities and services or the level of service (LOS) provided by those facilities and services (supply side); or by
- Adjusting the amount of financing available.

Since these actions are interrelated, balancing between them can become complex.

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In determining needs for new capital facilities

The process to determine need for new capital facilities is rather straightforward. Some facility needs are easy to determine as they are based on the principle of maintaining or meeting technically derived Levels of Service (LOS) standards. LOS standards are established by a technical based measure, e.g. water flow levels to serve a certain population or park space needed per one thousand citizens. Capital facility needs are also derived from special plans and strategies developed for a special purpose.

Planning Period & Update Frequency

Regularly updated capital facilities plans support implementation of the 20-year goals of the Comprehensive Plan. GMA requires at least a six-year plan for capital facility financing.[5]

WAC 365-196-415(2)(a)(iv) recommends a jurisdiction "periodically" review and update its inventory. Skagit County includes both its inventory and financing plan in its six-year CFP, which is updated biennially.

Capital Facilities Budgeting and Financing

The six-year CFP is fully funded, meaning that the cost of all identified facility improvements is matched to realistic funding sources based on an analysis of available funding capacity and financial resources. However, capital facility planning often requires multi-year commitments of financial resources. The CFP assumes receipt of outside grants and voter approved bonds. If grants or bonds are not forthcoming projects included in the plan may be delayed or removed. The 20-year CFP provides a broader view of available funds in the longer-term. The CFP is a planning document; not a budget for expenditures, nor a guarantee that the projects will be implemented.

Facility Capacity

A CFP provides public facility capacity to meet current demand based on capacity assumptions and population trends. Capacity assumptions are often called levels of service (LOS) and can be

established by applying national standards, regional averages, or service-level assessments for a particular facility or service.

Levels of service are measures of the amount of public facilities that are provided to the community (e.g., number of jail beds). Levels of service may also measure the performance or completeness of public facilities (e.g., roads, walkways, and bikeways). Typically, measures of levels of service are expressed as ratios of facility capacity to demand (i.e., actual or potential users) or percent of network completeness.

No standard formula or methodology is used, as the considerations for assessing needed parks and recreation facilities, for example, is entirely different than that used for assessing road, walkway, and bikeway-improvement priorities. Therefore, the Capital Facilities Plan predicts the demand for various facilities based on capacity assumptions unique to each type of facility. Such assumptions are stated in the Capacity Analysis for each type of facility, or the documentation in support of the analysis is cited where appropriate.

Non-County Capital Facilities

The County's primary responsibility is to ensure that adequate facilities and services are, or will be in place, to support forecasted growth. This includes County owned and operated facilities as well as those of other providers. Within the unincorporated area, the County is primarily responsible for facilities and services supporting community activities, law and justice, solid waste, surface water management, and transportation. Water supply, fire and emergency medical service, schools, sanitary sewer collection and treatment, diking and drainage, transit, and port services are the responsibility of other providers outside of the ownership and management of Skagit County. However, the GMA requires the County to coordinate with these other facility providers' plans and to recognize them within the Comprehensive Plan.

Although Skagit County is not responsible for providing planning and land use regulation services within the incorporated portions of the municipal UGAs, the County must ensure that public facilities and services are available, adequate, and concurrent with development within non-municipal UGAs and the unincorporated portions of municipal UGAs prior to annexation. The Framework Agreement between the County and the cities and towns requires that those jurisdictions plan and implement capital facilities improvements adequate to accommodate growth within their respective UGAs so that concurrency with adopted levels of service is

maintained. The County also has the ability to adjust LOS standards in UGAs, which may have very different growth expectations than rural areas of the County. This requirement provides for the transition of government from the County, to the cities, as intended by GMA. Skagit County solicits capital facilities plans and related information of non-County service providers in conjunction with CFP updates, and provides ongoing consultation and assistance to encourage coordination of capital facilities planning across jurisdictions.

Concurrency

Goal 12 of the GMA, also known as the concurrency goal, requires jurisdictions to "ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy…"[6] This goal requires a jurisdiction to adopt policies and regulations that ensure that the jurisdiction phases growth such that "adequate facilities are available when the impacts of development occur."[7] A jurisdiction's capital facilities plan element is one mechanism by which a jurisdiction complies with Goal 12.[8] In particular, the financing plan that is part of the capital facilities plan element provides the assurance that those capital facilities necessary to support development are not illusory and will be both funded and available when the development occurs. Similarly, the transportation element is a mechanism by which a jurisdiction will achieve concurrency.

Skagit County Code Chapter 14.28 includes concurrency standards that development must meet and requirements for an annual concurrency assessment. A jurisdiction must achieve concurrency for only "those public facilities… necessary to support development," not all public facilities which are included in a capital facilities plan element. It is within the jurisdiction's discretion to identify which facilities are necessary to support development and must meet the concurrency requirement.[9] The Department of Community Trade and Economic Development "recommends" that "at least domestic water systems and sanitary sewer systems be added to concurrency lists applicable within urban growth areas and that at least domestic water systems be added for lands outside urban growth areas."[10]

Impact fees and REET

State law requires the County to adopt a Capital Facilities Plan as part of its Comprehensive Plan before it can collect impact fees,[11] including impact fees for school districts,[12] and allows the

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County to spend impact fees and the first quarter percent of its Real Estate Excise Tax receipts (REET 1 revenue) solely on "capital projects" listed in the Capital Facilities Plan.[13]

Capital Facilities Planning Process

The GMA lays out the statutory requirements for planning capital facilities to ensure that they are, or can be, available when needed to accommodate forecasted growth. This includes the regular maintenance of the inventory of existing facilities; assessment of current and future needs based on adopted LOS standards or planning assumptions; and plans (including financing) for meeting the needs. The specificity of the needs assessments and plans varies as inventories, needs and capacity information is more certain for the immediate future and less so for the later years of the 20-year GMA horizon. WAC 365-196-415(2)(c)(ii) recommends a jurisdiction update its six-year financing plan at least biennially.

Skagit County reviews and updates the Capital Facilities Plan periodically to reflect official population estimates and projections by the State Office of Financial Management, revisions to the Countywide Planning Policies and population allocations, and any revisions to facility-specific plans or data. The update generally coincides with the annual budget process and includes:

- Revision of population projections.
- Updating the inventory and capacities of public facilities.
- Determining facilities needs based on adopted or desired level of service standards and planning assumptions.
- Updating the costs of public facilities.
- Updating capital improvements project needs for the next six fiscal years.
- Updating the revenue forecast and analysis of financial capacity.
- Amending the CFP, and Comprehensive Plan (if necessary) including level of service standards, capital projects, and/or the financing plan sources of revenue.

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How is the CFP developed?

- **Requests from departments** – County departments must submit any capital project the department wants to execute in the following year for inclusion in the CFP
- **Requests from Outside Agencies** – The County solicits capital facilities plans from non-county service providers to be included or referenced in the CFP
- **Public Review and Comment** – The County code (SCC 14.08) outlines the process for adoption of a comprehensive plan amendment, which includes a comment period and hearing.
- **Planning Commission Review & Recommendation** – The Planning Commission holds a hearing and makes a recommendation on adoption or modification of the draft CFP.
- **Board of Commissioners Adoption** – The Board adopts the CFP during their annual opportunity to amend the Comprehensive Plan or when it adopts or amends the County budget.

Goals and Policies

Capital Facilities

Goal 10A Ensure that adequate public facilities are provided to accommodate the needs of Skagit County citizens for the next 20 years by:

- maintaining level of service standards for capital facilities;
- ensuring compatibility of development adjacent to public facilities
- providing consistency among functional plans;
- ensuring timely provision and financing of facility improvements; and

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- taking advantage of revenue sources such as impact mitigation, grants, and loans.

Capital Facility Needs

Goal 10A-1

Establish the baseline for the types of capital facilities to be addressed, levels of service, needed capital improvements to achieve and maintain the standards for existing and future populations, and to repair or replace existing capital facilities

policy 10A-1.1 "Capital facility" is any publicly owned structure, improvement, or asset (including land) that meets all of the following criteria:

(a) is related to providing one of the facilities or services identified above;

(b) exists now or may be needed during the current GMA 20-year planning period (2025 - 2045);14

(c) requires the expenditure of public funds over and above annual maintenance and operational expenses; and

(d) costs $10,000 or more; and

(e) has a life expectancy of 10 years or more;

(f) but not existing vehicles and equipment, the replacement of which is programmatically funded by the County's Equipment Rental & Repair fund.

policy 10A-1.2 **Capital Facilities Categories:** For the purpose of Skagit County's Capital Facility planning efforts to support growth and ensure facilities necessary to support growth are provided, the following categories of capital facilities are defined:

(a) Category A: Capital facilities owned or operated by Skagit County and subject to the requirement for concurrency including roads, Sheriff's facilities, and county-owned drainage facilities.

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(b) Category B: Capital facilities owned or operated by federal, state, or city governments, independent districts, or private organizations and subject to the requirement for concurrency including water, fire and sewer, and drainage facilities where applicable.

(c) Category C: Capital facilities owned or operated by Skagit County but not subject to the requirement for concurrency including walkways, bikeways, parks and recreation, general government, fair, senior services, public safety and solid waste.

(d) Category D: Facilities owned or operated by Federal, State, or City governments, independent districts, or private organizations but not subject to the requirement for concurrency including schools.

policy 10A-1.3 **Application of Standards** – Based on the categories defined above, the following application of LOS standards shall be used by the county in assessing facility needs and financing:

(a) Category A facility standards shall apply to development permits issued by the County and shall be used in evaluating future capital improvement programs and budgets.

(b) Category-B standards shall apply to development permits issued by the County but shall not apply to the County's annual budget or its Capital Improvements Program.

(c) Category-C & D standards shall be the basis for annual reporting but not for development permit review.

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policy 10A-1.4 **Levels of Service (LOS):** Skagit County adopts the following LOS standards.

Facility or Service	Level of Service for Rural Development	Level of Service for Urban Development
Streets/Roads	The LOS standard for County roads is C. LOS D is acceptable for all road segments that: ▪ have Annualized Average Daily Traffic (AADT) greater than 7,000 vehicles; and ▪ are NOT federally functionally classified as an 09-Local Access Road; and ▪ are designated as a County Freight and Goods Transportation Systems Route (FGTS). The LOS standard for County road intersections is LOS D. Roads must be constructed consistent with latest County Roads Standards. The Multimodal LOS (MMLOS) standard for walkway and bikeway segments on the Active Transportation Network is: • Degree of Network Completeness (as a percent of the overall network) The degree of Active Transportation Network completeness is a Category C MMLOS standard and the status will be published in the Annual Concurrency Report along with the data on vehicle LOS.	
Domestic Water	Rural water service provided by individual wells, community systems, or extensions of urban water systems shall be designed to meet the rural water supply needs of the rural area users consistent with the Skagit County Comprehensive Plan and the Coordinated Water System Plan for rural domestic water supply and fire protection.	Urban water service provided by a utility and designed to meet the needs of the designated service areas consistent with the Skagit County or City Comprehensive Plan, the Coordinated Water System Plan, and the designated water utility's Water System Plan shall meet the design criteria of the Coordinated Water System Plan.
Stormwater	SCC 14.36.020: rural surface water management systems constructed consistent with SCC Chapter 14.32	SCC 14.36.020: urban surface water management systems constructed consistent with SCC Chapter 14.32

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Facility or Service	Level of Service for Rural Development	Level of Service for Urban Development
Wastewater	Sewer is generally prohibited in rural areas.	Except as determined by the County Health Department, urban sanitary sewer service shall only be provided in urban growth areas by cities or county-approved special districts. SCC 14.16.215(3)(d) and BVR SAP 6A-4.2: as established in the City of Burlington Comprehensive Sewer Plan.
Fire Suppression	Facilities must maintain a WSRB public protection classification No. 8 or better, and fire flow in accordance with the CWSP Section 4, Minimum Design Standards. See also CPP 1.7.	The County must ensure that adequate fire and emergency medical service facilities are located or planned to accommodate current and future population. See also CPP 1.7.
Law Enforcement	SCC 14.28.070(1)(c)(ii):1 officer per 2000 served	SCC 14.28.070(1)(c)(i): 1 officer per 1000 or 100 acres of developed commercial or industrial
Education	Educational and facility standards in district's CFP	Educational and facility standards in district's CFP
Parks and Rec	Facilities must be provided at the following population ratios:	
	Park Classification	**LOS Standards (per 1,000 people)**
	Regional Parks	11.93 acres
	Community Parks	1.12
	Neighborhood Parks	.19

policy 10A-1.5 **Determining Public Facility Needs** – Facility needs shall be determined by comparing existing facility capacity to adopted levels of service (LOS), national standards, regional averages, or assessments of a particular facility or service demand.

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policy 10A-1.6 Level of Service (LOS) Alternatives – Factors in addition to LOS for calculating needs include:

(a) Repair, renovation, or replacement of existing facilities;

(b) Provision of facilities exceeding LOS;

(c) Use of non-capital solutions such as programs that reduce needs or substitute for facilities; reduce demands;

(d) Replacement of traditional LOS;

(e) Creation of additional capacity within existing facilities; or

(f) Support for the provision of services at the end users' locations.

policy 10A-1.7 **Prioritizing Improvements** - Capital improvement decisions shall be based on the following criteria:

(a) Safety – elimination of hazards;

(b) Efficiency – reduction of operational costs;

(c) LOS – achievement of adopted or desired standards;

(d) Community – satisfaction of expressed desires; and

(e) Funding – use of non-county funds.

policy 10A-1.8 **Coordination** - All facilities scheduled for construction or improvement in accordance with adopted policies shall be coordinated with any plans of the State, other local governments or junior taxing districts that may have an effect on the County's proposed capital improvement.

policy 10A-1.9 **Review of Other Providers' Plans** - The County shall acknowledge and incorporate the Capital Facilities Plans of other public facility and service providers that are consistent with this Comprehensive Plan.

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Financial Feasibility

Goal 10A-2 Provide means to balance needs with available funding.

policy 10A-2.1 **Financial Feasibility** - The estimated costs of identified capital improvements shall not exceed dependable revenue sources that are available to the County.

policy 10A-2.2 **Financial Responsibility** - Funding for capital facilities shall be from both current and future users depending upon the timing of need.

policy 10A-2.3 **Current Needs -** Capital improvements that reduce or eliminate existing deficiencies; some or all of the replacement of obsolete or worn out facilities; and/or pay a portion of the cost of capital improvements needed by future growth shall be funded by user fees, service charges, special assessments and/or taxes.

policy 10A-2.4 **Future Needs** - New growth shall pay its fair share of capital improvements cost necessary to support its demands. This may include voluntary contributions for the benefit of any capital facility, impact fees, mitigation payments, capacity fees, dedications of land, provision of public facilities, and future payments of user fees, charges for services, special assessments and taxes. These revenue sources shall not be used to pay for the portion of any public facility that reduces or eliminates existing deficiencies.

policy 10A-2.5 **Financing Policies – Enterprise Funds**. Capital improvements financed by County enterprise funds shall be financed by:

(a) debt to be repaid by user fees and charges and/or connection or capacity fees for enterprise services;

(b) current assets (i.e., reserves, equity or surpluses, and current revenue, including grants, loans, donations and interlocal agreements), or a combination of debt and current assets.

policy 10A-2.6 **Financing Policies: Non-enterprise Funds** Capital improvements financed by non-enterprise funds shall be financed from either current assets: (i.e., current

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revenue, fund equity and reserves), debt, private sources, or a combination thereof. Financing decisions shall include consideration for which funding source (current assets, debt, or both) will be the most cost effective; consistent with prudent asset and liability management; appropriate to the useful life of the project(s) to be financed and efficient use of the County's ability to borrow funds.

policy 10A-2.7 **Funding by Referendum** - If projects requiring voter approval of funding remain unfunded for more than one year after listing in the CFP, the CFP shall be revised at the next annual amendment to adjust for the lack of such revenues. Adjustments can be made by reducing the level of service for one or more public facilities; increasing the use of other sources of revenue; decreasing the cost, and therefore the quality of some types of public facilities while retaining the quantity of the facilities that is inherent in the level of service standard; decreasing demand for and subsequent use of capital facilities; or by combining any of the above alternatives.

policy 10A-2.8 **Uncommitted Revenue** - All development permits issued by the County, which require capital improvements that will be financed by sources of revenue which have not been approved or implemented (such as future debt requiring referenda) may be conditioned on the approval or implementation of the indicated revenue sources, or the substitution of a comparable amount of revenue from existing sources.

policy 10A-2.9 **Available Revenue and Capital Facilities to Support Land Use** - The county must finance the six-year Capital Facilities Plan within the its financial capacity. If the projected costs exceed the financial capacity the county may elect to adjust level of service standards; revise the land use element; consider other sources of revenue; or select any combination of the preceding, to achieve a balance between available revenue and capital facilities needs.

policy 10A-2.10 **Alternative Resources -** The county may consider alternative funding sources such as outside service contracts and joint use of capital facilities to supplement capital funding.

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policy 10A-2.11 **Implementation Schedule Changes** - Amendments to the schedule of capital facilities may be made in conjunction with Comprehensive Plan amendments or may be concurrent with adoption of or amendment to the County budget where the Board determines that such changes are warranted, and adequate public notice is given.

policy 10A-2.12 **Project Delays** - Project implementation delays that affect concurrency provisions may only be allowed if other projects can substitute for addressing the need, or the adopted LOS can be reduced to be consistent with the shortfall.

policy 10A-2.13 **Evaluation of Buildings and Space Improvements** - The annual review of the six-year CFP should include the evaluation of buildings and space improvements needed to provide workspace for projected staffing levels.

policy 10A-2.14 **Ensuring Concurrency** - Impacts of development on capital facilities occur when development is constructed. The county may issue development permits only after it has determined that there is sufficient capacity of Category-A and Category-B public facilities to meet the LOS standards concurrent with the proposed development.

policy 10A-2.15 **Concurrency Determination** - Concurrency of public facilities for new development may be determined only if the facilities and services are, or will be, in place, at the time of development, or if the conditions of the permit are that the facilities or services will be in place, or the County has a binding commitment for the cost of the facility or service.

policy 10A-2.16 **Capital Facilities and Concurrency in Municipal UGAs** – The County plans in partnership with cities on Municipal UGAs, and the Cities must plan and demonstrate the capability of providing services in the future. Until Municipal UGAs are annexed, urban development is not allowed. Capital facility requirements and concurrency within municipal Urban Growth Areas that allow urban development shall be governed by the Capital Facilities Plan and concurrency requirements of the respective municipality.

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policy 10A-2.17 **Capital Facilities and Concurrency in Non-municipal UGAs** – Capital facility requirements and concurrency within county-governed, non-municipal UGAs shall be developed for the specific urban growth area using a combination of county- and non-county-provided services at adopted urban levels of service appropriate to the planned urban development.

policy 10A-2.18 **Land Use Compatibility of Category-A and Category-C Capital Facilities** - Public capital facility improvements should be consistent with the adopted land use map and the goals and policies of other elements of this Comprehensive Plan.

policy 10A-2.19 **Other Capital Facilities Plans** - For informational and coordinating purposes the capital facilities plans of cities and special purpose districts, including water purveyors, fire districts, port districts, public utility districts, and others as appropriate are resources for county planning.

Citizen Involvement

Goal 10A-3 Ensure that capital facility planning involves citizens.

policy 10A-3.1 **Public Participation in Capital Facility Proposals** – A public process that informs, notifies and encourages participation in formulating significant capital facility proposals shall be part of the on-going comprehensive plan amendment or budget processes.

policy 10A-3.2 **Capital Facilities Financing** - Citizens shall have the opportunity to participate in and comment on proposed capital facilities financing.

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1 RCW 36.70A.020(12).
2 RCW 36.70A.070(3).
3 "Public facilities" are defined by RCW 36.70A.030(12). See also WAC 365-196-415.
4 "Public services" are defined by RCW 36.70A.030(13).
5 A capital facilities element that only forecasts future needs and proposed locations and capacities of new capital facilities on a 6-year projection does not comply with the GMA requirement that such a forecast be done on a 20-year cycle. Cotton v. Jefferson County 98-2-0017 (Amended FDO, 4-5-99).

6 RCW 36.70A.020(12).

7 WAC 365-197

8 See e.g., Taxpayers for Responsible Government v. City of Oak Harbor, WWGMHB 96-2-0002 (Final Decision and Order, July 16, 1996); McVittie v. Snohomish County, CPSGMHB 99-3-0016c (Final Decision and Order, Feb. 9, 2000).

9 Id. See also Oak Harbor, 96-2-0002 (FDO) (quoting RCW 36.70A.020(12)).

10 WAC 365-197. See also Sedro-Woolley v. Skagit County, WWGMHB 03-2-0013c (Final Decision and Order, June 18, 2004) (finding County's failure to make adequate provision for sewer and water prior to urban development in the UGA did not comply with GMA).

11 RCW 82.02.050(4).

12 RCW 82.02.050(4), last line.

13 See spending limitation at RCW 82.46.010(2)(b) and definition of "capital project" at RCW 82.46.010(6). Recent legislation also allows the County to spend limited REET 1 revenue on operations and maintenance through 2016. RCW 82.46.010(7).

14 Only the financing plans for fulfilling those needs may be limited to the next six years.

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Introduction

This Element includes a summary of analysis and strategies that support the goals and policies in the Economic Development Element. This introduction fulfills the County's obligations under the GMA to include an economic development element in the Comprehensive Plan.

The Economic Development Element of the Skagit County Comprehensive Plan is a companion to the *Comprehensive Economic Development Strategy (CEDS)* that is maintained by the Skagit Council of Governments (SCOG). The Council is a regional government body charged with a number of activities including the coordination of local economic analysis and planning. The *Comprehensive Economic Development Strategy* is updated periodically by the Skagit Council of Governments in partnership with the Economic Development Alliance of Skagit County to address requirement of the Growth Management Act (GMA) and the U.S. Economic Development Administration. The Community Economic Development Strategy provides information on trends, needs, problems and opportunities, and identifies strategies for implementing the goals in this Element.

The SCOG Board of Directors adopted the revised CEDS at their meeting in December 2024. Visit the SCOG website to review the adopted 2024 Comprehensive Plan Economic Development Strategy and the 2024 Landscape Assessment and Data Profile.

Demographic Profile

Skagit County has seen steady growth in population over the past three decades with the population growing by 52,000 since 1990, mostly driven by in-migration. Urban areas grew faster than rural areas; Burlington grew the fastest while Mount Vernon accounted for the highest

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share of countywide growth since 2000. Skagit County's population growth was mostly in line with the Countywide Planning Policies (CPP) projections for 2036. According to the Washington State Office of Financial Management's (OFM) most recent projections, the county is projected to accommodate an additional 28,800 residents by 2045 – a growth rate of 0.9% per year on average for the next two decades[11]. Since 1990, total housing units in Skagit County have increased by over 23,000 units, with approximately 16,600 of these, or 71%, single family homes – versus 57% in the Puget Sound region. The overall mix of housing unit types in the county has remained mostly stable over time, with single family homes accounting for 73% of the housing supply in 1990 and 72% in 2023, again higher than the region, state, and neighboring counties. Housing production in Skagit County has slowed down in the past decade, and the overall availability of housing has not kept pace with growth in the number of households[12].

Trends

Employment and Industry

Overall employment within Skagit County has experienced incremental growth since 1990. Roughly 21,000 new jobs have been created in the county between 1990 and 2022, of which 63% have been added in the 1990s, which was the fastest growth decade for jobs during this period. Job growth slowed significantly after 2000 and the county lost roughly 3,600 jobs between 2008 and 2011, coinciding with the Great Recession. While job growth picked up after that, the county had another period of job loss during the COVID-19 pandemic and lost an additional 3,800 jobs in 2020[13].

In 2022, the retail, finance, insurance, real estate, and services (FIRES) and health care sectors made up more than half (55%) of the covered employment in Skagit County. Retail, health care, manufacturing, education, government, and resources represent a higher proportion of jobs in Skagit than in the Puget Sound Region and Washington state. In contrast, Skagit has a smaller

[11] OFM Growth Management Act County projections, Medium Scenario, 2022. Among the OFM projections, the Medium scenario is considered the most likely future.
[12] SCOG Comprehensive Economic Development Strategy, 2024.
[13] SCOG Comprehensive Plan Economic Development Strategy, 2024

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proportion of jobs in the FIRES and wholesale trade, construction, transportation, and utilities (WTCU) sectors.

Agriculture

While the region is well known for agriculture, as of 2013, it is no longer the county's largest sector. In 2013, agriculture, forestry, fishing, and hunting accounted for about 4.5% of gross domestic product (GDP).[14] In 2007, the county's 1,215 farms (operations that produced or sold $1,000 of products) produced crops and livestock products worth $256 million. In 2012, this decreased to 1,074 farms with a market value of $272 million. Historically, the county has generated 50% of the world's cabbage seed production, upwards of 85% of the nation's beet seed production, and 75% of the world's spinach seed production. More recently, the number of small farms has increased and demand for organic, locally grown food has diversified the mix of products.

Less than 2 percent of the county's farms are larger than 1,000 acres and 41 percent of the farms are categorized by the U.S. Department of Agriculture as "residential or lifestyle" farms meaning the owner's primary occupation is something other than farming. Skagit County has designated almost 90,000 acres as agricultural lands, though less than that is in full production in any given year.[15]

Forestry and Fishing

In terms of land area, forest resources take up a large share with 315,000 acres designated as Industrial Forest Lands and another almost 39,000 acres designated as Secondary Forest Lands (lands that are harvested and also provide buffers between industrial forestry and rural residential areas). According to the Washington Regional Economic Analysis Project, forestry and fishing experienced the fifth fastest employment decline between 2002 and 2010, falling by 0.5%. This decline in the strength of the forestry sector has occurred over the last two decades with declining harvests on federal and state lands, along with other economic and market factors.

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[14] Employment Security Department. September 2015. Skagit County Profile. Available: https://fortress.wa.gov/esd/employmentdata/reports-publications/regional-reports/county-profiles/skagit-county-profile.

[15] Skagit Conservation District, 5 Year Plan (2009-2014). Available at: http://scc.wa.gov/wp-content/uploads/2013/12/Skagit-LRP-2009_2014.pdf

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While fishing is not as viable as it once was, there are Alaska fishers with home ports in Anacortes and La Conner along with boat builders, service and repair facilities.

Commercial and Industrial Activity

The Port of Skagit, Skagit County, and the Skagit Council of Governments commissioned the Skagit County Industrial Land Study by ECONorthwest in 2014. The final report (December 2014) found an available supply of about 1,767 acres of land zoned to accommodate industrial uses, and a demand for about 525 to 1,675 acres of buildable land:

> Skagit County has 1,767 buildable industrial acres. Of these, 307 acres are in tax lots that are partially vacant, and 1,461 acres are in vacant tax lots. Bayview Ridge, Anacortes, and Mount Vernon have the largest shares of buildable industrial land.
>
> Skagit County will need between approximately 400 to 1,300 acres of land for WTCU [Wholesale, Transportation, Communications and Utilities] employment and between approximately 125 and 375 acres of manufacturing employment.

Various Skagit County governmental and economic development organizations will use the inventory to assess the future need for ready-to-build industrial land in the county, and to serve as the basis of a property search/marketing tool for economic development interests in the County.

The industrial and buildable lands inventory identifies a limited supply of large-lot industrial land to meet the needs for larger development projects in Skagit County. Given its location out of the floodplain and its proximity to transportation and other urban services, the Bayview Ridge UGA is uniquely well suited to meet that need. New employment forecasts approved by the Growth Management Act Steering Committee for county and city planning through their 2016 comprehensive plan updates place a greater emphasis on job growth than has been the case with previous adopted forecasts. One important piece of meeting those job growth projections through 2036 is having an adequate supply of commercial and industrial land, particularly in the large-lot category.

Expanding the amount of industrial land at the Bayview Ridge UGA was a key recommendation from the Envision Skagit 2060 Citizen Committee Final Recommendations report (October 2011). Those recommendations generated support for the countywide industrial lands inventory and for significant policy changes at Bayview Ridge, which downplayed future residential development in

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favor of a stronger focus on industrial development. Amendments to the Bayview Ridge Subarea Plan made by the County in 2013 and 2014 increased the amount of land available for development in the Bayview Ridge-Light Industrial zone by nearly 300 acres.

Infrastructure

Skagit Public Utility District operates the County's largest water system serving an area from Conway to Alger/Lake Samish in the north/south direction and from Fidalgo Island in the west to Marblemount in the east. The cities of Burlington, Mount Vernon and Sedro-Woolley receive the majority of the PUD water. The Skagit PUD provides nine million gallons of water each day to about 65,000 people and maintains nearly 600 pipeline miles. Resource conservation and stewardship are increasing concerns and the PUD is a member of the Skagit Watershed Council actively participating in efforts to protect in-stream flows.

The Skagit County road system is made up of over 800 miles of roads and 110 bridges. The County also operates the Guemes Island Ferry. As noted in the Transportation Element Technical Appendix, there are needs to improve Cook Road; it is anticipated that existing traffic congestion along Cook Road between I-5 and Green Road will worsen with additional intersection volumes and with increased railroad crossing delays. Other improvements are proposed for non-motorized modes.

Strengths, Weaknesses, Opportunities and Threats

The 2024 Comprehensive Economic Development Strategy planning process included an assessment of factors that form the basis for the overall economic development strategy. This assessment produced the following conclusions in the 2024 CEDS as updated based on the 2013 CEDS Data Supplement, US Census Bureau, and State information.

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County Strengths

Community characteristics that make Skagit County a good place to do business or invest, as well as to live, work and recreate, also are a good basis from which to achieve the community's vision for economic development. These include:

1. *Diverse natural resources and access to outdoor recreation contribute to high quality of life as well as economic opportunity.*
2. *A unique commitment to environmental protection supports high quality of life, access to the outdoors, and climate resiliency.*
3. *Skagit County benefits from its location in the pacific northwest dynamic growth corridor between Seattle and Vancouver B.C.*
4. *The explicit centering of equity emerging as a priority in economic development in Skagit County helps to address vulnerabilities and inequities identified during the pandemic.*
5. *Inter-jurisdictional and public-private partnerships facilitate coordination in the public service sector and delivery of services.*
6. *Skagit County offers an available workforce talent pool that supports many industrial, commercial, and institutional endeavors.*
7. *During the pandemic, quick technology shifts, such as the shift to virtual healthcare, education, and social support services, were swift and relatively effective contributing to disaster resiliency*.

County Weaknesses

Local conditions may limit the extent or speed with which countywide objectives for economic development can be realized. Several weaknesses or areas of concern are noted:

1. *Housing is a foundational need for residents in Skagit County but decreasing housing availability and affordability combined with population growth places pressure on housing costs and security.*
2. *Lack of affordable or accessible childcare affects children, working parents, and employers causing work disruptions, missed career opportunities, and greater employee turnover.*

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The childcare system in Skagit County is marked by fragmentation, inaccessibility, inequity, and underfunding, leaving many families struggling to find suitable care options.

3. *Educational attainment, workforce development, and social issues are increasingly misaligned with employer demands for a more skilled workforce.*
4. *Critical physical infrastructure is inadequate to support the County's growth needs. Existing infrastructure challenges include county owned buildings and facilities in need of maintenance, connectivity gaps in transportation infrastructure, outdated technology and gaps in broadband access, and preparation of ready-to-build industrial properties.*
5. *Skagit County faces challenges in building consensus on a common course for future across diverse stakeholders.*
6. *The Latinx population was disproportionately represented in essential workforces during the COVID-19 pandemic, and therefore was overexposed to the virus.*
7. *The pandemic revealed an overwhelming need for behavioral health support, including expanded access to mental health, substance use disorder care and treatment resources, increased training for medical workers, and community education. Pandemic-related job loss, school closures, social isolation, and fear of the disease itself caused significant problems and exacerbated existing behavioral health challenges.*
8. *Wide-scale disconnection of some communities from services and programs was revealed during the pandemic, including broadband internet access, transportation, and childcare, due to barriers.*
9. *The pandemic also revealed barriers in accessing health care. Treatment systems are difficult to enter, and it can be unclear how to access resources.*
10. *The pandemic has intensified the challenges related to foundational needs in Skagit County, such as affordable housing, food security, employment opportunities, and childcare access. Despite efforts to support affordable and equitable housing, the availability of housing remains a pressing issue. Furthermore, the county faces additional significant challenges, including issues related to food access, community services, education, economic development, and healthcare services. Families in the region are grappling with food security concerns, unable to afford an adequate and healthy diet,*

11: Economic Development: Economic Development
Strengths, Weaknesses, Opportunities and Threats

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which has implications for both food insecurity and childhood obesity among the population.

External Opportunities

The following include major characteristics of Skagit County's location and economic potential that are important in the larger region:

1. *Climate resiliency strategies can help to proactively navigate and leverage shifts arising from climate change and promote sustainability while also mitigating negative impacts.*
2. *Leverage strategic location near Puget Sound and Pacific Rim markets to foster economic growth in local businesses that align with the needs of these markets.*
3. *Encourage redevelopment and investment in needed properties and infrastructure to better take advantage of existing opportunities and prepare for future growth.*
4. *Foster recreation, convention, and resort development to capitalize on tourism potential and stimulate economic growth.*
5. *Promote further growth of value-added natural resource businesses to optimize regional resource utilization, capitalize on clustered advantages, and build upon Skagit County's existing economy.*
6. *Cultivate a diverse economic landscape by supporting the recruitment and growth of high-tech industries, aviation industries, trade and commerce-related sectors, specialty manufacturing, and other advantageous industries in Skagit County.*
7. *Leverage cluster advantages and existing industrial firms to cultivate a dynamic and diversified economic base, enhancing the region's competitiveness and resilience.*

External Threats

Conditions or concerns that could undermine local economic stability are identified as posing potentially significant issues for Skagit County's economic development both short and long-term:

1. *Climate change related impacts, including risks of flooding and rising sea levels, can pose a significant threat to existing land usage and development.*

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2. *Navigating the complexities of federal, state, and local regulatory requirements can pose challenges to development and economic growth.*
3. *The impact of federal endangered species listings, such as the Puget Sound Chinook Salmon, necessitates strategic planning to balance environmental conservation with economic development goals.*
4. *Managing economic stability in the face of declining public revenues, increased costs, and evolving County regional and local service delivery roles poses challenges, leading to potential constraints on public sector budgets.*
5. *Limitations on rural water rights can present obstacles to economic development initiatives, sustainable development, and utilization of water resources in rural areas.*
6. *Unemployment peaked in Skagit County at 19.6% in April 2020, leading to job losses and financial instability. Addressing issues of economic security may require improved coordination across systems to create employment opportunities, especially in isolated communities, structured financial support to undocumented workers, and reform of funding structures to ensure resources reach the community. Small businesses would benefit from budgeting assistance, legal services, and hardship waivers to support economic recovery.*

Goals and Policies

The following goals and policies are supported by the analyses and strategies included in the narrative above.

The goals and policies below align with the 2024 CEDS created by SCOG. Refer to the CEDS document on SCOG's website for a list of additional goals, policies, and actions that will support economic development implementation for the next 20 years.

Economic Growth and Land Use

Goal 11A-1 Establish a land use framework in Skagit County that supports diverse businesses, enhances natural resource industries.

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policy 11A-1.1 Work with SCOG to align the County economic growth actions with regional actions and routinely participate to evaluate this relationship.

policy 11A-1.2 Encourage the re-use of existing industrial sites that have potential for reuse or redevelopment.

policy 11A-1.3 Coordinate with cities to identify sufficient sites for human and social services, and improved access to those services, to meet the needs of Skagit County employees and employers.

policy 11A-1.4 Implement permitting procedures that are understandable, predictable and can be accomplished within time periods that meet or exceed statutory requirements. Procedures for permitting that require approvals of both the County and other jurisdictions should be consistent.

policy 11A-1.5 Work cooperatively with local jurisdictions, the Skagit Council of Governments, the Economic Development Alliance of Skagit County, the ports of Skagit and Anacortes, and federal and state agencies to promote economic development and employment opportunities consistent with countywide economic development policies.

policy 11A-1.6 Accommodate home-based businesses that are compatible with the character of adjoining properties and neighborhoods.

Industry Growth and Diversification

Goal 11B Economic Viability: Promote the continued economic viability of Skagit County's natural resources and encourage related value-added production of agricultural, fishery, and forestry resources.

Encourage a mix of diverse non-resource-based industries that complement and enhance resource-based industries as a major part of Skagit County’s economy.

Work with jurisdictions and agencies to identify appropriate areas for increased business diversity and explore options for implementation.

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policy 11B-1.1 Strive to stimulate the economy of the upper Skagit Valley through protection of resource-based industry, compatible tourism, and community development strategies.

policy 11B-1.2 Promote business recruitment and development of firms that will diversify the local economy and compete effectively in local, national and international markets.

policy 11B-1.3 Promote the retention and expansion of existing local businesses as a first priority while also promoting the start-up of new businesses particularly those providing living wage jobs.

policy 11B-1.4 Recognize the importance of the marine-based economy of Skagit County in the County's Comprehensive Economic Development Strategy.

Recruitment

Goal 11C Coordinate with organizations and agencies Promote for business recruitment and development of firms retention that will diversify the local economy and compete effectively in local, national and international markets.

policy 11C-1.1 Maintain cooperative working relationships with local, tribal, regional, statewide, federal and international organizations that pursue economic development activities consistent with the goals and objectives of this economic development element.

Upper Skagit Valley

Goal 11C-2 Strive to stimulate the economy of the upper Skagit Valley through protection of resource-based industry, compatible tourism, and community development strategies.

policy 11C-2.1 Protect long-term commercially significant natural resource industries and operations shall be protected from encroachment by incompatible uses

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policy 11C-2.2 In cooperation with the cities, ports, tribes, and users, conduct, and maintain an inventory of buildable lands suitable for urban and rural commercial and industrial development.

policy 11C-2.3 Locate lands designated for industrial use where they will have ready access to appropriate infrastructure, environmental constraints will be minimized, and permitting can be expedited.

policy 11C-2.4 Ensure lands designated as industrial accommodate a mix of uses, and include public and private ownership consistent with market demands and trends.

policy 11C-2.5 Maintain cooperative working relationships with local, tribal, regional, statewide, federal and international organizations that pursue economic development activities consistent with the goals and objectives of this economic development element.

policy 11C-2.6 Participate in seeking grant funding for the following:

(a) Clean-up of contaminated sites;

(b) Re-use and redevelopment of infill sites;

(c) Improvement of infrastructure to support economic development; and

(d) Strategic investment in business recruitment and expansion.

Tourism Attraction

Goal 11C-3 Promote the county's excellent regional location, lodging and retail opportunities and local public transportation options as attractions for tourism.

policy 11C-3.1 Encourage the establishment and maintenance of a countywide convention and visitors' bureau. The bureau would support city efforts to develop and market visitor services and promote of the county's regional location, amenities, and services.

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policy 11C-3.2 Through adopted parks, transportation, and community plans, implement strategic efforts to develop and maintain scenic open space and cultural and heritage resources that are attractive to residents and visitors alike.

policy 11C-3.3 Site visitor facilities at locations that can be served with necessary public infrastructure and are compatible with surrounding uses.

policy 11C-3.4 Ensure that plans for rural area visitor facilities and services do not conflict with rural lifestyles, critical areas, and the long-term commercial significance of natural resources, and are coordinated with appropriate local, state, and federal agencies.

Quality of Life

Goal 11D Encourage economic development that supports all aspects of quality of life including, living wages, education, human services, housing, and transportation.

policy 11D-1.1 Identify strategies and incentives to encourage businesses to recycle, use, or manufacture products made from recycled materials and use innovative processes that conserve natural resources and protect or enhance environmental quality.

policy 11D-1.2 As appropriate, use the community planning process to address conflicts between development and environmental objectives. These processes shall involve participants representing all interests and viewpoints.

policy 11D-1.3 Encourage diverse job options and entrepreneurial opportunities for persons interested in full-time and part-time employment or desiring to own their own business.

policy 11D-1.4 Encourage the creation and retention of diverse employment opportunities and encourage local business investments in employment opportunities.

policy 11D-1.5 Support development and maintenance of human and social service facilities through funding decisions and land use codes.

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policy 11D-1.6 Work with SCOG and other organizations to identify living wage job markets and business and develop strategies for recruitment and retention.

policy 11D-1.7 Encourage the creation and retention of living wage jobs to meet the needs and demands of Skagit County households.

policy 11D-1.8 Encourage educational opportunities for residents of all ages to develop and upgrade skills required for employment, advancement and entrepreneurship.

policy 11D-1.9 Work cooperatively with local jurisdictions, the Skagit Council of Governments, the Economic Development Alliance of Skagit County, the ports of Skagit and Anacortes, and federal and state agencies to promote economic development and employment opportunities consistent with countywide economic development policies.

policy 11D-1.10 Cooperate with education providers and employers to ensure the availability of facilities and programs necessary to meet the needs of K-12, college, vocational and continuing education levels.

Infrastructure

Goal 11E Provide and expand infrastructure that supports economic growth and natural resource industries.

policy 11E-1.1 Acknowledge economic development needs in formulating recommendations for improvements to transportation facilities and services.

policy 11E-1.2 Encourage low cost, easily accessible, state of the art telecommunications services throughout the county with linkages to nearby counties that are economically tied to Skagit County.

policy 11E-1.3 Work with ports, economic development organizations, cities, transportation providers, and agencies to provide the infrastructure necessary to facilitate a sustainable county economy.

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Ports

Goal 11E-2 Support the economic and job-creating activities of the port districts to ensure their long-term viability.

policy 11E-2.1 Encourage the Washington State Ferry System to maintain ferry services from Anacortes to the San Juan Islands and Vancouver Island, B.C., in order to provide for commerce and tourist trade in and through Skagit County.

policy 11E-2.2 Support the Port of Skagit in its economic development activities across the County, particularly at the Skagit Regional Airport and North Cascades Gateway Center (the former Northern State Hospital campus) areas, and the Port of Anacortes in its efforts to more fully utilize its deep draft marine terminal for trade, commerce and related economic development.

policy 11E-2.3 Strive to keep Highway 20 open to eastern Washington throughout the year, if economically feasible, in order to stimulate the economy of the economically distressed upper Skagit Valley.

Fiscal Impact

Goal 11E-3 Encourage economic development that creates a net positive fiscal impact for Skagit County.

policy 11E-3.1 Link County capital facility planning and programming to the Comprehensive Economic Development Strategy (CEDS) to sustain a high quality of life and attract business investment.

policy 11E-3.2 Monitor and evaluate constraints to economic development caused by regulations and permitting procedures and implement revisions, if necessary, as part of annual or periodic comprehensive plan and development regulation updates. Coordinate with other (federal and state) permitting agencies to simplify procedures.

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policy 11E-3.3 Maintain a growth management indicators monitoring program to measure progress in economic development initiatives in coordination with the Skagit Council of Governments and the Economic Development Alliance of Skagit County. The indicators program report should be updated at least every 3 ½ years to coincide with the periodic GMA update schedule.

policy 11E-3.4 Consider as part of the County's budgeting process outside funding sources such as grants, as well as careful fiscal needs analyses in order to ensure that tax revenue generation is competitive with other jurisdictions.

policy 11E-3.5 Support the work program of the Skagit Council of Governments to update the Comprehensive Economic Development Strategy as least every three years to identify needs and solutions for transportation, human services, environmental protection, community development and other elements that support improvements to the location economy

policy 11E-3.6 Implement the Comprehensive Economic Development Strategy to build local capacity for sustained economic development.

policy 11G-4.7 Expend funds collected under Chapter 82.14 RCW to finance public facilities serving economic development purposes and finance personnel in economic development offices. For purposes of this Policy any public facility, as defined in RCW 82.14.370(3)(c)(i), listed in this Comprehensive Plan (including subarea plans) is fully incorporated to this Economic Development Section.

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Introduction

The Growth Management Act (GMA) requires local comprehensive plans to have a climate element. Skagit County is required to include a Resiliency Sub-Element and Greenhouse Gas Emissions (GHG) Reductions Sub-Element in the Climate Element. Climate elements must maximize economic, environmental, and social co-benefits and prioritize environmental justice in order to avoid worsening environmental health disparities. A climate element can take the form of a stand alone comprehensive plan element or be integrated into several elements such as housing, transportation, and land use[16].

The Skagit County Climate and Resiliency Element goals and policies are contained within the Climate and Resiliency Element and integrated across all elements through updated policies. Goals and policies revised to promote climate resiliency and GHG reductions are noted across the entire Comprehensive Plan with the following icons.

[16] Washington Department of Commerce, 2024 https://www.commerce.wa.gov/growth-management/climate-planning/



This resiliency icon is featured throughout the Comprehensive Plan and identifies policies that address natural hazards exacerbated by climate change, protect natural areas, and enhance community resilience.



This GHG icon appears throughout the Comprehensive Plan and represents policies that help the County reduce GHG emissions overtime contributing the State of Washingtons goal of net-zero emissions by 2050.

The resiliency and GHG sub-elements must include strategies to mitigate the effects of a changing climate, support reductions in greenhouse gas emissions (GHG) and per capita vehicle miles traveled (VMT), prepare for climate impact scenarios, foster resiliency to climate impacts and natural hazards, protect and enhance environmental, economic and human health and safety, and environmental justice[17].

Relationship to Other Elements

Climate related goals, policies, and strategies are found throughout the other elements of the Comprehensive Plan. Goals and policies specifically related to Climate Change and Resiliency, rather than incidentally related, appear in this element.

Resilience Sub-Element



As required by state law the resiliency sub-element must include but is not limited to:

- *Address natural hazards created or aggravated by climate change, including sea level rise, landslides, flooding, drought, heat, smoke, wildfire, and other effects of changes to temperature and precipitation patterns,*
- *Identify, protect, and enhance natural areas to foster climate resilience, as well as areas of vital habitat for safe species migration, and*

[17] Revised Code of Washington 36.70A.020 Planning Goals. https://app.leg.wa.gov/RCW/default.aspx?cite=36.70A.020

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- *Identify, protect, and enhance community resilience to climate impacts, including social, economic, and built-environment factors, which support adaptation to climate impacts consistent with environmental justice*[18].

To identify, protect, and enhance natural areas and community resilience, Skagit County identified over 80 assets, including administrative and civic buildings, parks, recreation facilities, transportation infrastructure and facilities, farms, natural preserves, solid waste facilities, water distribution infrastructure, radio communication infrastructure, water wells and reservoirs, and other critical facilities. These assets have been organized into specific community sectors. Skagit County explored hazards, climate indicators, and climate impacts relevant to the identified assets and sectors.

Community Assets by Sector

Sector	Assets (See Appendix for full list)
Agriculture & Food System	Farms
Buildings & Energy	County Administrative buildings, Electricity generating stations, Residential neighborhoods, Gas pipelines, Flood pump stations, Baker Dam, Petroleum gas refinery
Cultural Resources and Practices	Fisheries
Economic Development	Port of Skagit, Farms, Commercial forests, Industrial businesses
Ecosystems	Rivers, Fisheries, Nature preserves
Emergency Management	Flood management infrastructure (levees/dikes/pumps/tidegates), Fire station, Emergency staging areas, Hospital
Health and Well-being	Community centers
Transportation	Roadways, Bridges, Railroad, Public transit (Sea ferry, bus, shuttles), Port, Airport
Waste Management	Solid waste facility, Private septic tanks
Water Resources	Water treatment facility, Reservoirs
Zoning & Development	Museum, Schools, Radio towers

Hazards, climate indicators, and climate impacts specific to Skagit County were identified for each sector utilizing the Climate Mapping for a Resilient Washington ("CMRW") webtool. Priority climate hazards were identified based on the County's existing plans and anecdotal information.

[18] Washington Department of Commerce, Intermediate Climate Planning Guidance, 2024, https://app.leg.wa.gov/RCW/default.aspx?cite=82.14&full=true#82.14.370

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The existing plans include the Comprehensive Plan, Shoreline Master Program, 2023 Natural Hazard Mitigation Plan, and Countywide Planning Policies. The climate hazards most relevant to the County are listed below. For a detailed explanation of the analysis used refer to the Appendix.

- Drought
- Extreme Precipitation
- Flooding
- Reduced snowpack
- Sea level rise

Assets most vulnerable to priority climate hazards are residences, agricultural farms, rivers and tributaries, fisheries, commercial forests used for timber production, industrial/manufacturing businesses, nature preserves, fire stations, flood management infrastructure i.e., dikes/levees, roadways & bridges, railroad infrastructure, public transit infrastructure, wastewater treatment facilities, reservoirs & water supply infrastructure, schools, and telecommunication-fiber optic infrastructure.

Lower income households in rural areas and with mobility difficulties are vulnerable to climate hazards. A census tract (53057951100) that is in the eastern half of unincorporated County is identified as disadvantaged due to higher-than-average lower income households, cost and time spent on transportation, increased projected flood risk, and increased mortality rates due to natural hazard injuries and fatalities[19].

Assets are most likely to be impacted by hazards from seasonal peak (flooding) and low (drought) stream flows, extreme precipitation, and sea level rise. Assets are located in flood zones where increased exposure to flooding is exacerbated by sea level rise, geologic subsidence, storm events, changing precipitation patterns, and high tide events. Assets are also located in upper watershed areas where increased drought conditions can impact profitability of natural resources and subsistence fishing.

For further findings of vulnerability and risk see the Summary of Potential Climate Impacts in the Appendix.

[19] Climate and Economic Justice Screening Tool. Explore the map – Climate and Economic Justice Screening Tool

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The goals and policies in this sub-element and discussed throughout the Comprehensive Plan relating to climate and resiliency were established to address priority hazards identified and preserve and enhance natural areas and community resilience. Each goal identified below is intended to help Skagit County improve community resilience by sector.

Resiliency Goals and Policies

Integrated resiliency goals and policies are distributed throughout the Comprehensive Plan in addition to the resiliency policies included below.

The policies listed below are summarized from the original policy and may be missing language. Review the policy in its associated element to read the full text.

> Goal 3A Protect the rural landscape, character, and lifestyle by: (a) Defining and identifying rural lands for long-term use and conservation and resilience; **etc.**
>
> Goal 4A Preserve, protect, and designate agricultural lands.
>
> Goal 5A Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats, including corridor connections and tree canopy. See page 174 for complete language.
>
> Goal 8A Plan and maintain a safe, and efficient, and equitable regional transportation system. See page 287 for complete language.

Goal 5A is intended to help support the mitigation of reduced snowpack in addition to providing other co-benefits such as improving salmon recovery and protecting water quality.

Goal 12A-1 Promote a resilient and sustainable agricultural sector by preserving farmland, supporting climate resilience efforts, and ensuring the well-being of farmworkers and farming communities.

policy 12A-1.1 Continue to support and secure funding to protect agricultural land from conversion to other uses through the Conservation Futures taxing mechanism, federal and state grants, and private funding sources.

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policy 12A-1.2 Support WSU Skagit County extension program in providing educational opportunities and financial incentives for farmers and landowners to adopt regenerative agricultural practices that enhance soil health and resilience.

policy 12A-1.3 Promote and support adequate, safe, and affordable supply of housing for farmworkers in urban growth areas that addresses the unique needs of agricultural communities, prioritizing equitable access to healthy living environments, reducing environmental health risks, and promoting the well-being of farmworker families.

policy 12A-1.4 Support the WSU Skagit County extension program and the Skagit County Conservation District in providing agricultural resilience resources and programs to support farmers in making informed business decisions in a changing climate

policy 12A-1.5 Work with special purpose districts, the WSU Skagit County extension program, WSU NWREC, the Skagit County Conservation District, diking/drainage districts, and Skagit tribes to enhance flooding, sea level rise, and drought resilience within the agricultural sector, ensuring that farming practices, water management, habitat quality, and economic stability are effectively supported during extreme events.

policy 12A-1.6 Protect the +/-88,000 acres of remaining prime farmland in Skagit County. Success requires continued commitment to restrictive farmland zoning; continued farmland development right acquisition through the Farmland Legacy Program; support for an adequate water right necessary to sustain Skagit Agriculture; and an integrated, strategic investment plan in partnership with Skagit tribes and diking/drainage districts, to holistically address sea level rise, habitat enhancement, and farmland preservation on the Skagit/Samish Delta downstream of the Wild & Scenic portion of the Skagit River.

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Goal 12B Enhance the resilience and reliability of energy infrastructure. Promote and support building designs that better withstand climate change impacts.

policy 12B-1.1 Develop regulations that require commercial developments to address climate resilience through best management practices, such as floodproofing, adaptation to sea-level rise, and the integration of green infrastructure. Work with energy providers to improve the safety and reliability of infrastructure vulnerable to climate change.

policy 12B-1.2 Work with energy providers to improve safety and reliability of infrastructure vulnerable to climate change.

policy 12B-1.3 Require new residential subdivisions and commercial and industrial developments to bury electricity transmission lines and associated infrastructure to reduce damage from storms and wildfire ignition risks.

policy 12B-1.4 Identify areas in the County that are appropriate for siting renewable energy generation and storage facilities that prioritize protection of Natural Resource Lands.

Goal 12C Protect community health and well-being from the impacts of climate-exacerbated hazards and ensure that the most vulnerable residents do not bear disproportionate health impacts.

policy 12C-1.1 Expand and bolster efforts to reduce the negative impacts of natural hazards, such as appropriate hazard identification, warning, dissemination of relevant information and data, and public outreach.

policy 12C-1.2 Promote and support resilience hubs — community-serving facilities that are designed to support residents, coordinate communication, distribute resources, and reduce carbon pollution while enhancing quality of life.

policy 12C-1.3 Continue to develop and support hazard planning policies identified in the Multi-Jurisdictional Natural Hazard Mitigation Plan.

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policy 12C-1.4 Maintain and support a program to distribute cooling and/or air purifying units to protect against extreme heat and wildfire impacts, prioritizing households with residents most vulnerable to extreme temperature events (e.g., low-income seniors).

policy 12C-1.5 Work with Skagit County WSU extension and other organizations to support programs to educate and train employers and workers about working in extreme conditions. Measures could include mandatory heat protection (cooling breaks, shade, hydration) and stricter enforcement of work-rest cycles during heatwaves.

policy 12C-1.6 Create a comprehensive wildfire smoke resilience strategy by collaborating with local residents, emergency management officials, and air quality agencies.

Goal 12D

Promote climate resilience and equity through culturally sensitive outreach and education, and strengthen collaborative relationships with Tribal governments, local leaders, and non-profit groups that work with vulnerable communities to effectively manage climate change risks.

policy 12D-1.1 Develop and implement culturally relevant outreach and educational programs to raise awareness of climate change impacts, ensuring equitable opportunities for all residents to participate in and shape climate-related policy decisions.

policy 12D-1.2 Work with federally recognized tribal governments, federal and state agencies, and appropriate community leaders to identify and support the conservation of culturally important consumptive and non-consumptive resources including foods, medicinal plants, and materials that could be adversely impacted by climate change.

policy 12D-1.3 Strengthen and sustain government-to-government partnerships with Tribal governments to collaboratively address climate change impacts and protect traditional cultural properties that are at risk due to climate impacts.

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Goal 12E Foster economic resilience and sustainable growth by supporting businesses and workers in climate preparedness and resilience.

policy 12E-1.1 Support businesses in climate preparedness; ensure economic recovery plans incorporate sustainable practices and continuity of operations.

policy 12E-1.2 Define and identify frontline communities, including low-income communities, outdoor workers, and those employed in carbon intensive industries, who may be disproportionately impacted by environmental and economic shifts.

policy 12E-1.3 Support schools, technical institutions, labor unions, businesses, and community-based organizations to develop accessible training programs, apprenticeships, and career advancement pathways in living-wage low carbon industries, including renewable energy, sustainable infrastructure, energy efficiency, and environmental restoration.

Goal 12F Protect and enhance natural ecosystems to support climate change resilience, carbon sequestration, and GHG emissions reduction.

policy 12F-1.1 Ensure the protection and restoration of streams, riparian zones, estuaries, wetlands, and floodplains to maintain healthy, climate-resilient watersheds.

policy 12F-1.2 Once modeling is available, incorporate hydrologic climate impact projections into the design of water-crossing structures such as culverts and bridges to support fish passage and habitat quality.

policy 12F-1.3 Minimize stream sedimentation from extreme precipitation events and flooding by implementing watershed restoration plans that identify susceptible streams and vulnerable areas, restore streambanks, and enhance stream health through collaborative efforts with public and private partners.

policy 12F-1.4 Work to increase tree canopy and forest acreage and health, including in urban areas, to enhance ecosystem health, carbon sequestration, and improve air quality.

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Goal 12G Promote transportation resilience to climate impacts and reduce vehicle miles traveled while prioritizing benefits for overburdened communities.

policy 12G-1.1 Support the expansion of employer commute trip reduction (CTR) programs to include both large and small businesses across various jurisdictions.

policy 12G-1.2 Map transportation infrastructure that is vulnerable to repeated floods, landslides, and other natural hazards, and designate alternative travel routes for critical transportation corridors when roads must be closed. Strengthen the resilience of public transportation systems against heatwaves and extreme precipitation by implementing proactive measures that prevent delays, reduce disruptions, and minimize the risk of community isolation.

policy 12G-1.3 Encourage and support the transition to EVs through expansion of reliable EV charging infrastructure throughout Skagit County, prioritizing high-traffic areas with little existing infrastructure. Provide education on options and available rebates and incentives.

policy 12G-1.4 Support community mobility hubs in strategically accessible, multimodal available locations with a focus on overburdened communities experiencing a scarcity of transportation alternatives.

policy 12G-1.5 Seek to reduce greenhouse gas emissions and air pollutants from County-owned vehicles, equipment, and machinery, where feasible, using clean fuel technologies including but not limited to bio-blend fuels or converting to electric or hydrogen power.

Goal 12H Enhance waste management practices to align with Skagit County's Comprehensive Solid Waste Management Plan, with a focus on reducing greenhouse gas emissions.

policy 12H-1.1 Support implementation of the Skagit County Comprehensive Solid Waste Management Plan, including initiatives focused on waste prevention and diversion.

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Resiliency Goals and Policies

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policy 12H-1.2 Strengthen waste management engagement and education policy by developing targeted campaigns for recycling material with highest GHG reduction impact (e.g., paper, metal, food waste) in culturally contextualized outreach and education initiatives and materials.

Goal 12I Support long-term water security needs through integrated natural resource management planning and implementation.

policy 12I-1.1 Encourage and support public and private water purveyors to prepare for climate related drought by planning and funding appropriate capital facility upgrades.

policy 12I-1.2 Assess and implement resilience strategies to reduce the vulnerability of Skagit's aquifers, wastewater systems, and septic systems to saltwater intrusion, flooding from rising sea levels, and changing groundwater tables.

policy 12I-1.3 Support water conservation practices such as rainwater catchment, onsite retention, water reuse, and gray water treatment to conserve water resources.

Goal 12J Enhance community resilience by integrating climate change projections into land use, infrastructure planning, and development regulations, ensuring long-term safety from sea-level rise, flooding, wildfires, and other climate-exacerbated hazards while protecting natural ecosystems.

policy 12J-1.1 Develop regulations, if appropriate after in-depth analysis and stakeholder engagement, for elevating or setting back new and substantially improved structures to reduce the risk of damage caused by sea level rise.

policy 12J-1.2 Plan and build facilities, utilities, and infrastructure projects to avoid or withstand flooding from rising sea levels and changing precipitation patterns.

policy 12J-1.3 Consider climate change, including sea level rise, extreme precipitation, increased winter streamflow, and other impacts, in floodplain management planning by updating flood hazard zones according to most recent climate change projections and modeling.

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policy 12J-1.4 Require that proposals for shoreline stabilization demonstrate a need, and require the use of soft shore stabilization methods to the extent practicable to protect sites from wave-driven erosion or flooding exacerbated by sea level rise.

policy 12J-1.5 Consider future climate conditions during siting and design of capital facilities to help ensure they function as intended over their planned life cycle.

policy 12J-1.6 Establish development regulations that incorporate best practices for reducing the risks and consequences of wildfire, extreme heat, flooding, and other climate-exacerbated hazards.

policy 12J-1.7 Assess the sea level rise vulnerability of wetlands, aquatic vegetation, beaches and dunes, and other valuable natural assets and collaborate with landowners and partners to support resilience-building, as needed.

policy 12J-1.8 All residential and commercial development and accessory uses, port and water-related industrial facilities, equipment, and works should be located, designed, and maintained to avoid, or if necessary, withstand 100-year flood frequency flooding and/or storm tides or surges without becoming hazards and without the placement of flood hazard reduction measures or other hard structural shoreline stabilization. Incorporate climate projections to account for anticipated changes in flood frequency, storm intensity, and sea-level rise. Ensure that designs and maintenance plans adapt to these projections to enhance long-term resilience against evolving climate impacts.

Goal 12K Promote climate resilience through ensuring healthy resilient forests that are sustainably managed.

policy 12K-1.1 Ensure a resilient, operable and viable forest product sector by promoting and ensuring the well-being of timber communities.

policy 12K-1.2 Support the forestry industry in active forest management and retaining the critical infrastructure.

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policy 12K-1.3 Support the Forest Practice Rules, which are vetted through the Adaptive Management Program, and the DNR Sustainable Forest Policies adopted in 2005 and amended through 2024.

policy 12K-1.4 Promote forest road system, which includes road building and maintenance to access forested landscape to promote fire resilience.

policy 12K-1.5 Build the Good Neighbor Authority relationship with the USFS to promote and foster crucial forest management to aid in fire resilience and promoting carbon sequestration.

Goal 12L Encourage forest management practices which minimize the size, scope, and impact of future wildfires.

policy 12L-1.1 Promote Forest Health by ensuring a viable industry and performing good forest practices management practices outlined in the CWPP and NFPA codes and standards manuals: (1140 – Wildland Fire Protection, 1141 – Infrastructure for Land Development, 1142- Water Supplies, 1143 – Wildfire Management, 1144 – Reducing Structural Ignition). Support active vegetation management as prescribed in the CWPP home ignition zones to reduce wildfire risk and improve forest health.

policy 12L-1.2 Educate on the importance of reducing excessive fuel loading.

policy 12L-1.3 Educate in developing fuel breaks where appropriate to protect infrastructure and high value ecosystems.

policy 12L-1.4 Support bolstering wildland fire fighting capacity of rural fire districts.

policy 12L-1.5 Incorporate best management practices outlined in the CWPP and NFPA codes and standards manuals: (1140 – Wildland Fire Protection, 1141 – Infrastructure for Land Development, 1142- Water Supplies, 1143 – Wildfire Management, 1144 – Reducing Structural Ignition). Support active vegetation management as prescribed in the CWPP home ignition zones to reduce wildfire risk and improve forest health.

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Greenhouse Gas Emissions (GHG) Reduction Sub-element

As required by state law, the greenhouse gas emissions sub-element must include:

> (A) Result in reductions in overall greenhouse gas emissions generated by transportation and land use within the jurisdiction but without increasing greenhouse gas emissions elsewhere in the state;
>
> (B) Result in reductions in per capita vehicle miles traveled within the jurisdiction but without increasing greenhouse gas emissions elsewhere in the state; and
>
> (C) Prioritize reductions that benefit overburdened communities in order to maximize the co-benefits of reduced air pollution and environmental justice[20].

To understand existing greenhouse gas emissions, a 2022 Greenhouse Gas Emission Analysis was completed by the Washington Department of Commerce for Skagit County. The GHG analysis provides a summary of 2022 Communitywide and County government operations emissions for Skagit County, as well as projected future emissions and GHG emission reduction strategies. Skagit County's communitywide and operational emissions were quantified for the 2022 calendar year, representing the most recent year with complete data at the time of this study.

The analysis was completed for both communitywide and County operations emissions. The communitywide emissions inventory quantifies emissions produced by activity from county residents, businesses, schools, and visitors, including from buildings, transportation, land use, and solid waste generation and disposal. Within the communitywide-emissions inventory, "Core emissions" were quantified which include emissions from electricity, natural gas, on-road vehicles, solid waste generation and disposal, and wastewater treatment processes. The County operations emissions inventory reports emissions that are produced by County government activities and facilities, including from County facilities, fleet vehicles, employee commuting, and waste generation and disposal. See the Skagit County 2022 GHG Analysis in the appendix for further details.

[20] RCW 36.70A.070(9) Mandatory Elements

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The 2022 GHG Analysis reported a total of 23.7 $MTCO_2e$ per-capita emissions for "Core emissions" on page 12 of the GHG Analysis report in the appendix. In 2022, Skagit County's "Core emissions" produced an estimated 3,104,398 MTCO2e which made up approximately 51% of Skagit County's 2022 communitywide emissions[21].

The GHG Sub-element focuses on the "Core emissions" as these emissions are produced from sectors most commonly included in community GHG inventories and are within the County's ability to reduce overtime in order to address the State's overall target of net-zero emissions by 2050[22].

Based on 2022 GHG Analysis[23], GHG emissions forecasting and scenario planning estimated emissions from 2022 to 2050 under the following three scenarios:

- Business as-usual (BAU), which assumes no action is taken to reduce GHG emissions
- Adjusted business-as-usual (ABAU), which models estimated emissions reductions from existing federal, sate, and regional policies.
- Additional local action needed to achieve state GHG emission reduction targets.

Through consideration of an ABAU scenario and additional local action, the following actions were found to be most impactful in reducing GHG emissions by 2050. Generally, the actions listed below fall into four categories.

Land Use These actions relate to the establishment land use designations and land use practices that contribute reductions in emissions from soil management, and reduction of tree loss. The policies assisting in implementing these actions are integrated in the Environment and Land Use Elements and are referenced below.

Transportation These actions contribute to the reduction of vehicle miles traveled, percentage of electric vehicles and infrastructure, reduction in fuel emissions. The policies assisting in implementing these actions are integrated in the Land Use, Transportation, and Utilities Elements and are referenced below.

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[21] Skagit County 2022 Greenhouse Gas Emission Analysis, Washington Department of Commerce, 2024
[22] RCW 70A.45.020 (1)(a)(iv) Greenhouse gas emissions reductions – reporting requirements.
[23] Skagit County 2022 Greenhouse Gas Emission Analysis, Washington Department of Commerce, 2024.

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Greenhouse Gas Emissions Reduction Policies

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Solid Waste These actions contribute to the reduction of waste to landfills and reduction of construction and demolition waste diverted. The policies assisting in implementing these actions are integrated in the Utilities Element and are referenced below.

Built Environment These actions relate to the reduction of fossil fuels used for buildings, reduction in energy use, percentage of fossil fuels converted to electric, and percentage of new solar capacity. The policies assisting in implementing these actions are integrated in the Utilities Element and are referenced below

Greenhouse Gas Emissions Reduction Policies

Skagit County has developed goals and policies to help reduce greenhouse gas emissions from transportation and land use, as well as to cut down on how far people need to drive. These strategies are already included throughout different parts of the County's Comprehensive Plan. In this section, they are highlighted again to show how the County is meeting new state requirements for reducing emissions. Skagit County's overall strategy for reducing greenhouse gas emissions focuses on a combination of key approaches. This includes reducing urban sprawl by encouraging growth within already developed areas that have existing facilities and services. The plan also aims to provide more opportunities for alternative or multi-modal transportation, such as walking, biking, and public transit. Additionally, the County seeks to incentivize GHG reductions in new building projects and promote sustainable land management practices that enhance carbon sequestration, such as preserving forests and improving soil health.

Implementation Timeline

It is Skagit County's intent to focus initial GHG reduction actions in the zoning and development sector by increasing residential density in urban areas and increasing job density, where possible, to preserve Skagit County's vital agricultural industries, and assist with climate resilience. These actions are anticipated to be worked on with Cities until the next periodic update in 2035.

Between now and 2035, Skagit County will also focus on the transition of energy resources, where feasible on County facilities. These are discussed in the utilities policies. The County

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intends to explore all methods for GHG reduction in County processes including EV vehicle fleets, recycled construction materials use, energy efficient buildings and energy efficient facilities under the County's jurisdiction.

Between now and 2035 Skagit County will explore what multi-modal transportation options may be feasible on County owned and operated facilities. Skagit County does not own or operate the public transit system so the County GHG reduction actions will be limited to walking and biking. However, the County will closely coordinate with the transit system to ensure consistency with transit opportunities and roadway improvements.

Between now and 2035 the County will continue to promote existing programs that may help with energy efficiency or renewable energy generation. After 2035, Skagit County will start to explore additional opportunities for GHG reductions in the buildings and energy sector.

Skagit County has also identified several other policies that the County will continue to support through coordination and stakeholder engagement, but is not under Skagit County's direct control, like natural land management of forest lands and best management practices for agricultural and forestry activities.

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Integrated GHG Policies

Element	Goal or Policy ID	Measures to Reduce GHG Emissions
Urban, Open Space, Land Use	Policy 2A-1.1 Policy 2A-1.6 Policy 2A-8.7	Increase residential density Increase job density
Natural Resource Lands	Goal 4B-8 Policy 4B-8.1 Policy 4B-8.2 Policy 4B-8.3 Policy 4B-8.4 Policy 4B-8.5 Policy 4B-8.6 Policy 4B-8.7 Policy 4B-8.8	Management practice to improve the health and function of natural and working lands
Environment	Goal 5B Policy 5B-1.5 Policy 5B-1.2 Policy 5B-1.3	Expand urban tree planting
Transportation	Policy 8B-1.8 Policy 8D-1.1 Policy 8G-1.9 Policy 8G-1.14 Policy 8N-1.2 Policy 8O-1.1	Provide pedestrian network Construct bike facilities Expand bikeway network Provide EV charging infrastructure
Utilities	Policy 9A Policy 9A-5.1 Policy 9A-5.2 Policy 9A-5.3 Policy 9A-5.4 Policy 9A-5.5 Policy 9A-5.6 Policy 9A-5.7 Goal 9A-6 Policy 9A-6.1 Policy 9A-6.2 Policy 6A-6.3	Transition to electric for buildings and vehicles Recycle demolished construction materials

13: Implementation and Monitoring: Implementation and Monitoring
Greenhouse Gas Emissions Reduction Policies

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13 Implementation and Monitoring

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Introduction

The purpose of an implementation plan for a Comprehensive Plan is to ensure that the goals, policies, and strategies outlined in the plan are put into action effectively and within the timelines set by the state's Growth Management Act (GMA). The implementation plan serves as a roadmap for how local governments—such as counties, cities, and towns—will guide and manage future growth and development, including land use, housing, infrastructure, transportation, environmental protection, and economic development.

An implementation plan also clearly defines who is responsible for monitoring specific programs, policies, and actions related to carrying out the Comprehensive Plan. This includes identifying the roles and responsibilities of various departments, agencies, and stakeholders, such as planning departments, public works, transportation authorities, housing agencies, and environmental regulators. By assigning accountability to specific entities, the plan ensures that each aspect of implementation is managed and tracked effectively. Regular reporting mechanisms are often established, requiring responsible parties to provide updates on progress, challenges, and outcomes. This structure helps maintain accountability, encourages collaboration across departments, and ensures that the plan's goals remain on track over time.

Implementation Themes

The County's role in the overall regional growth management implementation process involves several major activities, all of which are discussed further in various sections of the Plan:

- City/County coordination: *Within an agreed-upon framework, the County works with the cities and towns to address growth and development in the Urban Growth Areas through the coordination of public infrastructure investment and permitting activities, and the forecasting and monitoring of growth to ensure that adequate land is available for future urban needs.*
- Regional economic development: *The County is a partner with the Skagit Council of Governments and the Economic Development Alliance of Skagit County in maintaining a program for retaining and attracting businesses that generate revenue and jobs.*

- Regional transportation planning: *The County is a partner in the Skagit Council of Governments Regional Transportation Planning Organization and the Metropolitan Planning Organization, charged with planning for public investment in highways and other facilities.*
- Regional housing strategies: *The County is committed to continue to help rural residents with housing affordability. Housing solutions require joint planning with the cities and inter-agency coordination to provide housing programs. The County is a partner with SCOG, North Star, and the cities to continue to support housing for all income bands, especially extremely low-income and disadvantaged communities.*
- Community planning: *The County works with the various rural communities within unincorporated Skagit County to establish planning priorities and timelines for developing more detailed community plans.*
- Data Collection and Monitoring: *Within the limits of available funding and technology Skagit County monitors and collects new data, or acquires existing data to establish meaningful benchmarks and indicators to assist in planning decisions. Public input plays a significant role in this process.*
- Tribal Coordination: *It is important to Skagit County to continue to collaborate with local tribes that may be impacted by adjacent planning initiatives. Skagit County will continue to prioritize continuous involvement with tribes for implementation of the Comprehensive Plan.*

2025 Policy Implementation

For the 2025 periodic update, Skagit County identified a goal to establish an implementation plan that would better track progress on development regulations, policies, and programs intended to implement until the next periodic update or for the next twenty years to accommodate projected growth and housing allocations. This implementation plan is intended to be used by Skagit County staff and elected officials annually to help identify next steps, appropriately allocated funds and resources, and foster transparency with the community and Skagit County's regional partners.

The 2025 implementation goals and reasoning:

- Protecting and preserving agricultural lands and other natural resources.

In keeping with the first comprehensive plan vision and goals established in 1967 and addressing community feedback collected for the 2025 periodic update, policies 3A-1.1, 12A-1.1, 12A-1.2 will help to continue the preservation of farmland and protection of Skagit County's vital natural resources.

- Concentrating and monitoring growth near existing facilities and services.

To support the continued preservation of natural resource lands, policies 2A-8.7, 3A-1.1 are intended to help the County continue to focus growth in appropriate areas and reduce pressure from potential development of natural resource lands. Under 3A-1.1 new housing in rural areas will be closely monitored for potential impacts to existing natural resource lands.

- Providing some new opportunities for affordable housing in LAMIRDs.

To protect current residents from potential displacement in rural areas due to rising housing costs, the County intends to provide some new opportunities for affordable housing types in LAMRIDs. This is intended to be addressed through development regulations and then coordinate with local housing organizations for funding and programming.

- Providing a variety of transportation options.

It is required in the GMA to provide multi-modal transportation including transit, walking, and biking, and reduce vehicle miles travelled. Policies 8B-1.9, 8G-1.5, 8P-1.8, and 12G-1.3 are intended start the slow transition to providing more options for urban and rural residents.

- Encouraging the provision and incentivization of alternative energy sources for transportation and buildings.

It is required and expected by the State that Skagit County will reduce greenhouse gas emissions by 2050. Policies 9A-5.3, 9A-5.7, and 12G-1.3 are intended to start the process of reducing GHG emissions through allowances in development regulations, incentives, and funding.

The following policies have been highlighted as critical to implement over the next ten years to help achieve Skagit County's goals.

Element Key	Timing Definitions	Priority	Lead/Partners

LU = Urban, Open Space, Land Use

RU = Rural

NRL = Natural Resource Lands

E = Environment

H = Housing

T = Transportation

U = Utilities

CF = Capital Facilities

ED = Economic Development

CR = Climate and Resiliency

Ongoing = Task will be completed monthly, annually, or other.

Year – Anticipated date to complete the policy.

The priority is based on state requirements, feedback collected from the community, and County feedback.

Priority Levels:

High

Med = Medium

Low

The County may coordinate with these groups to achieve the final outcome of the goal or policy.

Partner Acronyms

PDS = Planning and Development services

PW = Public Works

PH = Public Health

SCOG = Skagit Council of Governments

EDASC = Economic Development Alliance of Skagit County

Policy	Element	Related Element(s)	Lead, Partners	Timing	Priority
Policy 2A-8.7 Collaborate with the Skagit Council of Governments to investigate the feasibility of revising Countywide Planning Policy 1.2 by reducing target growth allocations in rural areas.	LU	H, CR, CF	**PDS,** SCOG	2035	High

Policy	Element	Related Element(s)	Lead, Partners	Timing	Priority
Policy 3A-1.1 Monitor rural growth in relation to the target established in Countywide Planning Policy 1.2 that 80 percent of new growth should locate in urban areas. Analyze development trends to determine if changes in land use designations are necessary or additional regulatory techniques or measures are needed to assure compliance with targeted urban/rural population distribution goals.	LU, RU	H	**PDS,** SCOG	2045	High
Policy 3B-1.7 Expand the type of housing units allowed in LAMIRDs where public facilities and services provide sufficient capacity, to include middle housing types such as townhouses, triplexes, and fourplexes and manufactured and tiny homes.	LU, RU	H, CR	**PDS,** PH	2045	High
Policy 8B-1.9 Develop and adopt a Skagit County Complete Streets ordinance to ensure that context-sensitive multimodal transportation improvements can be made and, where possible, funded by grants.	T	LU, CR	**PW**	2045	High
Policy 5A-5.1(b)(vi) Develop a centralized data collection, storage, retrieval, and analysis system for ground water data on Guemes Island.	E	CF	**PDS, PH**	2030	Med

Policy	Element	Related Element(s)	Lead, Partners	Timing	Priority
Policy 8G-1.5 Connect neighborhoods and communities with each other and with other important destinations including schools, employment and commercial centers, medical and social service centers, other transportation facilities and modes, scenic and recreational areas, and the active transportation facilities and systems of cities and towns within Skagit County and of adjoining areas.	T	CR	PW	2045	High
Policy 8P-1.8 Promote modal interconnectivity that best serves the users by identifying missing links and connections, and working with partner agencies to provide missing links.	T	CR	PW	2045	High
Policy 9A-5.3 The County shall support the prioritization of the use of renewable, low-carbon energy resources, net-zero greenhouse gas emission features in the design, construction, and retrofit of new and existing developments (i.e., residential and commercial structures), such as through programs like C-PACER that provide accessible financing for clean energy projects and Home Repair and Weatherization Programs	U	CR	PDS	2035	Med
Policy 9A-5.7 The county shall work with builders and developers to integrate renewable and energy efficiency resources into building and site design, such as through incentive programs, green building certification programs, and C-PACER financing programs.	U	CR	PDS	2045	Med

Policy	Element	Related Element(s)	Lead, Partners	Timing	Priority
Policy 12A-1.1 Continue to support and secure funding to protect agricultural land from conversion to other uses through the Conservation Futures taxing mechanism, federal and state grants, and private funding sources.	CR	NRL	**PDS**	2035	High
Policy 12A-1.2 Support WSU Skagit County extension program in providing educational opportunities and financial incentives for farmers and landowners to adopt regenerative agricultural practices that enhance soil health and resilience.	CR	NRL	**PDS**	2035	Med
Policy 12G-1.3 Encourage and support the transition to EVs through expansion of reliable EV charging infrastructure throughout Skagit County, prioritizing high-traffic areas with little existing infrastructure. Provide education on options and available rebates and incentives.	CR	LU	**PDS**	2030	Med

Monitoring Plan Effectiveness

The effectiveness or success of the Comprehensive Plan is measured or monitored in several ways, including through the collection and evaluation of land use development trends and policies. Certain data, such as population, age, family size, cost and number of housing units, school enrollments, building permits, and others, contribute to an understanding of how these factors relate to public policies and programs.

Regular collection, evaluation, and reporting of data assists County policy- and decision-makers, and the public, in identifying whether the Plan's policies are furthering their intended goals, and whether programs and public services are meeting the public's needs. When measured over time

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such data can become “indicators” that may signal changing trends, or reveal successes or needed adjustments in comprehensive plan policies.

The County is committed to working collaboratively with cities and towns to collect, monitor and evaluate meaningful and mutually beneficial data, particularly in the sizing and density of UGAs. The County is also committed to continued cooperation with other jurisdictions in data sharing, and maintaining a current database of growth management information.

The monitoring of the implementation of Comprehensive Plans in Skagit County is conducted under the Skagit Growth Monitoring Program. This program, established after the 2002 Framework Agreement between Skagit County and its cities and towns, is now administered by the Skagit Council of Governments (SCOG). SCOG supports planning coordination efforts, including monitoring population, employment, and housing growth trends across the county’s urban growth areas (UGAs) and unincorporated rural areas.

The Framework Agreement established a foundation for developing countywide planning policies (CPPs), including CPP 1, which was amended in 2016 to allocate projected growth to different areas within Skagit County. This amendment continues the policy of directing 80% of forecast population growth to UGAs, with 20% allocated to rural areas. The Growth Management Act Steering Committee (GMASC), composed of elected officials from local jurisdictions, recommended these allocations, with input from a technical advisory committee of planners.

The long-term monitoring process, outlined in CPP 1, involves maintaining a regional geographic information systems (GIS) database to track undeveloped, buildable urban land. The program also mandates annual reports to evaluate population, employment, and housing growth trends. SCOG prepared the program's initial methodology in 2017 and issued the first baseline report that year. The methodology has since evolved to improve data usability for planning purposes.

To date, eight annual reports have been completed, with the ninth report due in 2025. Each report builds on previous findings, providing a cumulative analysis of growth patterns. SCOG posts these reports on its website after adoption, ensuring that local governments have access to consistent and reliable data for planning and development purposes.

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Periodic Review of the Comprehensive Plan

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Periodic Review of the Comprehensive Plan

Amendments to the Comprehensive Plan must retain the broad perspectives articulated by the community, and remain consistent with the intent of the Growth Management Act. Over time, changes in law, population and growth trends, economic conditions, and public perspectives and opinions may change. Periodic review of the Comprehensive Plan ensures, to the extent possible, that the Plan reflects and acts upon these changing circumstances.

The Comprehensive Plan is reviewed and amended periodically, according to several review cycles:

- *Periodic Urban Growth Area Review: On a periodic basis established by the Growth Management Act, the County and cities and towns are to review designated UGA boundaries, densities, and patterns of urban growth, and revise the boundaries and permitted densities as needed to accommodate the urban growth projected in Skagit County for the succeeding 20 years.*
- *Periodic Update: On a periodic basis established by the Growth Management Act, the Comprehensive Plan, the land-use/zoning map, and implementing development regulations are to be reviewed, and if needed, revised to ensure they comply with the Growth Management Act. This review incorporates new data, changes in law, or changes in local circumstances that come to light through early and continuous public participation.*
- *Annual Amendments: Incremental changes to the Comprehensive Plan may be necessary to address unforeseen circumstances, or to re-balance land-use designation criteria for a particular parcel or area of land. The Comprehensive Plan may only be amended once annually, except for exceptions allowed by the Growth Management Act.*

Comprehensive Plan Amendment Process

General Requirements

Amendments to the Comprehensive Plan must be supported by findings from monitoring of growth management and economic indicators, changes in law, omissions or errors, or declared

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emergency. Comprehensive Plan amendments may be initiated by the County or by other entities, organizations, or individuals according to the process and procedures specified in Skagit County Code.

The docketing cycle for these amendments is initiated by an official notice that specifies the requirements for public participation; submittal requirements; procedures for determining the docket of amendment proposals to be reviewed in a given amendment cycle; and the steps that will be taken to reach the final amendment decision.

Comprehensive Plan amendments will be considered no more frequently than once per year, except for the exceptions allowed by RCW 36.70A.130. The County may consider adopting amendments more frequently than once per year if a declared emergency exists. An emergency amendment may only be adopted if the Board of County Commissioners finds that the amendment is necessary to address an immediate situation of federal, state, countywide, or local concern, as opposed to a personal emergency on the part of the applicant or property owner, and if the situation cannot adequately be addressed by waiting until the annual comprehensive plan amendment process.

The boundaries separating the Urban Growth Area, Rural and Natural Resource Lands designations are intended to be long-term and unchanging. Amendments or changes to natural resource lands and critical area designations should be based on changes in law or local circumstances, errors in designation, or new information on natural resource lands or critical areas.

Periodic Urban Growth Area Review

Urban Growth Areas (UGAs) include incorporated cities and towns, combined with whatever surrounding unincorporated area is necessary to accommodate urban growth projected to occur over 20 years. Skagit County and its cities and towns must periodically assess the respective Urban Growth Area boundaries and densities, and revise their comprehensive plans and development regulations as necessary to accommodate the urban growth projected to occur in Skagit County for the succeeding 20-year period.

Skagit County and the cities and towns periodically review and update a 20-year population and employment forecast. Timing of this update may be adjusted as necessary to best utilize U.S.

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Census and Washington State Office of Financial Management data, and for the convenience and benefit of other update cycles requiring such data.

Procedures, timelines, and fees for requesting an amendment to an Urban Growth Area are specified in Skagit County Code. Generally, Skagit County requires that:

- *Proposals to amend an Urban Growth Area boundary may generally only be accepted every periodic update cycle. More frequent amendments to Urban Growth Areas may be requested by a city or town based on a list of exceptions in Skagit County Code.*
- *Urban Growth Area boundary amendments are due by the same deadline as all other annual Comprehensive Plan amendments, and may only be submitted by the jurisdiction (county, city, town or tribe) whose UGA is proposed to be modified.*
- *Applicants for Urban Growth Area boundary changes must demonstrate compliance and consistency with the Land Use Element requirements for designating Urban Growth Areas.*

Periodic GMA Update

The update of the Comprehensive Plan, map and development regulations is made official through legislative action of the Board of County Commissioners. However, the planning process leading up to the Board's action is ongoing – the next cycle beginning shortly after the last one ends.

Comprehensive Plan policies guide the establishment of more detailed facility plans, regulations, and programs, which may require updates and review according to timelines that may not always coincide with the GMA-required periodic update. Between each periodic update, new laws and policies, legal decisions, implementation measures, data and other information may raise the need to amend or update certain portions of the Comprehensive Plan, the land-use/zoning map, development regulations, or supporting plans and studies to maintain consistency and relevance.

Amendments that occur between the periodic updates, in effect, keep the Comprehensive Plan and development regulations continuously up to date. At the end of the periodic update cycle, these various amendments are reviewed and incorporated into the official action by the Board of County Commissioners to affirm that the Plan and regulations are updated. Any actions that may be further necessary, but cannot be completed by the end of the periodic update cycle, are identified in a work program for subsequent years.

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Comprehensive Plan Amendment Process

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The final year of a GMA-required periodic update cycle may be combined with the coinciding regular annual amendment cycle to ensure cumulative review, consistency and convenience. Flexible submittal requirements, suspension of application fees and other measures may be used during this periodic update year to encourage broad public participation. Such flexible requirements may not supersede State Environmental Policy Act (SEPA), Planning Commission and Board of County Commissioner public notification and other procedural requirements and deadlines. Depending on staffing and budget constraints, Skagit County may choose to not initiate other major planning projects or programs during this final year of the update cycle.

Annual Comprehensive Plan Amendments

The Comprehensive Plan may be amended once annually (with exceptions as allowed by law) to ensure consistency with development regulations and supporting plans, such as community, facility and other functional plans. Amendments may also be necessary to address changes in local circumstances, and to rebalance existing land-use designation criteria for a specific parcel or group of parcels in light of new information.

General Amendment Process Requirements

- Fees. *The petitioner shall pay the application fees specified in an adopted fee schedule, unless waived by the Board of County Commissioners during a periodic update.*
- Petition. *The petitioner shall submit a written application, on forms provided by the County, containing appropriate amendatory language and, if applicable, a map showing the proposed change. The petitioner shall also address how the proposal is consistent with Comprehensive Plan policies or land-use designation criteria.*
- Timing. *Petitions shall be submitted by the date specified in the docketing announcement. Petitions received after the deadline will be processed with proposed amendments in the following year.*
- Docketing for Further Consideration. *According to procedures and timelines specified in Skagit County Code, the Department will evaluate each complete application to determine whether the proposal, if included in the annual docket for further consideration, would:*
  - adversely affect the County's budget;

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- require additional amendments to policies or regulations;
- be more appropriately addressed as part of a separate work program;
- or not be approvable due to some legal or procedural flaw in the proposal.

- *Following the Department's recommendation on these considerations, the Board of County Commissioners will conduct a public meeting or hearing to consider whether or not to include each proposal in the year's docket of proposed amendments. A decision by the Board to include or exclude an amendment from the annual docket is final, procedural only, and does not constitute a decision by the Board as to whether the amendment will ultimately be approved. Applicants whose proposals were not included in the docket are free to resubmit the same or modified proposal in a future year's amendment cycle.*
- Environmental Review. *If the Board approves for the docket the amendment proposal, the petitioner shall submit an environmental checklist, and fees as specified in an adopted fee schedule, within a time specified in Skagit County Code. After receipt of the environmental checklist, fees, and supporting documentation the County will issue an environmental threshold determination on the proposed amendment(s). If the threshold determination finds that there may be significant adverse environmental impacts, a Draft Environmental Impact Statement may be required.*
- Process. *Amendment docketing, processing, public and agency review and participation, notification, public hearings, and final actions shall be as specified in Skagit County Code, an in accordance with other local and state laws, and this Comprehensive Plan.*

Community Plans

Relationship to the Comprehensive Plan

The Comprehensive Plan envisions a hands-on approach to how the Plan and its development regulations will be applied at the community scale. Community plans exemplify how the community vision statements, goals, objectives and policies of this Comprehensive Plan are applied to detailed and specific conditions. Community plans may indicate specific land use designations, appropriate densities, and the design standards that should apply in community

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planning areas. Preserving and building community character while ensuring an efficient and predictable development approval process is a central theme.

Subarea or community planning may be considered under the provisions of the Growth Management Act provided the community plan is consistent with the comprehensive plan (RCW 36.70A.080). During the development of the countywide comprehensive plan, many rural communities and residents expressed an interest in developing their own community plans. Policies within this element relate to administrative processes: initiation and development of community plans, and the relationship between each community development plan and the Comprehensive Plan.

Development of this element was guided in particular by the following GMA Planning Goal: “Encourage the involvement of citizens in the planning process and ensure coordination between communities and jurisdictions to reconcile conflicts.”

Function of Community Plans

The community planning process seeks to enhance community values and assure sensible growth and development. Community plans result from partnerships uniting the County, other jurisdictions, and citizens of a planning area. A community plan puts into action the general policies of the Comprehensive Plan at a much finer scale and level of detail. Community plans may address issues at the local level that are not covered in a general comprehensive plan. Patterns of land use, design, traffic circulation, and services expressed within the community plan are a function of local economic, social, physical health, safety and welfare issues of the people who live and work within the community planning area. Community plans also consider compatibility and consistency with surrounding land uses and jurisdictions. Community plans focus on enhancing individual communities in a manner that benefits the entire county. Citizens decide what they want to nurture and what they want to change at a level that they are knowledgeable about and comfortable relating to.

The Comprehensive Plan serves as an "umbrella" document and provides a foundation upon which community plans are developed. Community plans may vary considerably depending upon local issues, problems, and opportunities. They will generally include mapping, policy, and capital facilities amendments to the Comprehensive Plan.

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Consistency Between the Comprehensive Plan and Community Plans

Community plans must be consistent with the Comprehensive Plan, Growth Management Act, and other federal and state laws. They may explore areas where flexibility exists in the application of Comprehensive Plan policies to a given community, or where the Comprehensive Plan is silent on an issue. Ensuring consistency requires analyzing proposed community plans against each policy of the Comprehensive Plan. If a proposed community plan or policy conflicts with the Comprehensive Plan, the proposed plan or policy is inconsistent. Modifications would need to be made to any such community plan, or to the Comprehensive Plan, through the amendment process described earlier in this element.

Completed Community Plans

Alger. The Alger Community Plan was developed with the assistance of a Citizen Advisory Committee and extensive public outreach and was adopted in December 2008. Some of the plan recommendations are to:

- *Maintain the rural character of the area with modest additions to the Rural Freeway Service and Rural Intermediate land use designations;*
- *Maintain and enhance the open space areas;*
- *Minimize the impact of large-scale special uses;*
- *Increase opportunities for small-scale businesses in the Alger Rural Village.*

Bayview Ridge. The Bayview Ridge Subarea Plan, originally adopted in 2006, was most recently updated in November 2014. The 3,586-acre non-municipal Urban Growth Area is located approximately one mile west of the City of Burlington. The 2014 update to the plan, development regulations and land use designations expanded the area within the UGA available for industrial development; rezoned or removed land previously intended for new urban residential development; and adopted measures to ensure compatibility with continued development of the Skagit Regional Airport.

Guemes Island. The Guemes Island Subarea Plan, adopted in January 2011, contains recommendations to protect the sole-source aquifer, shoreline environs, open space and natural

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resource lands, and transportation, among other topics. Some of those recommendations are proposed for implementation through code as part of the 2016 periodic update to the comprehensive plan and development regulations.

Town of Hamilton. In 2008, Skagit County approved the Town of Hamilton Subarea Plan and an expansion of its Urban Growth, both important steps in the town's efforts to relocate itself out of the Skagit River floodway. The Hamilton UGA expansion provided the town with 48 acres outside of the floodway for the relocation of its old town commercial center and residential areas; added 59 acres owned by Janicki Industries for construction of a high-tech manufacturing facility; and designated 157 acres to the northeast of the new UGA as "Hamilton Urban Reserve," indicating the town's long-term plans to expand into that area.

Goals and Policies

Plan Implementation

Goal 13A Create opportunities for citizens to participate in developing community plans at a local level that protect and conserve community character while ensuring consistency and compatibility with the comprehensive plan.

policy 13A-1.1 There are two fundamental steps in community planning: plan development and plan adoption.

(a) The development of a community plan may be initiated by the County, by community groups in collaboration with the County, or by community groups or other entities working largely or entirely with their own resources. Groups that may initiate a community planning processes should consult with the County on timing, priorities, Comprehensive Plan policies and procedures, and other factors that may affect the development, consideration, and adoption of the proposed community plan.

(i) Skagit County is not obligated to provide financial support, staff support, or technical assistance to a community planning effort if

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the Board of County Commissioners has not determined it to be a priority per policy 12A-1.2 below.

(b) Adoption of a community plan proposal shall follow the legislative procedures described earlier in this element. A community group that has initiated and completed a community plan per this policy may submit the plan to the County for consideration through the annual Comprehensive Plan amendment process.

policy 13A-1.2 The County may initiate a community plan; provide assistance and guidance in the community planning process; or advance a community plan proposal through the legislative process, according to an annual determination of priorities by the Board of County Commissioners. In establishing priorities the Board may consider numerous factors, including:

(a) legislative mandates;

(b) threats to public health and safety;

(c) major environmental or economic threats or opportunities;

(d) major development proposals;

(e) community initiatives;

(f) availability of staff and financial resources; and

(g) the need to update an adopted community plan.

Goal 13A-2 Provide for early and ongoing citizen involvement in the development of community plans.

policy 13A-2.1 Establish citizen advisory committees (CACs), consistent with the County's public participation program, to make recommendations on land use designations, development and design standards, transportation improvements, capital facility improvements, densities, and other land use matters within the community

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planning area which are consistent with the policies of this Comprehensive Plan and development regulations.

policy 13A-2.2 Design and conduct public outreach and communication procedures to inform citizens interested in community plans of proposed policy decisions and land use matters that would affect the community plan or planning area.

Goal 13A-3 Use community plans to protect and conserve community character while maintaining consistency with the Comprehensive Plan.

policy 13A-3.1 Community plans may identify design characteristics and design standards that, if adopted, will be used to review development and construction projects within the jurisdiction of the adopted community plan.

policy 13A-3.2 Common elements of a community planning process and the resulting plan include the following:

(a) Preparation of a community vision statement;

(b) Assessment of current adopted County Comprehensive Plan goals, policies and strategies and development code provisions as they apply to the subarea;

(c) Inventory, analysis, and mapping of current land uses, characteristics of the physical environment, and availability of utilities;

(d) Assessment of current community strengths, weaknesses, opportunities, and threats including special studies such as market- and traffic analyses;

(e) Development and evaluation of area-specific recommendations for problem solutions; and

(f) Continuous public outreach and communication throughout the process tailored to the size, demographics, and interests of the community.

policy 13A-3.3 Community plans should develop a range of alternatives that are consistent with the Comprehensive Plan while protecting community property values; economic

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vitality; affordable housing; the natural and built environment; natural resource lands; historic buildings, districts, and sites; and, character of the community.

policy 13A-3.4 Community plans should include findings of fact to accompany the adoption of the plan that either:

(a) demonstrate that community vision statements, goals and policies, and land use designations are consistent with this comprehensive plan, or

(b) identify inconsistencies between the Comprehensive Plan and the community plan which must be resolved by amending the Comprehensive Plan.

Goal 13A-4 Implement and maintain an ongoing program of community planning to address the specific issues and concerns of Skagit County communities.

policy 13A-4.1 The adopted Alger, Bayview Ridge, Guemes Island, and Hamilton Subarea Plans, which are part of this Comprehensive Plan, will help to guide growth and development within those subareas.

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Appendix A Acronyms and Definitions

Acronyms

ADT	average daily traffic
BMP	best management practice
CAC	Citizen Advisory Committee
CAO	Critical Areas Ordinance
CEDS	Comprehensive Economic Development Strategy
CFP	Capital Facilities Plan
CIP	capital improvement program
CaRD	Conservation and Reserve Development
CCR	Conditions, Covenants, and/or Restrictions
CPP	Countywide Planning Policies
CWSP	Coordinated Water System Plan
DEIS	Draft Environmental Impact Statement (see also FEIS, DEIS, SEIS, DSEIS)
DNR	Department of Natural Resources (State of Washington)
DOE	Department of Ecology (State of Washington)
DSEIS	Draft Supplemental Environmental Impact Statement (see also FEIS, DEIS, SEIS, DSEIS)
EDASC	Economic Development Alliance of Skagit County
EIS	Environmental Impact Statement (see also FEIS, DEIS, SEIS, DSEIS)
ELF	extremely low frequency
EMF	electric and magnetic fields or electromagnetic field
FEIS	Final Environmental Impact Statement (see also FEIS, DEIS, SEIS, DSEIS)
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FGTS	freight goods transportation system

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FPA	forest practice application
GMA	Growth Management Act
HCA	habitat conservation area
IVM	integrated vegetation management
JOA	joint operating agreement
LID	local improvement district
LOS	level of service
MOU	memorandum of understanding
MPO	Metropolitan Planning Organization
MPR	Master Planned Resort
MRO	Mineral Resource Overlay
NRL	Natural Resource Land
NWCAA	Northwest Clean Air Agency
OFM	Office of Financial Management (State of Washington)
OHWM	ordinary high water mark
PCA	Protected Critical Area
PDR	purchase of development rights
PFLG	private forest land grade
PUD, Skagit	Skagit Public Utility District
PUD	planned unit development
RCW	Revised Code of Washington
RTPO	Regional Transportation Planning Organization
SCC	Skagit County Code
SCOG	Skagit Council of Governments
SEIS	Supplemental Environmental Impact Statement (see also FEIS, DEIS, SEIS, DSEIS)
SEPA	State Environmental Policy Act
SRS	scientific resource site
TDM	transportation demand management

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TDR	transfer of development rights
TIP	transportation improvement program
UGA	Urban Growth Area
USDA	United States Department of Agriculture
WAC	Washington Administrative Code
WSDOT	Washington State Department of Transportation
WUTC	Washington Utilities and Transportation Commission

Definitions

Accessory
As applied to a use, building or structure, means customarily subordinate or incidental to, and located on the same lot with a principal use, building, or structure.

Act
the Growth Management Act.

Adequate Public Facilities
Facilities that have the capacity to serve development without decreasing levels of service below locally established minimums.

Affordable Housing
Housing where the occupant is paying no more than 30 percent of gross income for gross housing costs, including utility costs. In the case of ownership housing, the purchase costs of a housing unit is equal to or less than three times a household's annual gross income.

Agriculture
The use of land for commercial production of horticultural, viticultural, floricultural, dairy, apiary, vegetable, or animal products or of berries, grain, hay, straw, turf, seed, Christmas trees (not subject to the state excise tax on timber harvest), or livestock.

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Agricultural Advisory Board
A formally established board that reviews and monitors agricultural policies and programs, and advises the Skagit County Board of Commissioners, the Planning Commission, and the Planning and Development Services Department on issues regarding agriculture lands in Skagit County.

Agricultural Land
Land primarily devoted to the commercial production of horticultural, viticultural, floricultural, dairy, apiary, vegetable, or animal products or of berries, grain, hay, straw, turf, seed, Christmas trees not subject to the state excise tax on timber harvest, or livestock and that has long-term commercial significance for agricultural production.

Agricultural Support Services
Any non-agricultural use which is directly related to agriculture and directly dependent upon agriculture for its existence. These support services generally exist off-site and within districts that are intended to facilitate the production, marketing and distribution of agricultural products. Agricultural support services are separate and distinct from Farm-based businesses (see Farm-Based Business).

All Weather Road System
Roadway not normally subject to Winter Weight Restrictions.

Americans with Disabilities Act of 1990 (ADA)
Ensures access for the disabled for publicly used facilities, employment, public transportation and public communication.

Annual Program
This is similar to the six year program, except it covers only the projects that will be constructed within the next year (see Six Year Transportation Program).

Aquatic Resource Areas
An area providing assets and functions that is of or related to water.

Aquifers
Any geologic formation that will yield water to a well or other withdrawal works in sufficient quantity for beneficial use.

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Aquifer Recharge Areas
areas where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the potability of the water.

Arterial roadways
A class of roadway serving major movements of traffic not served by freeways. Arterial roadways are functionally classed depending on the degree to which they serve through traffic movements versus access to land.

Available Public Facilities
means that facilities or services are in place or that a financial commitment is in place to provide the facilities or services within a specified time. In the case of transportation, the specified time is six years from the time of development.

Average Daily Traffic (ADT)/Annualized Average Daily Traffic (AADT)
Average Daily Traffic (ADT) is the average amount of traffic (average number of vehicles) crossing one location of a roadway within a 24 hour period. Annualized Average Daily Traffic (AADT) is a yearly average.

Benchmarks
A strategic planning tool to measure policy outcomes across time and space.

Best Management Practices (BMP)
Practices or structures designed to reduce the quantities of pollutants - such as sediment, nitrogen, phosphorus, and animal wastes - that are washed by rain and snow melt into nearby surface waters, such as lakes, creeks, streams, rivers, and estuaries.

Buffer
An area contiguous with a critical area, natural resource land, or urban growth area that is required for the integrity, maintenance, function, and stability of the area or land.

Business Park
A development providing for a mix of light industrial distribution and related commercial retail, office and service uses.

Calibration
The procedure used to adjust travel models to simulate base year travel.

Capacity
The maximum number of vehicles that can pass over a given section of a lane or roadway in one direction (or in both direction for a two- or three-lane facility) during a given time period under prevailing roadway and traffic conditions. It is the maximum rate of flow that has a reasonable expectation of occurring.

Capital cost
Costs of building, improving, or acquiring long term assets or infrastructure such as purchase of land, construction of roadways, and acquisition of buildings. Distinguished from operating costs.

Capital facilities
As a general definition, public structures, improvements, pieces of equipment or other major assets, including land, that have a useful life of at least 10 years. Capital facilities are provided by and for public purposes and services. For the purposes of the capital facilities element, capital facilities are surface water management, solid waste disposal, law and justice, general government, parks and recreation, airport, transportation, education, fire protection, sanitary sewer and public water supply systems.

Capital Improvement Program (CIP)
A plan that matches the costs of capital improvements to anticipated revenue and a time line. CIPs are usually prepared for six or more years, updated annually, and coordinated with the comprehensive planning process.

City
Generally refers to any city or town within Skagit County.

Coastal High Hazard Area
The area subject to high velocity and/or volume of waters, including but not limited to storm surge or tsunamis. The area is designated on a Flood Insurance Rate Map as Zone V1-30.

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Collector System
In Rural Areas Principal Arterials, Minor Arterial Roads, Collector Roads, Local Roads. In Urbanized Areas Principal Arterials, Minor Arterial Streets, Collector Streets, and Local Streets. In Small Urban Areas Principal Arterials, Minor Arterial Streets, Collector Streets, and Local Streets.

Commuter Rail
Rail service targeted for daily commuters traveling under 40 miles. The service tends to be frequent, at least every half-hour during rush periods, and stops are often spaced from 5 to 10 miles apart.

Compatible
Capable of existing together without discord or in a state of mutual tolerance.

Comprehensive Land Use Plan, Comprehensive Plan, or Plan
The policies and proposals approved and recommended by the planning agency or initiated by the Board of County Commissioners (the Board) and approved by motion of the Board (a) as a beginning step in planning for the physical development of the county; (b) as the means for coordinating county programs and services; (c) as a source of reference to aid in developing, correlating and coordinating official regulations and controls, and; (d) as a means for promoting the general welfare. Such plan shall consist of the required elements set forth in RCW 36.70A.070 and may also include the optional elements set forth in RCW 36.70A.080 which shall serve as a policy guide for the subsequent public and private development and official controls so as to present all proposed developments in a balanced and orderly relationship to existing physical features and governmental functions.

Comprehensive Plan Amendment
An amendment or change to the text or maps of the Comprehensive Plan.

Concurrency
means that adequate public facilities are available when the impacts of development occur. This definition includes the two concepts of "adequate public facilities" and of "available public facilities" as defined above.

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Concurrency Management System
An financial and accounting system that keeps track of cumulative impacts of developments, impact fees, level of service on impacted roads, and timing for road improvements in order to ensure that the concurrency requirements of GMA are met.

Conservation and Reserve Development (CaRD)
A technique of land division characterized by the placement of dwellings and accessory buildings in a pattern of development which reduces impervious surface area, lowers costs of development and maintenance and retains larger expanses of property available for agriculture, forestry, or continuity of ecological functions characteristic of the property to be developed.

Contiguous development
Development of areas immediately adjacent to one another.

Coordination
Consultation and cooperation among jurisdictions.

Countywide planning Policies
Written policy statements used solely for establishing a countywide framework from which county and city comprehensive plans are developed and adopted. (RCW 36.70.210)

Covenants
Private restrictions placed on land regulating land use activities.

Critical Areas
Areas of environmental sensitivity, which include the following areas and ecosystems (a) wetlands; (b) areas with a critical recharging effect on aquifers used for potable water; (c) fish and wildlife habitat conservation areas; (d) frequently flooded areas; and (e) geologically hazardous areas.

Critical Facilities
Schools, hospitals, police, fire, emergency response installations, nursing homes, and installations which produce, use or store hazardous materials or hazardous waste.

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Current Use Open Space Taxation

Current Use Open Space Taxation Program includes properties utilized for agriculture, timber and open space uses as provided in RCW 84.34.

Demand Management Strategies or Transportation Demand Management Strategies (TDM)

Strategies aimed at changing travel behavior rather than at expanding the transportation network to meet travel demand. Such strategies can include the promotion of work hour changes, ride-sharing options, parking policies, telecommuting.

Density

The ratio between the number of families, individuals, housing units, or residential dwelling units per land surface area (usually acreage). Gross density means the total number of dwelling units divided by the total land area of the site or area, excluding nothing. Net density means the total number of dwelling units divided by the net area of the lot or site. The net area excludes roads, public open spaces, community facilities, and critical areas.

Density Bonuses

Where a proposed development is designed and constructed at a level of quality in excess of the minimum, additional development rights may be allowed in locations where added density can be accomplished while still providing appropriate protection to neighboring properties and the general public.

Development

Any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operations. Any action requiring a land use permit or approval regulated by Titles 14 and 15, SCC, including, but not limited to, subdivisions, binding site plans, site specific rezones, unclassified special use permits, variances, building permits, shoreline permits, or flood area development permits.

Development Code

Skagit County Code (SCC) Titles 14 and 15.

Development Regulation(s)

The controls placed on development or land use activities by a county or city, including, but not limited to, zoning ordinances, critical area ordinances, shoreline master programs, official controls, planned unit development ordinances, subdivision ordinances, and binding site plan ordinances together with any amendments thereto. A development regulation does not included a decision to approve a project permit application, as defined in RCW 36.70B.020, even though the decision may be expressed in a resolution or ordinance of the legislative body of the county or city.

Ecological Functions

Those uses of land that are part of a larger related natural system. These functions include, but are not limited to, storm water detention; floodway/floodplain; drainway; sediment collection area; aquifer recharge area; fish and wildlife habitat conservation area; wind break; noise, sight, or dust barrier; shade; erosion control; waste disposal; and, maintenance of slope stability.

Erosion Hazard Areas

Those areas containing soils which, according to the United States Department of Agriculture Soil conservation Service soil Classification System, may experience severe to very severe erosion.

Essential public facilities

Facilities that are typically difficult to site, such as airports, state education facilities, and state or regional transportation facilities, state and local correctional facilities, solid waste handling facilities, and in-patient facilities including substance abuse facilities, mental health facilities and group homes. (RCW 36.70A.200)

Extremely Low Income

Households whose income is less than 35% of the median income for the area, as determined by the Department of Housing and Urban Development (HUD).

Facilities

The physical structure or structures in which a service is provided.

Farm-Based Business

An on-farm commercial enterprise devoted to the direct marketing of unprocessed and/or value-added and soil-dependent agricultural products that are produced, processed, and sold on-site.

Farm-based businesses are intended to supplement farm income, improve the efficiency of farming, and provide employment to farm family members. Farm-based businesses are separate and distinct from Agricultural support services (see Agriculture Support Services).

Farm-Worker Housing

Permanent housing for seasonal and year around farm workers and their families.

Freight and Goods Transportation System (FGTS)

A system of streets, roads, and highways formally designated by the State as current truck routes.

Fish and Wildlife Habitat Conservation Areas

Fish and Wildlife Habitat Conservation Areas and their networks shall be classified as follows:

Areas with which endangered, threatened, and sensitive species have a primary association;

Habitats and species of local importance that have been designated by the County at the time of application;

All public and private tidelands suitable for shellfish harvest;

Kelp and eelgrass beds, herring and smelt spawning areas;

Naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish or wildlife habitat;

Waters of the state as defined by WAC 222-16;

Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity;

Areas with which anadromous fish species have a primary association;

State Natural Area Preserves and Natural Resource Conservation Areas; and

Other aquatic resource areas.

Fixed-route service

Transportation service operated over a set route on a regular schedule.

Forest Resource Land

Forest Resource Lands are those lands that due to soils, climate, topography, parcel size, and location have long-term commercial significance for forestry.

Frequently Flooded Areas

Lands in the floodplain subject to a one- percent or greater chance of flooding in any given year. These areas include, but are not limited to, streams, rivers, lakes, coastal areas, wetlands, and the like.

Functional Classification

Functional Classification is the grouping of highways, roads, and streets that serve similar functions into distinct systems or classes. Functional Classification defines the primary role a road or street serves within the total existing or future highway network (see Collector System above).

Geologically Hazardous Areas

Areas that, because of their susceptibility to erosion, sliding, earthquake, or other geological events, are not suited to the siting of commercial, residential, or industrial development consistent with public health or safety concerns.

Goal

A goal is a direction setter. It is an ideal future end, condition, or state related to the public health, safety, or general welfare toward which planning and implementation measures are directed. A goal is a general expression of community values and, therefore, is abstract in nature. Consequently, a goal is generally not quantifiable, time-dependent, or suggestive of specific actions for its achievement.

Gross Density

Gross density means the total number of dwelling units divided by the total land area of the site or area, excluding nothing.

Growth Management Act (GMA)

The Growth Management Act as codified in RCW Chapter 36.70A.

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Habitats of Local Importance

These include a seasonal range or habitat element with which a given species has a primary association, and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long-term. These might include areas of high relative density or species richness, breeding habitat, winter range, and movement corridors. These might also include habitats that are of limited availability or high vulnerability to alteration, such as cliffs, talus, and wetlands.

Highway Heritage

An expansion of the scenic highways concept to include highways with scenic, cultural, historic, archeological and/ or other environmental resources.

Highway-Oriented Commercial Uses

Food service, fuel and repair service for motorists, transient lodging.

Home Based Business

Home based businesses are home occupations that remain incidental to the use of a residence for general dwelling purposes and are compatible with rural character. Different categories of home based businesses may be regulated.

Impact Fees

Standard fees for development impacts on governmental facilities. Impact fees are often levied per housing unit and usually include transportation impacts.

Implementation measure

Regulatory and non-regulatory measures used to carry out the plan.

Infrastructure

Facilities and services needed to sustain land use activities. Infrastructure includes water, sewer, roads, parks, schools and other such public facilities.

Joint Planning

Plans that address small geographic areas and focus on issues of local concern. Joint plans may be developed with other planning jurisdictions and communities for urban growth areas (UGAs), rural villages (RVs), and tribal community plans (Swinomish Tribal Community).

Land Conservation
The placement of dwellings and accessory buildings in a pattern of development which reduces impervious surface area, lowers costs of development and maintenance and retains larger expanses of property available for agriculture, forestry, or continuity of ecological functions characteristic of the property to development.

Landslide Hazard Areas
Areas potentially subject to risk of mass movement due to a combination of geologic, topographic, and hydrologic factors.

Level of Service
A measure of the amount of a public facility or service that is being or will be provided.

Local Improvement District (LID)
A quasi-governmental organization formed by landowners to finance and construct a variety of physical infrastructure improvements beneficial to its members. A Road Improvement District is a specific type of LID that is formed to finance road improvements.

Local road
A class of roadway with the primary function of providing access to abutting properties. Traffic control is usually limited with slow speeds and numerous driveways. This roadway class typically carries low traffic loads and is usually 1 to 2 lanes. They can be paved or gravel and don't often extend over much distance.

Long-term Commercial Significance
Includes the growing capacity, productivity, and soil composition of the land for long-term commercial production, in consideration with the land's proximity to population areas, and the possibility of more intense uses of the land.

Low-Income
Households whose income is between 51% and 80% of the median income for the area, as determined by the Department of Housing and Urban Development (HUD).

Manufactured Housing
A manufactured building or major portion of a building designed for long-term residential use. It is designed and constructed for transportation to a site for installation and occupancy when connected to required utilities.

Metropolitan Planning Organization (MPO)
A federally mandated organization, in urbanized areas, responsible for planning, programming and coordination of federal highway and transit investments. The Skagit Council of Governments is the lead agency for the local MPO.

Multi-modal
Two or more modes or methods of transportation.

Middle Income
Households whose income is between 80% and 95% of the median income for the area, as determined by the Department of Housing and Urban Development (HUD).

Mine Hazard Areas
Areas underlain by or affected by underground mine workings such as adits, tunnels, air shafts and those areas adjacent to steep slopes produced by open pit mining or quarrying, but excluding any areas where the mine workings have been properly stabilized and closed and made safe consistent with all applicable federal, state and local laws.

Minerals
Clay, coal, gravel, industrial mineral, valuable metallic substances, sand, stone, and other similar solid materials or substances excavated from natural deposits on or in the earth for commercial, industrial, or construction use.

Mineral Resource Lands
Lands containing mineral deposits, both active and inactive, that have known or potential long-term commercial significance for the extraction of minerals and which are in close, economic proximity to locations where the deposits are likely to be used.

Mixed-Use
Typically, buildings with residential units above or beside a story or two of commercial spaces.

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Moderate Income
Households whose income is between 80% and 95% of the median income for the area, as determined by the Department of Housing and Urban Development (HUD).

Multi-modal
Two or more modes or methods of transportation.

Natural Resource Lands
Lands designated on the official Skagit County Comprehensive Plan/Zoning Map as Agricultural (Ag-NRL), Industrial Forest (IF-NRL), Secondary Forest (SF-NRL), Mineral Resource Overlay (MRO-NRL), and Rural Resource (RRc-NRL) which have long-term commercial significance.

Nonconformance or nonconforming
Any use, improvement or structure established in conformance with Skagit County rules and regulations in effect at the time of establishment that no longer conforms to the range of uses permitted in the site's current zone or to the current development standards of the Code due to changes in the Code or its application to the subject property.

Non-Motorized Transportation
Bicycle, pedestrian and equestrian transportation modes.

One-Hundred-Year Floodplain
Land within a community subject to a one (1) percent or greater chance of flooding in any given year. Designation on maps always includes the letters A or V.

Open Space
Any land area, the preservation of which in its present use would conserve and enhance natural or scenic resources; or, protect streams or water supplies; or, promote conservation of soils, wetlands, beaches or tidal marshes; or, enhance the value to the public of abutting or neighboring parks, forests, wildlife preserves, nature reservations; or, sanctuaries or other open space; or, enhance recreation opportunities; or, preserve historic sites. Public Open Space are public owned lands that have been or will be set aside for open space and recreational use. Private Open Space are privately owned lands that have been or will be set aside by operation of the Critical Areas Ordinance, by

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voluntary conservation, or by land reserve easements. Current Use Open Space Taxation Program includes properties utilized for agriculture, timber, and open space uses as provided in RCW 84.34.

Operating costs

Those recurring costs in a transportation system, such as salaries and wages, maintenance, energy, taxes, insurance, and supplies. Distinguished from capital cost.

Objective

An objective is a specific end, condition, or state that is an intermediate step toward attaining a goal. It should be achievable and, when possible, measurable time-specific. An objective may only pertain to one particular aspect of a goal or it may be one of several successive steps toward goal achievement. Consequently, there may be more than one objective for each goal.

Pedestrian Friendly Development

Development designs that encourage walking be providing site amenities for pedestrians. Pedestrian friendly environments reduce auto dependence and may encourage the use of public transportation.

Performance Standards

These provide criteria for testing the degree of hazard, environmental damage, or nuisance from land use activities creating smoke, dust, noise, glare, odor, erosion and sediment, runoff, liquid, solid, or airborne wastes, fumes or traffic.

Policy

A policy is a specific statement that guides decision-making. It indicates a clear commitment of the local legislative body. A policy is based on a comprehensive plan's goals and objectives as well as the analysis of data. A policy is effectuated by implementation measures (such as zoning, land division, and environmental ordinances).

Private Open Space

Private Open Space are privately owned lands that have been or will be set aside by operation of the Critical Areas Ordinance, by voluntary conservation, or by land reserve easements.

Public Facilities

Include streets, roads, highways, sidewalks, street and road lighting systems, traffic signals, domestic water systems, storm and sanitary sewer systems, parks and recreational facilities, and schools.

Public Open Space
Public owned lands that have been or will be set aside for open space and recreational use.

Public Services
include fire protection and suppression, law enforcement, public health, education, recreation, environmental protection, and other governmental services.

Public transportation
A wide variety of passenger transportation services available to the public including buses, ferries, rideshare, and rail transit.

Public water
Any system providing water intended for, or used for, human consumption or other domestic uses. It includes, but is not limited to… facilities where water is furnished to any community, or number of individuals, or is made available to the public for human consumption or domestic use, but excluding water systems serving one single family residence (RCW 70A.100).

Regional Transportation Planning Organization (RTPO)
A State authorized organization of local governments responsible for transportation planning, growth management compliance, and the development and adoption of regional transportation plans. The Skagit Council of Governments is the lead agency for the Skagit RTPO.

Roadway
An open, generally public way for the passage of vehicles, persons, and animals. Limits include the outside edge of sidewalks, curbs and gutters, or side ditches.

Rural Character
The patterns of land use and development established by a county in the rural element of its comprehensive plan:

(a) In which open space, the natural landscape, and vegetation predominate over the built environment;

(b) That foster traditional rural lifestyles, rural-based economies, and opportunities to both live and work in rural areas;

(c) That provide visual landscapes that are traditionally found in rural areas and communities;

(d) That are compatible with the use of the land by wildlife and for fish and wildlife habitat;

(e) That reduce the inappropriate conversion of undeveloped land into sprawling, low-density development;

(f) That generally do not require the extension of urban governmental services; and

(g) That are consistent with the protection of natural surface water flows and groundwater and surface water recharge and discharge areas.

Rural Development

Development outside the urban growth area and outside agricultural, forest, and mineral resource lands designated pursuant to RCW 36.70A.170. Rural development can consist of a variety of uses and residential densities, including clustered residential development, at levels that are consistent with the preservation of rural character and the requirements of the rural element. Rural development does not refer to agriculture or forestry activities that may be conducted in rural areas.

Rural Government Services

Rural Government Services, or "rural services," include those public services and public facilities historically and typically delivered at an intensity usually found in rural areas, and may include domestic water systems, fire and police protection services, transportation and public transit services, and other public utilities associated with rural development and normally not associated with urban areas. Rural services do not include storm or sanitary sewers, except as otherwise authorized by RCW 36.70A.110(4).

Rural Lands

All lands which are not within an urban growth area and are not designated as natural resource lands having long term commercial significance for production of agricultural products, timber, or the extraction of minerals.

Rural Village

Predominantly residential unincorporated rural communities or centers supported by limited commercial and compatible industrial, and community services which typically include a post office, church, elementary school, fire hall, grocery store, service station, tavern, restaurant, or other small retail business catering to local rural needs. Compact development within designated boundaries distinguishes a village from surrounding undeveloped land.

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Sanitary Sewer Systems
all facilities, including approved on-site disposal facilities, used in the collection, transmission, storage, treatment of discharge of any waterborne waste, whether domestic in origin or a combination of domestic, commercial or industrial waste.

Scenic Highways
A Washington State designation for highways that have particular scenic characteristics. This designation was originally initiated to control billboards.

Scenic Resources
Includes, among other things, the historical pattern of land use (including logging and farming activities).

Seismic Hazard Areas
areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, or soil liquefaction.

Sensitive Species
A species native to the State of Washington, that is vulnerable or declining and is likely to become endangered or threatened in a significant portion of its range within the State without cooperative management or the removal of threats as designated by WAC 232-12-011.

Shoreline Master Program
A program first adopted in 1976 to promote the public health, safety and general welfare by providing long range, comprehensive policies and effective, reasonable regulations for development and use of Skagit County shorelines.

Six-Year Transportation Improvement Program
A plan that shows road and other transportation projects planned for the next six years. Both cities and counties are required to update the six-year program each year.

Sole Source Aquifer
Sole Source Aquifer is an EPA definition. It defines those areas where more than 50 percent of the drinking water is obtained from the groundwater.

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Species of Local Importance

Those species that may not be endangered, threatened or sensitive from a statewide perspective, but are of local concern due to their population status, sensitivity to habitat manipulation, or other educational, cultural or historic attributes.

Special Needs Populations

Populations with special needs in Skagit County include the mentally ill, with chemical dependency, developmentally disabled, persons with drug and/or alcohol addiction, victims of domestic violence, youth, the elderly and farmworkers.

Suburban

Blending or characterized by the blending of the urban and the rural. A land use development pattern that is dispersed as opposed to decentralized.

Sub-Area Planning/Community Planning

Subarea plans, also called community plans, are more detailed plans for smaller geographic areas within the County. Community plans focus on local issues, problems and opportunities, and may address land use, economic, social and other issues of local concern, at a finer level of detail than in the general policies of the Comprehensive Plan.

Transfer of Development Rights (TDR)

The transfer of the right to develop or build, expressed in dwelling units per acre, either on land within one zoning district under contiguous ownership, or from land in one zoning district to land in another district where such density/development is permitted.

Transit

A general term applied to passenger rail and bus service available for the use by the public and generally operated on fixed routes with fixed schedules.

Transportation Demand Management (TDM)

Methods or strategies aimed at changing travel behavior by reducing the demand for single occupancy vehicle travel rather than by expanding transportation facilities to meet travel demand. The strategies can include such things as expanding transit of ride-sharing options, changing parking policies, promoting work hour changes, and providing for telecommuting.

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Transportation Improvement Program (TIP)
A plan or schedule showing specific expenditures for transportation capital projects over a specific time period, often for six years.

Transportation Facilities
includes capital facilities related to air, water or land transportation.

Transportation Level of Service Standards
A measure that describes the operational condition of the travel stream and acceptable adequacy requirements. Such standards may be expressed in terms such as speed and travel time, freedom to maneuver, traffic interruptions, comfort, convenience, geographic accessibility, and safety.

Transportation System Management (TSM)
The use of inexpensive capital expenditures and other methods to increase the efficiency and capacity of the transportation system. TSM strategies include such things as intersection signalization, synchronization of traffic signals, the provision of left turn lanes, and the designation of one way streets.

Trip
A one-direction movement, which begins at the origin at the start time, ends at the destination at the arrival time, and is conducted for a specific purpose.

Trip generation
A general term describing the analysis and application of the relationships between the trip makers, the urban area, and the trip making.

Urban Density
Density equal to or higher than four dwelling units per one acre.

Urban Governmental Services
include those governmental services historically and typically delivered by cities, and include storm and sanitary sewer systems, domestic water systems, street cleaning services, fire and police protection services, public transit services, and other public utilities associated with urban areas and normally not associated with rural areas.

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Urban Growth

refers to growth (commercial, industrial, and residential) that makes intensive use of land for the location of buildings, structures, and impermeable surfaces to such a degree as to be incompatible with the primary use of such land for the production of food, other agricultural products, or fiber, or the extraction of mineral resources, rural uses, rural development, and natural resource lands designated pursuant to RCW 36.70A.170. A pattern of more intensive rural development, as provided in RCW 36.70A.070(5)(d), is not urban growth. When allowed to spread over wide areas, urban growth typically requires urban governmental services. "Characterized by urban growth" refers to land having urban growth located on it, or to land located in relationship to an area with urban growth on it as to be appropriate for urban growth.

Urban Growth Area

An area designated by the County pursuant to RCW 36.70A.110 within which most new growth is planned for and encouraged to locate. Urban Growth Areas include incorporated cities and towns (municipalities) along with any unincorporated area designated for future urban growth and annexation into the municipality's corporate limits. Urban Growth Areas also may be non-municipal, such as the Bayview Ridge UGA and the Swinomish UGA. Regulatory control of land within unincorporated Urban Growth Areas remains with the County until annexed into a city. The land and development controls within unincorporated Urban Growth Areas, however, may be subject to joint county/city or tribal interlocal planning agreements and concurrency.

Urban Sprawl

Urban sprawl manifests itself in one or more of the following patterns (a) Leapfrog development which bypasses vacant parcels located closer to the urban area that are suitable for development and instead locates away from existing urban areas; (b) strip development which allows commercial, retail, and multi-family residential developments to locate in a linear pattern along both sides of a major arterial; and (c) large expanses of low density, single-family dwelling development.

Use

The specific purpose for which land or a building is designated, arranged, intended, or for which it is or may be occupied or maintained.

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Utilities or Public Utilities

enterprises or facilities serving the public by means of an integrated system of collection, transmission, distribution, and processing facilities through more or less permanent physical connections between the plant of the serving entity and the premises of the customer. Included are systems for the delivery of natural gas, electricity, and telecommunications services.

Visioning

A process of citizen involvement to determine values and ideals for the future of a community and to transform those values and ideals into manageable and feasible community goals.

Volcanic Hazard Areas

Areas subject to pyroclastic flows, lava flows, and inundation by debris flows, mudflows, or related flooding resulting from volcanic activity.

Voluntary Stewardship Program

An alternative to traditional GMA for protecting critical areas in areas of agricultural activity, codified at RCW 36.70A.700-760.

Wetland or Wetlands

areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas created to mitigate conversion of wetlands.

Wildland Urban Interface (WUI)

means the geographical area where structures and other human development meets or intermingles with wildland vegetative fuels. RCW 36.70A.030 (49).

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Zone and Zoning District

A legislatively defined and enacted policy, including standards, a detailed map and other criteria, all of which control and define areas of physical development of the county or any part thereof or any detail thereof and which are classified by the zoning ordinance as available for certain uses and unavailable for certain other uses.

Zoning

The demarcation of an area by ordinance (text and map) into zones and the establishment of regulations to govern the uses within those zones (commercial, industrial, residential) and the location, bulk, height, shape and coverage of structures within each zone.

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Appendix B Skagit County Comprehensive Planning History

Referenced/ Related Skagit County Documents

The following documents were used in the development and implementation of the Comprehensive Plan, but are not part of the Comprehensive Plan:

- Housing Needs Assessment, March 1993
- Low Income Needs Assessment, Community Action of Skagit County, 2017
- Community Needs Assessment, Community Action of Skagit County, 2024
- Coordinated Water System Plan - Regional Supplement, 2000
- Skagit County Population, Housing and Employment Growth Allocations Methodology, 2023
- Transportation Systems Plan/ Programs
- Skagit Transit – Transit Development Plan, 2024-2029
- Comprehensive Solid Waste Management Plan, 2017
- Countywide Planning Policies, 2024
- Growth Projections, July 2014; Updated, September 2015
- Growth Projections Summary of Methods and Results, July 2014
- Skagit Countywide UGA Open Space Concept Plan, September 2009
- Comprehensive Parks and Recreation Plan, 2022
- Guemes Island Ferry 14-year Capital Plan, 2024-2037
- Guemes Island Ferry Operations and Service Study Plan, 2021
- Road Segment and Intersection Concurrency Report, 2023
- 6-year TIP, 2024-2029

- County Road Inventory, 2020
- Private Road Inventory, 2020
- Skagit County Housing Action Plan, 2017
- Comprehensive Economic Development Strategy (CEDS) 2024-2029

Comprehensive Planning Timeline

Following is an overview of Skagit County's comprehensive planning between 1965 and the adoption of its first comprehensive plan under the Growth Management Act (GMA):

March 1965	Skagit County adopts its first Comprehensive Plan.
September 1968	Comprehensive Plan is amended.
1970 - 1980	Sphere-of-Influence agreement passed. County/city cooperative efforts define lands surrounding city limits.
1973	Resource Management begins with adoption of large tract zoning requirements for agriculture lands.
December 1973	North Central District Plan is adopted.
September 1974	Northwest District Plan is adopted.
August 1975	Islands District Plan is adopted.
1976	First forestry large tract requirements are passed.
1979	Five acre rural zoning district is adopted.
July 1979	Southwest and South Central District Plans are adopted.
April 1981	Resolution 8854 is passed enabling Joint Sphere of Influence agreements with cities.
June 1981	Amendment to Resolution 8854 is passed.
June 1981	Resolution 9312 is passed adopting Joint Sphere of Influence areas.
May 1982	Eastern District Plan is adopted.
1987	Ordinance No. 11158 established a Memorandum of Understanding to initiate joint comprehensive planning with Swinomish Tribe.

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February 1990	Board of County Commissioners direct Skagit County Department of Planning and Community Development to review and recommend changes to district policies, including the recommendation of county-wide Comprehensive Plan policies.
1990	Formal establishment of environmental review SEPA co-lead status in the interim urban growth areas.
April 1990	Growth Management Act passes House and Senate.
June 1990	Growth Management Act planning team established.
July 1990	Growth Management Act of 1990 formally adopted.
September 1990	Vision for the Future, Vol. I published. Beginning of educational media campaign encouraging citizen participation in the Comprehensive Plan updating process. Thirty thousand (30,000) tabloid copies carried by Skagit Valley newspapers.
October 1990 - March 1991	Comprehensive Plan Policy Review and Update. Twenty-six community-wide meetings generated approximately 1,500 community values, statements and proposed policies.
April 1991	A Vision for the Future, Vol. II published. Contained County's GMA Progress Report and update on watershed and shoreline plans, wetlands, natural resource areas, interim urban growth areas, and building permit information.
July 1991	Passage of Re-engrossed House Bill 1025 requiring that policies be compatible with both city and County Comprehensive Plans.
October 1991	Public Hearing on proposed Draft Comprehensive Plan Policies.
October 1991	Planning Commission holds six policy study sessions over six months with
March 1992	County and city staff to review public comment and recommendations for changes to existing Comprehensive Plan policies as proposed on October 14, 1991 in draft form.
March 1992	Second Draft Comprehensive Plan County-wide Regional Policy document sent to all interested parties, 1,500 participants on the GMA mailing list, and outside agencies for review and comment.
April 1992	Public Hearing to take formal public testimony regarding proposed countywide Regional Comprehensive Plan policies.

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April 1992	Citizen Participation Newsletter mailed. Provided an update on GMA and comprehensive planning policy development and discussed upcoming citizen participation opportunities.
July 1992	Adoption of the Skagit County Countywide Planning Policies by County and cities.
September 1992	Informational Update Public Meetings (September 21, 23 and 30th). To discuss the development of and encourage citizen participation in the Housing, Forestry, Rural, Utilities, and Mineral Elements for Skagit County's Comprehensive Plan. Citizen Advisory Committee (CAC) application forms made available through media and meetings.
October 1992	Citizen Participation Newsletter mailed throughout Skagit County informing readers of the Board of County Commissioner's appointments to the Skagit County Comprehensive Plan Element Citizen Advisory Committees.
October 1992	Citizen Advisory Committee Orientation meeting held.
October 1992 - August 1993	Ongoing Citizen Advisory Committee meetings for the Rural, Housing, Forestry, Agriculture, Utilities and Mineral elements.
December 1992	In the winter of 1992, county-city discussions began relating to the establishment of Interim Growth Areas.
July 1993	Adopting Temporary Interim Zoning for Unincorporated Skagit County which established 5 acre minimum lot sizes for multi-family residential, residential, residential reserve and rural intermediate zoning districts.
September 1993	Citizen Participation Newsletter mailed. Information on upcoming citizen participation opportunities. Update on County activities on urban growth areas, land use designations, CAC activities, additional comprehensive plan elements and the environmental review process on proposed Comprehensive Plan.
September 1993	Growth Management Act and State Environment Policy Act (SEPA) Comprehensive Plan informational meetings held in Concrete, Fidalgo Island and Mount Vernon.
October 1993	Passage of Ordinance 15038 adopting Interim Urban Growth Areas.

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November 1993	Citizen Advisory Committee Open House for community review of proposed comprehensive plan element policies on rural, forestry, minerals, housing and agriculture.
December 1993	Planning Commission study session on proposed Comprehensive Plan Policies.
1994	County ordinance recognizes Swinomish Tribal Community, the Upper Skagit, and the Sauk-Suiattle Tribes as sovereign governments which created a government to government relationship.
January 1994	A Vision for the Future, Vol. III published. Forty-five thousand (45,000) copies included in all newspapers within Skagit County. Provided an overview of the Draft Environmental Impact Statement (DEIS), a programmatic, non-project approach used to address the impacts of anticipated population increases in Skagit County consistent with Growth Management Act requirements. Department invites comments on the alternatives presented in the DEIS. Timeline outlined additional opportunities for public comment during the comprehensive plan adoption process.
January 1994	Draft Environmental Impact Statement (DEIS) is published.
January 1994	Planning Commission Study Session on Land Use Designation Element held.
January 1994	Planning Commission Study Session on Draft Environmental Impact Statement (DEIS).
January 1994	Planning Commission Public Hearing on Draft Land Use Element and DEIS.
February 1994	Planning Commission Study Session on review of Citizen Advisory Committee (CAC) draft Natural Resource Conservation Element.
February 1994	Planning Commission Public Hearing on Natural Resource Conservation Element.
March 1994	Adoption of Ordinance 15280 amending Ordinance 15038 regarding Interim UGAs.
March 1994	Planning Commission Study Session to review Public Hearing public comments and staff report.

March 1994	Planning Commission Public Hearing on Planning Commission proposed Natural Resource Conservation Element (Agriculture, Forestry and Minerals).
April 1994	Planning Commission Study Session for deliberations and recommendations on Agriculture, Forest and Mineral elements.
April 1994	Planning Commission Study Session to review Citizen Advisory Committee's Draft Urban Growth Areas, Rural and Housing Elements
April 1994	Planning Commission Public Hearing on Urban Growth Area, Rural and Housing Elements.
April 1994	Planning Commission Study Session to review Citizen Advisory Committee Draft Utility and Transportation Elements.
April 1994	Planning Commission Public Hearing on Citizen Advisory Committee Draft Capital Facilities, Utilities and Transportation Elements.
May 1994	Planning Commission Study Session to deliberate on public comments and testimony on UGA draft element policies and CAC proposed Rural and Housing policies.
May 1994	Passage of Ordinance 15372 extending Temporary Interim Zoning Regulations.
May 1994	Planning Commission Study Session on review of public comments and staff report.
May 1994	Planning Commission Public Hearing on Utility and Transportation Elements.
May 1994	Planning Commission Study Session on deliberations and recommendations on Forest Resource Element.
May 1994	Planning Commission Study Session to consider and begin deliberations on Capital Facilities Element.
May 1994	Planning Commission Study Session to review and deliberate on proposed Mineral Element.
June 1994	Planning Commission Study Session to review and deliberate on proposed Capital Facilities Element.

June 1994	Planning Commission Study Session for deliberations and recommendations on proposed Mineral Element.
June 1994	Publication of Final Environmental Impact Statement for the Land Use Element.
June 1994	Copies of the policies of the Natural Resource Conservation Element, Rural, UGA, Housing, Transportation, and Utilities Element available for comment.
June 1994	Planning Commission Study Session on UGA policy document.
June 1994	Citizen Participation Newsletter mailed. Informed public of upcoming dates on the Comprehensive Plan proposed element policy documents.
June 1994	Passage of Ordinance No. 15432 authorizing the collection of impact fees.
July 1994	A Vision for the Future, Vol. IV published. Forty-eight thousand (48,000) copies included in all Skagit County newspapers. Tabloid presented information on the proposed Land Use Element, plan concept, objectives and designations; the Environmental Impact Statement for the proposed Land Use Element; a summary of land use actions which are part of proposal, maps of proposed Urban Growth Areas and Rural Villages; and the Executive Summary of the Skagit County Planning Commission Proposed Comprehensive Plan Element Policy document. Invited public and agency comments on the Final Environmental Impact Statement.
July 1994	Planning Commission Study Session to discuss the process and timeline for reviewing public comments and written correspondence on proposed Comprehensive Plan Elements.
July 1994	Public Hearings on July 11 and 12 on the Final Environmental Impact Statement for the Land Use Element and the Planning Commission Proposed Comprehensive Plan Element Policy Document.
August 1994	All written correspondence on the Final Environmental Impact Statement for the Land Use Element of Skagit County's Comprehensive Plan and the Skagit County Planning Commission Proposed Comprehensive Plan Element Policy document are made available to the Planning Commission and public. Materials photocopied included all letters received during the extended comment period of June 17, 1994 through July 29, 1994.

August 1994	All exhibits submitted at the Skagit County Planning Commission Public Hearings on July 11 and 12, 1994 on the Final Environmental Impact Statement for the Land Use Element for Skagit County's Comprehensive Plan and Skagit County Planning Commission Proposed comprehensive Plan Element Policy Document made available to Planning Commission and public.
August 1994	Planning Commission Study Sessions on the Economic and Utility elements and on Urban Growth Areas.
September 1994	Planning Commission Study Sessions on Urban Growth Areas, and the Rural and Forestry Elements.
October 1994	Publication of the Skagit County Planning Commission Revised Comprehensive Plan Element Policy Document and Revised Land Use Element.
October 1994	Planning Commission Study Sessions on the Rural, Transportation, and Land Use Elements.
November 1994	Planning Commission Study Sessions on the Land Use Element.
December 1994	Planning Commission Study Sessions on Rural Villages.
January 1995	Planning Commission Study Session on Land Use Element, Goal B.
January 1995	Planning Commission Study Session on Environment and Capital Facilities Elements.
January 1995	Public Hearing on Environment, Economic Development and Capital Facilities Elements.
January 1995	Planning Commission Study Session to review public comments and written correspondence on Environment, Economic Development and Capital Facilities Elements.
February 1995	Planning Commission Study Sessions on the Environment, Capital Facilities and Economic Elements.
March 1995	Planning Commission Study Sessions on draft elements of the Comprehensive Plan.
April 1995	Planning Commission Study Sessions to review draft Comprehensive Plan and Final Environmental Impact Statement (FEIS) on Skagit County's Comprehensive Plan and Land Use Element.

May 1995	Review of the draft Planning Commission Review Copy of the Comprehensive Plan, Map Portfolio and Addendum to the Final EIS.
May 1995	Release of above documents for a 30 day comment period.
May 1995	Determination of Non-Significance and adoption of existing environmental documents (to consider draft elements of the Comprehensive Plan on Natural Resource Conservation)
May 1995	Notice of Availability on the Addendum to the FEIS for the Land Use Element of the Comprehensive Plan
July 1995	Planning Commission Study Session to review and discuss Skagit County's 6 year Transportation Improvement Plan
August – December 1995	Planning Commission reviews Public Comments of draft Comprehensive Plan
November 1995	Board of Commissioners' adoption of Revised IUGAs, moving boundaries to existing city limits.
December 1995	Planning Commission completes review of draft Comprehensive Plan
February 1996	Critical Areas Ordinance before Planning Commission
February - April 1996	Planning Commission review of Critical Areas Ordinance
April 1996	Draft Critical Areas Ordinance
May 1996	Board of County Commissioner public hearing on draft CAO
May 1966	Critical Areas Ordinance adopted
May 1996	Addendum to EIS issued on Skagit County classification and designation of Natural Resource Lands
June 1996	Board of County Commissioners and Planning Commission hold public hearing on Natural Resource Lands
June- July 1996	Planning Commission reviews public comments on Natural Resource Lands. deliberates and forwards recommendation
July 1996	Planning Commission holds public hearing and recommends approval of Countywide planning policies

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August 1996	Board of County Commissioners holds public hearing on draft Natural Resource Lands Ordinance and map
August 1996	Board of County Commissioners approves amendments to Countywide Planning Policies
August- October 1996	Interlocal Agreements re: Urban Growth Areas executed between County and cities of Anacortes, Burlington, Mount Vernon, Sedro-Woolley, and La Conner
September 1996	Natural Resource Lands Ordinance adopted
November 1996	Draft 1996 Comprehensive Plan and Draft Supplemental Environmental Impact Statement made available for public review and comment
December 1996	Planning Commission public hearing on Draft 1996 Comprehensive Plan and Draft Supplemental Environmental Impact.
January – March 1997	Planning Commission conducts twice a week study sessions to review public comment on the Draft Plan and DSEIS.
March 1997	Planning Commission forwards recommendation on Comprehensive Plan to Board of County Commissioners.
April 1997	In early April 1997, the Board of County Commissioners after review of the Planning Commission's recommendation identified several issues that warranted further public debate and remanded the draft Plan back to the Planning Commission for additional public review and comment. Later in April 1997, the Planning Commission conducted a public hearing on the draft Plan, reviewed public comment and written correspondence, deliberated and forwarded a revised Plan to the Board of County Commissioners for review and action.
May 1997	In May 1997, the county issued the FSEIS on the draft Plan. On May 19, 1997 the Board of County Commissioners reviewed the Planning Commission's recommended draft Plan, deliberated, made revisions and passed Ordinance No. 16550 initially adopting this Comprehensive Plan.

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Visioning Process

From the fall of 1990 through the spring of 1991, citizens worked at home and at public workshops to voice their visions for the future. Participants across the county said they wanted to preserve high quality of life, strive for government efficiency, support economic opportunities, increase housing choices, ensure that transportation facilities and services are available to serve the development at time of occupancy and use (concurrency), provide for an efficient land use pattern, preserve rural, resource, and ecologically fragile areas for future generations, respect property rights, and maintain opportunities for citizen participation and involvement throughout Skagit County's planning process.

Historical Public Involvement

From the start of the GMA era, the County embraced the GMA requirement for "early and continuous" public involvement. This included a wide-ranging visioning process, creation of citizens' advisory committees for the key plan elements, newsletters and media articles, videotapes, and presentations and briefings to community and interest groups. A detailed list of major public involvement activities leading to adoption of the 1997 Comprehensive Plan may be found in Appendix B.

Since the Plan was first adopted, the County has used the Planning Commission as the primary focus for public outreach and communication. This is true in the 2016 Comprehensive Plan Update process as well, where the Board of County Commissioners instructed the Planning & Development Services department to work directly with the Planning Commission in developing the 2016 Update proposal, ensuring that the Planning Commission had the opportunity to vet major elements of the proposal before releasing the completed draft for formal public review and comment.

Community planning processes for Bayview Ridge, South Fidalgo Island, Alger, and Hamilton involved appointed advisory committees, as did the Envision Skagit 2060 50-year visioning process. The County has recognized the Guemes Island Planning Advisory Committee (GIPAC) as the community-based representative for subarea planning for Guemes Island. Natural resource advice is provided in part by the Agricultural Advisory Board and the Forest Advisory Board. Other advisory committees have worked on such issues as mineral resource lands, Master Planned Resorts, and the Shoreline Master Program update.

As time goes on, the County employs a wide range of outreach procedures such as open houses, community meetings, social media, and the Skagit County website to reach the community.

For the 2016 update, the Board of County Commissioners established a scope of work that focused on making required updates and completing the update on time. The plan elements receiving the most attention—Transportation, Housing, and Rural—were discussed at workshops with the Planning Commission in the spring of 2015. Four additional community outreach meetings were held in 2015 in Concrete, Fidalgo Island, Edison, and Big Lake. The County released the 2016 Update proposal for public review and comment in March 2016 and the Planning Commission held hearings in April 2016.

Citizen Advisory Committees in the Development of the 1997 Plan

Natural Resource Conservation

Agricultural

Andy Anderson, Earl Angevine, Cheryl Bishop, Allen Bush, Serena Campbell, Chuck Dynes, Carolyn Kelly, Roger Knutzen, Jim Koetje, Don Kruse, Carl Loeb, Danny Miller, Joe Von Moos, Marvin Omdal, Lyle Wesen, Don Wick, Chip Wiles (Staff: Rob Knable, Kraig Olason)

Forestry

Greg Arris, Donna Butler, Dave Chamberlain, Jim Chu, Don Van Etten, Jim Harris, James Karcher, Paul Kreigel, Doyle McClure, Ken Osborn, Tim Raschko, George Shelton, Gerald Steel, Keith Wyman, (Staff: Jim Cahill)

Mineral

Garth Anderson, Doug Argo, Mike Crawford, Doug Dillenberger, Mark Hitchcock, Kenny Portis, Dick Threet, Rick Van Pelt, Shirley Viscalla (Staff: Pat Bunting)

Rural

Mike Adkinson, Gary Arentzen, Dr. Herbert Goldston, Dean Hayes, Sr., Willard Hendrickson, Gary Jones, Susan Meyer, Carol Oglesbee, Louis Requa, Ed Stauffer, Paul Taylor, Andrea Xaver (Staff: Gary Christensen)

Housing

Kathleen Brown, Susan Corsden, Cecelia Johnson, Al Jongsma, Brian McGuiness, Judy Montoya, Geneal Posey-Fox, Stephen Story, José Viscalla, Mike Youngquist (Staff: Edwyna Fong)

Utilities

Peter Avondo, Martin Corin, Gary Dickinson, Jerry Kaufman, Marianne Kooiman, Jim Loop, Kelley Molstad, Linda Storbakken, Craig Swenter, John Weiss (Staff: Pat Bunting)

Transportation

Bob Boudinot, Bill Carlisle, Robert Eakins, James Falk, Dale Fisher, Harland Forrest, Steve Hood, Donald Hoye, Chuck McConnell, Bruce Wells (Staff: Jim Cahill)

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Environment

Dave Chamberlain, John Day, Woody Deryckx, Lorna Ellestad, Elsa Gruber, Ranger Kidwell-Ross, Anita Klein, Roger Knutzen, Bobbi Krebs-McMullen, George McFadden, Brian McGuiness, Ian Munce, Allan Olson, Bill Reinard, Jim Scott, Paul Taylor, Don Van Etten, Don Wick, Margaret Yeoman, Nancy Paine-Donovan (Facilitator: Claire S. Reiner, Staff: Gary Christensen, Oscar Graham, Edwyna Fong)

Environment Technical Advisory Committee

Jon Aarstad, Jim Beaster, Martha Bray, Dave Brookings, Kurt Buchanan, Jim Chu, Mike Davison, Terry Doran, David Fredrick, Noel Gilbrough, Jerry Heller, Carolyn Kelly, Steve Nissley, Terry Nyman, Bill Paleck, Britt Pfaff, Zoë Pfahl, Ann Remsburg, Alice Schisel, Brad Spangler, Art Stendal, Terry Stevens, Gary Voorman, Larry Wasserman

Envision Skagit 2060: looking forward 50 years

Many of these same themes were reinforced by a planning and visioning process the County undertook between 2009 and 2012 called Envision Skagit 2060. Envision Skagit was a collaborative process intended to identify long-term opportunities and challenges facing

residents and communities in Skagit County over the next 50 years. The process received assistance from numerous local partner organizations and was funded with two federal grants and local in-kind contributions from participating organizations;

Skagit County launched the project with the help of a Steering Committee consisting of 18 community leaders representing cities, towns, tribes, and the Port of Skagit, conservation organizations and agencies and the farm and forestry sectors, and Skagit Valley College. The project also drew on the knowledge of four Technical Committees consisting of experts in the fields of agriculture, forestry, ecology, economic development and growth management;

The project made extensive use of a 12-member Citizen Committee consisting of a broad cross-section of Skagit County residents selected from an applicant pool by the Board of County Commissioners and the Mayors of Anacortes, Burlington, La Conner, Mount Vernon and Sedro-Woolley acting as the GMA Steering Committee;

The Envision Skagit Citizen Committee worked between September 2010 and June 2011 to develop its recommendations. The Citizen Committee engaged in extensive information gathering and public outreach activities during that time, meeting with dozens of local elected officials and business and community leaders, making site visits throughout the county, and sponsoring more than a dozen community visioning sessions and open houses in communities throughout the county.

The Envision Skagit Citizen Committee's Final Report and Recommendations were released in October 2011. The recommendations emphasize the following key goals and policies consistent with the existing Comprehensive Plan:

- *Encourage the majority of new population growth in cities and towns, which have the infrastructure and financial resources to provide urban services.*
- *Protect and sustain Skagit County's Natural Resource Lands and industries, and its environmental resources and open spaces, which contribute significantly to the County's economy and unique quality of life.*
- *Support rural communities and economies, maintain rural character, and discourage urban sprawl into rural lands.*
- *Address the housing and transportation needs of the current and future populations through sound regional planning; and*

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- *Maintain a strong economy by ensuring adequate land for current and future industrial development at Bayview Ridge.*

The Committee's recommendations regarding Bayview Ridge and protecting industrial land for the future were instrumental in generating support for the countywide industrial lands inventory and for significant policy changes at Bayview Ridge, which downplayed future residential development in favor of a stronger focus on industrial development. Amendments to the Bayview Ridge Subarea Plan made by the County in 2013 and 2014 increased the amount of land available for development in the Bayview Ridge-Light Industrial zone by nearly 300 acres.

The State of Washington recognized Envision Skagit with a 2012 Governor's Smart Communities Award for Excellence in Comprehensive Planning. The Board of County Commissioners in February 2013 acknowledged the contributions to the project of more than 50 community leaders and a much larger number of members of the general public.

At that ceremony, the Board noted that the Envision Skagit recommendations reinforce key goals, themes, and policies contained in the current Skagit County Comprehensive Plan, which has evolved through more than 50 years of community planning in Skagit County and has involved countless Skagit County residents serving on the Planning Commission and citizen advisory committees and otherwise contributing to the development of the plan.

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Appendix C Land Capacity Analysis

MEMORANDUM

To: Jack Moore, Planning and Development Services Director
Robby Eckroth, Long Range Planner
Skagit County

From: Erin O'Kelley, Long Range Planner
Joel Farias, Long Range Planner
Clay White, Director of Planning
Kimley-Horn and Associates, Inc.

Date: April 15th, 2025

Subject: Land Capacity Analysis & Housing Requirements Review

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SUMMARY

Skagit County completed a Land Capacity Analysis (LCA) in September 2024, referred to as the 2024 LCA, as part of the Comprehensive Plan Periodic Update, consistent with the Skagit County Countywide Planning Policies and Growth Management Act (GMA) requirements. The 2024 LCA found that there is a population and housing capacity shortfall, identified as Exhibit 8 in the 2024 LCA. When the 2024 Land Capacity Analysis was completed, Skagit County reviewed potential capacity to accommodate allocated housing targets between 51-100% in LAMIRDs where some higher densities may be provided. With the recent approval of SB 5471[2] Skagit County requested that Kimley-Horn review housing capacity to ensure allocated housing targets can be provided without increasing density in LAMIRDs that do not have sewer.

The updated analysis found that adequate housing capacity can be provided in rural areas of Skagit County for all income levels between 51-120% or greater.

Table 1. Revised Housing Allocation for Skagit County[1]

AMI	Projected Housing Need
0-30%	0
>31-50%	0
>51-80%	501
>81-100%	268
>101-120%	238
>120%	2,483
Total	**3,490**

The 2024 LCA originally cited the preliminary housing allocations which have since been revised and adopted by the Board of County Commissioners in March 2025.

[1] Adopted March 25, 2025, Ordinance 0202500002, https://www.scog.net/growth-management/growth-projections-and-allocations/

Following the housing planning guidance provided by the Department of Commerce the housing types most likely affordable to each AMI can be categorized in the following table, identified as Exhibit 6 in the 2024 LCA.

Exhibit 6. Housing Types and Potential Income Levels Served in Rural Skagit County

Housing Type	Definition	New Market Rate Housing	Subsidized Affordable Housing	Assumed Affordability Level for Capacity Analysis
Low-Rise Multifamily	Walk up apartment buildings or condominiums (up to 3 floors).	>80%-120 MFI	0-80% MFI	**Low-Income (0-80% MFI)**
Moderate Density	Also known as "middle housing". Includes townhomes, duplex, triplex, quadplex. May also include new manufactured homes on smaller lots.	>80%-120 MFI & >120% MFI	*Not typically feasible at scale*	**Moderate-Income (80-120% MF)**
Low Density: Single Family	Detached single family homes.	>120% MFI	*Not typically feasible at scale*	**Higher Income (>120% MFI)**
Low Density: Manufactured Homes	Newly placed manufactured homes in low density zones	>80%-120 MFI	*Not typically feasible at scale*	**Moderate-Income (80-120% MF)**
ADUs	Accessory dwelling units associated with a detached home.	>50-80% MFI & 80-120% MFI	*Not typically feasible at scale*	**Low-Income (50-80% MFI) Group with Low-Rise Multifamily**

Sources: Washington Department of Commerce Guidance for Updating Your Housing Element, 2023; BERK, 2024.

UPDATED ANALYSIS METHODOLOGY

During early discussions with the cities and counties discussing growth targets, the cities and the County made a conscious effort to focus growth in City boundaries. Housing Element requirements in the Growth Management Act (GMA), require jurisdictions to provide housing to all income levels to accommodate growth. The adopted housing allocations for housing types affordable to incomes earning 0-50% AMI, were allocated to cities, which means Skagit County received no housing allocation for these income levels (0-50% AMI).

The analysis combines the findings from the 2024 LCA, the historical permit data used for the capacity translated into a ratio and broken out by zone which can be used in combination with the available acreage identified in the LAMIRDs and rural areas from the LCA to estimate the potential capacity of housing units from the County's available rural lands. Table 2. takes the historical building permit production by type identified in Table 12 of the 2024 LCA and translates the data to ratios of production by zone. The ratios are used to calculate housing estimates by zone in rural areas, excluding LAMIRDs and CaRDs shown in Table 3. Based on the housing types and potential income levels identified in the 2024 LCA, the housing units by zone are categorized by income level in Table 4, showing the assumed capacity in rural areas compared to the need and identifies the surplus and deficit for each income level. The analysis concludes that there is a deficit of 42 units for income levels between 81-120% AMI. However, there is a surplus of 432 units for income levels between 51-80%.

Table 2. Housing production by Zone as a % of total constructed housing (2018-2024)

	Single Family Detached	ADU	Manufactured	Total
RI	73.45%	23.73%	2.82%	**1**
RRc-NRL	74.29%	20.00%	5.71%	**1**
RRv	72.57%	23.54%	3.88%	**1**
RVR	73.39%	18.35%	8.26%	**1**
SF-NRL	86.67%	3.33%	10.00%	**1**

Table 3. Rural Zone capacity (Excluding LAMIRDS AND CaRDS)

	Single Family Detached	ADU	Manufactured	Total
RI	569.9	184.1	21.9	**776**
RRc-NRL	213.9	57.6	16.5	**288**
RRv	1837.5	596.1	98.3	**2532**
RVR	317.1	79.3	35.7	**432**
SF-NRL	432.5	16.6	49.9	**499**
Total	**3370**	**933**	**222**	

Table 4. Assumed Capacity in Rural Areas Compared to Need

AMI %	Housing Need Allocation	Housing types with Potential to Serve these Needs	Aggregated Housing Need Allocation	Capacity	Surplus (Deficit)
>51-80%	501	ADUs, subsidized housing	501	933	**432**
>81-100%	268	Manufactured Homes, Middle Housing	506	464	**(42)**[2]
>101-120%	238				
>120%	2,483	Single Family Detached	2,483	3370	**887**
Total	**3490**		**3490**	**4767**	**1277**

FINDINGS FROM THE 2024 LCA

The 2024 LCA findings found the potential developable acreage by zone in the County's limited areas of more intense rural development (LAMIRD), identified as Exhibit 2 in the 2024 LCA, and found capacity by acreage on Group A waters systems and capacity by acreage without group A water, excluding well restriction areas. These exhibits are identified as Exhibit 3 (with Group A) and Exhibit 5 (without Group A)

[2] The deficit is reconciled by surplus capacity in the 51-80% AMI category.

in the 2024 LCA. The LCA completed a preliminary analysis of development trends by collecting previous permits for housing units in rural areas between 2018 – 2014. Using the trends by year between 2018 to 2024 an estimated rate of production can be deduced by housing type, identified as Exhibit 7 in the 2024 LCA. This historical data was then categorized by zone to better understand potential options Skagit County might consider through policies and development regulations to improve housing production for a variety of housing types. This table is identified as Table 12 in the appendix of the 2024 LCA.

Using the findings under the "Capacity by Zone" section the LCA found the available acreage identified for each LAMIRD and then identified available land by acreage for each zone sub categorized into Option A (with Group A water) and Option B (without Group A water, and well restriction areas).

Using the findings under the "Capacity by Income Level" section the LCA found the potential housing types and quantity that could be produced if historical trends continue out to 2045 and categorized those by the affordability of each housing type produced by income level.

Exhibit 2. Residential Development Capacity by Zone in LAMIRDs

LAMIRDs	Zoning	Net Acres Vacant	Net Acres Partially Developed	Net Buildable Acres	Units on Developable Parcels	Assumed Density	Residential Capacity (housing units)
Alger							
Rural Village Residential	RVR	3.27	8.24	7.91	4	1	3
Rural Intermediate	RI	23.28	66.60	61.71	6	0.4	18
Bay View							
Rural Intermediate	RI	77.99	102.08	125.06	2	0.4	48
Rural Village Residential	RVR	22.99	55.88	54.28	10	1	44
Clear Lake							
Rural Village Residential	RVR	103.60	95.62	139.14	13	1	126
Similk Beach							
Rural Intermediate	RI	11.45	7.30	13.17	2	0.4	3
Total		**247.11**	**348.46**	**408.33**	**38**		**242**

Source: Skagit County GIS, 2024, BERK 2024

Exhibit 3. Housing Capacity by Zoning in Vacant Acreage with Group A Water (excluding LAMIRDs)

Zoning	Vacant acres (A – excludes zero land value)	Vacant acres (B - does not exclude zero land value)	Density (acres / unit)	Capacity by housing units A	Capacity by housing units B
[RI] Rural Intermediate	1,178	1,716	2.5	471	686
[RRc-NRL] Rural Resource - NRL	1,802	5,541	40	45	139
[RRv] Rural Reserve	6,121	17,715	10	612	1,771
[RVR] Rural Village Residential	82	279	1	82	279
[SF-NRL] Secondary Forest - NRL	1,260	3,050	20	63	152
Total	**10,469**	**28,384**		**1,273**	**3,028**

Source: Skagit County Percel Data 2024, BERK 2024

Note: Excludes zones where single family residential is accessory to the primary use.

Exhibit 5. Vacant Acreage without Group A Water and not in Well Restriction Area (Excluding LAMIRDs)

Zoning	Vacant acres (A – excludes zero land value)	Vacant acres (B - does not exclude zero land value)	Density (acres / unit)	Capacity by housing units A	Capacity by housing units B
[RI] Rural Intermediate	139	226	2.5	56	90
[RRc-NRL] Rural Resource - NRL	1,260	6,033	40/10[1]	32/126[2]	151/603[2]
[RRv] Rural Reserve	3,040	7,612	10/5[1]	304/608[2]	761/1522[2]
[RVR] Rural Village Residential	76	153	1	76	153
[SF-NRL] Secondary Forest - NRL	4,300	6,955	20	215	348
Total	**8,814**	**20,979**		**682/1080[2]**	**1,503/2,716[2]**

1: Density under CaRD subdivision SCC 14.18.310

2. Capacity under CaRD subdivision

Source: Skagit County Percel Data 2024, BERK 2024

Exhibit 7. Manufactured Home and ADU Production Trends in Rural Skagit County (including LAMIRDs)

Housing Type	Estimated Net New Housing (2020-2023)*	Average Annual Production of Housing Type (2020-2023)	Expected Production if Trend Continues (2020-2045)
ADUs	39	13	324
Manufactured Homes	44	15	363
Single Family	145	48	1,208

Source: OFM, 2024; BERK, 2024

Exhibit 12. Permits 2018-2024 (Partial Year) by Zone and Type

Zone	Single-family	ADU	Multi-family	Manufactured
Ag-NRL	24	28	0	7
RB	0	0	0	-3
RC	1	0	0	0
RI	130	42	0	5
RRC-NRL	26	7	0	2
RRv	299	97	0	16
RVR	80	20	0	9
SF-NRL	26	1	0	3
Total	**586**	**195**	**0**	**39**

BERK

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MEMORANDUM

DATE: September 30, 2024

TO: Skagit County Planning and Development Services

FROM: Ferdouse Oneza, AICP and Kevin Gifford, BERK Consulting

RE: Rural Skagit County Housing Land Capacity Analysis

Purpose

The purpose of this document is to provide a summary of the land capacity for new housing production in rural Skagit County under current Comprehensive Plan land use designations and zoning, and to identify which housing types are likely to be produced. This analysis addresses recent Growth Management Act (GMA) requirements (HB 1220) for jurisdictions to demonstrate sufficient capacity to accommodate housing needs at all income levels (see: RCW 36.70A.070(2)(c), and WAC 365-196-410(e) and (f)). Consistent with guidance from the Washington State Department of Commerce, this analysis compares potential zoned capacity allowing for housing to Skagit County's rural allocation of countywide projected housing needs. Results of the land capacity analysis will support the development of the Comprehensive Plan periodic update due in 2025.

Overall Approach

Skagit County's initial 2045 allocation of Population, Housing and Employment was adopted by the Growth Management Act Steering Committee (GMASC) composed of cities, towns, and Skagit County in December 2023. Exhibit 1 indicates 2045 housing allocation within the county's UGAs that are not associated with cities, and rural areas. These include Bayview Ridge, Swinomish and rural county. Bayview Ridge was not allocated additional housing. Additional housing on unincorporated land is also not feasible in Swinomish due to tribal trust lands. Therefore, it is expected that allocated housing units from Swinomish will be reallocated within the cities and to other locations under land use management by Skagit County. In Skagit County's letter to the cities dated July 25, 2024, the County indicated the allocation to Swinomish will need to be reallocated. In addition, housing targets for those under 50% of the area median income (AMI) would need to be reallocated since it relies on multifamily housing to achieve the affordability at that level, a housing type not allowed in rural areas. However, the County indicated it can assume allocations of 51% AMI to over 120% in the rural areas.

Exhibit 1. Initial Housing Allocation in Unincorporated Skagit County Net Growth 2020-2045

	0-30%	31-50%	51-80%	81 - 100%	101 – 120%	Above 120%	Total	51-120% Share
Bayview Ridge	0	0	0	0	0	0	0	0
Swinomish	37	24	17	9	8	23	118	57
Rural (outside UGAs)	89	57	501	268	238	2,337	3,490	3,344

Source: Skagit County Council of Government (SCOG) Resolution 2023-01

The cities and towns in Skagit County have decided to conduct their own Land Capacity Analyses (LCA), inclusive of their associated unincorporated UGAs. Therefore, instead of a countywide LCA, the County is conducting land capacity only for limited areas of more intensive rural development (LAMIRDs) where compact growth seems feasible with utilities and public services.[1] This memo also identifies the feasibility of accommodating housing allocated within rural areas outside of LAMIRDs.

Based on the December 2023 countywide growth allocations, and discussion with jurisdictions, the County identifies land available and suitable to:

- Accommodate growth within the following LAMIRDs:
  - Alger
  - Bay View
  - Clear Lake
  - Similk Beach
- Accommodate growth within rural areas

Land Capacity Analysis Methodology for LAMIRDS

This memo considers the following steps in determining capacity within LAMIRDs:

- Evaluate the suitability of land in the four LAMIRDs indicated above for future development at densities allowed by current County zoning.
  - Identify and deprioritize areas in public uses (parks, schools, public facilities, capital infrastructure, etc.).
  - Identify regulated environmentally critical areas, protected natural resource areas, and environmental hazards (geologic hazard areas, flood-prone areas, etc.) that could make these lands unsuitable for future development.

[1] Skagit County does not have any unincorporated UGAs except for Bayview Ridge and Swinomish that are not associated with a city.

- Evaluate the remaining areas of the LAMIRDs for development suitability, including but not limited to the following characteristics:
  - Proximity to existing development and services.
  - Prevailing land use patterns and current level of development.

- Determine assumed density and calculate capacity
  - Select suitable land areas throughout the LAMIRDs based on the county's review of growth to accommodate
  - Determine zoning and allowed density for suitable land areas
  - Calculate estimated land capacity within suitable land areas in each zone.

Estimating Capacity for Rural Growth Excluding LAMIRDs

GMA does not require a land capacity analysis for rural lands; however, the GMA requirements to show capacity for housing at different income levels mean that the County should consider the range of housing types and locations in the rural areas. The following method informs land availability in the rural area in various zoning districts.

- Identify acreage by County zoning for all lands outside UGAs and not included in a LAMIRD.
  - Review all rural area zoning where single family residential is permitted as a primary use.
  - Identify vacant lands that are outside of the above mentioned LAMIRDs, that are within the Group A water system or within a system that has potential to be served by water (no instream flow restrictions), and lots that are one acre or larger to include development.
- Calculate potential residential capacity by zone.

Capacity by Zone

Exhibit 2 identifies residential development capacity by zone within LAMIRDs. Results show capacity for about 242 dwelling units.

Exhibit 2. Residential Development Capacity by Zone in LAMIRDs

LAMIRDs	Zoning	Net Acres Vacant	Net Acres Partially Developed	Net Buildable Acres	Units on Developable Parcels	Assumed Density	Residential Capacity (housing units)
Alger							
Rural Village Residential	RVR	3.27	8.24	7.91	4	1	3
Rural Intermediate	RI	23.28	66.60	61.71	6	0.4	18
Bay View							
Rural Intermediate	RI	77.99	102.08	125.06	2	0.4	48
Rural Village Residential	RVR	22.99	55.88	54.28	10	1	44

LAMIRDs	Zoning	Net Acres Vacant	Net Acres Partially Developed	Net Buildable Acres	Units on Developable Parcels	Assumed Density	Residential Capacity (housing units)
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Rural Village Residential	RVR	103.60	95.62	139.14	13	1	126
Similk Beach							
Rural Intermediate	RI	11.45	7.30	13.17	2	0.4	3
Total		**247.11**	**348.46**	**408.33**	**38**		**242**

Source: Skagit County GIS, 2024, BERK 2024

Vacant acres in the rural zones allowing housing as a principal use are identified in Exhibit 3. These lands also are considered vacant (classified by the Assessor as undeveloped land OR an assessed improvement value less than $10,000). These lands also have access to Group A water. This is because The State of Washington has prohibited new wells in most of the Skagit Basin through the Skagit Instream Flow Rule.[2] Most resource zones allow housing as an accessory to a primary use of resource production; therefore, resource lands with this zoning limitation are excluded from the capacity estimate. Permit information appears to show the greatest number of permits are found in RRv, RI, and RVR zones. See Attachment A.

Land capacity analyses often exclude properties with an assessed land value of zero because this can indicate the property is unbuildable (public right-of-way, tidelands, etc.) or the record represents property that is not tied to land (such as a condominium unit or a mobile home on leased land). In Exhibit 3, two calculations of potentially vacant land are provided: Option A excludes such zero-value properties from the land supply and Option B that includes them.

Exhibit 3. Housing Capacity by Zoning in Vacant Acreage with Group A Water (excluding LAMIRDs)

Zoning	Vacant acres (A – excludes zero land value)	Vacant acres (B - does not exclude zero land value)	Density (acres / unit)	Capacity by housing units A	Capacity by housing units B
[RI] Rural Intermediate	1,178	1,716	2.5	471	686
[RRc-NRL] Rural Resource - NRL	1,802	5,541	40	45	139
[RRv] Rural Reserve	6,121	17,715	10	612	1,771
[RVR] Rural Village Residential	82	279	1	82	279
[SF-NRL] Secondary Forest - NRL	1,260	3,050	20	63	152
Total	**10,469**	**28,384**		**1,273**	**3,028**

Source: Skagit County Percel Data 2024, BERK 2024

Note: Excludes zones where single family residential is accessory to the primary use.

According to the December 2023 countywide growth allocations, the county's rural areas outside UGAs need to accommodate 3,344 additional housing units for households of 51% AMI and above. These

[2] See: https://www.skagitcounty.net/Departments/PlanningAndPermit/watermain.htm and https://www.skagitcounty.net/Maps/iMap/?mapid=983c6d3f176f4818a3fc1e519b16054c.

housing units need to be allocated in the unincorporated county. Exhibit 4 indicates the total capacity in the rural (including LAMIRD) areas. This indicates a deficit of 1,822 housing units under lands included with Option A that excludes zero-value properties from the land supply. Option B that includes zero-value properties indicates a surplus of 21 housing units.

Exhibit 4. Housing Deficits or Surplus by Options (including LAMIRDs)

	Capacity by housing units Option A	Capacity by housing units Option B
Rural area capacity	1,273	3,028
LAMIRDs	242	242
Assume 5% of dwellings as ADUs	64	151
Total Capacity	1,579	3,422
Surplus/ Deficit	**-1,822**	**21**

Source: Skagit County Percel Data 2024, BERK 2024

Note: Excludes zones where single family residential is accessory to the primary use.

Due to the deficit in Exhibit 4, we include additional analysis to identify potential capacity on vacant acreages in the county that are without Group A water but are not in well restriction areas. See Exhibit 5. This indicates surplus capacity in the rural area. The county code allows additional density in Rural Resource - NRL and Rural Reserve zones under Conservation and Reserve Developments (CaRDs). Exhibit 5 indicates additional capacity while using CaRD density. However, these capacities are not readily available to meet the housing needs.

Exhibit 5. Vacant Acreage without Group A Water and not in Well Restriction Area (Excluding LAMIRDs)

Zoning	Vacant acres (A – excludes zero land value)	Vacant acres (B - does not exclude zero land value)	Density (acres / unit)	Capacity by housing units A	Capacity by housing units B
[RI] Rural Intermediate	139	226	2.5	56	90
[RRc-NRL] Rural Resource - NRL	1,260	6,033	40/10[1]	32/126[2]	151/603[2]
[RRv] Rural Reserve	3,040	7,612	10/5[1]	304/608[2]	761/1522[2]
[RVR] Rural Village Residential	76	153	1	76	153
[SF-NRL] Secondary Forest - NRL	4,300	6,955	20	215	348
Total	**8,814**	**20,979**		**682/1080[2]**	**1,503/2,716[2]**

1: Density under CaRD subdivision SCC 14.18.310

2. Capacity under CaRD subdivision

Source: Skagit County Percel Data 2024, BERK 2024

Due to the lack of available land with water availability found in the data analysis (Exhibit 4), the County may consider the following approaches:

- There are limitations in the analysis due to the county's lack of parcel data accuracy. The two options have two different outcomes of land capacity, one with a significant deficit of 1,822 housing units in the method that excludes zero-value properties. A closer look at the parcel data for accuracy might reveal additional capacity.
- If a capacity deficit continues to be identified, the County can address this deficit in multiple ways. The County could reallocate rural growth to LAMIRDs or UGAs. This would require rezoning of lands for higher density and planning for infrastructure capacity. Additional water system infrastructure could be considered in the areas that are without Group A water. The County can evaluate the feasibility of providing rural water service in these areas through partnerships with water purveyors or municipal latecomers agreements (chapter 35.91 RCW and chapter 57.22 RCW) or other tools.[3]

Capacity by Income Level

Not all housing types are appropriate for meeting all housing needs. Due to differences in land and construction costs per unit, the affordability of new housing depends in part on housing type. For instance, a new single-family home on a large lot is the most expensive type of home to produce per unit. As detailed in the housing needs assessment, new single family homes in Skagit County typically require an income of well over 120% median family income (MFI) to afford. Other housing types can be produced at a lower cost per unit. Exhibit 6 presents a framework for relating zones and housing types to assumed affordability level. These housing types and affordability assumptions are consistent with Commerce guidance for updating housing elements as well as BERK's analysis of housing market conditions in rural Skagit County.

Exhibit 6. Housing Types and Potential Income Levels Served in Rural Skagit County

Housing Type	Definition	New Market Rate Housing	Subsidized Affordable Housing	Assumed Affordability Level for Capacity Analysis
Low-Rise Multifamily	Walk up apartment buildings or condominiums (up to 3 floors).	>80%-120 MFI	0-80% MFI	**Low-Income (0-80% MFI)**
Moderate Density	Also known as "middle housing". Includes townhomes, duplex, triplex, quadplex. May also include new manufactured homes on smaller lots.	>80%-120 MFI & >120% MFI	*Not typically feasible at scale*	**Moderate-Income (80-120% MF)**
Low Density: Single Family	Detached single family homes.	>120% MFI	*Not typically feasible at scale*	**Higher Income (>120% MFI)**
Low Density: Manufactured Homes	Newly placed manufactured homes in low density zones	>80%-120 MFI	*Not typically feasible at scale*	**Moderate-Income (80-120% MF)**

[3] See: https://mrsc.org/explore-topics/planning/subdivisions/latecomer-agreements.

Housing Type	Definition	New Market Rate Housing	Subsidized Affordable Housing	Assumed Affordability Level for Capacity Analysis
ADUs	Accessory dwelling units associated with a detached home.	>50-80% MFI & 80-120% MFI	*Not typically feasible at scale*	**Low-Income (50-80% MFI) Group with Low-Rise Multifamily**

Sources: Washington Department of Commerce Guidance for Updating Your Housing Element, 2023; BERK, 2024.

Current zoning in LAMIRDs and other rural areas only allow for low density housing development, including detached single family homes, manufactured homes or ADUs.[4] Therefore this analysis focuses on estimating potential capacity for these housing types. Rather than evaluate total housing capacity in rural areas, this analysis evaluates how many new homes the market is already providing each year and estimates how many new homes could be provided over the entire planning period (2020-2045) if the historic trends continue.[5] Exhibit 7shows the results of this analysis. Note that changes to development regulations or incentives to encourage the production of a housing type, such as ADUs, could impact the future rate of production.[6]

Exhibit 7. Manufactured Home and ADU Production Trends in Rural Skagit County (including LAMIRDs)

Housing Type	Estimated Net New Housing (2020-2023)*	Average Annual Production of Housing Type (2020-2023)	Expected Production if Trend Continues (2020-2045)
ADUs	39	13	324
Manufactured Homes	44	15	363
Single Family	145	48	1,208

Source: OFM, 2024; BERK, 2024

Next, we use this estimate of Expected Production if Trend Continues as a proxy for total capacity for new development of each housing type. We also compare this assumed capacity to the aggregate housing need at each corresponding income level. This analysis is shown in Exhibit 8. It reveals a shortage of capacity at every income level. However, the county is not required to demonstrate capacity meeting housing needs above 120% MFI.

[4] Recent changes to GMA under SB 5275 allow options for development and redevelopment inside the boundary of a LAMIRD, subject to confirmation from all existing providers of public facilities and public services of sufficient capacity to serve any new or additional demand from the new development or redevelopment. With adequate public facilities, LAMIRDs can potentially accommodate homes for moderate density housing that could serve moderate income households (80-120% MFI). However, this would require rezoning to increase allowed density.

[5] This proposed methodology is currently (August 2, 2024) under review by Commerce staff and BERK will refine it based on their feedback.

[6] If the County is seeking to encourage ADUs to support housing for households with incomes from 50-80% AMI, consider limitations on the size of ADUs or incentives to convert portions of existing buildings to ADUs. Large new homes built as ADUs would not likely be affordable to these lower-income households.

Capacity to meet housing targets in rural Skagit County

Skagit County's housing target is broken down by income levels in Exhibit 8 and compared against the expected production trend identified in Exhibit 7. This identifies housing surplus or deficits by income levels.

Exhibit 8. Assumed Capacity in Rural Areas (Including LAMIRDs) Compared to Need

Income Level (% MFI)	Initial Housing Need Allocation (2020-2045)	Aggregated Housing Needs Allocation	Housing Types with Potential to Serve These Needs	Aggregated Housing Needs Allocation	Expected Production if Trend Continues (Assumed Capacity)	Capacity Surplus or Deficit
0-30%	89	146	Low-Rise Multifamily	146	0	-146
>30-50%	57					
>50-80%	501	501	ADUs	501	324	-177
>80-100%	268	506	Manufactured Homes	506	363	-143
>100-120%	238					
>120%	2,337	2,337	Single-Family	2,337	1,208	-1,129

Sources: BERK, 2024.

The County's permit data by housing type is shared in Exhibit 9. It includes the number of single-family, multi-family, and ADU permits issued by the county from 2018 through mid-2024 in the rural areas. The observed permits are multiplied to compare the condition if past trends are projected forward to the next 20 years. See Attachment A for more details.

Exhibit 9. Unincorporated Skagit County – Permit by Housing Type (2018 – 2024)

Housing Type	Net Number of Permits (2018 – 2024)	Permits if Trend is Projected forward to 20 years
Multi-family	0	
ADUs	195	600
Manufactured Homes	39	120
Single Family	586	1803
Total	**820**	**2,523**

Sources: Skagit County permit data 2024, BERK, 2024.

It is to be noted that this is an exercise of permit trends only. There are many other variables that would impact the housing production trends such as availability of infrastructure and market conditions.

Next Steps

The County needs to take steps to show adequate capacity for meeting housing needs at each income level. As a first step, the County should consider reallocating housing for 0-50% MFI to the cities and UGAs where urban services are available. LAMIRDs have the potential to provide housing capacity for 51-80% MFI and 81-120% MFI with appropriate changes to zoning where adequate public facilities are available. However, the zoning is not yet in place to support these housing types, with the exception of new ADUs and manufactured housing.

GMA requires an adequate provisions analysis for housing element, which will provide more guidance on how to address deficits and barriers to providing affordable housing. Per this guidance, the County is required to study whether there are barriers in place to developing housing that will meet the 2045 housing and to document actions needed to overcome barriers in unincorporated rural and LAMIRDs.

Attachment A: Permit Data

BERK received permit data from Skagit County and attached it to parcel data to further identify unit types and production by zone. BERK filtered the permit data to reflect permit summary for just the rural areas. Data for 2024 are year to date collected as of July 2024.

Exhibit 10. Permits 2018-2024 (Partial Year) by Unit Type

By Housing Type	Units Built	Units Demolished
Single-Family	586	0
ADU	195	0
Multifamily	0	0
Manufactured/Mobile Home	39	39
Total	**820**	**39**

Exhibit 11. Permits 2018-2024 (Partial Year) by Zone

By Zone	Units Built	Units Demolished
Ag-NRL	63	4
RB	0	3
RC	1	0
RI	187	10
RRC-NRL	36	1
RRv	430	18
RVR	112	3
SF-NRL	30	0
Total	**859**	**39**

Exhibit 12. Permits 2018-2024 (Partial Year) by Zone and Type

Zone	Single-family	ADU	Multi-family	Manufactured
Ag-NRL	24	28	0	7
RB	0	0	0	-3
RC	1	0	0	0
RI	130	42	0	5
RRC-NRL	26	7	0	2
RRv	299	97	0	16
RVR	80	20	0	9
SF-NRL	26	1	0	3
Total	**586**	**195**	**0**	**39**

Exhibit 13. Permits by Year

By Year	Units Built	Units Demolished
2018	159	0
2019	140	0
2020	99	5
2021	156	6
2022	149	11
2023	96	12
2024 (partial)	60	5
Total	**859**	**39**

Attachment B: Land Capacity Maps

Exhibit 14. Rural Land Capacity Parcels – East County

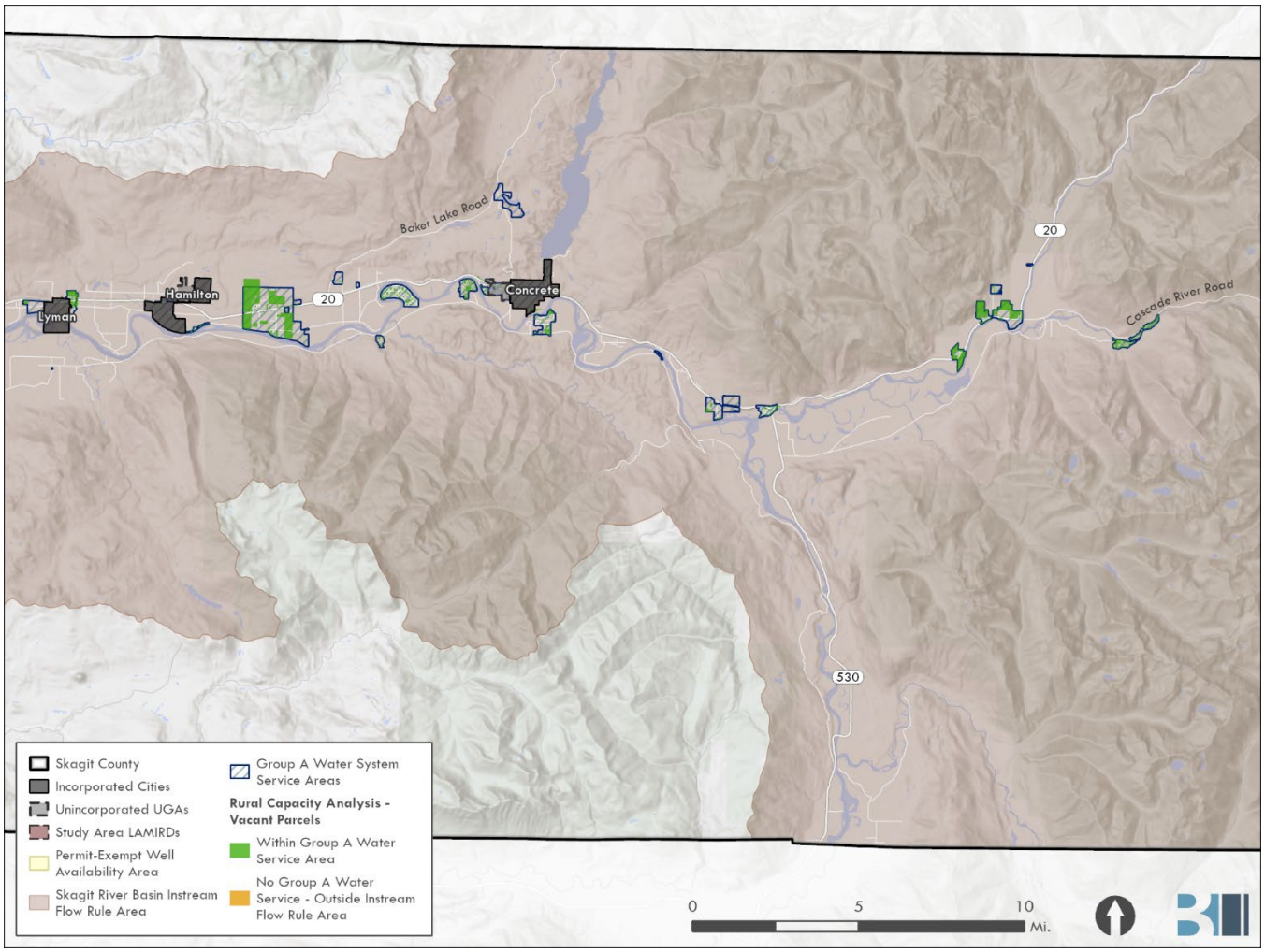
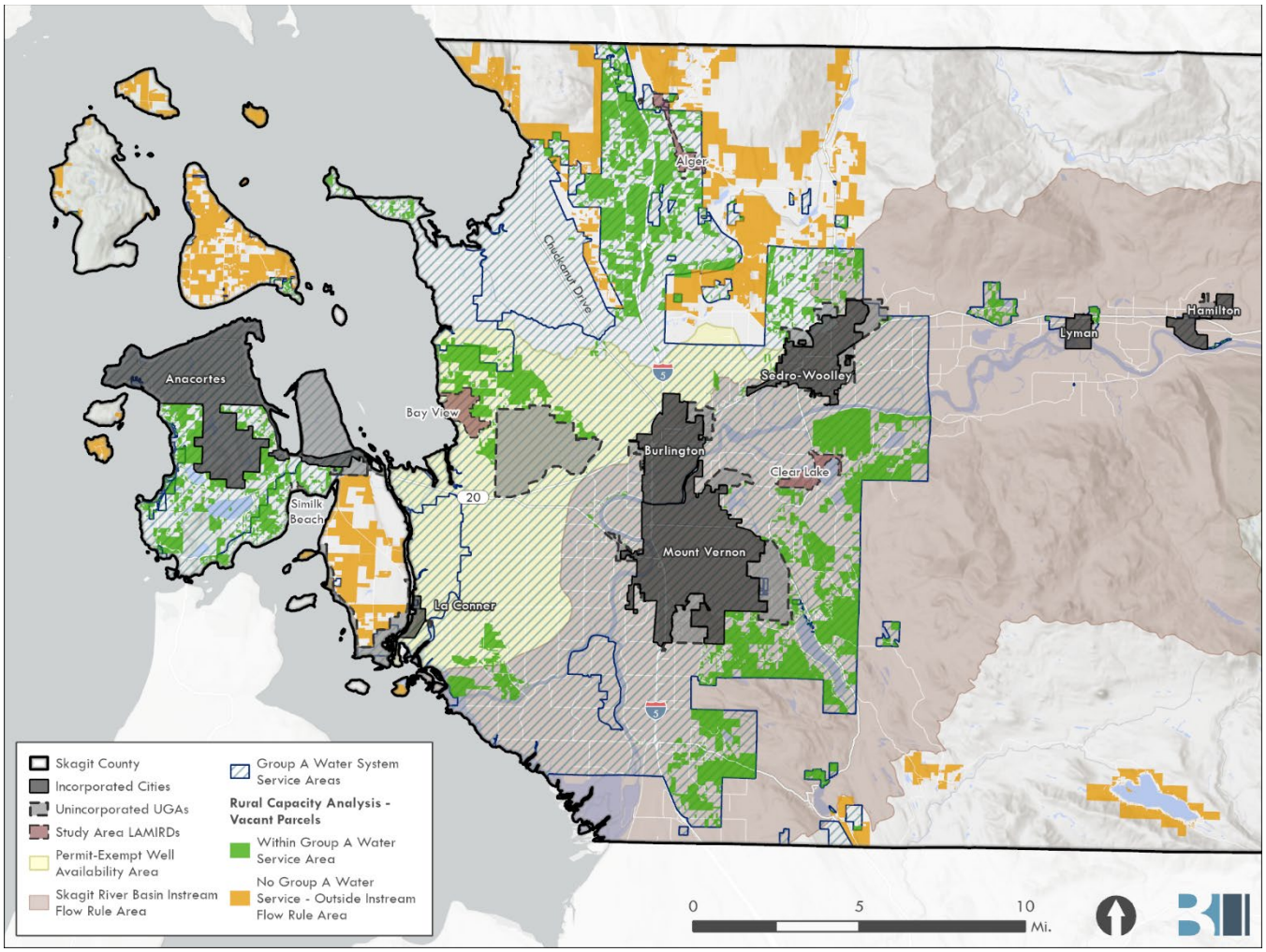


Exhibit 15. Rural Land Capacity Parcels – West County



MEMORANDUM

DATE: November 04, 2024

TO: Skagit County Planning and Development Services

FROM: Joel Farias and Clay White, Kimley-Horn and Associates

RE: Skagit County Bayview Ridge Employment Land Capacity Analysis

Purpose

This document serves as an amendment to the Housing Land Capacity Memo prepared by BERK Consulting.

The purpose of this document is to provide a summary of the land capacity for new commercial and industrial production in the Bayview Ridge UGA of Skagit County under current land use designations and zoning. This analysis addresses Growth Management Act (GMA) requirements for jurisdictions to demonstrate sufficient capacity to accommodate employment projections. Results of the land capacity analysis will support the development of the Comprehensive Plan periodic update due in 2025.

Overall Approach

Skagit County's 2045 allocation of Population, Housing and Employment was adopted by the Growth Management Act Steering Committee (GMASC) composed of cities, towns, and Skagit County in December 2023. While the December 2023 population and housing targets are currently under consideration for amendment, no changes are being proposed to the employment allocations (See Appendix A for Final 2045 Employment Allocations). **Exhibit 1** indicates 2045 employment allocation of 1,939 new jobs for Bayview Ridge. Bayview Ridge was not allocated any housing or population.

Exhibit 1. Employment Allocation in Bayview Ridge 2022-2045

	2022 Employment	2045 Employment Targets	2022-2045 Employment Growth	Percent Total Growth
Bayview Ridge	2,962	4,901	1,939	9%

Source: Skagit County Council of Government (SCOG) Resolution 2023-01

Commercial and Industrial Land Capacity Analysis Methodology

The analysis has been prepared using the methodology described in the Sedro-Woolley 2015 Buildable Lands Analysis which was based on the 2010 Buildable Lands & Land Capacity Analysis Report by the

City of Mount Vernon Community and Economic Development Department. The countywide Skagit County Industrial Land Study completed by ECONorthwest in December 2014, aerial imagery, and Skagit County's iMap were also used in this analysis. A Bayview Ridge UGA zoning map is included in Appendix B.

The following steps were used in this analysis:

- Evaluate the suitability of land for future development allowed by current County zoning.
  - Identify and remove areas in public uses (parks, schools, public facilities, capital infrastructure, etc.).
    - Any fully developed properties were removed from the analysis.
    - Any properties with utility use, such as pump stations, storm ponds, transformers, etc. were removed from the analysis.
  - Identify regulated environmentally critical areas, protected natural resource areas, and environmental hazards (geologic hazard areas, flood-prone areas, etc.) that could make these lands unsuitable for future development.
    - Large wetlands and utility easements make up the majority of undevelopable lands in Bayview Ridge.
    - All parcels with less than 10,000 square feet of developable area after the critical area deduction was removed from the analysis.
  - Evaluate the remaining areas for development suitability, including but not limited to the following characteristics:
    - Remaining development area after fully developed, public, and critical areas were removed (674 acres)
    - Prevailing land use patterns and current level of development.
- Determine assumed employment density and calculate capacity
  - Determine zoning of suitable land areas
    - All non-residential zones in Bayview Ridge are Industrial.
    - Industrial employment density was set to 6.5 jobs per acre for industrial zoned land (BR-HI and BR-LI).
    - The Aviation related zones were set to a lower job density of 4 jobs per acres (AVR and AVR-L).
  - Calculate estimated land capacity within suitable land areas in each zone.

Capacity by Zone

Exhibit 2 identifies industrial development capacity by zone within Bayview Ridge. Results show capacity for about 2426 jobs and a surplus of 487 jobs over the 2045 employment allocation.

Exhibit 2. Industrial Development Capacity by Zone in Bayview Ridge

Bayview Ridge UGA Industrial Zones	Zoning	Net Acres Developable (after critical areas deduction)	Infrastructure Deduction (20%)	Market Factor (25%)	Net Buildable Acres	Job Density	Employment Capacity (jobs)
Aviation Related	AVR	54.11	43.29	32.47	32.47	4	129
Aviation Related-Limited	AVR-L	79.94	63.95	47.97	47.97	4	191
Heavy Industrial	BR-HI	171.38	137.10	102.83	102.83	6.5	668
Light Industrial	BR-LI	368.79	295.03	221.27	221.27	6.5	1,438
Total		**674.22**	**539.37**	**404.53**	**404.53**		**2,426**

Source: Skagit County GIS, 2024, Kimley-Horn 2024

Next Steps

The County has sufficient employment capacity within the Bayview Ridge UGA to meet the employment allocation allotted to Bayview Ridge through 2045.

Appendix A

Final 2045 Employment Allocations

~~INITIAL~~ FINAL 2045 EMPLOYMENT ALLOCATIONS IN SKAGIT COUNTY

Urban Growth Areas	2022 Employment Estimates	2045 ~~Initial~~ Final Employment Allocations	2022-2045 Projected Employment Growth		
			Amount	Percent of Total Growth	Percent Growth by Area
Anacortes	9,503	12,648	3,145	15.3%	33.1%
Burlington	11,640	17,410	5,770	28.1%	49.6%
Mount Vernon	18,781	23,559	4,778	23.3%	25.4%
Sedro-Woolley	4,640	7,040	2,400	11.7%	51.7%
Concrete	391	506	115	0.6%	29.4%
Hamilton	466	489	23	0.1%	4.9%
La Conner	1,020	1,905	885	4.3%	86.8%
Lyman	56	76	20	0.1%	35.7%
Bayview Ridge	2,962	4,901	1,939	9.4%	65.5%
Swinomish	1,140	1,579	439	2.1%	38.5%
UGAs Subtotal	**50,599**	**70,113**	**19,514**	**95.1%**	**N/A**
Rural (outside UGAs)	8,972	9,987	1,015	4.9%	11.3%
Grand Total	**59,571**	**80,100**	**20,529**	**100.0%**	**N/A**

Notes:

1. Percentages may not sum due to rounding.

2. Figures may vary from Skagit County Population, Housing and Employment Growth Allocations Methodology findings due to rounding.

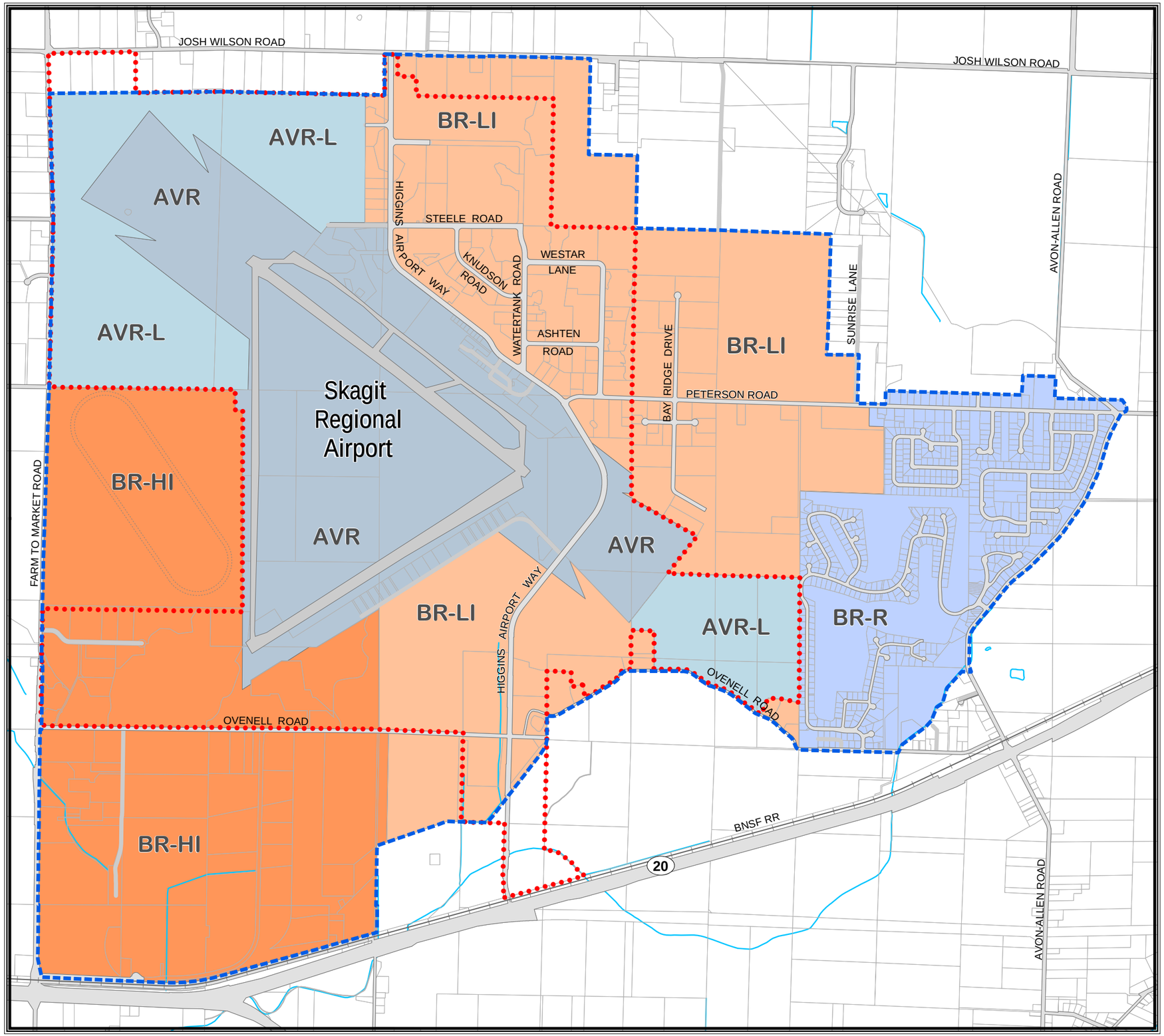
3. UGA is "Urban Growth Area".

~~4. The 2015 Planned Action Environmental Impact Statement for the SWIFT Center (formerly known as the "North Cascades Gateway Center") in Sedro-Woolley anticipates 2,855 additional jobs from 2016-2036. These additional jobs are not explicitly included with the 2045 initial final employment allocation., though the land capacity analysis Sedro-Woolley conducts, and regional reconciliation process expected to begin in late 2024, can account for additional planned employment growth.~~

4. Allocations for the Swinomish Urban Growth Area provided for informational purposes only. Skagit County did not conduct a land capacity analysis for this UGA due to jurisdictional challenges on tribal lands.

Appendix B

Bayview Ridge Subarea Plan maps



LEGEND

- Urban Growth Area Boundary
- Port of Skagit County Boundary
- [AVR] Aviation Related
- [AVR-L] Aviation Related - Limited
- [BR-R] Bayview Ridge Residential
- [BR-LI] Bayview Ridge Light Industrial
- [BR-HI] Bayview Ridge Heavy Industrial

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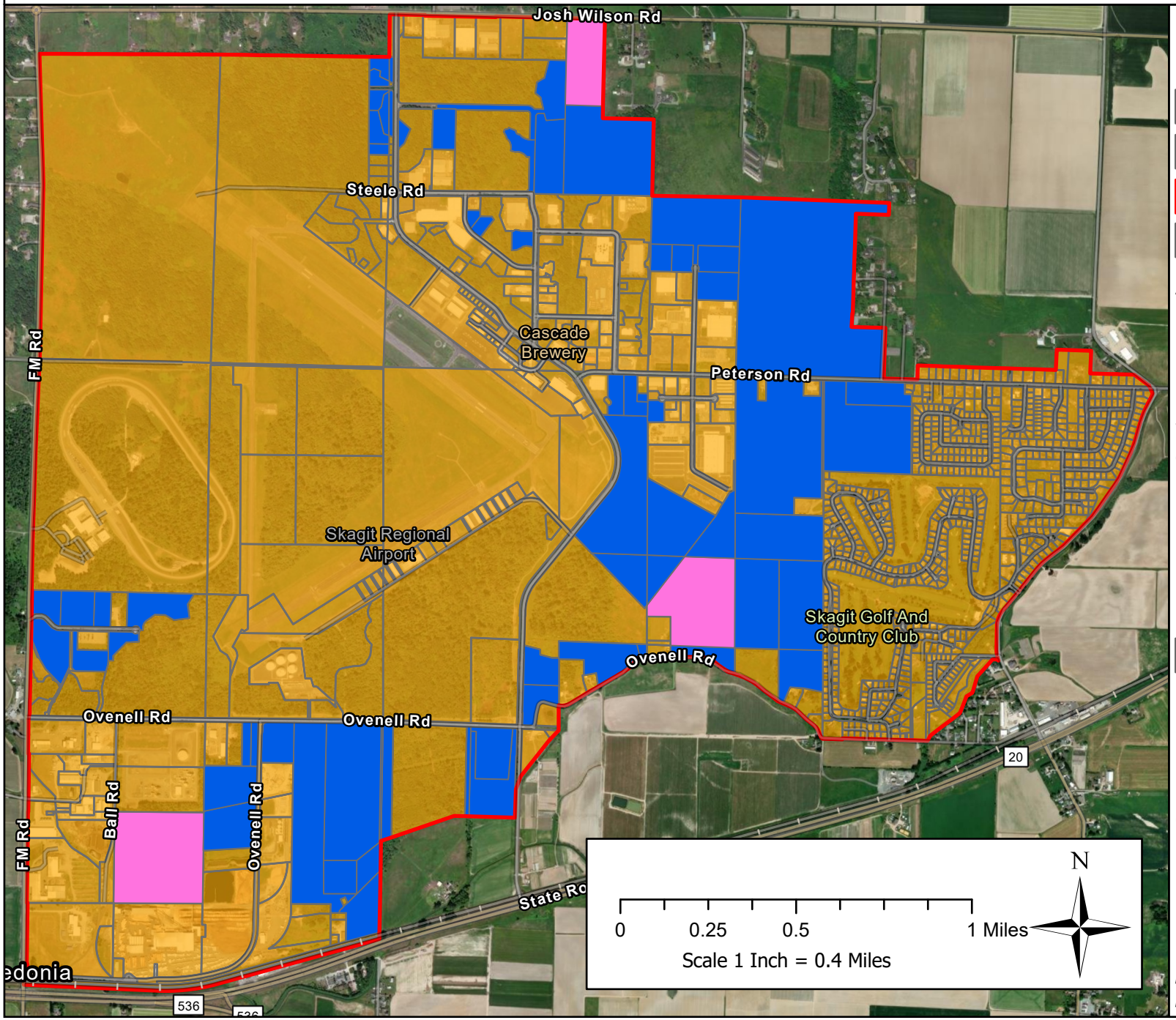
SKAGIT COUNTY WASHINGTON

BAYVIEW RIDGE SUBAREA PLAN

Land Use Plan

Figure 2-1

Bayview Ridge UGA Commercial and Industrial Land Capacity Analysis Map



Legend

- Vacant
- Partially Used
- UGA Boundary
- Tax Parcels

As part of the Skagit County Land Capacity Analysis, this map has been prepared to portray the parcels in the Bayview Ridge UGA which were identified to have employment capacity.

Per the methodology, certain parcels were removed and are not shown as having capacity in the analysis.

- Undevelopable Parcels

Undevelopable parcels include:
- Fully developed lots
- Small lots (under 10,000 sf)
- Lots encumbered more than 90% by critical areas or undevelopable land (easements)
- Lots zoned Residential (BR-R)

This map was prepared using best available public data and should not be used for any purpose outside of this land capacity analysis.

Preface
1 Contents
2 Land Use
3 Rural
4 Natural Resource Lands
5 Environment
6 Shoreline
7 Housing
8 Transportation
9 Utilities
10 Capital Facilities
11 Economic Development
12 Climate and Resiliency
13 Implementation
Appendices

Appendix D Housing Needs Assessment

Housing Affordability and Availability Needs Assessment

Skagit County Comprehensive Plan, 2025 Update

Introduction and Purpose

The Housing Element of the Comprehensive Plan Update provides a framework for promoting a diverse housing supply, protecting and improving the health and livability of neighborhoods, and making adequate provisions for the current and projected housing needs of all economic segments of the community. Safe and affordable housing is essential to realizing Skagit County's vision as a vibrant community.

Recent changes to the Growth Management Act (GMA) resulted in new requirements for this Housing Element update. These include:

- *House Bill 1337* amended RCW 36.70A to add significant changes to local government roles for regulating accessory dwelling units (ADUs) within urban growth areas (UGAs). Consequently, this plan includes additional consideration for the role of ADUs in meeting housing needs inside UGAs.
- *House Bill 1220* as amended in the GMA (RCW 36.70A.070) requires the county to "plan for and accommodate" housing affordable to all income levels. This requires changes in the Housing Element to address housing provisions by income bracket to show how the county is planning for housing. Additional requirements for housing element updates now include:
  - An inventory of housing needs by income level as well as needs for emergency housing, emergency shelters, and permanent supportive housing
  - Analysis to show sufficient land capacity for these housing needs as well as accommodation of moderate density housing options within Urban Growth Areas (UGAs)
  - Adequate provisions to address projected housing needs, including documentation of programs and actions needed to achieve housing availability, considering housing locations in relation to employment, and consideration of the role of ADUs.
  - Identifying policies and regulations that result in racially disparate impacts (RDI), displacement, and exclusion, and implementation of new policies and regulations to undo these impacts

Definition

HB 1220 added new terms in the housing element statue. Commerce developed the following definitions with a statewide stakeholder group to create a common understanding of the undefined terms.

- **Discriminatory effect:** The effect, regardless of intent, of differentiated outcomes for a group based on a protected classification. May be an action or failure to act. Protected classifications include race/color, national origin, religion/creed, sex/gender/domestic violence status, familial status, disability, marital status, sexual orientation and military/veteran status.
- **Disinvestment:** A process by which a community is not prioritized for investment, or by which a system, policy or action disincentivizes investment in a specific area. Disinvestment processes occur over time, often in the long term.
- **Displacement:** The process by which a household is forced to move from its community because of conditions beyond their control.
    - *Physical displacement:* Households are directly forced to move for reasons such as eviction, foreclosure, natural disaster or deterioration in housing quality.
    - *Economic displacement:* Households are compelled to move by rising rents or costs of home ownership like property taxes.
    - *Cultural displacement:* Residents are compelled to move because the people and the institutions that make up their cultural community have left the area.
- **Displacement risk:** The likelihood that a household, business or organization will be displaced from its community.
- **Exclusion in housing:** The act or effect of shutting or keeping certain populations out of housing within a specified area, in a manner that may be intentional or unintentional, but which leads to non-inclusive impacts.
- **Gentrification:** The process of neighborhood change resulting in households being unable to remain in their neighborhood or move into a neighborhood that would have been previously accessible to them. The neighborhood change includes economic change in a historically disinvested neighborhood, such as rising land values and rising housing costs, as well as demographic change representing a shift in the income, racial composition, or educational level of residents. This is also referred to as "neighborhood exclusionary change" or "exclusionary displacement." Gentrification creates discriminatory effects when it forces the displacement of long-time residents and businesses.
- **Inclusionary zoning:** A regulatory tool that requires permanent affordable units to be included within new residential development projects or requires payment for construction of such units elsewhere (fee-in-lieu). "Permanent" refers to affordable unit availability in the long term, specifically, for 50 years as defined by the Washington code.
- **Infrastructure:** The facilities and systems that serve a country, city, or area, such as transportation, parks, communication systems, energy and utility systems, and schools.
- **Market forces:** Economic factors that impact the provision, price and/or demand for housing.
- **Racially disparate impacts:** When policies, rules or other systems result in a disproportionate impact on one or more racial groups.
- **Median household income:** The household income for the median household in a region. Can also be understood as the midpoint of a region's income distribution.

- **HUD Median Family Income (MFI):** U.S. Dept. of Housing and Urban Development (HUD) calculates MFI for counties each year and uses this information to set income limits for affordable housing eligibility. MFI varies based on household size.

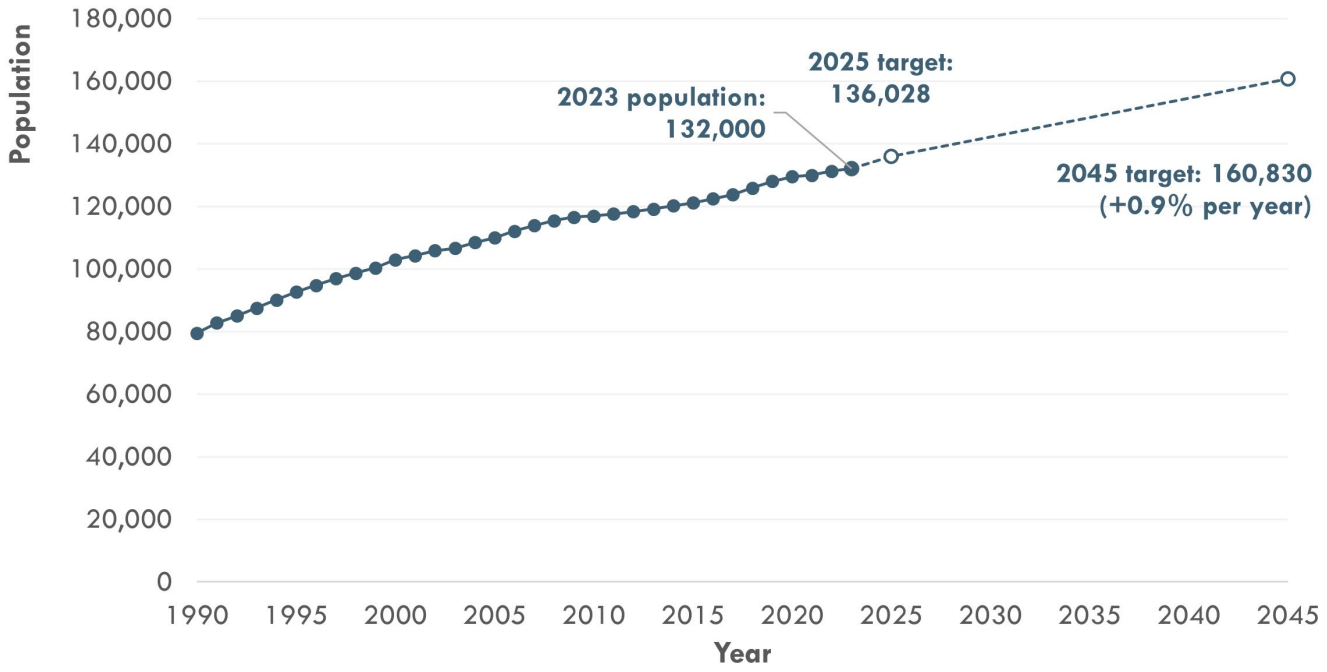
Summary of Key Findings

- As of 2020, approximately 6,000 households in Skagit County were spending over half of their income on housing costs. These families and individuals have limited income remaining to cover other essentials like food, transportation, and education. Many experience housing insecurity, and are at risk of losing their homes if housing costs continue to rise.
- In 2023, approximately 3,373 individuals experienced homelessness or unstable housing countywide.
- Rental housing costs increased consistently since 2018. This has reduced the supply of lower cost housing options, and likely increased the number of households experiencing housing insecurity since 2020.
- Typical home sale prices continue to rise, making it difficult for a first-time homebuyer to purchase a home under $500,000.
- Racial disparities in housing affect many BIPOC households, who have lower homeownership rates and are more likely to be cost burdened compared to their White counterparts.

Population Characteristics

According to the Office of Financial Management (OFM), the total population of Skagit County in 2023 was approximately 132,000. Between 2000 and 2023, Skagit County has grown by 29,021 people, an average annual increase of 1.1%. Looking forward, the Growth Management Act Steering Committee (GMASC) projected a 2045 population target of 160,830 for the county, which presents an expected 0.9% average annual population growth over the next two decades. Approximately 80% of the growth in Skagit County is expected to occur within incorporated cities and their UGAs.

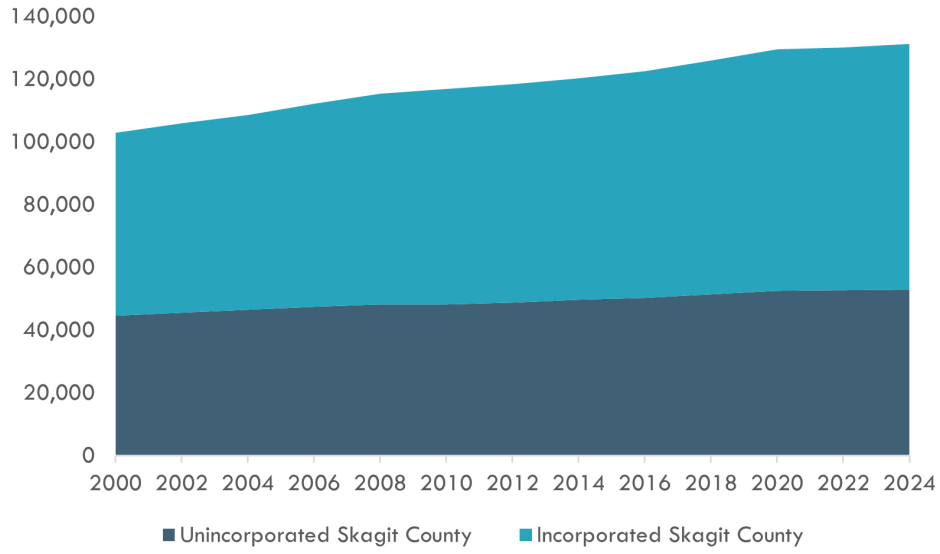
Exhibit 1. Skagit County - Population Growth: Historic and Projected (1990 – 2045)



Sources: US Census Bureau, 2022 ACS 5-Year Estimates; Office of Financial Management, 2023; Community Attributes, 2023; BERK Consulting, 2024.

Exhibit 2 shows that between 2000 and 2023, Unincorporated Skagit County has grown by 8,559 people, an average annual growth of 0.8% and Incorporated Skagit County has grown by 20,462 people, an average annual increase of 1.3%.

Exhibit 2. Skagit County – Population trend / unincorporated / incorporated (2000 – 2024)



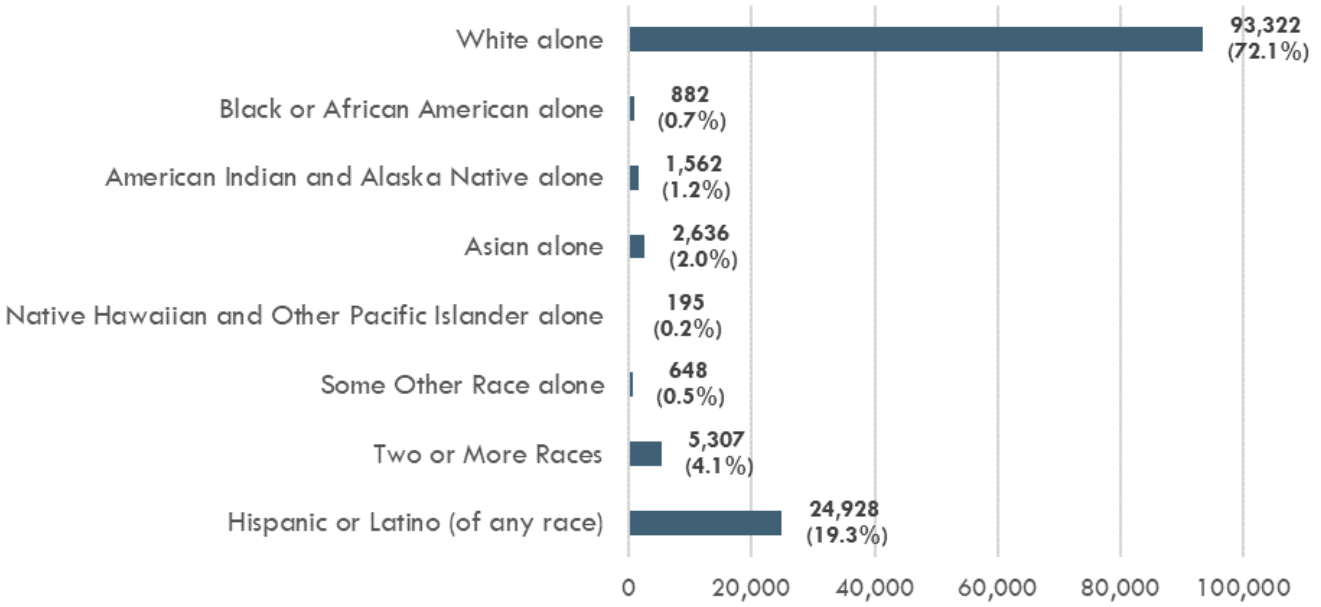
Source: OFM Intercensal Estimates 2000-2010 & 2010-2020; BERK, 2024.

Racial and Ethnic Makeup

As of 2022, Census data estimates that 72% of the Skagit County population identify as White alone, not Hispanic or Latino, which is a higher percentage than Washington state at 65.5%. As shown in Exhibit 3, about 19% of the population identifies as Hispanic or Latino, which is higher than the 13% of the population identifying as Hispanic or Latino in Washington State. 84% of the Hispanic or Latino population in the county are Mexican, compared to 76% for the state.

The largest racial groups represented in the non-Hispanic/Latino population in Skagit County are those who identify as two or more races and Asian alone. These groups represent 4% and 2% of the population, respectively. Smaller proportions of the population identify as American Indian and Alaska Native, Black or African American, or Native Hawaiian and Other Pacific Islander.

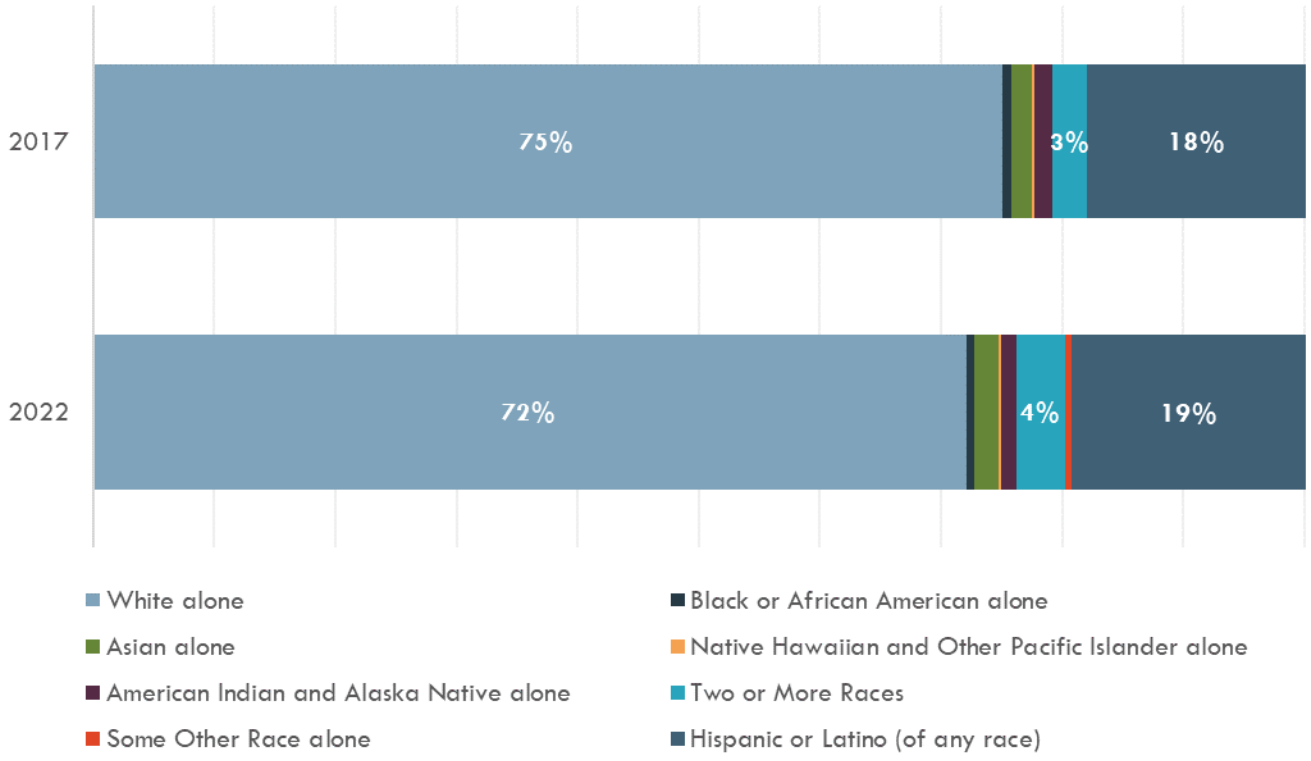
Exhibit 3. Skagit County – Race and Ethnicity of Population (2022)



Source: US Census Bureau, 2022 ACS 5-Year Estimates; BERK Consulting, 2024.

Over time, the population of Skagit County is getting more diverse. As shown in Exhibit 4, between 2017 and 2022, the percentage identifying as White alone, not Hispanic or Latino, decreased from 75% to 72%. The percentage identifying as Hispanic or Latino increased from 18% to 19%.

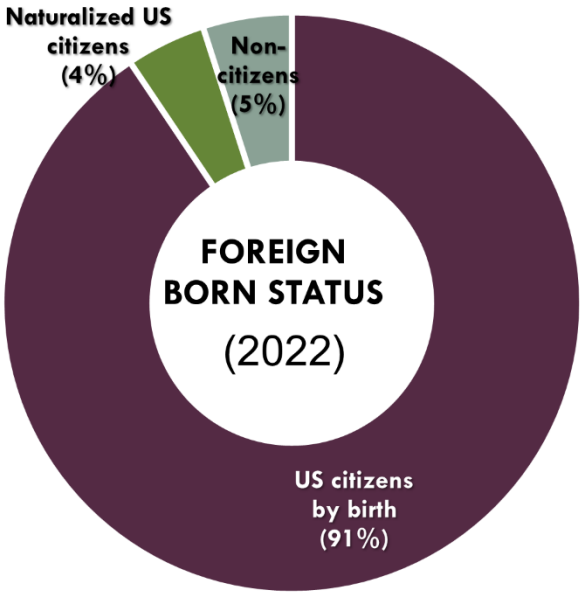
Exhibit 4. Skagit County - Population by Race and Ethnicity, Comparison Over Time (2017 and 2022)



Sources: US Census Bureau, 2018-2022 American Community Survey 5-Year Estimates; BERK Consulting, 2024.

As shown in Exhibit 5, 91% Skagit County's population was born in the United States with an addition 4% of the population being Naturalized citizens. This is a higher rate than the statewide US-born population which is at 85%.

Exhibit 5. Skagit County – Foreign-Born Populations (2022)

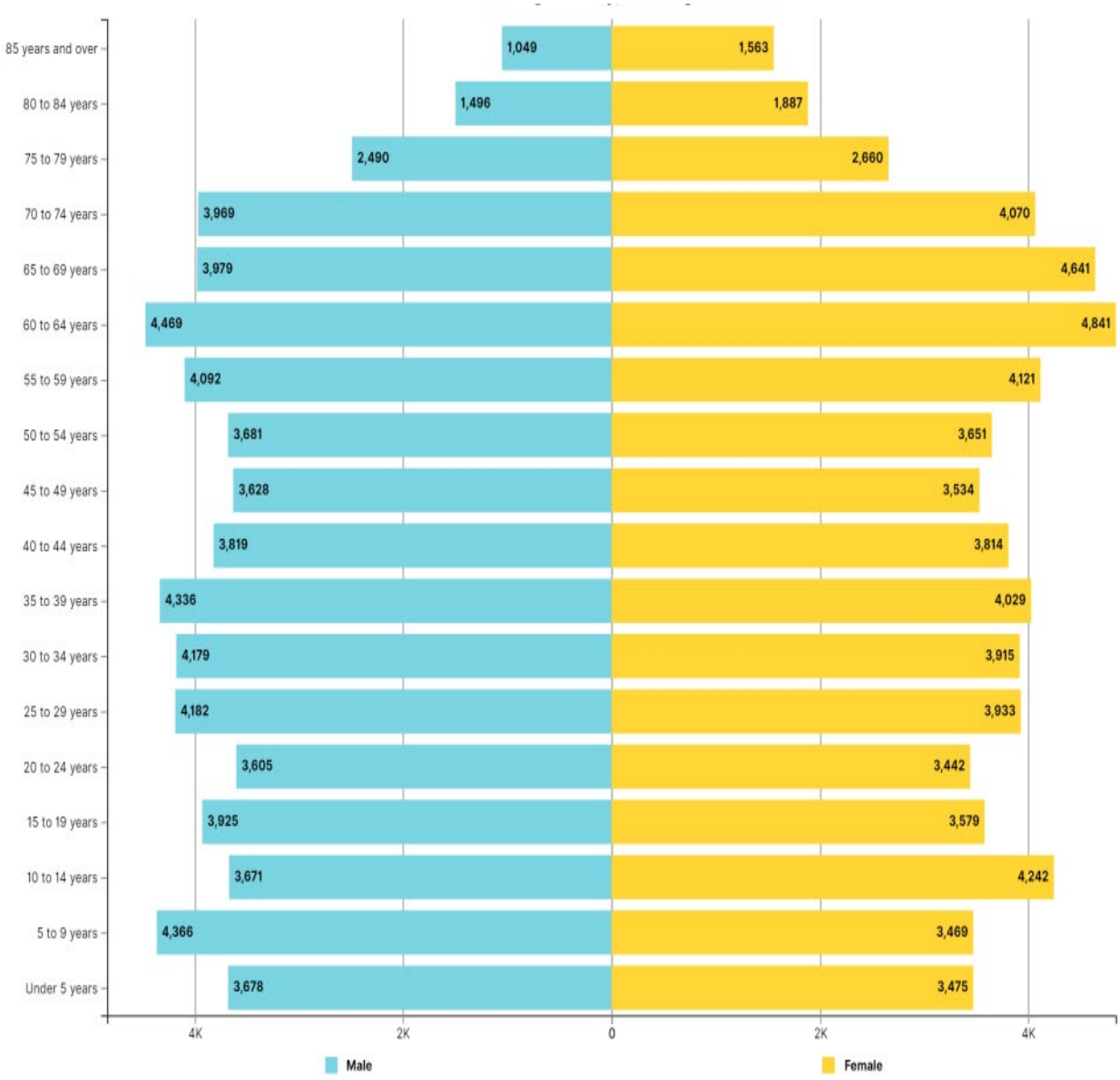


Source: US Census Bureau, 2022 ACS 5-Year Estimates; BERK Consulting, 2024.

Age of Population

Exhibit 6 shows Skagit County's population by age groups and gender. The gender makeup of the county is 49.9% male and 50.1% female. There is a larger distribution of male population in the young to middle age groups (30.4% male vs 28.9% female in the 0-49 age group). Correspondingly, there is a larger distribution of female population in the near retirement to retirement age groups (19.5% male vs 21.2% female in the 50+ age group).

Exhibit 6. Skagit County – Population by Age and Gender (2022)

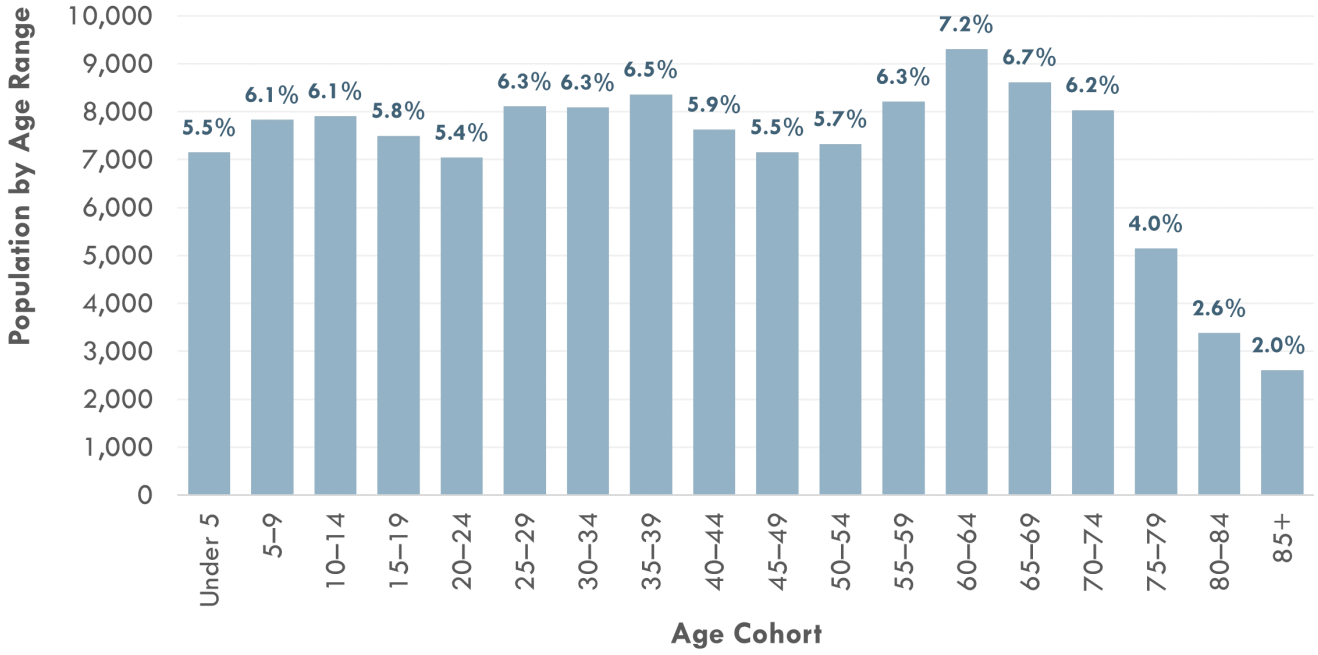


Source: ACS 5-Year Estimates, 2022.

Exhibit 7 shows that Skagit County's age distribution is diverse. The largest single age group is people between the ages 50-64 (19.2%), the age range associated with people who will be of retirement age

within the next 15 years. The next two largest age groups are people between the ages 20-34 (18%) and 35-49 (18%) who are people likely in their prime working years and may have young families. Correspondingly, about a quarter of Skagit County's population (23.5%) is children 19 and under, which indicates that many of the County's households are families with children. Finally, approximately 21.5% of Skagit County's population is of retirement age (ages 65+). In total, 40.7% of the County's current population is either of retirement age or will be in retirement age within the next 15 years.

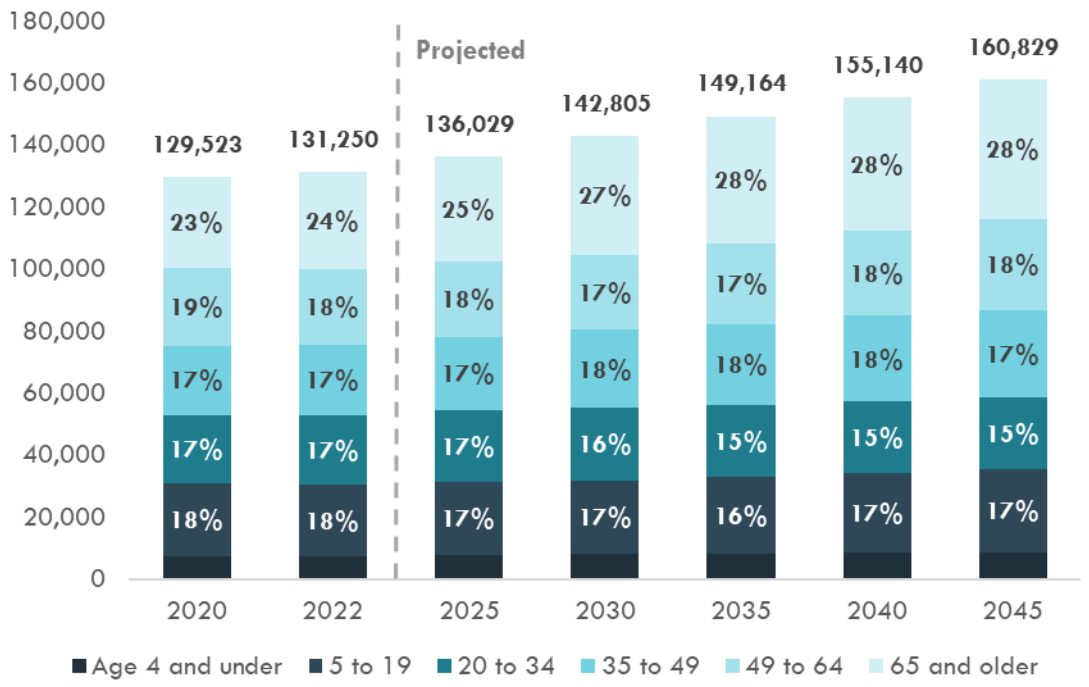
Exhibit 7. Skagit County – Age Structure of Population (2022)



Source: US Census Bureau, 2022 ACS 5-Year Estimates; BERK Consulting, 2024.

An increase in the senior population will impact the region's housing needs. Between 2020 and 2045, Skagit County's population of residents 65 and older is projected to increase from 29,373 (23 percent of the county's total population) to 45,022 (28 percent of the population). See Exhibit 8.

Exhibit 8. Skagit County - Population by Age Cohort, Estimates and Projections (2020-2045)



Sources: OFM, 2023; BERK Consulting, 2024.

Note: Projections reflect the OFM Medium projection series.

Households Characteristics

A household is a group of people who live together in a housing unit. Members of a household could be related, unrelated, or living alone. In 2022, there were approximately 50,824 households living in Skagit County.[1] This section presents a profile of these households. This information is critical for informing policy recommendations about the types and sizes of new housing needed.

Exhibit 9 shows the number of occupied housing units in Skagit County by jurisdiction, which is a proxy for households.[2] In 2024, there were 52,043 occupied housing units in Skagit County, of which 20,774 (39.9%) were in unincorporated areas.

Exhibit 9. Occupied Housing Units by Jurisdiction (2023)

	Occupied Housing Units
Anacortes	8,167
Burlington	3,980

[1] B25009: Tenure by Household Size; US Census Bureau, 2018-2022 American Community Survey 5-Year Estimates

[2] According to the U.S. Census Bureau, the count of occupied housing units is the same as the count of households. https://www.census.gov/housing/hvs/definitions.pdf

	Occupied Housing Units
Concrete	344
Hamilton	113
La Conner	520
Lyman	158
Mount Vernon	13,117
Sedro-Woolley	4,870
Unincorporated Skagit County	20,774

Source: OFM, 2024.

Household Sizes and Types

According to the Census, the average household size in Skagit County was 2.51 in 2022.[3] Looking to the future, the demographic trend of an aging population will likely result in a decreasing average household size over time, presuming there is an adequate supply of new homes to accommodate housing needs. This is because elderly residents are much less likely to have children living in their homes, and often are living alone or with one other person. The Washington State Dept. of Commerce projects that the average household size will be approximately 2.42 by 2045.

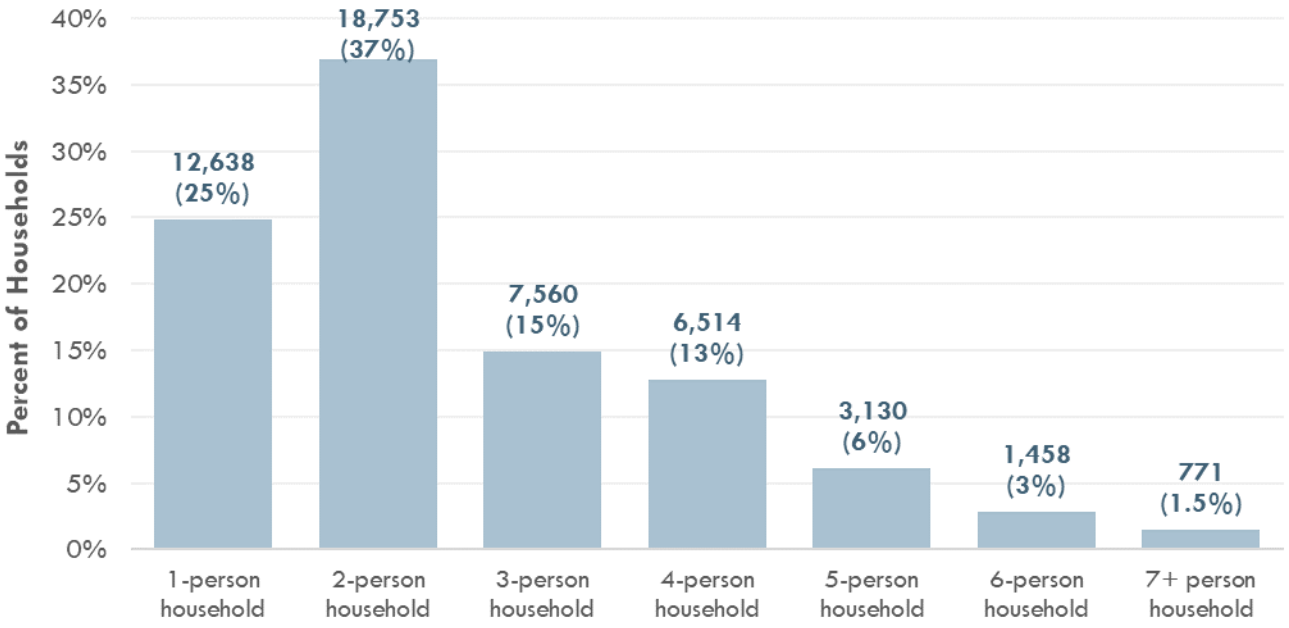
As of 2022, approximately 68% of households in Skagit County were families and 32% were non-family.[4] According to the U.S Census Bureau, family households include two or more people living together that are related by birth, marriage, or adoption. Non-family households are defined as persons living alone or with only non-relatives.

Exhibit 10 breaks down all households in Skagit County by the number of people living together. According to the 2018-2022 American Community Survey, two-person households are the most common in the county at 37%, followed by one-person households at 25%, and three-person households at 15%. Only about 10% of households have more than four members.

[3] B25010: Average Household Size of Occupied Housing Units by Tenure; US Census Bureau, 2018-2022 American Community Survey 5-Year Estimates

[4] B25011: Tenure by Household Type (Including Living Alone) and Age of Householder; US Census Bureau, 2018-2022 American Community Survey 5-Year Estimates

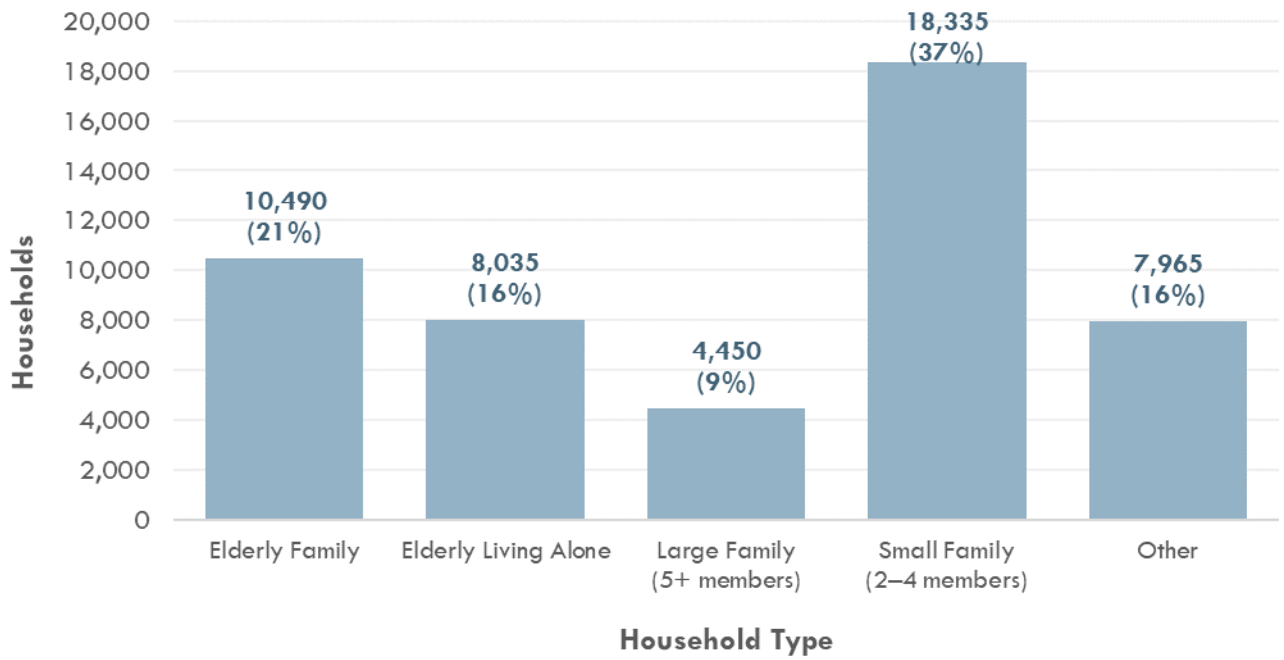
Exhibit 10. Skagit County - Households by Household Size (2022)



Sources: US Census Bureau, 2022 ACS 5-Year Estimates; BERK Consulting, 2024.

Exhibit 11 shows the distribution of households by type. The largest group (37%) are small families with 2 to 4 members. Many of these households are couples without children. This group excludes elderly families, which include a member who is age 62 and above. "Other" households include non-elderly people living alone as well as unrelated persons living together in a shared home.

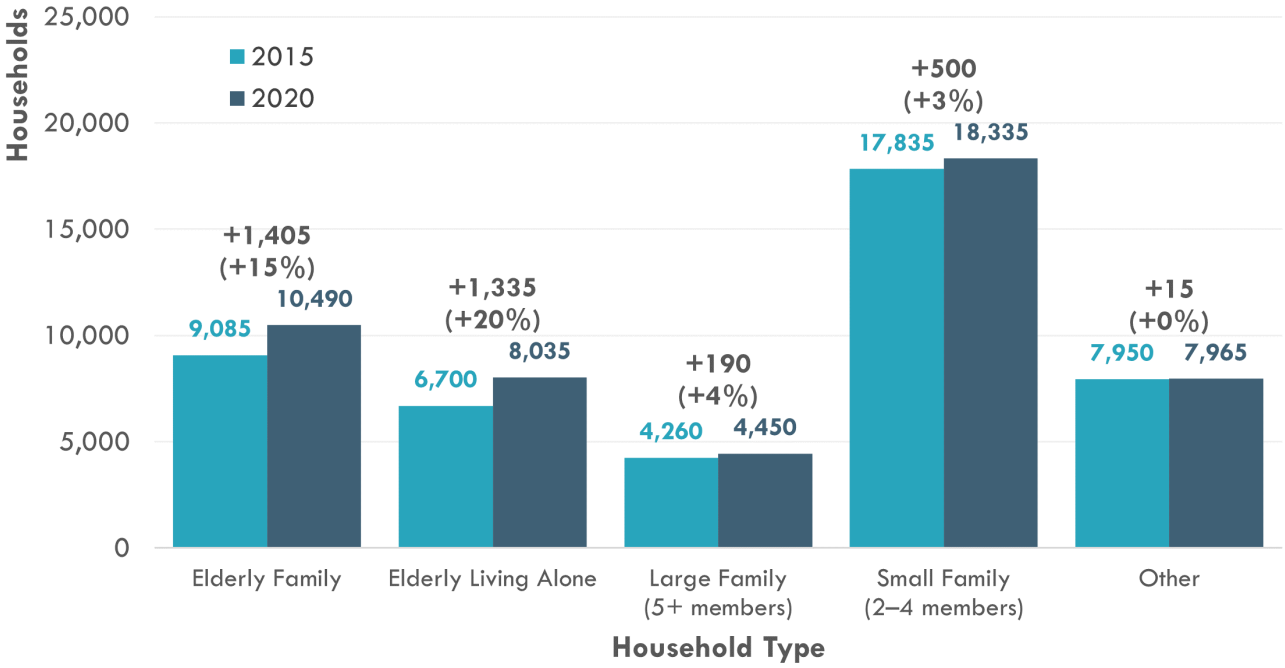
Exhibit 11. Skagit County - Households by Type (2020)



Sources: US HUD Comprehensive Housing Affordability Strategy (CHAS), 2016–2020; BERK Consulting, 2024.

The change in the number of households by family type shown in Exhibit 12 is consistent with the demographic trend of an aging population in Skagit County. The elderly families and elderly living alone households rose significantly over the last 5 years (+15% and +20%, respectively) while the number of large and small families (+4% and +3%) rose slightly. Non-family households stayed the same. This data indicates that there is a relatively high number of households aging into elderly years and/or elderly households are moving into Skagit County. The smaller increase in small families and non-family households may indicate that those households are moving out from Skagit County or aging into elderly households. The large and growing number of elderly households call for housing policies and strategies that support a diversity of housing options such as accessory dwelling units for family members or caregivers, and smaller housing units closer to services for those looking to downsize.

Exhibit 12. Skagit County - Households by Type (2015 and 2020)



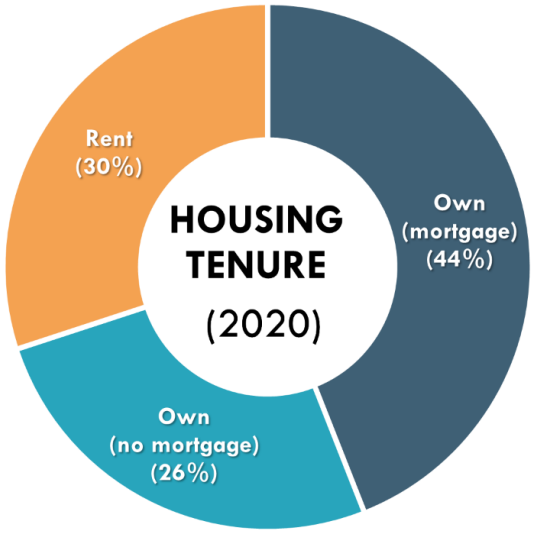
Source: US Census Bureau, 2020 ACS 5-Year Estimates, 2015 ACS 5-Year Estimates; BERK Consulting, 2024.

Household Tenure

Tenure refers to the ownership status of a home. The tenure mix (owner or renter) in an area provides insights into the housing situations and needs of different population segments. An overview of tenure patterns is vital for understanding housing needs and developing appropriate policies and programs.

A strong majority of households in the county own the home they live in. **Exhibit 13** shows that 70% of Skagit County households own the home they live in and 30% of households rent the home they live in. The results are not far off from the Washington State averages of 64% and 36%, respectively. Given the substantial proportion of homeowners, there may be opportunities for growth in rental units to accommodate those who cannot afford to buy or prefer the flexibility of renting. In the next section, household income and cost burden for residents in Skagit County is examined and the results suggest that the county would benefit from affordable housing, especially in the rental market.

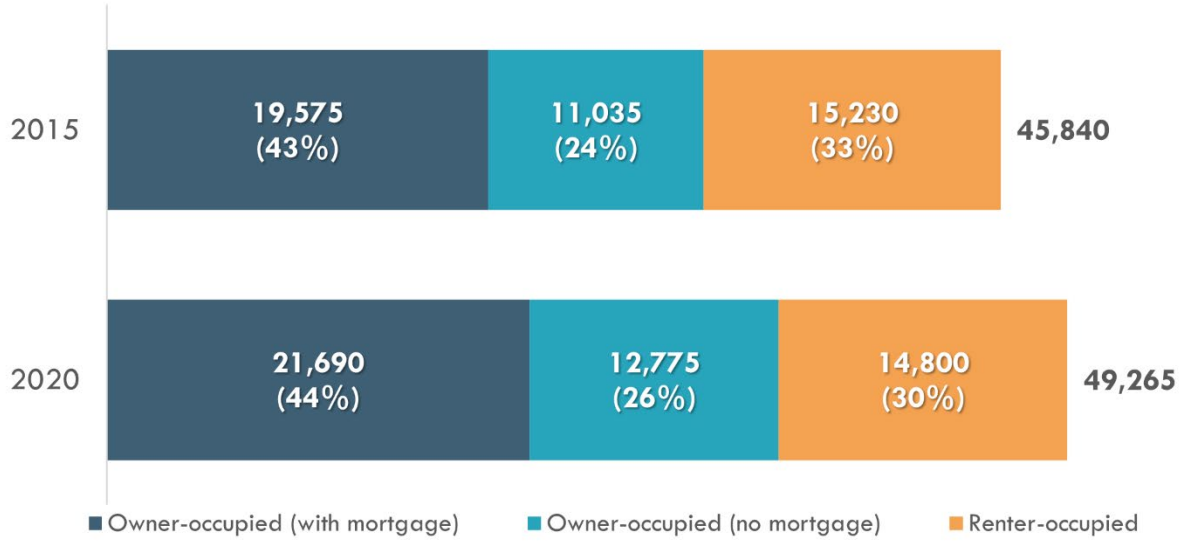
Exhibit 13. Skagit County – Tenure by Ownership vs Renters (2020)



Sources: US Census Bureau, 2020 ACS 5-Year Estimates; BERK Consulting, 2024.

Between 2015 and 2020 there was little change in percentage of tenure. Renter-occupied units decreased by 3% and owner-occupied units rose by 3% in that time span.

Exhibit 14. Skagit County – Five Year Change with Home Ownership and Renters (2015 and 2020)

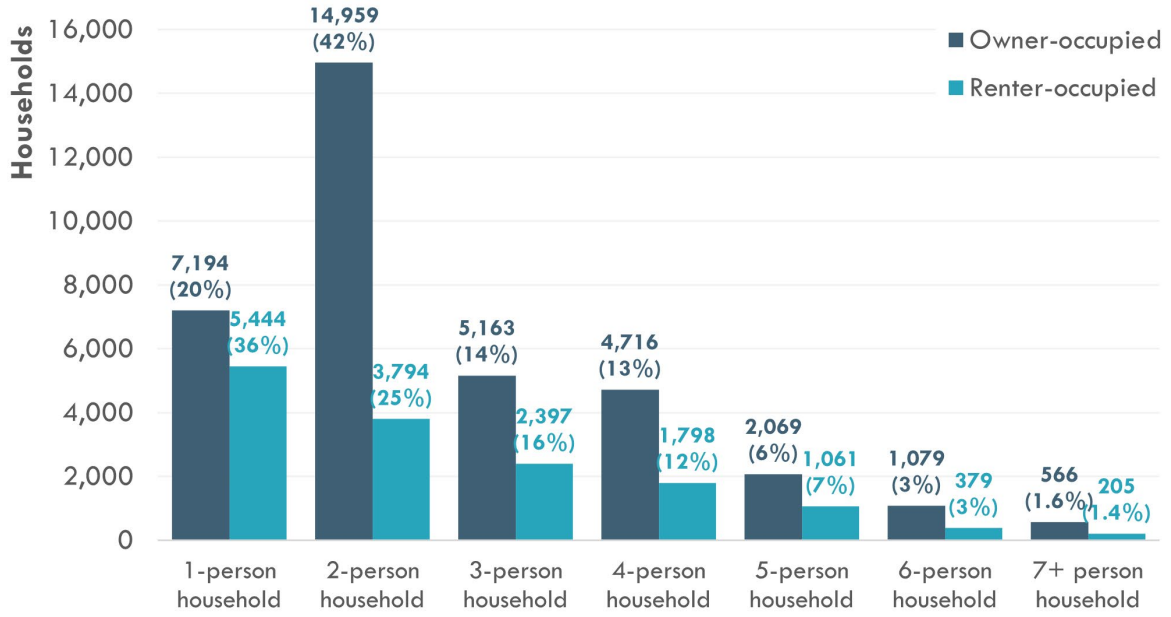


Source: US Census Bureau, 2020 ACS 5-Year Estimates, 2015 ACS 5-Year Estimates; BERK Consulting, 2024.

The most common type of household size are 2-person households for owner-occupied units and 1-person households for renter-occupied units. In total, 1- and 2-person households make up 62% of all the households in the county. Owner-occupied 2-person households are the most common type of household at approximately 29% of the total number of households. The high percentage of 1- and 2-person

households may necessitate a focus on smaller housing units and apartment complexes to meet the needs of the population effectively. The breakdown between household size by tenure is shown in Exhibit 15.

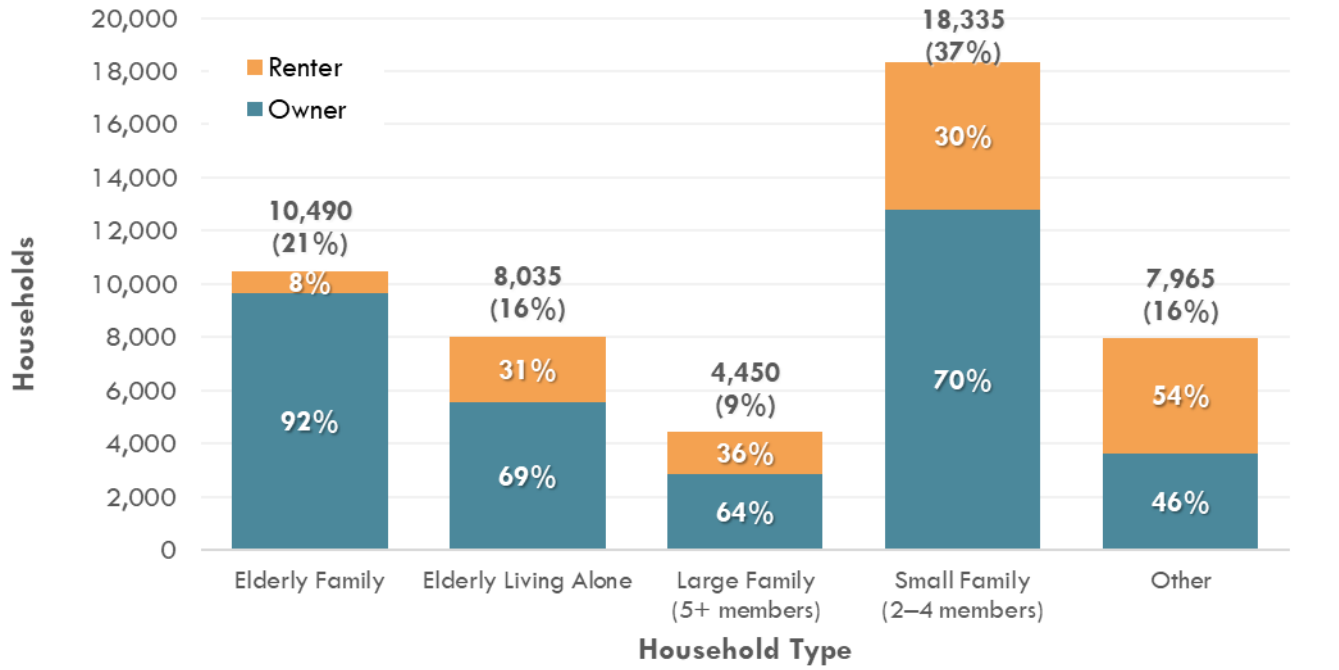
Exhibit 15. Skagit County – Owner and Renter Households by Size (2022)



Source: US Census Bureau, 2022 ACS 5-Year Estimates; BERK Consulting, 2024.

An analysis of the types of families both renting and owning their homes shows that elderly families (21% of the county's households) own their home at a very high rate (92%). The next highest percentage of families that own their home are small families between 2 and 4 people (37% of the county's households) which own at a 70% rate. In general, families and elderly living alone own their home at higher rates and non-family households (16% of households and own at 46% rate). See **Exhibit 16.**

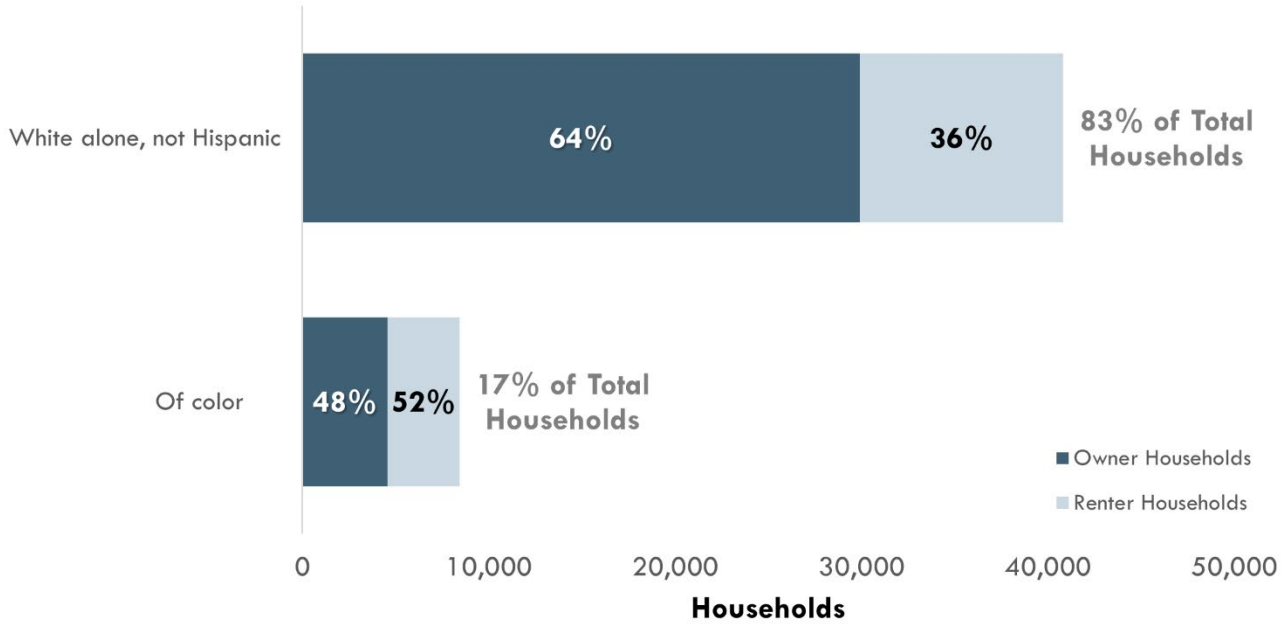
Exhibit 16. Skagit County - Households by Type and Tenure (2020)



Sources: US HUD Comprehensive Housing Affordability Strategy (CHAS), 2016–2020; BERK Consulting, 2024.

Analyzing tenure in Skagit County by Race and Ethnicity can help the County better understand the needs of the communities living here. Exhibit 17 shows that White, non-Hispanic households are more likely to own the house they live in (64%) than People of Color (48%) in Skagit County.

Exhibit 17. Skagit County – Households by Race and Ethnicity of Householder and Tenure (2022)

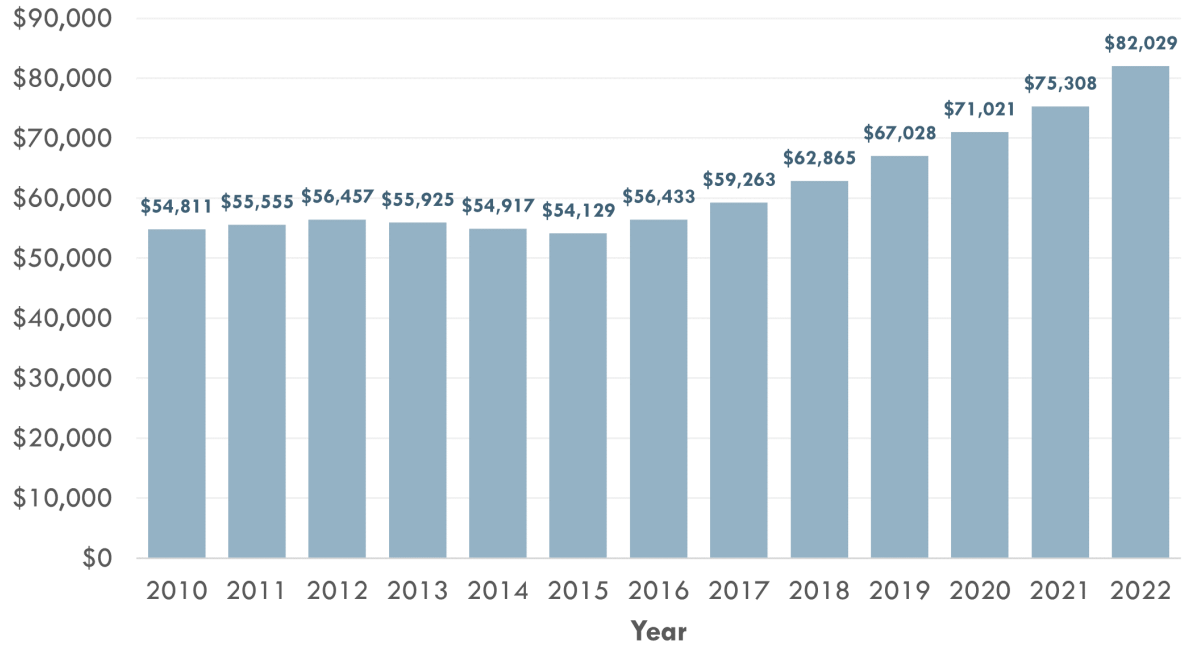


Source: US Census Bureau, 2022 ACS 5-Year Estimates; BERK Consulting, 2024.

Household Incomes

Household income refers to the total combined income of all members of a household. A household's income determines what kinds of housing and which locations are affordable to them. **Exhibit 18** shows the median household income in Skagit County from 2010 to 2022, as defined and calculated by the United States Census Bureau. The county's median household income in 2022 was $82,029, which is lower than the Washington State average of $90,325. Median household income rose rapidly in the county and state between 2017 and 2022, a total of a $22,766 (38.4%) increase for the county and a $24,151 (36.5%) increase in median household income for the state. The median household income can be further broken down between owner-occupied housing units and renter-occupied housing units. In Skagit County, households that own the housing unit they live in had a median household income of $96,338 while renter households had a median household income of $50,440.

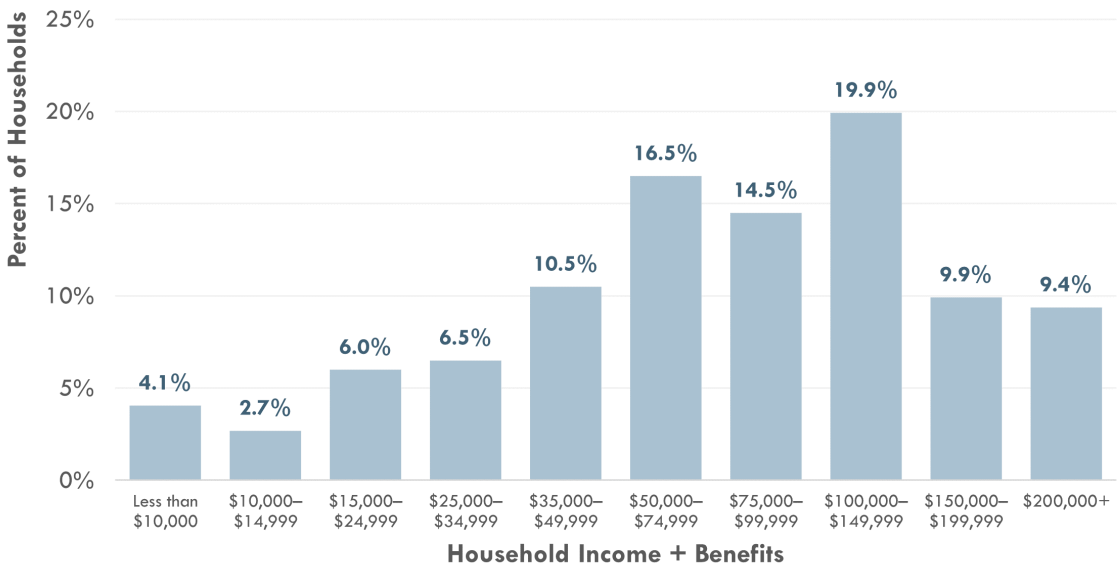
Exhibit 18. Skagit County – Median Household Income by Year (2010 – 2022)



Source: US Census Bureau, ACS 5-Year Estimates (2010 – 2022); BERK Consulting, 2024.

Approximately 51% of Skagit County households have a yearly income between $50,000 and $149,999, with the largest share (19.9%) in the $100,000 to $149,999 range. 19.3% of households in Skagit County make more than $150,000. This is lower than Washington State as a whole (26.2% of households make more than $150,000). 29.8% of Skagit County households make less than $50,000 a year.

Exhibit 19. Skagit County – Distribution of Household Total Income (2022)



Source: US Census Bureau, 2022 ACS 5-Year Estimates; BERK Consulting, 2024.

For the purpose of quantifying different kinds of housing needs, this study groups all households by income level relative to the HUD-area median family income, or MFI. This is different from the median household income presented above. In 2024, Skagit County's MFI for a four-person household is $102,800. However, the charts about households by income level that follow reflect conditions as of 2020, when MFI was $78,400. **Exhibit 20** shows typical income categories for grouping households by income level. Income thresholds for grouping households into these categories vary based on household size. This is because it takes more income to support a large family than a person living alone. So, for example, a 1-person household in 2024 with an income of $50,000 is considered to have an income of approximately 70% MFI, whereas a 5-person household with the same income is considered to have an income of 45% MFI.

Exhibit 20. Household Income Categories Associated with MFI Percentages

Household Income Category	Percent of HUD-Area Median Family Income (MFI)
Extremely Low-Income Household	0-30% MFI
Very Low-Income Household	30-50% MFI
Low-Income Household	50-80% MFI
Moderate Income Household	80-100% MFI
	100-120% MFI
Upper Income Household	>120% MFI

Sources: HUD, 2024; RCW 36.70A.030; BERK Consulting, 2024.

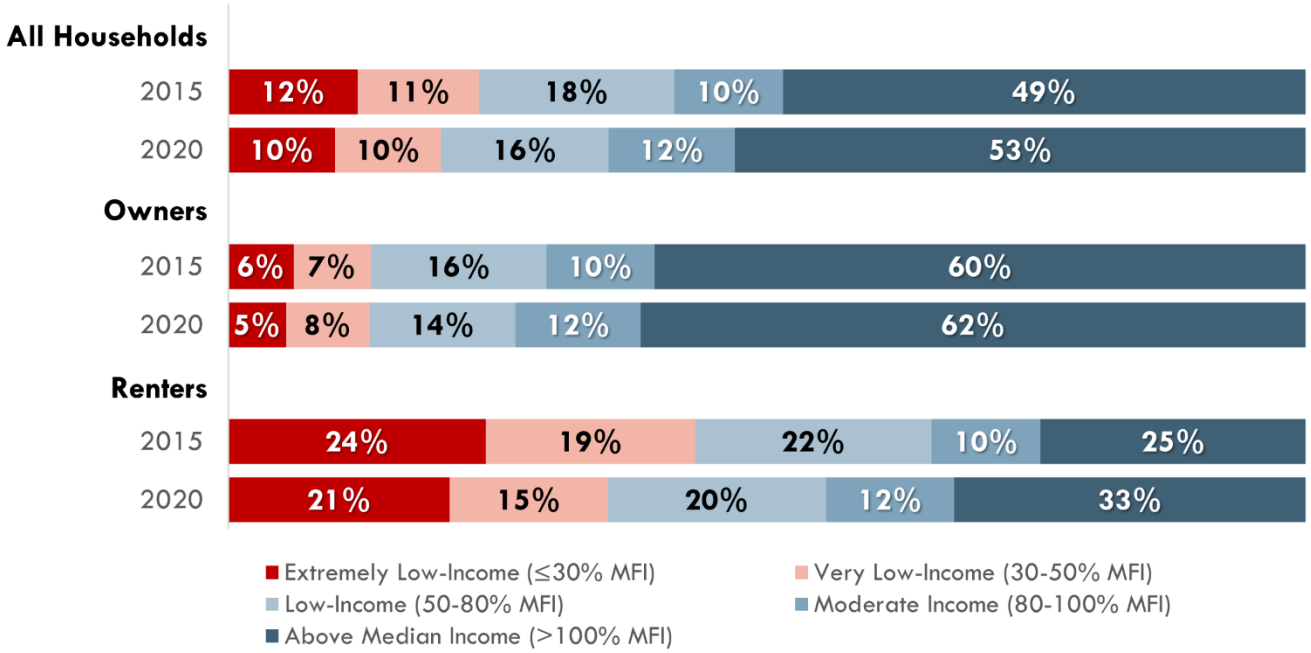
Exhibit 21. Skagit County - Thresholds for Classifying Households by Income Level, (2024)

MFI	Household Size						
	1	2	3	4	5	6	7
120%	$86,350	$98,690	$111,025	$123,360	$133,230	$143,100	$152,965
100%	$71,960	$82,240	$92,520	$102,800	$111,025	$119,250	$127,470
80%	$56,150	$64,150	$72,150	$80,150	$86,600	$93,000	$99,400
50%	$35,050	$40,050	$45,100	$50,100	$54,100	$58,100	$62,150
30%	$21,050	$24,050	$27,050	$31,200	$36,580	$41,960	$47,340

Sources: U.S. Department of Housing and Urban Development (HUD), 2024; BERK Consulting, 2024.

Households with incomes above MFI are considered "Above Median Income." Households below the MFI are broken into four groups that scale with household's income. Exhibit 22 shows that between 2015 and 2020, the percentage of households, both renting and owning, with incomes below MFI has steadily decreased. The 2020 data shows that 21% of renters and 5% of owners in the county had an extremely low income. These percentages are slightly lower than in 2015, which indicates that much of the household growth in Skagit County has been at the higher end of the income spectrum. Overall, it is apparent that there is a large income gap between renters and owners in the county.

Exhibit 22. Skagit County – Households by Income and Tenure Overtime (2020)

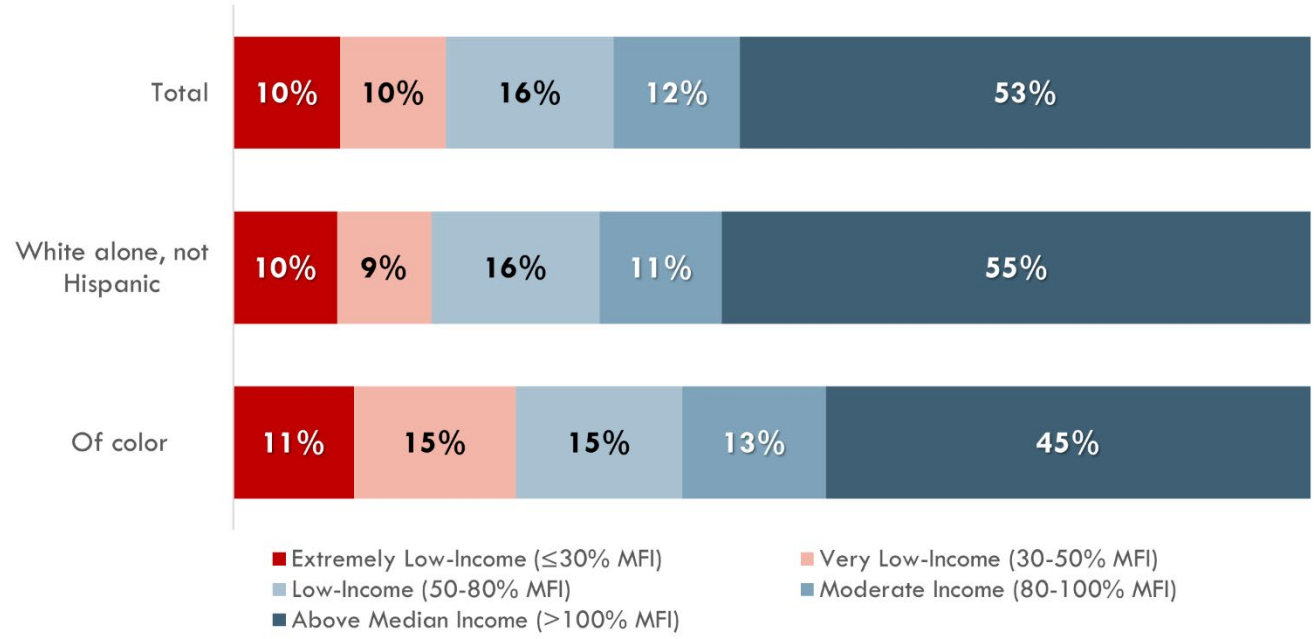


Source: HUD CHAS (based on ACS 5-Year Estimates, 2011-2015 and 2016-2020); BERK Consulting, 2024.

White, non-Hispanic households constitute 72% of all households in Skagit County. This large proportion can skew overall median household income data. Analyzing the household incomes of People of Color separately from White, non-Hispanic households provides a clearer picture of their median incomes without the distortion caused by the majority group.

Exhibit 23 shows that largest difference in the proportions of household incomes between White, non-Hispanic households and People of Color households are in general under 50% MFI. 19% of White, non-Hispanic households and 26% of People of Color households are below 50% MFI.

Exhibit 23. Skagit County – Household Income by White and People of Color (2020)

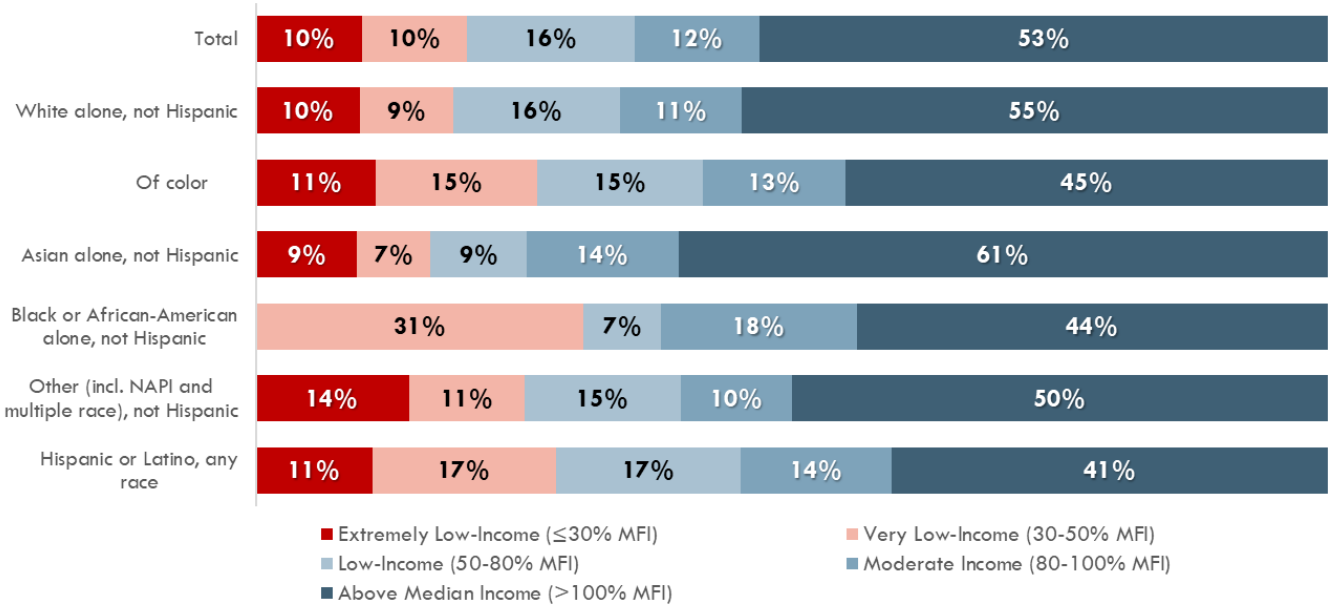


Sources: HUD CHAS (based on ACS 5-Year Estimates, 2011-2015 and 2016-2020); BERK Consulting, 2024.

Exhibit 24 highlights that Black and Hispanic or Latino households have the highest percentages of households earning below 100% of the MFI (56% and 59%, respectively). These are the only racial/ethnic groups in the county where a majority of households earn below 100% of the AMI.

The data emphasizes that Black and Hispanic or Latino households are more likely to fall into lower income brackets, suggesting economic vulnerabilities within these communities. These findings could inform targeted policy interventions to support the economic well-being of Black and Hispanic or Latino households in Skagit County. Policy options and actions will be further analyzed as part of the Racially Disparate Impacts report.

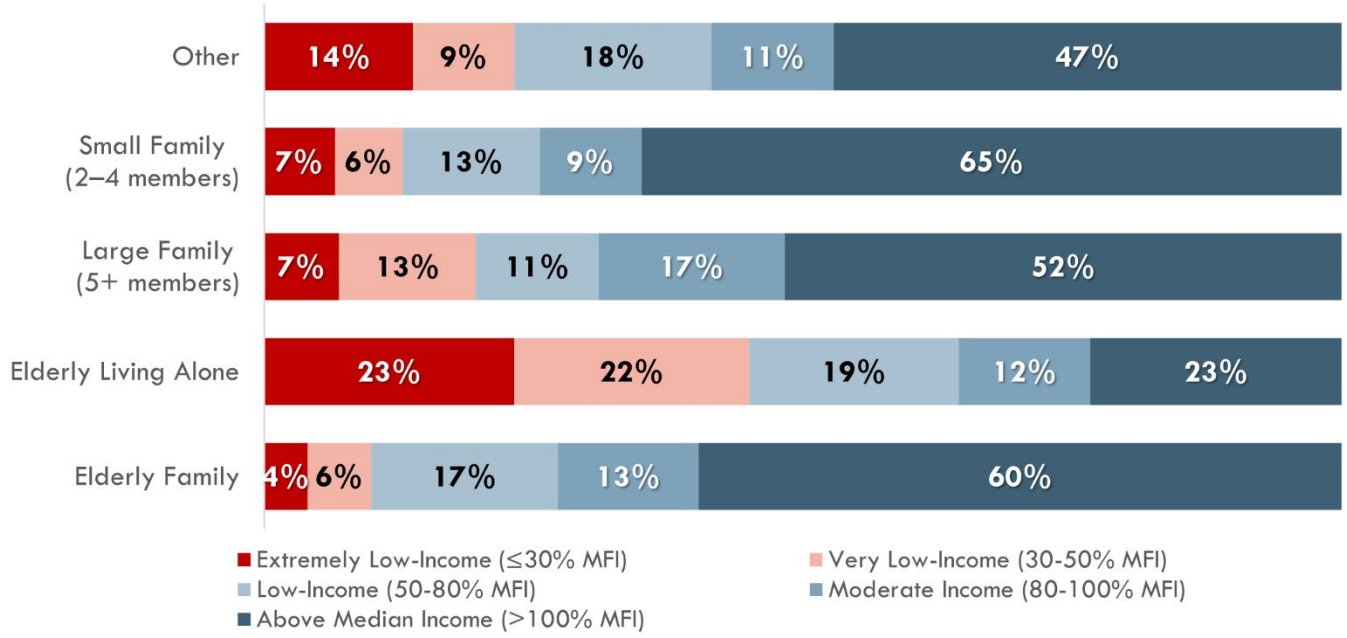
Exhibit 24. Skagit County – Household Income by Race and Ethnicity (2020)



Sources: HUD CHAS (2016-2020); BERK Consulting, 2024.

Exhibit 25 compares household types to household income. The exhibit shows that non-family households, small, large, and elderly families all lean heavily to household income above 100% MFI (58%, 74%, 69%, 73%, respectively). However, elderly living alone have a high rate of households making less than 100% MFI (74%). This is most likely due to a high number of elders living off government assistance or having no-income and being supported by family or other support services. This may also be true for the "Other" category which has non-family households and people living alone. This information can help inform the County regarding decisions involving allowing smaller, more affordable homes and supportive housing.

Exhibit 25. Skagit County – Household Type and Income (2020)



Sources: HUD CHAS (2016-2020); BERK Consulting, 2024.

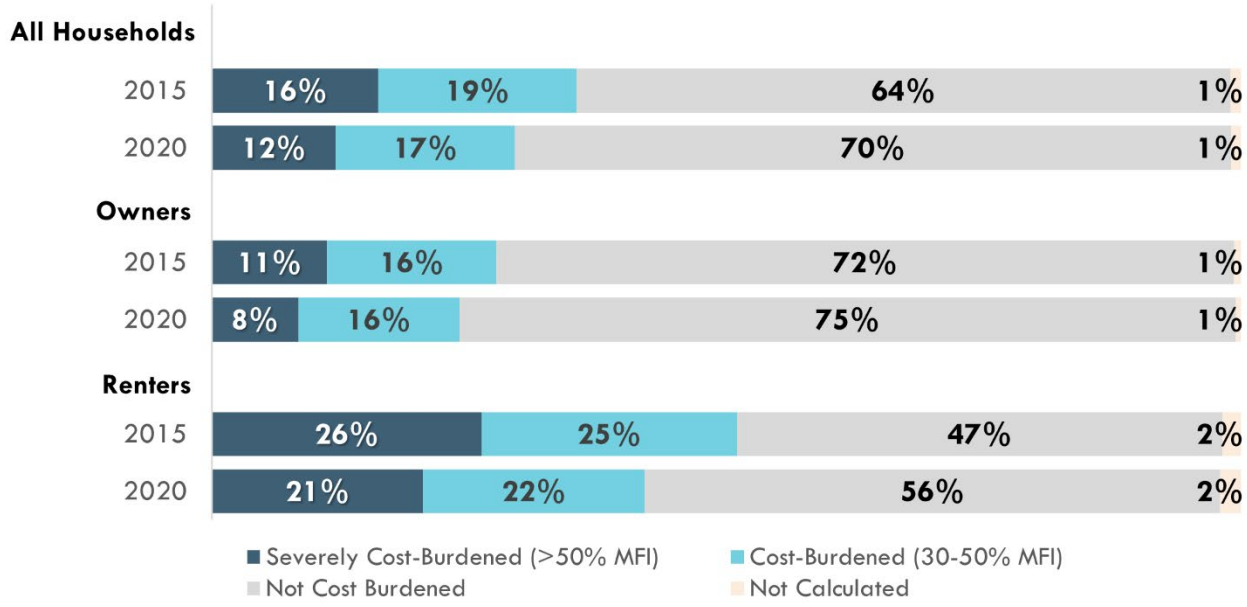
Household Cost-burden

The US Census ACS data can be used in conjunction with HUD median family incomes (MFI) to create estimates of the number of households that are cost burdened. A household is considered cost burdened when more than 30% of their household income is spent on housing. A household is considered severely cost burdened when more than 50% of their household income is spent on housing. The following exhibits below exemplify the number of households which are cost burdened.

Housing cost burden impacts a significantly higher proportion of renter households compared to owner households, indicating the need for affordable rental units. **Exhibit 26** represent the number of cost burdened households that rent the home they live in. The percentages represent the share of total renter-occupied households which are cost-burdened and severely-cost burdened. The figure shows that between the 2016-2020 survey years, 22% of renter-occupied households in Skagit County were cost burdened, which means they were paying more than 30% of their income on housing costs. 21% of these household were severely cost burdened, which means more than 50% of their income was spent on housing costs. Overall, 43% of all the renter-occupied households in the county were paying more than 30% of their income on housing costs (6,364 out of 14,800 total renter-occupied households). This represents a much larger share than households living in the house they own. For owner households, 8% are severely cost-burdened and 16% are cost-burdened for a total of 24% of owner households paying more than 30% of their income on housing costs.

Both the total renter and owner household rate of cost burden has decreased since 2015. The total number of renters experiencing cost burden has also decreased for both renters (from 7,770 in 2015 to 6,225 in 2020) and owners (from 8,465 in 2015 to 8,285 in 2020).

Exhibit 26. Skagit County – Change in Cost Burden Households by Tenure (2015 - 2020)

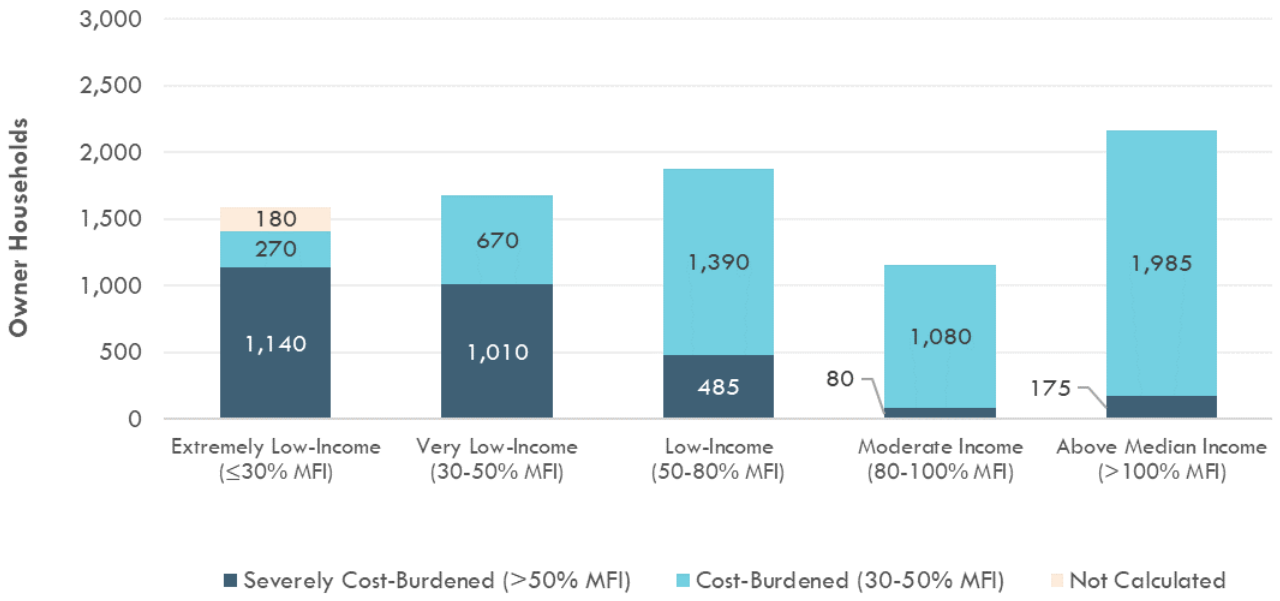


Sources: HUD CHAS (2016-2020); BERK Consulting, 2024.

As shown in Exhibit 30 and Exhibit 31, the majority of cost-burdened households had incomes below 80% MFI. Households in the lowest income brackets spent a higher percentage of their income on housing costs, with more than 50% of their income devoted to this expense. While severe cost burden is most prevalent among lowest-income households, housing affordability remains a challenge across the entire income spectrum.

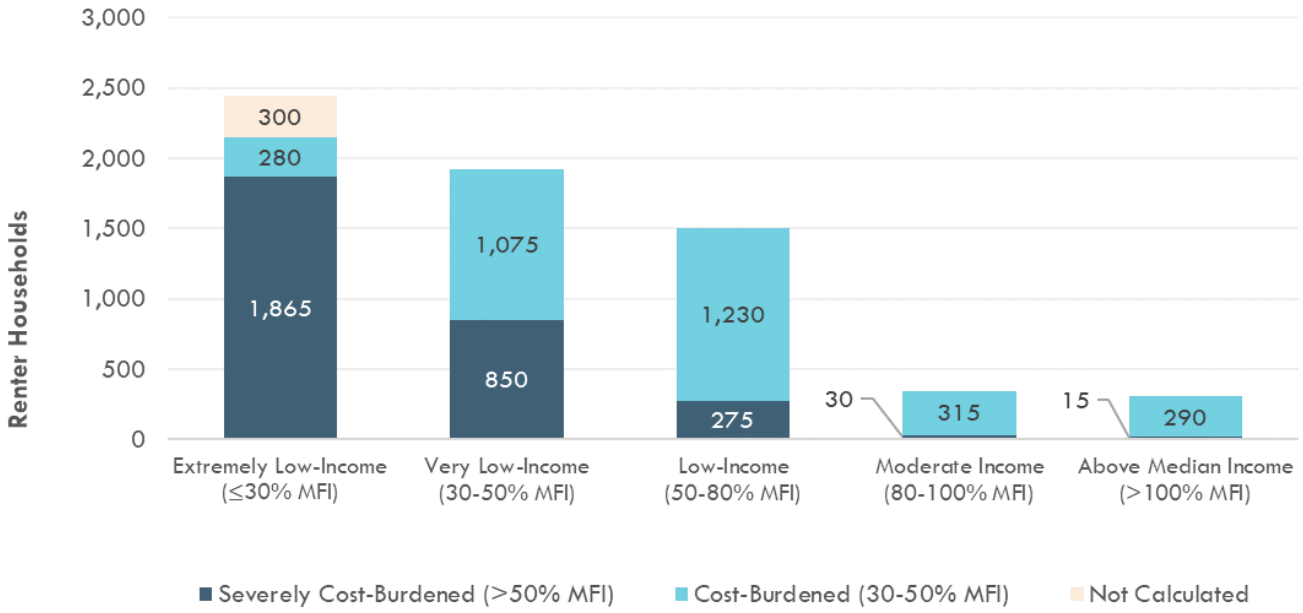
Households facing cost burden, whether owners or renters, often confront difficult choices between housing and other essential needs like food and healthcare. While these challenges affect all households, they manifest differently based on tenure. For homeowners, a common trade-off involves deferring home maintenance. This can lead to living in substandard conditions with issues related to plumbing, heating, electrical systems, and general upkeep. Renters, on the other hand, may seek to reduce housing costs by moving to older or lower-quality units, or to less desirable neighborhoods. Some might resort to overcrowded living situations or accept longer commutes. These compromises can jeopardize a household's health, financial stability, and economic mobility, exacerbating the vulnerability of those already struggling.

Exhibit 27. Skagit County – Cost Burdened Owner Households by Income Level (2020)



Sources: HUD CHAS (2016-2020); BERK Consulting, 2024.

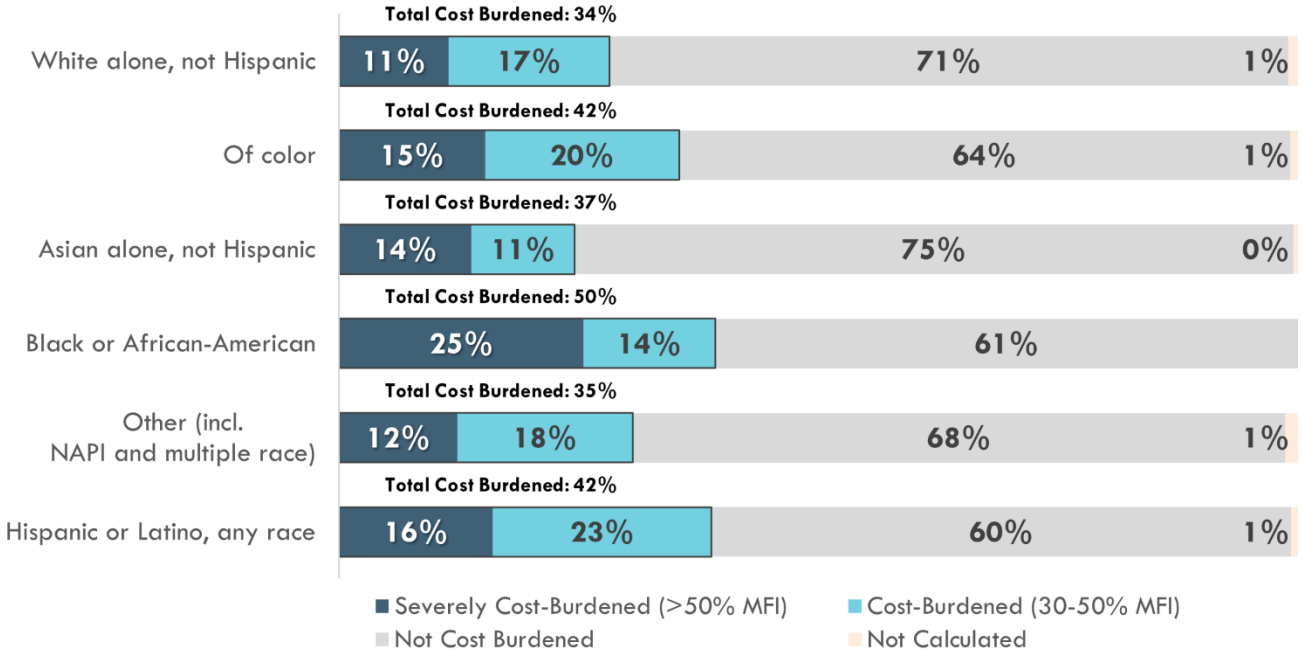
Exhibit 28. Skagit County – Cost Burdened Renter Households by Income Level (2020)



Sources: HUD CHAS (2016-2020); BERK Consulting, 2024.

When comparing cost-burden to race and ethnicity, the results correlate to the household income numbers in **Exhibit 24.** The groups experiencing the highest rate of cost burden are Black/African American and Hispanic/Latino of any race (50% and 42%). The highest rate of severely cost-burdened households is Black or African-American households at 25% of the all households being severely cost-burdened. See **Exhibit 29**.

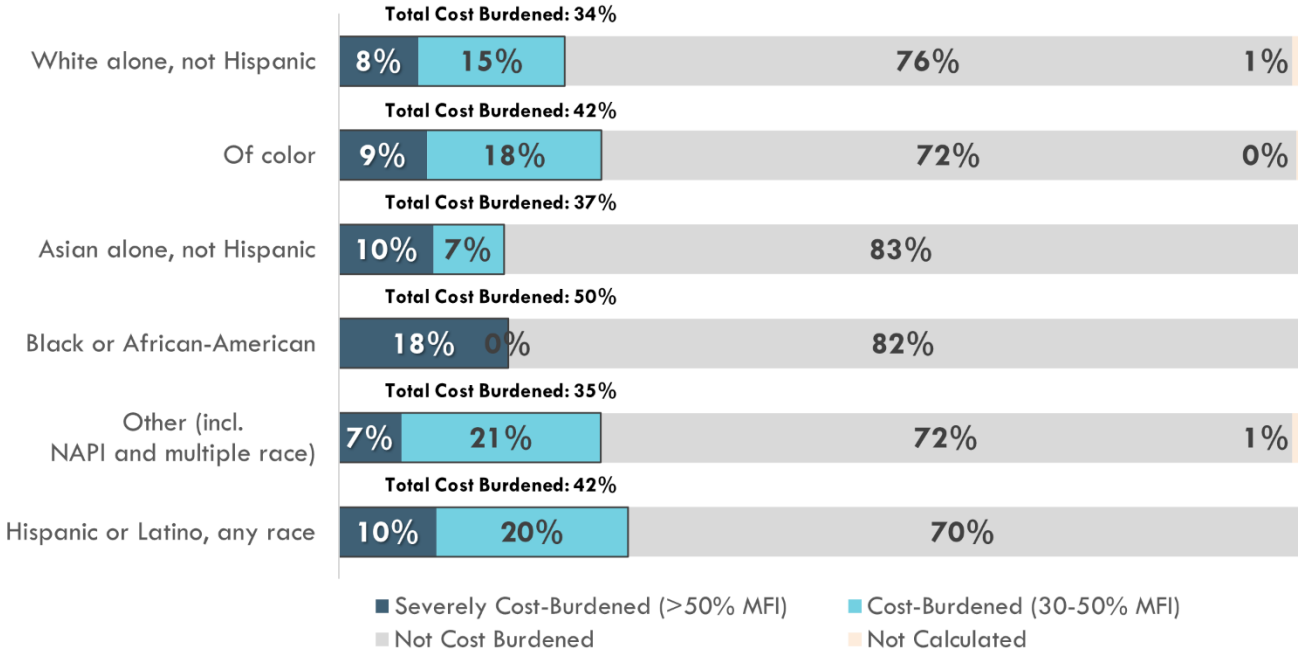
Exhibit 29. Skagit County – All Households by Race and Cost Burden Status (2020)



Sources: HUD CHAS (2016-2020); BERK Consulting, 2024.

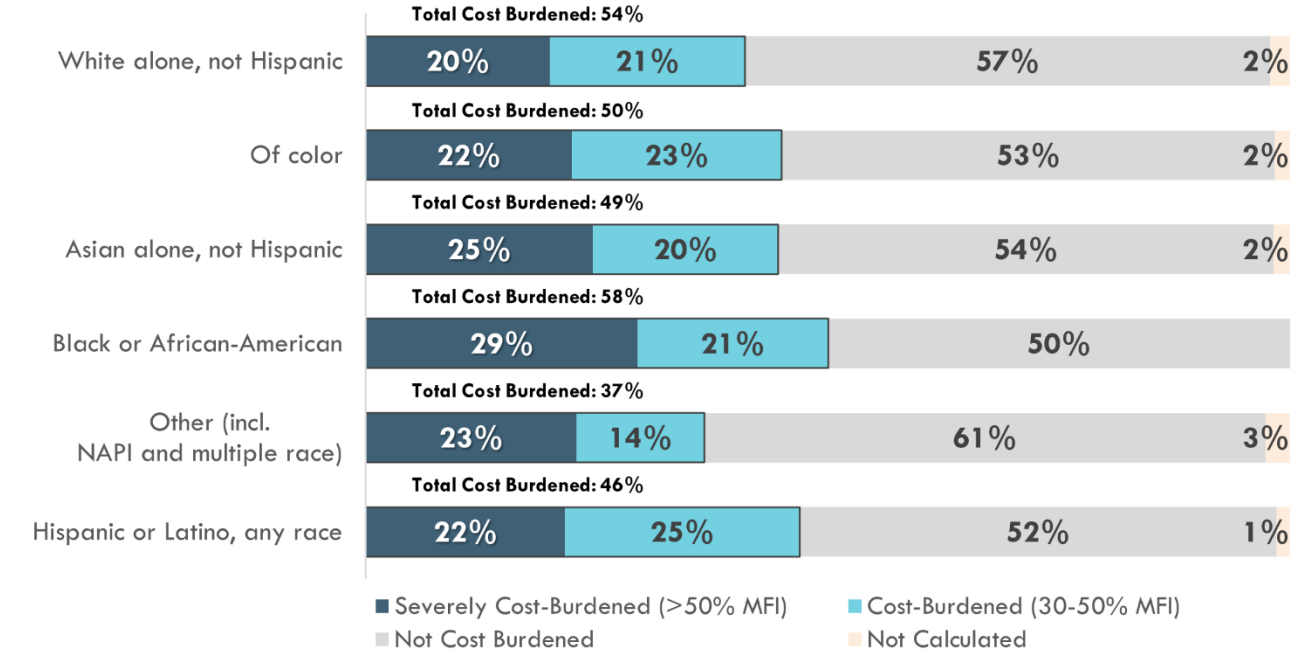
Owners are cost-burdened far less than renters in Skagit County for all races and ethnicities. **Exhibit 30** and **Exhibit 31** show that there is a significant difference between total rate of cost-burdened renter households and owner households, even within specific groups. 50% of Black or African American renter households are cost-burdened compared to only 18% of Black or African American owner households being cost-burdened. This same trend is true for the other race and ethnicities in Skagit County. Again, indicating the need for affordable rental units in the county. A deeper analysis with code options for these racially disparate impacts is included within this report.

Exhibit 30. Skagit County – Homeowners Households by Race and Cost Burden Status (2020)



Sources: HUD CHAS (2016-2020); BERK Consulting, 2024.

Exhibit 31. Skagit County – Renter Households by Race and Cost Burden Status (2020)



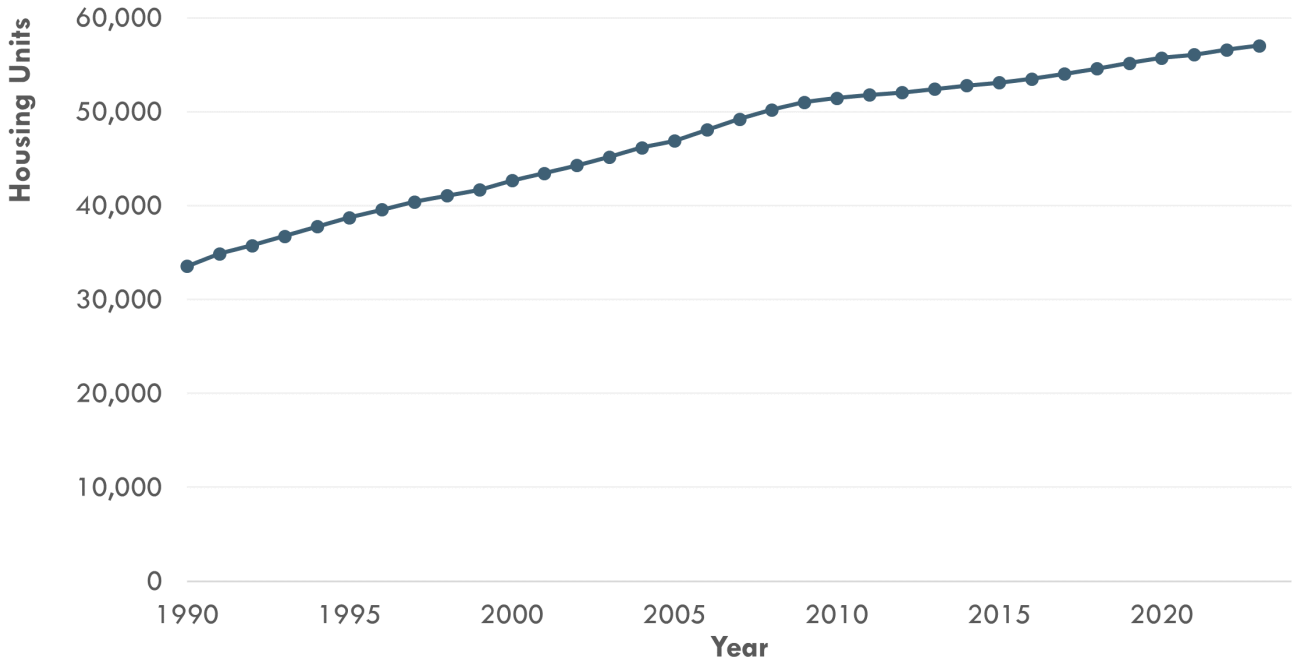
Sources: HUD CHAS (2016-2020); BERK Consulting, 2024.

Housing Supply and Affordability

Housing Inventory

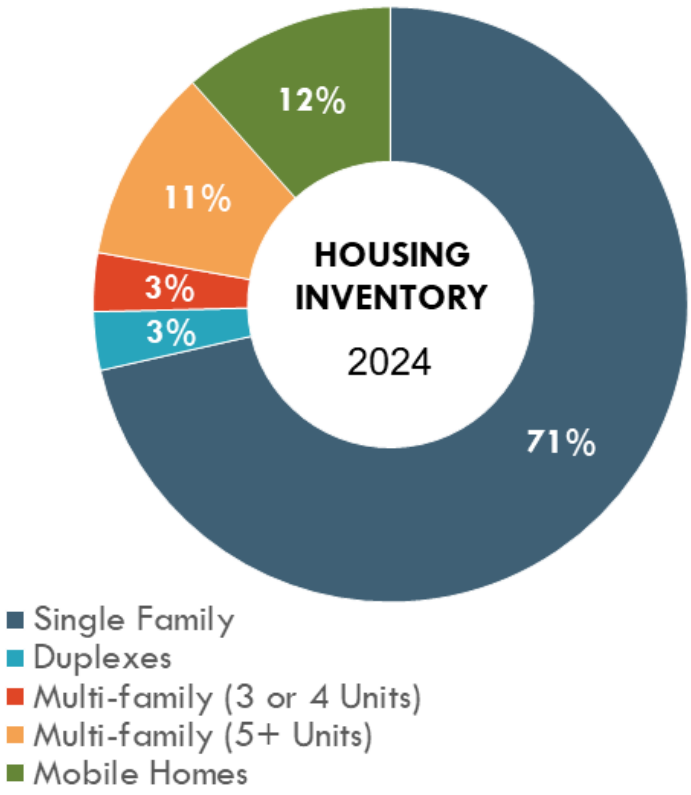
Skagit County had 57,797 housing units as of 2024, a 12% increase from 2010, as shown in **Exhibit 32.** Per the Office of Financial Management (OFM), 71% of housing units countywide were single family homes. The second and third most common housing types countywide were manufactured homes and multi-family housing developments with 5 or more units, respectively. See **Exhibit 33.**

Exhibit 32. Skagit County - Housing Units (1990 - 2022)



Source: US Census Bureau, 2022 ACS 5-Year Estimates; BERK Consulting, 2024.

Exhibit 33. Skagit County - Housing Supply (2024)

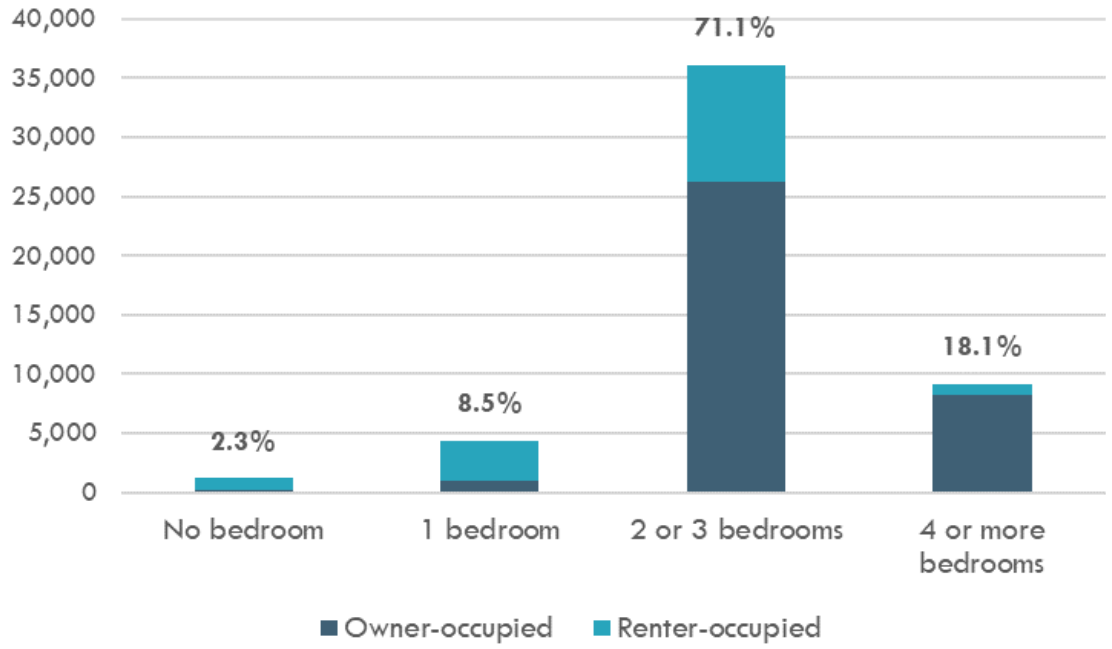


Sources: Washington Office of Financial Management, 2024; BERK Consulting, 2024.

Housing Inventory by Number of Bedrooms

As shown in **Exhibit 34,** most housing units in Skagit County are 2-3 bedrooms whether owner or renter occupied. Larger units tend to be owner-occupied, while smaller units tend to be renter-occupied.

Exhibit 34. Skagit County - Housing by Number of Bedrooms and Tenure (2022)



Sources: US Census Bureau, 2018-2022 American Community Survey 5-Year Estimates; BERK, 2024.

Housing Inventory by Type

Exhibit 35 breaks down all housing units in Skagit County by jurisdiction and housing type. Approximately 43% of all units (24,596 in total) are located in unincorporated Skagit County, which includes both unincorporated UGA areas and rural areas. Within these unincorporated areas, about 77% of units are detached single family homes (19,034 in total) and 20% are classified as mobile homes[5] (4,950 in total). As of 2023, there were 20,138 housing units in rural Skagit County.

Exhibit 35. Housing Units by Jurisdiction and Type (2024)

	Total Housing Units	1-Unit Homes (Single Family)	2+ Unit Home (Multifamily)	Manufactured, Mobile, and Special Homes
Anacortes	8,799	6,881	1,719	199
Burlington	4,271	2,131	2,056	84
Concrete	380	277	73	30
Hamilton	129	88	0	41
La Conner	577	419	138	20

[5] According to OFM, this category includes traditional manufactured homes, mobile homes, recreational vehicles, vans, and boats that provide a separate and distinct living space for an individual or household.

Lyman	176	126	3	47
Mount Vernon	13,744	9,086	3,817	841
Sedro-Woolley	5,125	3,251	1,386	488
Unincorporated Skagit County	24,596	19,034	612	4,950
Total	57,797	41,293	9,804	6,700

Sources: Washington Office of Financial Management, 2024; BERK Consulting, 2024.

Mobile and Manufactured Homes

Mobile and manufactured homes play a significant role in the housing supply for Skagit County. Though often grouped together as a single category, these are two different types of housing. Mobile homes include recreational vehicles (RVs), trailers on wheels, and other vehicles such as vans that are used as housing. Manufactured homes, on the other hand, are homes that are constructed in a factory and then assembled at the building site in modular sections. These types of homes are often much less expensive to produce than homes built on site and therefore are often more affordable than traditional detached homes. Both mobile and manufactured housing can be found in a variety of settings, such as:

- Stand-alone on a lot owned by the homeowner.
- As an accessory to a primary unit on a lot.
- On a leased plot in a campground or manufactured housing community (also known as mobile home parks).

In 2024, Skagit County has a total of 6,700 manufactured, mobile, and special homes[6], 4,950 of which are in unincorporated areas. Approximately 95 units have been added since 2020.

Housing Production Trends

Exhibit 36 shows the breakdown of net new units built between 2020 and 2024 by jurisdiction. Detached single-family units represented the majority of net new units in unincorporated Skagit County, followed by manufactured, mobile, and special housing, as well as ADUs. Multifamily development was more common in cities and composed the majority of net new housing in Anacortes, Burlington, Mount Vernon, and Sedro-Woolley.

Exhibit 36. Net New Housing Units by Housing Type (2020 - 2024)

JURISDICTION	ADUS	MANUFACTURED, MOBILE, AND SPECIAL HOMES	DUPLEX	3 / 4 UNITS	5+ UNITS	SINGLE-FAMILY	TOTAL (NET NEW)
Anacortes	40	16	16	49	130	153	404
Burlington	2	-1	2	19	593	11	626

[6] According to the Office of Financial Management, 'special' housing includes recreational vehicles, tents, and other non-standard living situations.

Concrete	0	0	0	0	0	5	5
Hamilton	0	-1	0	0	0	-1	-2
La Conner	1	0	2	7	0	11	21
Lyman	0	1	0	0	0	1	2
Mount Vernon	6	2	0	10	136	133	287
Sedro-Woolley	7	15	30	37	100	177	366
Unincorporated	61	63	0	0	0	220	344
Total	**117**	**95**	**50**	**122**	**959**	**710**	**2,053**

Sources: Washington Office of Financial Management, 2024; BERK Consulting, 2024.

Housing Affordability

Housing affordability is an urgent challenge in Skagit County. Increased demand for housing paired with limited supply has resulted in rapidly increased housing costs for both renters and potential homeowners. Exhibit 37 shows a snapshot of the profile of Skagit County's entire housing stock by affordability level as of 2020. Note that these estimates are based on survey data collected between 2016 and 2020. Housing costs have increased significantly since this period. Therefore, it is likely that the supply of homes affordable at lower income levels has decreased.

Exhibit 37. Housing Supply by Affordability Level (2020)

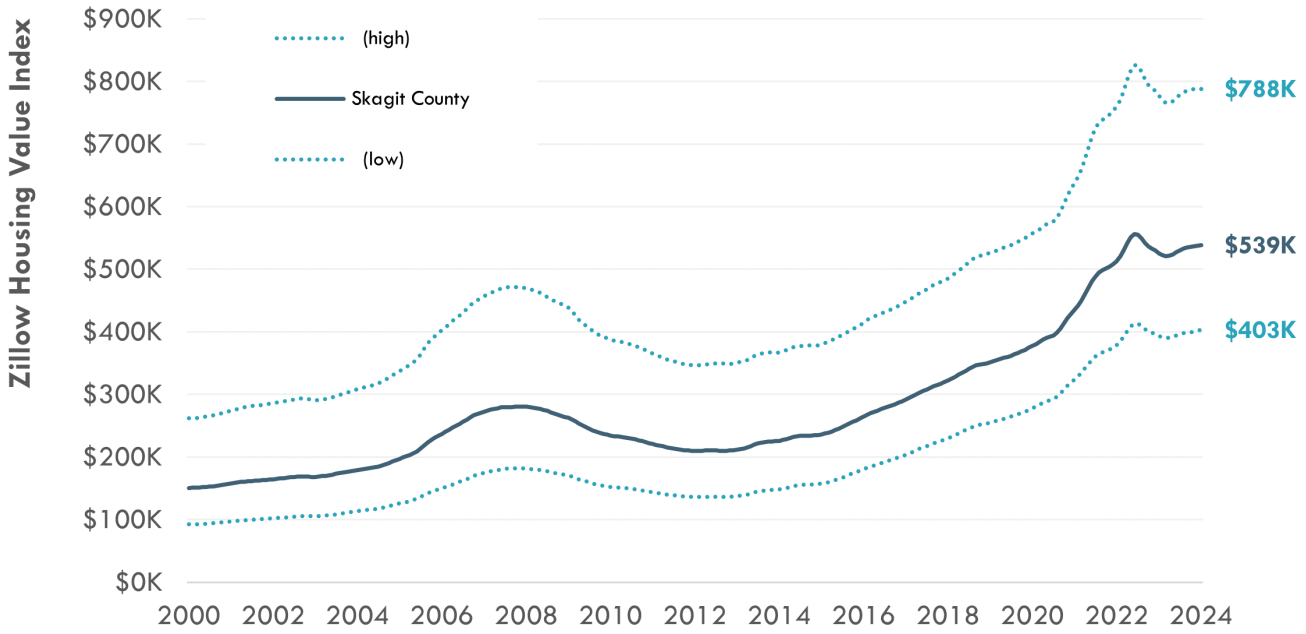
		Affordability Level (Percent of Area Median Income)								
		Total	0-30%							Emergency Housing
			Non-PSH	PSH	>30-50%	>50-80%	>80-100%	>100-120%	>120%	
Anacortes	City	8,395	270	0	333	1,606	1,214	1,110	3,862	30
Burlington	City	3,645	92	0	317	1,539	698	262	737	45
Concrete	Town	376	29	0	81	192	49	9	16	0
Hamilton	Town	131	4	0	22	42	22	8	33	0
La Conner	Town	557	38	0	29	127	128	56	179	0
Lyman	Town	173	4	0	16	49	46	12	46	0
Mount Vernon	City	13,458	586	62	1,888	4,286	2,104	1,037	3,495	207
Sedro-Woolley	City	4,759	231	0	438	1,708	1,305	332	745	28
Unincorporated		21,467	683	0	2,205	4,009	2,523	2,436	9,611	0

Sources: Washington State Dept. of Commerce Housing for All Planning Tool (HAPT), 2024; BERK, 2024.

Ownership Housing Costs and Trends

The Zillow Home Value Index (ZHVI) is a measure of the typical home value and market changes across a given region and housing type. It reflects the typical value for homes in the 35th to 65th percentile range. As of 2024, the typical home value in Skagit County was $538,598. See Exhibit 38. However new homes typically sell for more. The "high" value of $788,261 reflects the median of the top third of all home values and is a good proxy for the cost of new single-family homes in the county. At that price a household needs an annual income of nearly $200,000 and down payment of over $150,000 to afford to buy. Even a "low" tier home cost of $403,000 requires an annual income of nearly $100,000 to afford, assuming access to an $80,000 down payment.[7]

Exhibit 38. Skagit County – Residential Housing Values (2000 - 2024)

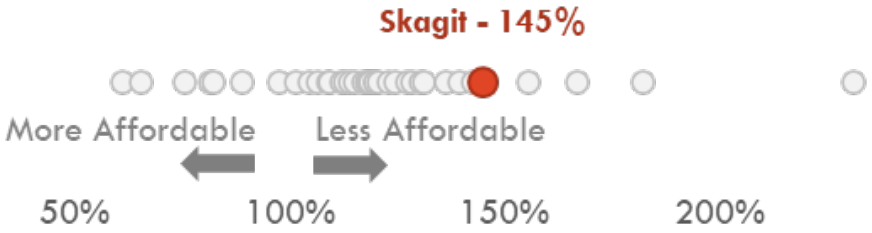


Sources: Zillow, 2024; BERK Consulting, 2024.

As shown in Exhibit 39, which reflects analysis from 2023, a three-person household needed at least 145% of MFI to afford to purchase a typical value home in Skagit County, ranking the county 34th out of the 39 counties in the state of Washington in terms of housing affordability.

[7] There is some evidence that new manufactured homes within manufactured housing communities (AKA mobile home parks), are providing moderate cost ownership housing opportunities with a much lower downpayment requirement. BERK analysis of list prices and recent home sales finds that these units sell for an average cost of $195,600. Based on BERK homeownership cost modeling, a household would need an income of about $93,000 to afford this unit with a downpayment of less than $7,000. This accounts for a $750 monthly rent paid to the manufactured home community owner.

Exhibit 39. Skagit County - Percent of MFI Required to Afford to Own a Typical Home (2023)



Note: Each circle represents a county in Washington.

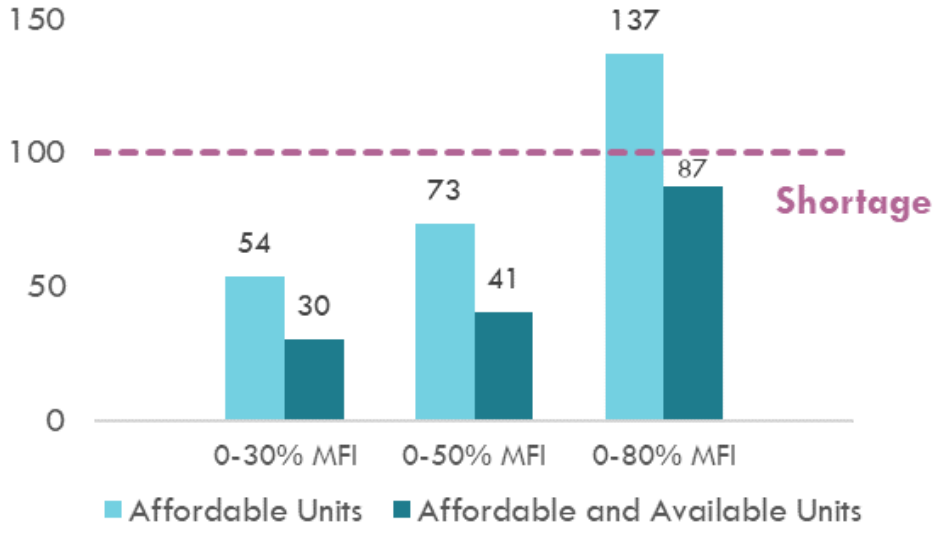
Sources: U.S. Department of Housing and Urban Development, 2023; Washington Center for Real Estate Research, 2023; Washington State Department of Revenue, 2023; BERK Consulting, 2024.

Rental Housing Costs and Trends

In some housing markets, moderate- or higher-income households occupy lower cost rental units, effectively making them unavailable to low-income households. This can happen in units that have no income requirements and when there are few ownership options that are affordable and desirable. Exhibit 40 provides a snapshot of the effective shortage of affordable housing in Skagit County. The light blue bars summarize the number of affordable rental units per 100 renter households at three different income thresholds. The dark blue bars summarize the number of units that are not only affordable but also occupied by a renter household at the specified income level. These units are considered both affordable and available. This concept is helpful for evaluating the effective shortage of housing at a given affordability level after accounting for higher income rental households that may be residing in a unit and effectively removing it from the supply of available units.

In 2019, Skagit County had approximately 30 affordable and available rental units for every 100 renter households at 0-30% MFI, as depicted in Exhibit 40. For households at 0-50% MFI, there were approximately 41 such units per 100 renter households. Although there were 137 affordable units for every 100 households at 0-80% MFI, only 87 of them were occupied by a renter household at that income level. These figures highlight a shortage of rental housing, particularly at the 30% and 50% MFI levels, indicating the need for new rental housing in Skagit County. The data reflects conditions surveyed between 2015 and 2019, and therefore do not reflect recent changes in the housing market.

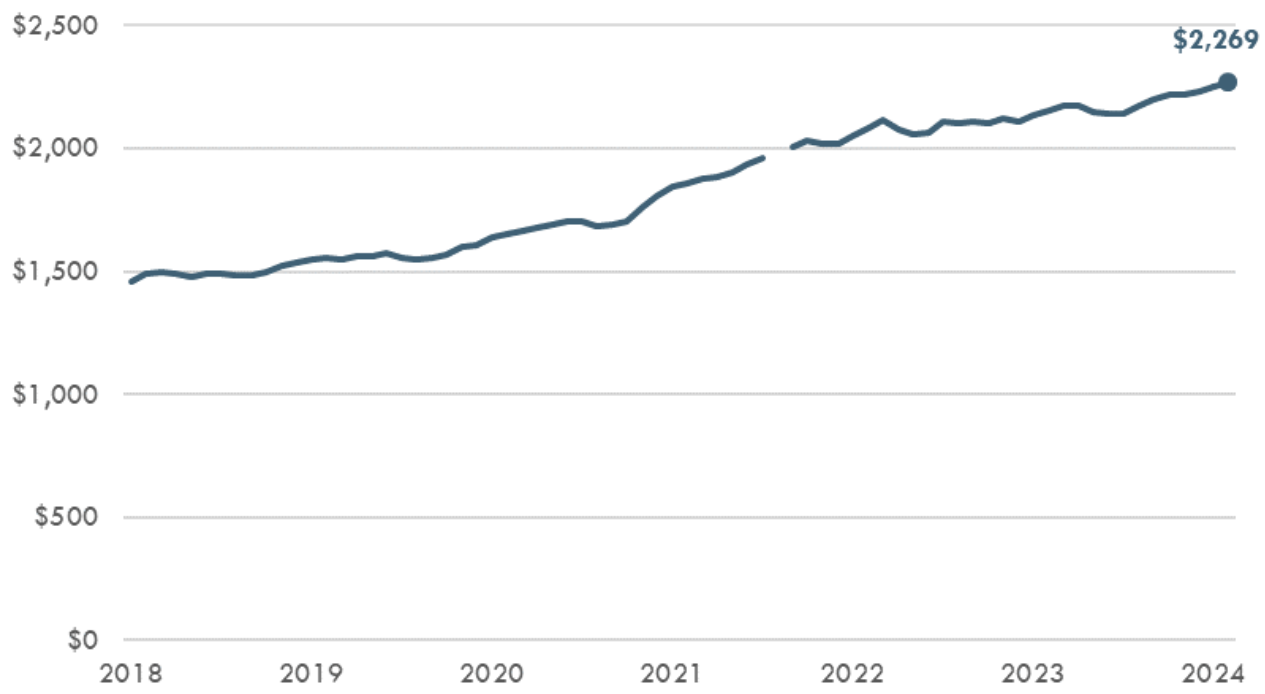
Exhibit 40. Skagit County - Affordable and Available Units Per 100 Households (2019)



Sources: US HUD Comprehensive Housing Affordability Strategy (CHAS), 2015–2019; BERK Consulting, 2024.

The Zillow Observed Rent Index (ZORI) measures changes in asking rents over time, controlling for changes in the quality of the available rental stock. Exhibit 41 shows the changes in asking rents between 2018 and 2024 in Skagit County. As of 2024, the typical observed market rate rent was $2,269. This includes the entire rental housing stock, including both apartments and rented single family homes. To afford this unit, a household would need an annual income of at least $90,760, or 110% of MFI for a 2-person household. For multifamily residences, the typical observed market rent was $1,740 in Skagit County.

Exhibit 41. Skagit County - Typical Monthly Rent (2018 – 2024)



Sources: Zillow Observed Rent Index, 2024; BERK Consulting, 2024.

Rental vacancy rates are used to estimate the tightness of a real estate market, with lower rates indicating a more competitive rental market. According to the Washington Center for Real Estate Research (WCRER), the apartment vacancy rate in Skagit County was 2.3% in the second quarter of 2024. This represents a decline of 0.7 percentage points from the previous year. Skagit County is one of 13 counties in Washington State where vacancy rates displayed a year-over-year decrease. In comparison, the statewide vacancy rate remained unchanged at 5% from the previous year.[8]

Subsidized Affordable Housing

The Washington Center for Real Estate Research (WCRER) estimates that Skagit County had a total of 2,504 subsidized affordable housing units as of 2023. This data does not indicate what affordability levels are served by these units, or how many of these units are located in unincorporated areas. However, data from WCRER indicates that 2,162 of these units are located in the cities of Anacortes, Burlington, or Mount Vernon. So, the remaining 342 are likely to be located in unincorporated areas or the smaller cities and towns of Concrete, Hamilton, La Conner, Lyman, or Sedro-Woolley.

[8] Washington State Apartment Market Report – Washington Center for Real Estate Research, 2024.

Employment

As of 2022, there were an estimated 59,571 employed people in Skagit County. Exhibit 42 provides a breakdown of these jobs by UGA. The majority of employment is located in Mount Vernon, Burlington, and Anacortes. Rural Skagit County had an employment estimate of 8,972.

Exhibit 42. Employment by UGA and Rural Skagit County (2022)

URBAN GROWTH AREA	ESTIMATED EMPLOYMENT (2022)
Anacortes	9,503
Burlington	11,640
Mount Vernon	18,781
Sedro-Woolley	4,640
Concrete	391
Hamilton	466
La Conner	1,020
Lyman	56
Bayview Ridge	2,962
Swinomish	1,140
UGAs Subtotal	**50,599**
Rural (outside UGAs)	8,972
Grand Total	**59,571**

Sources: Initial 2045 Allocations of Population, Housing and Employment in Skagit County Resolution, Skagit County, 2023; BERK Consulting, 2024.

Exhibit 43 provides a breakdown of jobs located in Skagit County by sector. The predominant sectors are Health Care and Social Assistance, Manufacturing, and Retail Trade.

Exhibit 43. Skagit County – Share of Jobs by NAICS Industry Sector (2021)

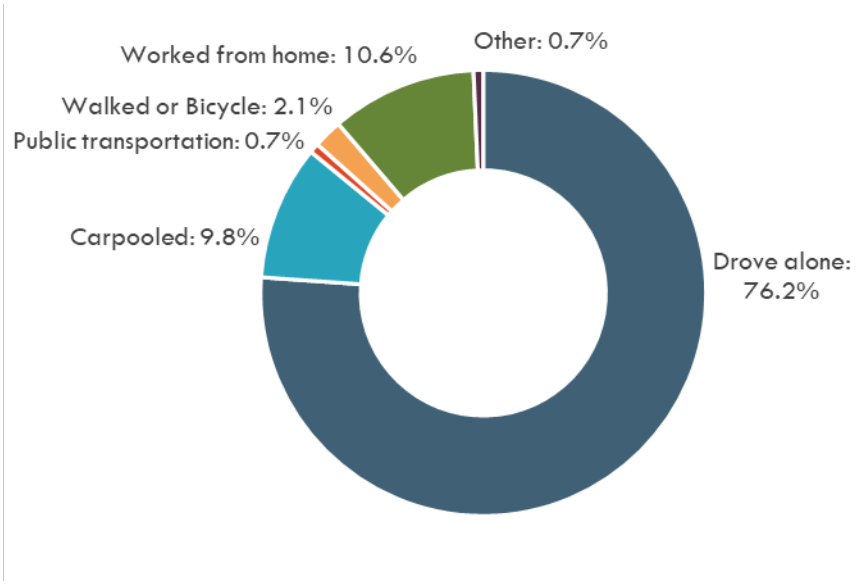
INDUSTRY	SHARE
Agriculture, Forestry, Fishing and Hunting	5.1%
Mining, Quarrying, and Oil and Gas Extraction	0.1%
Utilities	0.5%
Construction	7.9%
Manufacturing	13.7%

Wholesale Trade	2.4%
Retail Trade	12.4%
Transportation and Warehousing	2.9%
Information	0.6%
Finance and Insurance	2.9%
Real Estate and Rental and Leasing	1.0%
Professional, Scientific, and Technical Services	3.4%
Management of Companies and Enterprises	0.2%
Administration & Support, Waste Management and Remediation	2.9%
Educational Services	9.2%
Health Care and Social Assistance	16.7%
Arts, Entertainment, and Recreation	2.7%
Accommodation and Food Services	6.7%
Other Services (excluding Public Administration)	3.3%
Public Administration	5.3%

Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics, 2021; BERK Consulting, 2024.

As shown in Exhibit 44, most of the employed Skagit County population drives to work. Approximately 76.2% drive alone and 9.8% carpool. The second most common practice is to work from home (10.6%). The average travel time to work is 26.6 minutes.

Exhibit 44. Skagit County - Commute to Work (2022)



Sources: US Census Bureau, 2018-2022 American Community Survey 5-Year Estimates; BERK Consulting, 2024.

Farmworkers and Housing

According to the Washington State Department of Commerce's 2022 Washington Farmworker Housing Needs Assessment, Skagit County had 1,041 farms and more than 84,000 acres of agricultural land, primarily located in the western regions. It ranked as Washington's ninth most productive county for agriculture by the value of production and eighth for year-round agricultural employment. Major commodities included flowers, milk, and potatoes.

As of 2018, there were an estimated 1,378 year-round workers and 699 seasonal workers in Skagit County. Covered farmworkers accounted for 4% of the labor force, and agricultural products contributed 3% of the total GDP. This is relatively low compared to many other counties in Washington State, largely due to the prominence of its manufacturing sector. Key employers in the region included Skagit Regional Health, Draper Valley Farms, Mount Vernon School District, and Skagit Horticulture LLC.

In Washington, housing for agricultural workers is categorized by units for year-round employment and by beds for migrant workers, including both covered employment and H-2A workers. Certain organizations offer subsidized housing specifically for farmworkers and their families. These housing providers may include employers, nonprofits, or housing authorities. Outside of these designated units, farmworkers must compete in the ownership and rental markets alongside other residents. Approximately 461 seasonal beds were provided for migrant or H-2A farmworkers, and 240 permanent housing units were allocated for year-round farmworker households. This left up to 1,376 farmworker households searching local markets for both year-round and seasonal housing in Skagit County. Nearly 17% of this need was for migratory workers, who have more specific and potentially temporary housing requirements.[9]

Emergency and Supportive Housing Needs

Emergency housing provides temporary shelter for individuals and families that do not have access to permanent housing. As of 2020, there were 310 emergency beds countywide, all of which were located in the cities of Mount Vernon, Anacortes, Burlington, and Sedro-Wolley.

Permanent supportive housing provides long-term rental assistance with voluntary supportive services. As of 2020, there were 62 permanent supportive housing beds, all of which were located in Mount Vernon.

Homeless Population and Trends

Exhibit 45 displays a snapshot of unstably housed and homeless persons by household type in July 2023 across Skagit County. It is based on combined Medicaid, Economic Service, and Homeless Management Information System (HMIS) populations, including service recipients and all associated household members. "Homeless or Unstably Housed" refers to all clients or households experiencing any homelessness or housing instability (e.g., they are literally homeless/unsheltered, receiving housing services that indicate housing instability, residing in transitional housing, or couch surfing). "Homeless Only"

[9] Washington Farmworker Housing Needs Assessment – Washington Department of Commerce & BERK Consulting, 2022.

is a subset of that population and includes unsheltered clients/households who are literally homeless (i.e., lack a fixed nighttime residence, are living outside or in a shelter not fit for human habitation, or are living in emergency shelter). Adults without minors, and single or two parents with minors, represent the highest share of the population experiencing homelessness or unstable housing in Skagit County.

Exhibit 45. Skagit County - Homeless and Unstably Housed Persons by Household Type, Skagit County (2023)

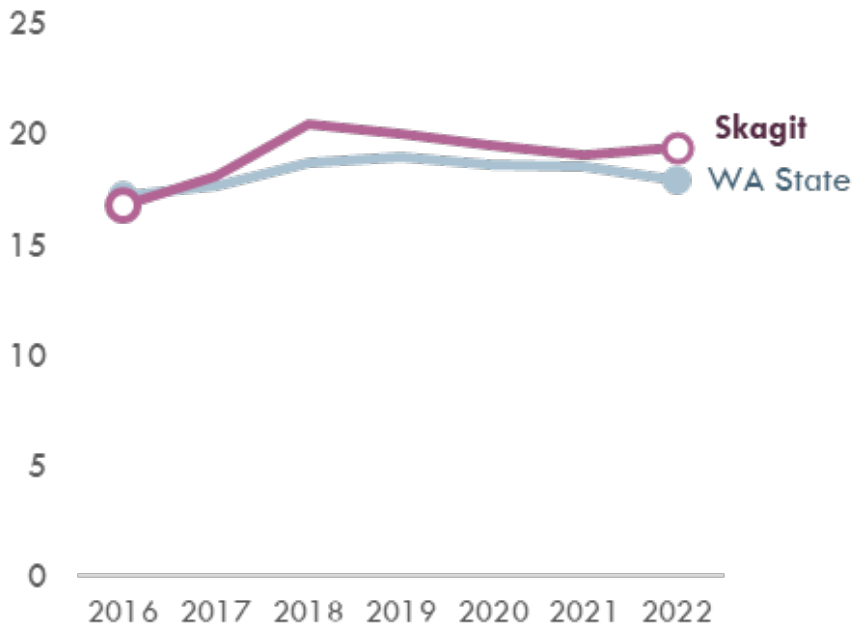
HOUSEHOLD TYPES	HOMELESS	UNSTABLY HOUSED	HOMELESS AND UNSTABLY HOUSED
Minor Only, None under Age 12	18	1	19
Minor Only, at Least One under Age 12	0	0	0
Youth (18-24) w/o Minors	142	27	169
Adults (25+) w/o Minors	1,669	303	1,972
Single Parent with Minors	483	198	681
Two Parents with Minors	314	214	528
Unknown	3	1	4
Total	**2,629**	**744**	**3,373**

Sources: WA Department of Social and Health Services, 2023; BERK Consulting, 2024.

In Skagit County, the count of people experiencing homelessness increased approximately 23% between 2016-2022, although there has been a decrease between 2018 and 2021. Estimates of homelessness per capita have remained relatively stable and above the estimates for Washington State over time, with an increase from 17 to 19 per 1,000 people in the same period (see Exhibit 46).[10]

[10] The WA Department of Social and Health Services updates historical estimates on an annual basis. Therefore, this exhibit is not directly comparable to Exhibit 38.

Exhibit 46. Skagit County and Washington State - Homeless Residents per 1,000 Population (2016 – 2022)

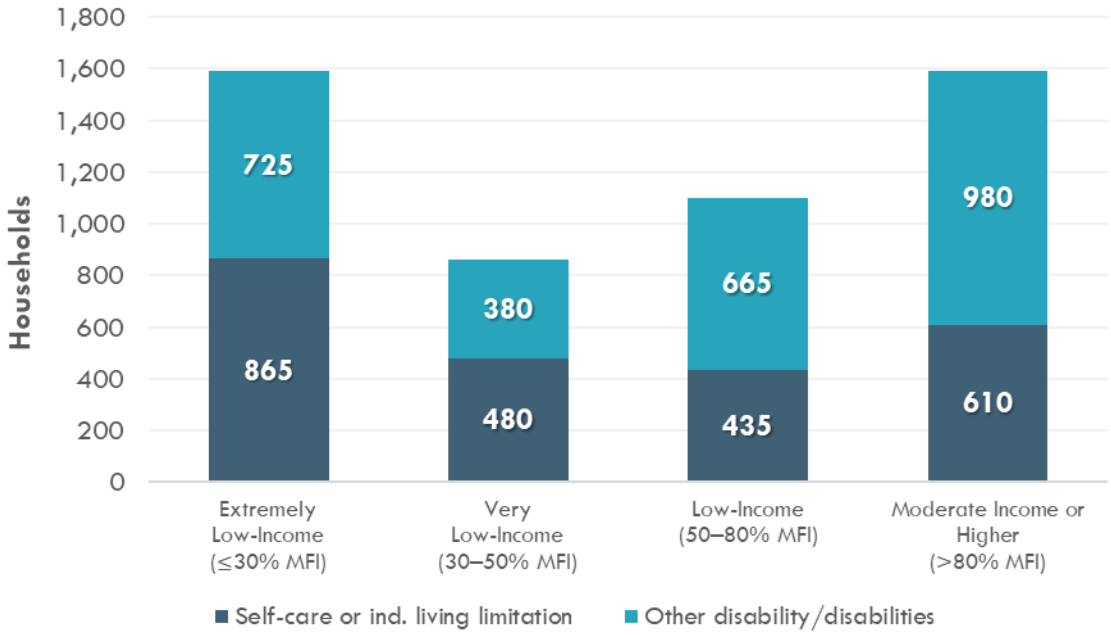


Sources: WA Department of Social and Health Services, 2023; BERK Consulting, 2023.

Special Needs Housing Needs

As shown in Exhibit 47, households across all income brackets include individuals with disabilities that may relate to housing needs. Importantly, many people have multiple disabilities. The exhibits group households into two categories: (1) counts of households with one or more members who have a self-care or independent living limitation, and (2) counts of households with one or more members who do not have a self-care or independent living limitation, but do have another disability, such as a hearing or vision impairment, an ambulatory limitation, or a cognitive limitation.

Exhibit 47. Skagit County - Renter Households by Disability Status and Income Level (2020)



Sources: US HUD Comprehensive Housing Affordability Strategy (CHAS), 2016–2020; BERK Consulting, 2024.

Displacement Risk and Exclusion (RDI)

Community History

First Peoples of Skagit County

Before the White settlement of what is now known as Skagit County, the Coast Salish people lived in tribal groups throughout the region.[11] In 1850, there were 11 different tribal groups in Skagit County in which people fished for salmon, collected clams and mussels, hunted deer, elk, and mountain goat, and grew bracken fern and camas on the natural prairies. In 1855, the Point Elliot Treaty relegated many of these tribal groups to the Swinomish Reservation located on the southeastern end of Fidalgo Island. Today, the County is home to the Swinomish, Upper Skagit, Sauk-Siuattle, and Samish Indian tribes. The relocation of the Coast Salish people has had racially disparate impacts on the health and socioeconomic outcomes of the Coast Salish people connected to Skagit County.

The Swinomish Indian Tribal Community is a federally recognized tribe that occupies the Swinomish Reservation in the State of Washington. The Swinomish Indian Tribal Community represents the four aboriginal bands of the Swinomish, Samish, Lower Skagit, and Kikiallus.[12]

The Upper Skagit Indian Tribe is a federally recognized tribe composed of eleven predecessor bands, including the Nuwha'ha, Nookachamps, Bsigwigwilts, Bsxwexwehwa'1, Chobahahbish, Sabelxu,

[11] Janet Oakley – Skagit County: Thumbnail History, 2004; Historylink.org

[12] Swinomish Indian Tribal Community – Who We Are

Saylayotsid, Shayayotsid, Kwabatsabsh, Sahkumehu, and Skaywih.[13] All of these bands either had villages or summer fishing locations at saltwater locations such as Skagit Bay, Deception Pass, Whidbey Island, Camano Island, Padilla Bay, Samish Bay, and Chuckanut Bay.

The Sauk-Suiattle Indian people lived as hunters, gatherers, and fishermen in the region of Sauk Prairie near the present-day town of Darrington and the foothills of the North Cascades.[14] Additionally, the early Sauk-Suiattle people were skilled horsemen who traversed the mountains to trade with tribes from Eastern Washington. The Sauk Suiattle Indian Reservation, north of Darrington, is home to many of the surviving descendants of the original people.

The Samish Indian Nation is the successor to the Samish Tribe. The Samish's traditional territory stretches from the western shores of the San Juan Islands to the tops of the Cascades Mountains.[15] The Samish people were respected for their spiritual strength as well as their skillful carving of canoes and construction of longhouses.

County History

Much of the early White settlement of Skagit County happened between the early 1850s and the late 1870s. The diking of the marshy flats near present day La Conner in 1863 made way for settlement on the County's mainland. [16] Additionally, a three-year effort to remove an enormous logjam that blocked the Skagit River was completed in 1879, which opened access to the interior upriver and allowed places like Mount Vernon to grow and develop over time.

Skagit County was originally part of Island County, which in 1853 included present day Snohomish, Island, Whatcom, and San Juan counties. In 1854, a small group of settlers broke away from Island County and formed Whatcom County, which included Skagit County land. Finally, in 1883, local legislators passed a bill to separate from Whatcom County and create Skagit County. The county seat first resided in La Conner but moved to Mount Vernon a year later, where it currently still resides.

Several industries supported Skagit County's early growth. One such industry was the fish cannery, which opened in Anacortes in the late 1890s and remained an economic mainstay through the second half of the twentieth century.

Agriculture is the primary industry that has supported Skagit County in the past and today. Skagit County is known for its growing of seeds, as at one point, Skagit County grew 95% of the cabbage seeds produced in the United States. The County is a major producer of cabbage, table beet, and spinach seeds worldwide. Tulip bulb production started as an extension of the seed production industry. Beginning in the 1920s and expanding after 1945, about 700 acres of land are used for bulb farming today in Skagit County.

Also, in the late 1920s, farmers began growing vegetables commercially for large produce packing companies. Farms mostly grew and packed peas, green beans, and spinach. During World War II, farmworkers from Mexico (Braceros) were brought to Skagit County in large numbers to help harvest hay

[13] Upper Skagit Indian Tribe & Dr. Bruce Miller – Upper Skagit Tribal Historical Overview

[14] Sauk-Suiattle Indian Tribe – About Us

[15] Samish Indian Nation – Samish Culture

[16] Janet Oakley – Skagit County: Thumbnail History, 2004; Historylink.org

and pea crops that supported the Skagit County dairy industry. Today, the production of peas has declined, but potatoes are enjoying the status of the county's number one crop.

Racially Disparate Impacts (RDI)

Unincorporated Skagit County has a population of 53,210 people (OFM, 2024) and a median household income of $82,029 (see **Exhibit** 18). Households in Skagit County are primarily homeowners, as **Exhibit** 13 shows 70% of households are homeowners and 30% are renters. As shown in Exhibit 3, 72% of the County identifies as White and 19% identify as Hispanic or Latino of any race.

Although most households in the County own their homes, **Exhibit 17** shows that households of color are primarily renters, with 52% of households of color renting their homes in the County. This is important as it indicates that rising housing prices in the rental market have a racially disparate impact on households of color in the County. This disparate impact in the rental housing market can also be seen in the cost burden data.

Although the percentage of households who are cost burden, or who spend 30% or more of their income on the cost of housing, has decreased in the five years between 2015 and 2020 (see **Exhibit 26)**. **Exhibit 31** shows that renter households of color are experiencing higher rates of being cost burden. Asian, Black, and Hispanic renter households are seeing renter household total cost burden percentages of 45%, 50%, and 47%, in comparison to the 41% of White renter households experiencing cost burden.

Vulnerable Populations

Housing affordability is a challenge for farmworkers, with as many as 1,377 farmworker households searching for housing through local market rate options in Skagit County.[17] In 2018, Skagit County had 1,737 year-round agriculture jobs and 1,356 peak months migratory jobs. That same year, only 240 dedicated permanent farmworker housing units and 461 provided beds for migratory workers were available to workers, leaving an estimated gap of 1,138 permanent housing units and 238 beds. A 2022 study of farmworker housing needs found that less than 5% of the housing stock in Skagit County is affordable to farmworkers. As a consequence, many farmworkers experience significant housing cost burden, living in unaffordable housing.

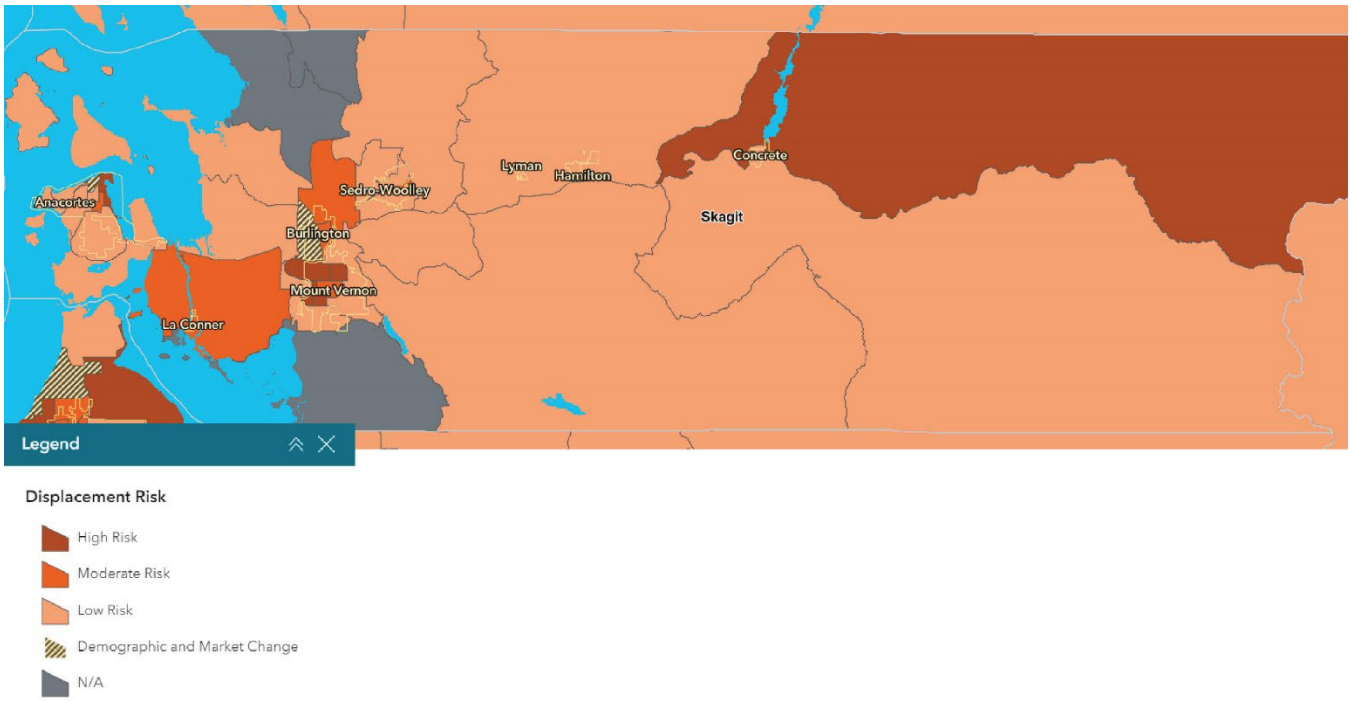
Additionally, as 19% of Skagit County identifies as Hispanic or Latino, and a large percentage of farmworkers also identify as Hispanic or Latino, the lack of housing affordable to farmworkers has racially disparate impacts on Hispanic or Latino people of color.

Skagit County Displacement Risk

According to Washington Department of Commerce's Displacement Risk Map, most of unincorporated Skagit County scores as low risk for displacement (see **Exhibit 48**). A couple of census tracks showed moderate displacement risk, with one census tract including the Swinomish Village and Reservation land. Another census tract showed high displacement risk. This census tract started around the City of Concrete and stretches into land through the Cascades Mountain Range.

[17] Washington Farmworker Housing Needs Assessment – Washington Department of Commerce & BERK Consulting, 2022.

Exhibit 48. Skagit County – Displacement Risk Map



Source: Washington Department of Commerce, 2023

Land Use and Housing Elements RDI Policy Review

The Land Use and Housing elements of the Comprehensive Plan were evaluated as part of the Racially Disparate Impact analysis. The following questions were used to review and analyze the goals and policies in each element:

- Does this policy contribute to racially disparate impacts or exclusion in housing?
- Is the policy effective in accommodating more housing?
- Does the policy increase displacement risk?
- Does the policy language include vague terms that could be used to marginalize communities of color?

Additionally, the goals and policies were given an evaluation score based on the following criteria:

- **(S) Supportive** - The policy is valid and supports meeting the identified housing needs. The policy is needed and addresses identified racially disparate impacts, displacement and exclusion in housing.
- **(A) Approaching** - The policy can support meeting the identified housing needs but may be insufficient or does not address racially disparate impacts, displacement and exclusion in housing.
- **(C) Challenging** - The policy may challenge the jurisdiction's ability to meet the identified housing needs. The policy's benefits and burdens should be reviewed to optimize the ability to meet the policy's objectives while improving the equitable distribution of benefits and burdens imposed by the policy.

- **(NA) Not Applicable** - The policy does not impact the jurisdiction's ability to meet the identified housing needs and has no influence or impact on racially disparate impacts, displacement or exclusion.

Findings for the flagged Land Use and Housing element goals and policies can be found below in **Exhibit 49**.

Exhibit 49. Skagit County – Land Use and Housing RDI Policy Review

Original Goal or Policy	Evaluation	Rationale
Land Use		
Goal 2A - Guide most future development into concentrated urban growth areas where adequate public facilities, utilities, and services can be provided consistent with the Countywide Planning Policies.	S	Future development like housing being guided into urban areas where higher densities are allowed supports meeting housing needs.
Policy 2A-1.1 - Work with local jurisdictions to designate and maintain Urban Growth Areas (UGAs) of sufficient size to accommodate the County's 20-year urban population and employment allocations. Areas proposed for UGA designation shall meet the following criteria:	S	Planning to accommodate 20-year population and employment allocations supports meeting housing needs.
Policy 2A-1.2 - Proposals for Urban Growth Area expansions shall be evaluated for their consistency with the Urban Growth Area Modification Criteria developed and approved by the Growth Management Act Steering Committee. These criteria address issues including: land capacity analysis; ability to provide urban services; impacts on critical areas, natural resource lands, and hazard areas; and compliance with related Countywide Planning Policies.	NA	
Policy 2A-1.3 - In designating Urban Growth Areas, consider GMA requirements to provide for recreational lands, critical areas, open space corridors, greenbelts, and view sheds, and to avoid natural hazard areas prone to flooding or other risks to public safety.	NA	

Policy 2A-1.4 - The following Urban Growth Areas are designated within Skagit County: **Non-Municipal UGAs** Bayview Ridge Swinomish **Municipal UGAs** Anacortes Burlington Concrete Hamilton La Conner Lyman Mount Vernon Sedro-Woolley	NA	
Policy 2A-1.5 - Overall residential densities within Urban Growth Areas shall be a minimum of four (4) dwelling units per net acre, when urban services are provided.	A	The allowance of at least 2 ADUs on residential lots in UGAs and possible allowances of duplexes and other middle housing increase the minimum allowed units on a lot to effectively 3 units per lot. This creates an opportunity for the minimum densities to be set higher if desired, which would help increase housing supply and options, reducing impacts on non-white households and vulnerable communities.
Goal 2A-3 - Within the designated Urban Growth Areas, coordinate with the respective local jurisdictions and other service providers within the Urban Growth Areas to ensure that growth and development are timed, phased, and consistent with adopted urban level of service standards.	NA	
Goal 2A-4 - Conduct joint planning between the County and local jurisdictions for future annexation areas within the Urban Growth Areas in accordance with the Framework Agreement and the Countywide Planning Policies.	NA	
Goal 2A-5 - Encourage commercial and industrial development to locate in well-defined centers within the Urban Growth Areas. Prohibit new zoning that furthers the continuation of strip commercial development.	NA	

Policy 2A-6.1 - Foster development within Urban Growth Areas that creates and maintains safe, healthy and diverse communities. These communities should contain a range of affordable housing and employment opportunities, and school and recreational facilities, and be designed to protect the natural environment and significant cultural resources.	S	Policy language includes affordable housing, jobs, and other amenities for diverse communities.
Policy 2A-6.2 - Adopt plans, policies, codes, and development standards that promote public health by increasing opportunities for residents to be more physically active. Such actions include: concentrating growth into Urban Growth Areas, promoting more compact urban development, allowing mixed-use developments, and adding pedestrian and non-motorized linkages where appropriate.	S	Mixed-use development with more opportunities to reduce reliance on single occupancy vehicles (SOV) and increasing active transportation would have positive benefits for people's health, especially communities of color who tend to have worst health outcomes then their white peers.
Policy 2A-6.3 - Concentrate facilities and services within Urban Growth Areas, using urban design principles, to make them desirable places to live, work, and play; increase the opportunities for walking and biking within the community; use existing infrastructure capacity more efficiently; and reduce the long-term costs of infrastructure maintenance.	S	The appropriate infrastructure and facilities is needed to provide space for people to actively transport themselves safely, comfortably, and reliably.
Goal 2A-7 - Provide for the orderly transition from rural to urban development patterns within the unincorporated portions of the municipal Urban Growth Areas.	NA	
Goal 2A-8 - Work with local jurisdictions to simplify the permitting process for landowners and developers within the unincorporated portions of the Urban Growth Areas.	S	Long and costly permitting processes increase the cost of housing for households. Long permit periods also discourage the amount of new housing built over a period of time leading to unmet housing supply that would have been built if permitting was faster and less complicated. Simplifying the permit process supports meeting housing need and making housing more affordable.
Policy 2A-8.1 - Maintain, in consultation with local jurisdictions, a common set of municipal Urban Growth Area zoning districts and	C	The language here is fine, but the County doesn't currently have any base urban density zones applied in UGAs.

development regulations for residential, commercial, industrial, and other land uses in the Urban Growth Areas.		
Policy 2A-8.2 - Maintain development regulations that allow development in the Urban Growth Areas at lower-than-urban densities and/or intensities, prior to annexation, provided that future urban development is not precluded. Development shall follow standards generally consistent with those applied in the rural portions of the County.	C	This policy likely limits the ability to meet housing needs. However, since the cities are unwilling to extend capital facilities at this point, recommend leaving the policy as is.
Policy 2A-8.3 - Maintain zoning maps for each of the Urban Growth Areas showing the zoning of all lands within the unincorporated portions of the Urban Growth Areas.	S	Good to let developers, home providers, and others know where certain developments are allowed.
Policy 2A-8.4 - Development at urban densities and/or intensities may be allowed prior to annexation. However, such development shall only be allowed if urban infrastructure is provided, and shall be subject to the standards of the future annexing jurisdiction.	S	Ensuring urban densities have the infrastructure to support people who may move there.
Policy 2A-8.5 - Any subdivision of land under these regulations shall include measures to ensure the accommodation of future rights-of-way for urban transportation infrastructure and utilities that will be required when the property is further subdivided and developed at urban densities and land uses.	S	Ensuring urban densities have the infrastructure to support people who may move there.
Housing		
Goal 7A - Ensure that the supply of housing and sufficient land capacity keep pace with population growth in the County.	S	Planning to accommodate 20-year population and employment allocations supports meeting housing needs.
Policy 7A-1.1 - Work with housing producers and stakeholders in urban and rural areas to apply creative solutions to infill and development using techniques such as attached dwelling units, co-housing, home-sharing, accessory dwelling units, clustering, planned unit developments and lot size averaging, consistent with the	S	Policy language supporting a variety of housing types supports meeting housing needs.

community's vision for urban growth areas and rural character.		
Policy 7A-1.2 - Develop explanatory materials, offer pre-application conferences, and employ other measures to facilitate the review and approval of building permit and land use applications.	S	Policy language the supports faster and smoother movement through the permitting process supports meeting housing needs.
Policy 7A-1.3 - Support, when financially feasible, low income housing programs, with tools such as multifamily tax exemptions, public bond issues, grants, and low interest loan programs.	A	The policy expresses support using financial tools to help develop more low-income housing. However, the policy qualifies with "when financially feasible." Additionally, MFTE programs may not be an available tool for Skagit County as RCW 84.14.010(4) refers to counties with an unincorporated population of at least 170,000 people.
Policy 7A-1.4 - Ensure zoning and subdivision regulations provide for the efficient use of lands for residential development where appropriate to increase available land supply and opportunities for affordable housing to match the demographic and economic housing needs of the County's current and projected population.	S	Policy language supporting processes to increase housing supply supports meeting housing needs.
Policy 7A-1.5 - Develop procedures to reduce impact fees and utility fees for low income housing projects, when such fees are required.	S	Dedicated policy language to remove costs from low-income housing projects.
Policy 7A-1.6 - Maintain an ongoing monitoring and evaluation program to improve the process of permit review and approval, save time, and decrease costs.	S	Policy language the supports faster and smoother movement through the permitting process supports meeting housing needs.
Policy 7A-1.7 - Work with the Skagit Council of Governments to establish a program for regular updating of the Housing Needs Assessment, including provisions to monitor and assist in providing affordable housing opportunities. The Assessment should be updated on a regular basis, several years in advance of each periodic GMA required Comprehensive Plan update.	S	Policy language that supports the monitoring and tracking of housing need over the years supports meeting housing needs.
Policy 7A-1.8 - Develop growth strategies and housing and human service programs to plan for affordable housing within the regional context. In collaboration with the cities and housing providers, address the	A	Policy language indicates support and planning for housing below 80% MFI and 50% AMI, but does not have language to geared towards actualizing development at those levels.

countywide need for ownership and rental housing affordable to households with moderate, low and very-low incomes. Work towards a common goal of having 40 percent of the countywide housing stock affordable at or below 80 percent of the area median income (AMI), with an intentional focus on expanding the supply of housing affordable at or below 50 percent of the AMI. Develop objectives for housing affordable to different income ranges and special needs populations.		
Policy 7B-1.1 - Facilitate the rehabilitation and reuse of existing structures for housing by allowing reduced permitting fees and "grandfathered" development standards.	S	Direct policy to reduce barriers to current nonconforming uses being able to survive over time and stay in high enough quality appropriate for people to live in.
Policy 7B-1.2 - Allow reuse of formerly non-residential structures for housing in mixed use developments in Rural Village Commercial Districts and Urban Growth Areas.	S	Direct policy to reduce barriers to current nonconforming uses being able to survive over time and stay in high enough quality appropriate for people to live in.
Policy 7B-1.3 - Establish development standards and design guidelines for Urban Growth Areas, Rural Villages, and large CaRD developments, to promote efficient, pedestrian friendly, and attractive communities.	A	Most of the policy language is fine. Flagging that "attractive" can be subjective and design guidelines geared towards residential housing that have the rational of increasing attractiveness has increased housing costs in other jurisdictions, while also not universally being agreed as attractive. Design guidelines geared towards pedestrian/active transportation are designed for more objective goals than attractiveness. Recommend removing the word "attractive".
Policy 7B-1.4 - Manage regulatory, administrative, funding and information programs that contribute to the development and maintenance of high quality housing and strong communities throughout the County.	A	The first half of the policy connects to housing clearly. The "and strong communities…" is a little more vague and could be left off the policy if desired.
Policy 7C-1.1 - Allow mixed residential and commercial uses in Urban Growth Areas and Rural Village commercial districts to promote housing affordability and availability.	S	Policy language supporting processes to increase housing supply and a mix of services supports meeting housing needs.
Policy 7C-1.2 - Consider allowing reduced minimum lot sizes in exchange for community facilities and amenities	A	A stronger policy would be to reduce minimum lot sizes by right as minimum lot sizes were historically one of the zoning tools used to segregate wealthier white

such as parks, open space, recreational facilities, and community centers.		households from less wealthy people of color. If a trade is desired, then dropping the "consider" and making that the policy is stronger.
Policy 7C-1.3 - Allow duplexes in zoning districts permitting single-family residences, as an alternative to accessory dwelling units or the ability to further subdivide. A duplex extinguishes two development rights.	A	Stronger policy language would be "Allow duplexes in zoning districts permitting single-family residences."
Policy 7D-1.1 - Allow specialized housing facilities such as senior housing, group homes for children and adults with special needs, in appropriate zoning districts.	S	Policy language that allows specialized housing supports meting housing needs.
Policy 7E-1.1 - Work in partnership with other public agencies and the private sector to ensure an adequate supply of farmworker housing. (a) Support strategic actions of the Skagit Valley Farmworker Housing Trust Advisory Council to develop new farmworker housing. (b) Recognize farmworker housing would occur primarily in urban areas where services are available and secondarily in rural areas when sensitively designed to minimize loss of agricultural lands of long-term commercial significance. (c) Consider the seasonal nature of farming and potential options to accommodate seasonal housing that does not permanently convert agricultural lands of long-term commercial significance.	C	There is tension and conflict within the policy language of "b" and other land use and housing policies due to Skagit County not having appropriate urban zoning and urban densities in UGA areas near farms that can accommodate the housing types needed to provide housing affordable to farmworkers.
Policy 7E-1.2 - Review permit applications for farm-worker housing developments in consideration of proximity to job locations and necessary public facilities and services consistent with the Washington State Temporary Worker Housing Health and Safety Regulations (RCW 70.114A).	S	Policy language making sure farmworker housing is in proximity to farms supports meeting housing needs.
Goal 7F - Recognize the value of manufactured housing as an affordable housing solution.	A	Opportunity for language change, as "recognizing the value," doesn't necessarily lead or mean there is actionable support towards the cause.

Policy 7F-1.1 - Ensure that regulations regarding manufactured housing are consistent with federal and state laws.	S	Supports meeting housing needs.

Source: MAKERS Architecture and Urban Design, 2024.

RDI Recommendations

The Hispanic or Latino population is the second highest racial demographic group in the County. Farmworkers, a majority of which identify as Hispanic or Latino, have a hard time finding housing affordable to them and their families. Addressing the housing gap for farmworkers would significantly increase equitable housing outcomes for Hispanic or Latino residents in the County. Additionally, agriculture is one of the largest contributors to Skagit County's economy and productivity is limited when a significant part of the workforce cannot attain quality affordable housing.

The results of the RDI analysis highlighted some overall adjustments that could increase inclusion and reduce disparate impacts. These adjustments include:

- Whether it is in UGAs or special areas in rural land, Skagit County should create zoning that allows for the appropriate densities needed to provide more affordable housing options. This goes beyond ADUs and duplexes, and is likely geared towards garden apartments, single room occupancies, and congregate housing.
- Consider specifically committing more affordable housing resources to farmworker housing, rather than resources for general or all affordable housing.
- There is a small opportunity to update LAMIRD standards that may allow for more housing types and housing types that would be more affordable to farmworkers and others that earn less than the area median income.

Gap Analysis

Projected Housing Needs by Income Level

In 2023, the Skagit Council of Governments (SCOG) conducted analysis to forecast future countywide population and housing needs in the year 2045. This work is documented in the Skagit County Population, Housing and Employment Growth Allocations Methodology (2023) and adopted in SCOG Resolution 20023-01. It reports that the county, inclusive of all jurisdictions, will need to add 17,450 net new housing units between 2020 and 2045 to address all current and projected housing needs countywide.

Exhibit 50 shows how these countywide housing needs were allocated to individual UGAs and rural county areas, with breakdowns by income level served.[18]

Exhibit 50. Initial 2045 Housing Need Allocations for Skagit County

Urban Growth Areas	Initial Allocation of Net New Housing Needed (2020-2045)						
	0-30% AMI*	31-50% AMI	51-80% AMI	81-100% AMI	101-120% AMI	Above 120% AMI	Total
Anacortes	924	592	422	226	201	577	2,942
Burlington	893	572	408	218	194	558	2,843
Mount Vernon	1,627	1,043	743	398	353	1,016	5,180
Sedro-Woolley	831	533	380	203	180	519	2,646
Concrete	34	22	15	8	7	21	107
Hamilton	0	0	0	0	0	0	0
La Conner	39	25	18	10	8	24	124
Lyman	0	0	0	0	0	0	0
Bayview Ridge	0	0	0	0	0	0	0
Swinomish	37	24	17	9	8	23	118
UGAs Subtotal	**4,385**	**2,811**	**2,003**	**1,072**	**951**	**2,738**	**13,960**
Rural (outside UGAs)	89	57	501	268	238	2,337	3,490
Grand Total	**4,474**	**2,868**	**2,504**	**1,340**	**1,189**	**5,075**	**17,450**

** 0-30% AMI includes permanent supportive housing and non-permanent supportive housing*
Source: Skagit Council of Governments (SCOG) RESOLUTION 2023-01

Exhibit 51 presents net housing needs by income level and housing type for just rural Skagit County. See the Housing Land Capacity Memo for an assessment of land capacity in rural Skagit County to accommodate the production of new housing in types appropriate to meet these housing needs.

Exhibit 51. Housing Needs by Income Level and Housing Type for Rural Skagit County (2020-2045)

Housing Type / Income Level Served	Net Units Needed 2020-2045
Emergency Housing*	57
0-30% Permanent Supportive Housing	32
0-30% Other	57
31-50%	57
51-80%	501
81-100%	268
101-120%	238

[18] Note, following the adoption of these allocations, the Swinomish Tribe determined it would be infeasible to accommodate the allocation for the Swinomish UGA due to trust land.

Above 120%	2,337

Sources: Department of Commerce, 2023; Office of Financial Management, 2023; SCOG GMATAC Committee, 2023; Community Attributes, 2023.

*Note: * Emergency Housing Needs are expressed as beds rather than housing units like Non-PSH and PSH housing need. Additionally, Emergency Housing Needs are not adjusted based on the GMATAC member recommendation and reflects the results of the HAPT Method A alone.*

Preface
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Appendix E Climate Impacts/Risks/Vulnerabilities & Potential Opportunities

Kimley»Horn

MEMORANDUM

January 31, 2025

To: Robby Eckroth, Senior Planner
Tara Satushek, Senior Planner
Skagit County, Washington

From: Heidi Rous
Climate Director, Kimley-Horn

RE: SUMMARY OF POTENTIAL CLIMATE IMPACTS/RISKS/VULNERABILITIES & POTENTIAL OPPORTUNITIES, CLIMATE ELEMENT AND RESILIENCY SUB-ELEMENT 2025 COMPREHENSIVE PLAN UPDATE, SKAGIT COUNTY

Purpose

As a follow-up to the current policy gaps and opportunities memorandum submitted earlier, this memorandum summarizes potential impacts, risks, and vulnerabilities to key assets in the County. Due to a changing climate, the memorandum identifies potential opportunities for the County to take actions to improve the resiliency of those assets. This memorandum informs new Climate Element and Resiliency Sub-Element, consistent with House Bill 1181 ("HB 1181") and Washington state's Growth Management Act (GMA) policies, that is part of the Comprehensive Plan update (RCW 36.70A.070(9)). In correlation with the previous Assets memorandum, this memorandum utilizes identified critical assets to assess potential climate impacts, risks, and vulnerabilities. Under HB 1181 and the GMA for Skagit County, a resiliency sub element must, among other things, equitably enhance resiliency to, and avoid or substantially reduce the adverse impacts of, climate change in human communities and ecological systems through goals, policies, and programs consistent with the best available science and scientifically credible climate projections and impact scenarios (RCW 36.70A.070(9)(e)(i).

Scope

Critical infrastructure located within the County are assessed for vulnerability and risk to prioritize climate hazards (see "Analysis" section below). Assets identified are the same as those mentioned in the previous memorandum, *Summary of Climate Hazards and Policy Gaps & Opportunities, Climate Element and Resiliency Sub-Element 2025 Comp Plan Update Skagit County* ("Assets Memorandum"). According to the 2023 Department of Commerce Guidance, assets are defined as community groups, places, natural resources, infrastructure, and services that the community finds valuable and wants to protect against climate-exacerbated hazardous events. This analysis characterizes the exposure of each asset to a climate hazard (sensitivity) along with how frequent the hazard is predicted to occur (probability), how adaptive the asset is to disturbances (adaptive capacity), and how significant functional and physical costs would be (magnitude). This memorandum strives to describe the findings and provide a basis for developing goals and policies that make up the Climate Element and Resiliency Sub-Element.

Methodology

Following guidance from the Washington State Department of Commerce's Intermediate Planning Guidance document, the Climate Element Workbook was utilized to assess climate impacts, risk, and vulnerabilities, and develop recommended actions. For this assessment, each asset-hazard pair from the Assets Memorandum was assessed in terms of infrastructure sensitivity to climate hazards and adaptive capacity. Both sensitivity and adaptive capacity characterized vulnerability outcomes on a low, medium, and high rating (see definitions in "Analysis" section below). As determined by analysis, outreach, and review of the County's existing plans mentioned in the "Analysis" section below), the climate hazards most relevant to the County are:

- Drought
- Extreme precipitation,
- Flooding,
- Reduced snowpack,
- Wildfire, and
- Sea level rise.

Based on these specific climate hazards, a total of 93 asset-hazard pairs were analyzed for sensitivity and adaptive capacity using a qualitative rating system (Low, Medium, and High). Ratings were determined based on indicators such as age, asset condition, physical design, social assets, economic costs, etc. Based on the sensitivity and adaptive ratings, an appropriate vulnerability risk rating (Low, Medium, High) was determined. For example, a low sensitivity and a low adaptive capacity would suggest a medium vulnerability for an asset-hazard pair. A total of 63 asset hazard pairs were identified as having medium to high vulnerabilities to climate hazards.

Similarly, the same 63 asset-hazard pairs were analyzed for its probability or frequency of hazard occurrence and the magnitude of potential losses/consequences using a low, medium, and high rating. The ratings were determined based on indicators such as location, social assets, revenue, operations, and safety, etc. Using both the probability and magnitude rating, a composite risk rating was calculated. Based on the composite risk rating, a decision of "Take Action" or "Accept Risk" was identified for each asset-hazard pair. For example, a high probability with a medium magnitude for an asset would indicate a high composite risk rating; thus, a "Take Action" decision was recommended.

Analysis

Vulnerability Characterization

Existing reports, documents, and the County Website were used to gather relevant data pertaining to each hazard. Existing reports and documents include, but are not limited to:

- 2024-2029 Skagit County Capital Facilities Plan
- 2023 Puget Sound Energy Electric Progress Report Chapter 1-9
- 2023 Skagit County Flood Book
- 2023 Skagit County Department of Public Works Annual Bridge Report
- 2023 Skagit River Delta Flood Drainage Project Modeling, Mapping, and Mitigation Analysis
- 2021 Skagit County Comprehensive Emergency Management Plan – Basin Plan
- 2019 Skagit County Community Wildfire Protection Plan Update
- 2019 Oak Ridge National Laboratory - Extreme Weather and Climate Vulnerabilities of the Electric Grid: A Summary of environmental Quantification Methods

- 2016-2036 Skagit County Comprehensive Plan
- 2016 Skagit County Drainage Utility Annual Report
- 2016 Skagit Council of Governments Rail Crossing Study
- 2011 Skagit River Basin Climate Science Report
- 2010 Skagit County Climate Action Plan
- 2003 Skagit County Natural Hazards Mitigation Plan; 2023 Skagit County Natural Hazards Mitigation Plan Update

Through utilization of data found in the above documents, in addition to sources listed in **Appendix B: Sources and References**, the sensitivity and adaptive capacity for each asset-hazard pair were determined based on a low, medium, and high rating according to the appropriate indicators. In accordance with DOE guidance, indicators are identified to qualitatively rank the sensitivity and adaptive capacity of each asset. **Table 1: Sensitivity and Adaptive Capacity Definitions** describes examples of key indicators that exhibit low, medium, and high sensitivity and adaptive capacity.

Table 1: Sensitivity and Adaptive Capacity Definitions

Example Key Indicators of "Sensitivity"		Example Key Indicators of "Adaptive Capacity"	
Low	• Minor repairs and accommodations required. • Slight inconveniences and temporary loss of services. • Minor disruption to business continuity and minimal loss of revenue and wages. • Little to no increase in costs and demands to respond to emergency events.	**Low**	• Adaptive solutions are innovative but costly. • Adaptive solutions may require coordination with multiple agencies to implement, leading to disruptions in service and longer implementation times. • Solutions require change in lifestyle or changes in political decisions. • Ability to avoid damage is limited.
Medium	• Temporary loss of food production, transportation, and distribution. • Temporary loss of functionality and operations closure of emergency response services. • Moderate repairs and replacements required. • Moderate increase in costs and demands to respond to emergency events.	**Medium**	• Impacts can be reduced or mitigated to a certain extent; however, adaptive solutions are only feasible for limited assets. • Some assets may face difficulties in adapting in terms of cost and implementation. • Coordination with third party agencies may be necessary for adaptivity measures. • Solutions require some change in systematic operations but are somewhat executable.
High	• Significant impact requiring reconstruction of parts or an entirety of an asset. • Extensive rehabilitation of assets resulting in long-term or	**High**	• Assets can adapt with little to no difficulty. • Direct influence on the implementation of strategies or solutions for the asset is apparent.

Table 1: Sensitivity and Adaptive Capacity Definitions			
	permanent loss of functionality or operations closure. • Significant impact to vulnerable populations due to flooding and extreme precipitation-related deaths and illnesses, population displacement, or migration. • Permanent loss of species not able to adapt to weather events exacerbated by climate change.		• Adaptive solutions are highly feasible for most, if not all assets with affordable costs. • Solutions are implemented immediately and face little to no resistance.
Sources: Orange County Transportation Authority, *Vulnerability Assessment*, Kimley Horn 2023.			

Based on the definitions above and relevant indicators, each asset-hazard pair was evaluated and given an appropriate sensitivity and adaptive capacity rating. Using the sensitivity and adaptive rating, an appropriate vulnerability rating was determined. Each asset-hazard pair describes climate indicators to determine sensitivity, adaptive capacity, and vulnerability ratings (Refer to **Appendix A: Skagit County Climate Element Workbook** for more details).

Risk Characterization

Similar to the Vulnerability Characterization described above, the same resources were used to determine the probability and magnitude ratings for each asset-hazard pair. The definitions for a low, medium, and high probability and magnitude rating are shown in **Table 2: Probability and Magnitude Definitions**.

Table 2: Probability and Magnitude Definitions[1]			
Probability		**Magnitude**	
Low	Very limited historic events recorded. Frequency of hazardous events to occur is periodic with likelihood of future events to occur episodically. For example, the likelihood of hazardous event(s) to occur once in 20 years.	*Low*	Minimal destruction to applicable assets with adequate functionality. In addition, minimal injuries and functionality to daily livelihood. Applicable assets may be easily repaired with available resources within a short duration of time without complications.
Medium	Limited, but some available historic events recorded. Frequency of hazardous events to occur is somewhat periodic. For example, likelihood of hazardous event(s) to occur once in 5 to 20 years.	*Medium*	Moderate destruction to applicable assets with decreased functionality. Injuries and functionality to daily livelihood are moderately heightened. Applicable assets may have increased difficulty for repair and functionality due to increased restoration times and complications. Health concerns are also a higher likelihood with strong suggestions for evacuation plans.
High	Recent, multiple historic events recorded. Hazardous events occur frequently. For example, likelihood of	*High*	Extreme destruction to applicable assets with little to no functionality. Injuries and functionality to daily livelihood are extremely heightened. Applicable assets will have

Table 2: Probability and Magnitude Definitions[1]			
	hazardous event(s) to occur within 5 years.		significant challenges for repair and elongated periods of construction before functionality can be resumed. Health concerns are at an extreme likelihood with strong coercion for evacuation plans.

1. Definitions for low, medium, and high probability and magnitude were derived from the U.S. Climate Resilience Toolkit, https://toolkit.climate.gov/steps-to-resilience/assess-vulnerability-risk. Accessed November 2024.

Based on the definitions above and relevant indicators, each asset-hazard pair were evaluated and given an appropriate rating. Each asset-hazard pair describes climate indicators to determine probability, magnitude, and climate risk (Refer to **Appendix A** for more details). It is also important to note that the recommended decisions of "Take Action" or "Accept Risk" should be not understood as a "final" decision for the County. The term "Take Action" can be defined as incorporating changes for the asset-hazard pair within a few years. The term "Accept Risk" can be defined as routine monitoring of the asset-hazard pair before implementing potential action. These decisions are strictly based on the structure of the climate workbook analysis.

Summary of Analysis

Based on the vulnerability and risk analysis, **Table 3: Asset Vulnerability and Climate Hazard Risks** showcase which asset/critical infrastructure are exposed to a priority climate hazard throughout the County. An asset-hazard pair which received a composite risk rating of medium or high are denoted with color scales associated with low (yellow), medium (orange), and high (red) ratings. Composite risk is comprised of an asset's level of vulnerability to a climate hazard and the probability and magnitude of impact to the asset from a climate hazard. A summary of asset vulnerability and climate hazard risks to critical infrastructure within the County is further provided below.

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Table 3: Asset Vulnerability and Climate Hazard Risks							
	Priority Climate Hazards[1]						
	Assets	Drought	Extreme Precipitation	Flooding	Reduced Snowpack	Wildfire	Sea Level Rise
Community Assets	Neighborhood 1						
	Neighborhood 2						
	Neighborhood 3						
	Neighborhood 4						
	Petroleum refineries						
	Natural gas pipelines						
	Electric utilities						
	Hydroelectric facilities						
	Farms (Food Systems)						
	Fisheries (Cultural Resources)						
	Farms (Economic Development)						
	Commercial Forests						
	Industrial Businesses						
	Rivers						
	Fisheries (Ecosystem)						
	Nature Preserves						
	Flood Management Infrastructure						
	Fire Stations						
	Emergency Staging Areas						
	Roadways						
	Bridges						
	Railroads						
	Public Transit						
	Solid Waste Facilities						
	Private Septic Tanks						
	Water Treatment Facilities						
	Reservoirs						
	Schools						
	Radio Towers						

1. Composite risk ratings are based on a low (yellow), medium (orange), and high (red). Boxes that are grey were not analyzed because of a lack of significant data from the CMRW tool.

Although certain assets may not be exposed to a particular climate hazard, they may be affected by secondary hazards such as landslides from riverine flooding and exposed soil following precipitation events, and flooding from overtopping of levees and unpredictable snowmelt. The section below focuses on asset-hazard pairs with a Medium to High vulnerability rating and Medium to High climate risk rating. Additional details can be found in **Appendix A.**

Findings of Vulnerability and Risk Assessment

- ***Sensitivity*[1]*:*** Assets most vulnerable to priority climate hazards are residences, agricultural farms, rivers and tributaries, fisheries, commercial forests used for timber production, industrial/manufacturing businesses, nature preserves, fire stations, flood management infrastructure i.e., dikes/levees, roadways & bridges, railroad infrastructure, public transit infrastructure, wastewater treatment facilities, reservoirs & water supply infrastructure, schools, and telecommunication-fiber optic infrastructure.
- Lower income households in rural areas and with mobility difficulties are vulnerable to climate hazards. A census tract (53057951100) that is in the eastern half of unincorporated County is identified as disadvantaged due to higher-than-average lower income households, cost and time spent on transportation, increased projected flood risk, and increased mortality rates due to natural hazard injuries and fatalities[2].
- Assets are most likely to be impacted by hazards from seasonal peak (flooding) and low (drought) stream flows, extreme precipitation, and sea level rise. Assets are located in flood zones where increased exposure to flooding is exacerbated by sea level rise, geologic subsidence, storm events, changing precipitation patterns, and high tide events. Assets are also located in upper watershed areas where increased drought conditions can impact profitability of natural resources and subsistence fishing. Examples of climate impacts to assets are further described below:
    - Climate projections anticipate heavier precipitation over winter and early spring, decreased summertime precipitation (drought), and reduced snowpack during early spring. Combined events can lead to intensified surface flooding that delays crop production for agricultural land uses.
        - Local farms produce approximately $350 million worth of crops, livestock, and dairy products on approximately 90,000 acres of land with over 90 different crops grown in the County. Crops such as blueberries, raspberries, strawberries, tulips, daffodils, pickling cucumbers, specialty potatoes, Jonogold apples, and vegetable seed are highest revenue generating crops. Around 95% of the red potatoes that are grown in the State of Washington are from Skagit County.
    - Neighborhood 2[3] comprises of residential neighborhoods along the Skagit River Delta and the Puget Sound Coast that is located within FEMA's 100-year floodway. Combined effects of sea level rise and extreme precipitation events during winter and early spring snowmelt and precipitation can expose Neighborhood 2 to increased risk of Phase 2 to 3 flood events that are major to severe.
    - Fish species like Chinook and coho salmon, steelhead, and bull trout—especially those that spawn in summer or rear as juveniles for extended periods in freshwater—are highly sensitive to low flow conditions and water quality. Decreased summertime precipitation, changes in peak streamflow due to reduced snowpack, and sea level rise are anticipated to decrease habitat opportunities, especially along tributaries in higher elevations of watersheds.

[1] Information for this section is derived from the County's updated Multi-Jurisdictional Hazard Mitigation Plan.
[2] Climate and Economic Justice Screening Tool. Explore the map - Climate & Economic Justice Screening Tool
[3] Exhibit SC-1 Skagit County Hazard Mitigation Neighborhoods – see Assets memorandum for additional details on Neighborhoods within Skagit County.

- Revenue-generating commercial manufacturing and industrial businesses, especially those that rely on raw timber materials, are sensitive to reduced snowpack, drought, wildfire, and flooding. A majority of land used for timber are privately owned: 332,000 acres of private forested timber lands, 282,812 acres of USFS land, and 131,203 acres of State-managed timberlands. Seasonal winter and springtime flooding along with increased summertime drought are anticipated to reduce harvestable trees, potentially impacting revenues for privately owned and operated timber companies. Species composition may shift to hardwoods that can tolerate longer periods of drought.
- Sea level rise (SLR) affects the extent of estuarine habitat (temperature, salinity, tidal height) that affects the abundance, diversity, spatial structure, and productivity of salmon population[4]. Salinity levels, vegetative distribution, and sediment distribution in nearshore environments are also affected that alters the extent of existing pocket estuaries, disrupting juvenile salmon habitats and stressing aquatic species.
- Railroads within the County are owned and operated by BNSF where distribution of gas and petroleum pipelines are exposed to inundation from increased sea levels. March Point refineries produce petroleum and natural gas that is distributed to Canada and southern Washington State. Although March Point and surrounding areas are mostly diked and protected by levees, transportation of petroleum and natural gas by train are subject to flooding from SLR inundation.

- ***Adaptive Capacity:*** The County currently uses land use controls through zoning codes, and memorandums of understanding or agreements, contracts, and programs to engage with private entities and stakeholders on natural resource management and operations. Consortiums comprised of elected officials, community members, scientists, and others that provide data enhances collaboration and engagement efforts among stakeholders. For example, the telecommunication consortium (TMC) was created to provide recommendations on best practices for procuring, siting, and managing fiber optic tunnels and telecommunication facilities. Adaptive capacity measures are intended to increase climate resiliency and are further provided in "Recommended Actions" section below.
- ***Probability:*** The frequency of priority climate hazards is anticipated to increase in intensity and become more unpredictable among all assets.
  - *Frequency of Drought*: Drought episodes have lasted more than a single season throughout mid-20th century: 1928 to 1932, 1992 to 1994, and 2001[5]. Natural peak summertime flows (June to September) among half of streams Countywide is anticipated to decrease by an average of 40 percent by mid-century under a high emissions scenario[6].
  - *Frequency of Extreme Precipitation*: Precipitation ranges significantly throughout the County. Overall, there is a predicted increase in heavy precipitation magnitude Countywide by eight percent by mid-century[7].
  - *Frequency of Flooding:* Major floods exceeding 80,000 cubic feet per second ("cfs") has been recorded intermittently since the year 1815 and occurs roughly every one to five years[8]. Annual maximum streamflow is anticipated to be 11 to 20 percent greater than the 30-year baseline by mid-century throughout the County[9]. The Skagit River, Samish River, Sauk River, Suiattle River, and

[4] Beamer et. al., 2005.
[5] 2014 Skagit County Natural Hazards Mitigation Plan.
[6] Climate Mapping for a Resilient Washington, 2023.
[7] Ibid.
[8] 2023 Skagit County Flood book, Emergency Response.
[9] Climate Mapping for a Resilient Washington, 2023.

Cascade River are located in 2% (50-year) and 1% (100-year) annual chance FEMA flood zones and are susceptible to increased hazardous flooding events[10].

- *Frequency of Reduced snowpack/avalanche*: Snowpack is projected to melt quicker during late spring/early summer[11], shifting streamflow to shorter but intensified durations. There is an anticipated decrease in April 1st snowpack from a historical average of 22 inches.
- *Frequency of Sea level rise*: Sea level rise is a singular event where sea levels have a 50% likelihood of exceeding 0.7 feet by 2050 and 2.1 feet by 2100[12]. Additional studies show that sea levels are projected to rise 0.8 to 1.0 feet by 2050 and 1.1 to 2.0 feet by 2100 under high emissions scenarios[13]. Storm events, tectonic uplift or shifts, king tides, and extreme precipitation are projected to increase in intensity and frequency that exacerbates sea level rise impacts such as saltwater intrusion of groundwater and surface flooding.
- *Frequency of Wildfire*: Wildfire likelihood – the probability that climate and fuel conditions are conducive to wildfire events (i.e., dry vegetation and soil, prolonged drought, low humidity, strong prevailing winds, fuel loads, etc.) – and high fire danger days are projected to increase by four percent and 11 days Countywide, respectively.

- ***Magnitude:*** Moderate destruction to certain assets will result in potential losses and consequences. Some assets are anticipated to experience significant destruction resulting in permanent losses. Some examples are included below:
  - Anticipated increase in drought conditions reduces available habitat i.e., flow velocities, water depths, that can impact multiple generations of fish life cycles and risking displacement of native species such as Chinook, Coho, Steelhead, and bull trout. Healthy fish habitat and populations have a direct correlation to cultural practices and traditions that rely on predictable fish runs.
  - Projected sea level rise is anticipated to reduce intertidal marsh areas by approximately 12% (580 acres) in Fir Island under high-emissions mid-century scenarios[14]. Potential habitat loss from 1.4 feet to 2.6 feet sea level rise correlates to 211,000 to 530,000 smolt capacity per year, respectively[15]. Multiple extreme storm and sea level rise conditions can impact multiple generations, where life cycle of fish are typically 1-4 years.
  - Road, railroad, and pipeline transportation to and from refineries employs a significant amount of workers throughout the County and the region, estimating $57 million in payroll and more than 800 employees. Projected sea level rise, flooding, and extreme precipitation can reduce revenues and increase operational costs.
  - The I-5 freeway is a Tier 1 roadway carrying more than 10 million tons of freight per year. SR-20 to Anacortes is a Tier 2 roadway carrying 4 to 10 million tons of freight per year. Increased flooding of these roadway reduces opportunities for carrying freight.
  - Reduced snowpack decreases water supply to reservoirs that provide electricity and potable water supply to the County. For example, the Judy Reservoir receives snowmelt from the Cultus

[10] Ibid.
[11] 2023 Skagit County Monitoring Program Water Year.
[12] Skagit County 2020 Multi-Jurisdiction Hazard Mitigation Plan Update Volume 1: Planning-Area-Wide Elements. (2020). Retrieved from https://skagitcounty.net/EmergencyManagement/Documents/2020HazMitPlan/Skagit%20County%20HMP_Base_Plan_05132020_Final.pdf .
[13] Beamer et. al., 2005; NOAA Sea Level rise viewer 2023.
[14] Beamer et. al., 2005
[15] Ibid.

Mountains and provides water for agricultural uses, water/wastewater treatment, recreational uses, and ecosystem services. Lake Shannon reservoir supplies a large mix of hydroelectric power to Countywide and regional residents.

- Major fire events (20+ acres) occur every 5-10 years throughout the County. Specifically, major fire events occur every 40 years in the Chuckanut Mountains[16]. Wildfire regimes are anticipated to increase in severity and frequency throughout the County and State of Washington. Commercial timberlands and rangelands revenue, recreational user experiences, utility infrastructure, and rural communities would be most impacted. For example, the cost of wildfire suppression statewide was $37 million annually from 2008-2012, and $153 million from 2013-2018[17]. Dollar impacts of wildfire on commercial forests are not available at the County level but are anticipated to increase. Suppression activity costs may outpace revenue generated resulting in a net loss on profitability.

[16] 2019 Update of Skagit County Community Wildfire Protection Plan
[17] Ibid.

Recommended Actions

This section is preliminary for discussion purposes only. Recommended actions are based on cumulative factors in the climate hazard analysis and is subject to change based on further discussions with the County and community members.

- Telecommunication infrastructure i.e., fiber optic cables, radio/cell towers, are a critical facility provided mainly in Anacortes, Mount Vernon, and Burlington. Consider funding opportunities and collaborative pilot programs that provide incentives for private owners or non-profit organizations to establish telecommunication infrastructure in unincorporated areas while considering hazards exacerbated by climate change.
- Riverine flooding is anticipated to increase the most along Sauk Mountain tributaries in southern County area that drain into the Stillaguamish River, and along Sauk River that drain into Skagit River[18]. Consider updating the county code to provide development standards for buildings and infrastructure located in 1% chance FEMA flood zones along the Skagit and Sauk Rivers, among other climate scenarios.
- Consider alternative routes and services for rural and disadvantaged communities located in hazardous areas that can be exacerbated by climate change. Promulgate a study or plan through coordination between WSDOT, Skagit Council of Governments, Skagit Transit, road maintenance districts, and other stakeholders.
- Roughly one foot of SLR is projected to inundate the Skagit /Samish delta region by the end of century. Consider a consolidated approach to localized study and mapping of climate hazards, including sea level rise extent, for the County to understand policy implications.
- Dollar impacts of wildfire on commercial forests are not available at the County level. Consider a Countywide assessment of economic impacts of increasing wildfire hazards on timberlands and rangelands, including other relevant sectors.
- Sea level rise (SLR) models show potential inundation extent of Skagit County and does not account for human influences such as improved dikes or levees, altered drainage channels, added floodgates, and other engineering methods. Although the County currently partners with Washington State University on flood management initiatives such as for sea water intrusion of irrigation water sources, a study targeting SLR adaptation strategies and its effects on soil salination and inundation are needed. Further collaboration and consensus building with irrigation and drainage districts, or other stakeholders, to account for sea level rise in future flood management efforts is recommended.

Kimley-Horn looks forward to collaborating with the County to identify potential opportunities to identify priority climate hazard impacts and increase resiliency among all sectors within the community.

Sincerely,

Heidi Rous
Climate Director, Kimley-Horn

On Behalf of County of Skagit, Washington State

[18] Climate Mapping for a Resilient Washington, 2023.

Appendix A: Skagit County Climate Element Workbook

For Tasks 3.1-3.3

Risk Characterization Matrix

Sensitivity	Adaptive Capacity: Low	Adaptive Capacity: Medium	Adaptive Capacity: High
High	High	High	Medium
Medium	High	Medium	Low
Low	Medium	Low	Low

For Tasks 3.4-3.5

Risk Characterization Matrix

Probability	Magnitude: Low	Magnitude: Medium	Magnitude: High
High	Medium	High	High
Medium	Low	Medium	High
Low	Low	Low	Medium

Risk Characterization Matrix

	Composite Risk Rating: Low	Composite Risk Rating: Medium	Composite Risk Rating: High
High	Take Action	Take Action	Take Action
Medium	Accept Risk	Take Action	Take Action
Low	Accept Risk	Accept Risk	Take Action

Tasks 3.1-3.3: Assess sensitivity and adaptive capacity to characterize vulnerability						
Number	**Asset-Hazard Pair** *(from Column B of Task 1.3 tab)*	**Sensitivity — Task 3.1** ***(Low, Medium, or High)***	**Adaptive Capacity — Task 3.2** ***(Low, Medium, or High)***	**Vulnerability — Task 3.3** (*Low, Medium, or High*)	**Notes** *(The CMRW tool used in Step 1 describes general factors that affect a given sector's sensitivity (susceptibility to change). To qualitatively rate the sensitivity and adaptive capacity of a specific local asset or a broader asset category, start with a core question and then select indicators and available information (e.g., online census data, local plans, and community knowledge) to answer the question. Use the sensitivity and adaptive capacity ratings -- and other information, as desired -- to characterize the asset's vulnerability.)*	**Indicators Discussion** *(If desired, use this column to discuss your indicators and how they affected your ratings.)*
1	Residential Neighborhood 1 - Drought	**High**	**Medium**	**High**	Neighborhoods 1, 3, and 4 are located outside of the 100-year floodplain and can be more susceptible to summer drought conditions and wildland fires because a high percentage of homes are located in timbered interface areas. Almost 20,000 residents reside in these hazard mitigation neighborhoods, making them more exposed to climate-related risks such as drought, fires, and landslides. Those areas most vulnerable to drought situations are Fidalgo Island and Guemes Island in western Skagit County. According to the Skagit County Population Summary, approximately 49,000 people live in unincorporated areas - this is not split between the four neighborhoods. =**High Sensitivity** According to the Skagit County Hazard Mitigation Plan Jurisdiction Specific Vulnerability Assessment, Neighborhood 1 has an estimated 4,697 structures with 25% of those structures at risk with a total estimated value of $354,811,380. This is a lot higher than neighborhoods 2,3, and 4 which have an estimated value of structures at risk at $187,904,588, $7,219,131, and $6,422,988. = **High Sensitivity** Based on the Skagit County Multi-Jurisdictional Natural Hazard Mitigation Plan Mid-Cycle update in January 2023, a Drought Contingency Plan should be made alongside the PUD and Skagit County Soil and Water Conservation District spring of 2023 to develop an outreach plan. This plan is anticipated to address public education and water conservation plans/practices (as necessary), particularly when needed for firefighting; however, as of November 12, 2024 and the Skagit County Multi-Jurisdictional Natural Hazard Mitigation Plan Mid-Cycle update in January 2023 revised May 2023, there has been no further update. = **Medium Adaptive Capacity**	Existing and proposed residential development, location
2	Residential Neighborhood 3 - Drought	**Low**	**Medium**	**Low**	Neighborhoods 1, 3, and 4 are located outside of the 100-year floodplain and can be more susceptible to summer drought conditions and wildland fires because a high percentage of homes are located in timbered interface areas. Almost 20,000 residents reside in these hazard mitigation neighborhoods, making them more exposed to climate-related risks such as drought, fires, and landslides. Those areas most vulnerable to drought situations are Fidalgo Island and Guemes Island in western Skagit County. According to the Skagit County Population Summary, approximately 49,000 people live in unincorporated areas - this is not split between the four neighborhoods. =**Low Sensitivity** According to the Skagit County Hazard Mitigation Plan Jurisdiction Specific Vulnerability Assessment, Neighborhood 3 has an estimated 2,154 structures with 5% of those structures at risk with a total estimated value of $7,219,131. This is marginal compared to neighborhood 1 which has an estimated 4,697 structures with 25% of those structures at risk with a total estimated value of $354,811,380. = **Low Sensitivity** Based on the Skagit County Natural Hazard Mitigation Plan 2023 Update revised may 2023,Initiative #3 can be summarized to develop a drought contingency plan to address public education and water conservation practices (as necessary), particularly when needed for firefighting. The action update of working with the PUD and the Skagit County Soil and Water Conservation District for this initiative has not changed since the revision in may 2023. =**Medium Adaptive Capacity**	Existing and proposed residential development, location
3	Residential Neighborhood 4 - Drought	**Low**	**Medium**	**Low**	Neighborhoods 1, 3, and 4 are located outside of the 100-year floodplain and can be more susceptible to summer drought conditions and wildland fires because a high percentage of homes are located in timbered interface areas. Almost 20,000 residents reside in these hazard mitigation neighborhoods, making them more exposed to climate-related risks such as drought, fires, and landslides. Those areas most vulnerable to drought situations are Fidalgo Island and Guemes Island in western Skagit County. According to the Skagit County Population Summary, approximately 49,000 people live in unincorporated areas - this is not split between the four neighborhoods. =**Low Sensitivity** According to the Skagit County Hazard Mitigation Plan Jurisdiction Specific Vulnerability Assessment, Neighborhood 4 has an estimated 1,513 structures with 5% of those structures at risk with a total estimated value of $6,422,988. This is marginal compared to neighborhood 1 which has an estimated 4,697 structures with 25% of those structures at risk with a total estimated value of $354,811,380. **= Low Sensitivity** Based on the Skagit County Natural Hazard Mitigation Plan 2023 Update revised may 2023, Initiative #3 can be summarized to develop a drought contingency plan to address public education and water conservation practices (as necessary), particularly when needed for firefighting. The action update of working with the PUD and the Skagit County Soil and Water Conservation District for this initiative has not changed since the revision in may 2023. =**Medium Adaptive Capacity**	Existing and proposed residential development, location
4	Residential Neighborhood 1 - Extreme Heat	**Low**	**Medium**	**Low**	Based on the Skagit County Natural Hazards Mitigation Plan, Skagit County experiences nearly every type of weather including wind, rain, drought, snow, fog, extreme heat, etc. These events have a high probability of occurring based on past events; however, there is low to moderate risk associated as the events are relatively short and have localized impacts. Based on the location of neighborhood 1, First Data showcases some hotspots that have major heat risk; however, majority of this neighborhood showcases projected minor-moderate heat risk in the next 30 years. = **Low Sensitivity** Within the Skagit County Comprehensive Plan 2016-2035, Policy 5A-5.1 has a sub goal to that can be summarized to consider the potential effects of tsunami, high winds with strong winds, sea level rise, and extreme weather events (e.g., extreme heat) for proposed developments or designing infrastructure. = **Medium Adaptive Capacity**	Existing and proposed residential development, location

5	Residential Neighborhood 2 - Extreme Heat	**Low**	**Medium**	**Low**	Based on the Skagit County Natural Hazards Mitigation Plan, Skagit County experiences nearly every type of weather including wind, rain, drought, snow, fog, extreme heat, etc. These events have a high probability of occurring based on past events; however, there is low to moderate risk associated as the events are relatively short and have localized impacts. Based on the location of neighborhood 2, First Data showcases some hotspots (e.g., near Sedro-Woolley and Mount Vernon that have major heat risk; however, majority of this neighborhood showcases projected moderate heat risk in the next 30 years. = **Low Sensitivity** Within the Skagit County Comprehensive Plan 2016-2035, Policy 5A-5.1 has a sub goal to that can be summarized to consider the potential effects of tsunami, high winds with strong winds, sea level rise, and extreme weather events (e.g., extreme heat) for proposed developments or designing infrastructure. = **Medium Adaptive Capacity**	Existing and proposed residential development, location
6	Residential Neighborhood 3 - Extreme Heat	**Low**	**Medium**	**Low**	Based on the Skagit County Natural Hazards Mitigation Plan, Skagit County experiences nearly every type of weather including wind, rain, drought, snow, fog, extreme heat, etc. These events have a high probability of occurring based on past events; however, there is low to moderate risk associated as the events are relatively short and have localized impacts. Also, RN 3 comprises of rural residences that are identified as disadvantaged. Population loss from natural hazards, projected flood risk, lower income households, and transportation barriers are higher than average for the State. Based on the location of neighborhood 3, First Data showcases some hotspots that have severe heat risk; however, majority of this neighborhood showcases projected medium-major with some areas having minor heat risk in the next 30 years. Projected Countywide increase of 5.1 deg. F for summertime max temperatures per CMRW tool. = Low Sensitivity Within the Skagit County Comprehensive Plan 2016-2035, Policy 5A-5.1 has a sub goal to that can be summarized to consider the potential effects of tsunami, high winds with strong winds, sea level rise, and extreme weather events (e.g., extreme heat) for proposed developments or designing infrastructure. = Medium Adaptive Capacity	Existing and proposed residential development, location, disadvantaged communities
7	Residential Neighborhood 4 - Extreme Heat	**Low**	**Medium**	**Low**	Based on the Skagit County Natural Hazards Mitigation Plan, Skagit County experiences nearly every type of weather including wind, rain, drought, snow, fog, extreme heat, etc. These events have a high probability of occurring based on past events; however, there is low to moderate risk associated as the events are relatively short and have localized impacts. Also, RN 4 comprises of rural residences that are identified as disadvantaged. Population loss, projected flood risk, lower income households, and transportation barriers are higher than average for the State. Based on the large area of neighborhood 4, First Data showcases some projected minor heat risk for the next 30 years. Projected Countywide increase of 5.1 deg. F for summertime max temperatures per CMRW tool.= **Low Sensitivity** Within the Skagit County Comprehensive Plan 2016-2035, Policy 5A-5.1 has a sub goal to that can be summarized to consider the potential effects of tsunami, high winds with strong winds, sea level rise, and extreme weather events (e.g., extreme heat) for proposed developments or designing infrastructure. = **Medium Adaptive Capacity**	Existing and proposed residential development, location, disadvantaged communities
8	Residential Neighborhood 2 - Flooding	**High**	**High**	**Medium**	According to the Skagit County Hazard Mitigation Plan Jurisdiction Specific Vulnerability Assessment, Neighborhood 2 has an estimated 8,043 structures with 90% considered to be at risk. The average value of each structure is approximately $155,750 with a total estimated value of structures at risk of $1,127,427,525. This is significantly higher than Neighborhood 3 with 2,154 estimated structures with 5% considered to be at risk. The average value of each structure in Neighborhood 3 is $67,030 with a total estimated value of structures at risk to be $7,219,131. = **High Sensitivity** Flood risk throughout the County's lowlands is addressed through reservoirs, levees, ditches, pipes, tide gates, and pumps. Further existing policies and goals include targets for increasing the peak flow capacity of the Skagit River downstream of the Sterling bend via construction of one or more flood by-pass channels and setting all existing levees back further from the river. New development plans and site specific permitting will also be aligned with the Skagit County Municipal Code (SCMC 14.16.410 and 14.26.470(4)) include measures to reduce flood hazards. Evacuation plans for the 100-year floodplain have been developed to include signed evacuation routes, evacuation brochures, evacuation walk time maps, siren warning systems, and telephone warning systems to alert residents of imminent danger. = **High Adaptive Capacity** In addition, Skagit County Multi-Jurisdictional Natural Hazard Mitigation Plan Mid-Cycle update in January 2023, initiative #9 states to provide erosion control information and steep slope stability recommendations to citizens and homeowners. Further Initiative #19 states to update the flood profile once the Assessor's data is updated, and the Flood Insurance Study and RiskMAP products are finalized; however, based on Skagit County Multi-Jurisdictional Natural Hazard Mitigation Plan Mid-Cycle update in January 2023 revised May 2023, the action has not been completed. In addition, according to the Skagit County Government Suggested Mitigation Strategies and Projects, there are various mitigation strategies that can be summarized below: - Cooperate with various Community Rating System programs that currently exist in Skagit County, continue and expand existing on-going public education programs to inform residents of Skagit County regarding flood risk in Skagit County to provide citizens with information they need in preparation for a catastrophic flood event. - Cooperate with various Community Rating System programs that currently exist in Skagit County, establish and conduct an on-going public education/awareness program to encourage those persons who live and/or own property within the 100-year floodplain to purchase flood insurance. -Enact additional regulations at the local level that will serve to restrict future construction of residential structures and non-agricultural related development within the 100-year floodplain -Develop evacuation plans for the 100-year floodplain that may include signed flood evacuation routes as well as siren warning systems and/or telephone warning systems to alert residents of imminent danger - Continue to conduct buy-out programs, elevation programs, and/or flood-proofing programs for repetitive loss properties within the 100-year floodplain.	Existing and proposed residential development, location
9	Residential Neighborhood 2 - Sea Level Rise	**Medium**	**Medium**	**Medium**	Neighborhood 2 comprises of the Skagit River delta and Puget Sound coast that follows the boundaries of the river floodplain and can be at greater risk of sea level rise and flood events. Based on the Skagit County Hazard Mitigation Plan Jurisdiction Specific Vulnerability Assessment, Neighborhood 2 has an estimated 8,043 structures with an average value of $155,750 per structure. Of these structures, 5% is at risk with an estimated total value of structures at risk to be $62,634,863. This is double that of Neighborhood 1 which has av estimated 4,697 number of structures with an average structure value of $302,160. Of structures in neighborhood 1, 5% are at risk with a total estimated value of $70,962,276. = Medium Sensitivity Within the Skagit County Multi-Jurisdictional Natural Hazard Mitigation Plan Mid-Cycle update in January 2023, initiative #17 states to continue to integrate mitigation planning data into ongoing land-use planning to assist in providing information necessary to enforce existing building codes, floodplain and critical areas ordinances, and shoreline protection. In addition, initiative #28 states to implement cost-effective measures to address the vulnerability of facilities at risk to sea level rise, extreme high tides, and storm surges as they relate to the potential inflow of saltwater. This initiative would lead to working with local private water purveyors and multiple departments such as the Consortium and Dike District Partnership. As of the Skagit County Multi-Jurisdictional Natural Hazard Mitigation Plan Mid-Cycle update in January 2023, May 2023 update, there has been no progress currently. = Medium Adaptive Capacity In the Skagit County Shoreline Master Program Chapter 4, Goal statement 1 can be summarized to allow for compatible uses of the shorelines in relationship to the limitations of their physical and environmental characteristics. These uses may enhance rather than detract from or adversely impact, the existing shoreline environment. = Medium Adaptive Capacity	Existing and proposed residential development, location

10	Residential Neighborhood 1 -Wildfire	**Medium**	**High**	**Low**	Based on the Skagit County Community Wildfire Protection Plan 2019 Update (CWPP), Skagit County experiences three types of fire threats: structure fires, wildland fires, and wildland-urban interface fires. Based on the CWPP, Neighborhood 1 has varied areas that are identified in the intermix and interface WUI zones. Further, between 2008 and August of 2019, Skagit County has experienced a total of 209 wildland fires with 2009 having the most occurrence of fires. Skagit County typically has numerous fires that occur in forestlands each year; however, all of these fires are extremely small (less than 0.2 acres in size) and remain that way due to the relative high moisture content in fire fuels. From the CWPP wildfire susceptibility assessment, it was concluded that Neighborhood 1 is classified as an area with increased susceptibility to wildfire in Skagit County. = **Medium Sensitivity** Skagit County has provided educational resources on Firewise USA and Fire Adapted Communities for County homeowners in WUI areas to ensure they can employ fire smart practices. Based on the Skagit County Multi-Jurisdictional Natural Hazard Mitigation Plan Mid-Cycle update in January 2023, initiative #6 states to continue implementation of coordinated public information program within Skagit County to inform citizens about the hazards faced and the appropriate preparedness such as affixing chimneys, foundations, fire-proof roofing materials, etc. Initiative #11 also states in coordination with the Skagit County Conservation District and local fire agencies, continue to promote a "FireWise" program in the County to increase fire safety zones around businesses and residences. This is especially important for this neighborhood as a high percentage of homes are located in timbered interface areas; thus Initiative #11 also encourages owners to reduce woodland fuel loads on their property. = **High Adaptive Capacity** Further, based on the CWPP, all aspects of wildland fire are addressed at an inter-agency cooperative level. This includes basic fire prevention and mitigation strategy consisting of pre-suppression. Pre-suppression involves interagency training and communication; wildfire awareness, prevention and preparedness outreach and education; and collaboration among fire agencies. = **High Adaptive Capacity**	Existing and proposed residential development, location
11	Residential Neighborhood 3 - Wildfire	**Medium**	**High**	**Low**	Based on the Skagit County Community Wildfire Protection Plan 2019 Update (CWPP), Skagit County experiences three types of fire threats: structure fires, wildland fires, and wildland-urban interface fires. Based on the CWPP, Neighborhood 3 has varied areas that are identified in the intermix and interface WUI zones. Further, between 2008 and August of 2019, Skagit County has experienced a total of 209 wildland fires with 2009 having the most occurrence of fires. Skagit County typically has numerous fires that occur in forestlands each year; however, all of these fires are extremely small (less than 0.2 acres in size) and remain that way due to the relative high moisture content in fire fuels. From the CWPP wildfire susceptibility assessment, it was concluded that Neighborhood 3 is classified as an area with increased susceptibility to wildfire in Skagit County. Neighborhood 3 consists primarily of forestlands, river valley floodplains, and rural development. = **Medium Sensitivity** Skagit County has provided educational resources on Firewise USA and Fire Adapted Communities for County homeowners in WUI areas to ensure they can employ fire smart practices. Based on the Skagit County Multi-Jurisdictional Natural Hazard Mitigation Plan Mid-Cycle update in January 2023, initiative #6 states to continue implementation of coordinated public information program within Skagit County to inform citizens about the hazards faced and the appropriate preparedness such as affixing chimneys, foundations, fire-proof roofing materials, etc. Initiative #11 also states in coordination with the Skagit County Conservation District and local fire agencies, continue to promote a "FireWise" program in the County to increase fire safety zones around businesses and residences. This is especially important for this neighborhood as a high percentage of homes are located in timbered interface areas; thus Initiative #11 also encourages owners to reduce woodland fuel loads on their property. = **High Adaptive Capacity**	Existing and proposed residential development, location
12	Residential Neighborhood 4 - Wildfire	**Medium**	**High**	**Low**	Based on the Skagit County Community Wildfire Protection Plan 2019 Update (CWPP), Skagit County experiences three types of fire threats: structure fires, wildland fires, and wildland-urban interface fires. Based on the CWPP, Neighborhood 4 has very limited areas that are identified in the intermix and interface WUI zones. Further, between 2008 and August of 2019, Skagit County has experienced a total of 209 wildland fires with 2009 having the most occurrence of fires. Most occur in Neighborhood 4 where sparse rural residential development exists, and is dominated by timbered forestland and open space. Skagit County typically has numerous fires that occur in forestlands each year; however, all of these fires are extremely small (less than 0.2 acres in size) and remain that way due to the relative high moisture content in fire fuels. From the CWPP wildfire susceptibility assessment, it was concluded that Neighborhood 4 is classified as an area with increased susceptibility to wildfire in Skagit County, affecting rural residents. = **Medium Sensitivity** Skagit County has provided educational resources on Firewise USA and Fire Adapted Communities for County homeowners in WUI areas to ensure they can employ fire smart practices. Based on the Skagit County Multi-Jurisdictional Natural Hazard Mitigation Plan Mid-Cycle update in January 2023, initiative #6 states to continue implementation of coordinated public information program within Skagit County to inform citizens about the hazards faced and the appropriate preparedness such as affixing chimneys, foundations, fire-proof roofing materials, etc. Initiative #11 also states in coordination with the Skagit County Conservation District and local fire agencies, continue to promote a "Firewise" program in the County to increase fire safety zones around businesses and residences. This is especially important for this neighborhood as a high percentage of homes are located in timbered interface areas; thus Initiative #11 also encourages owners to reduce woodland fuel loads on their property. = **High Adaptive Capacity**	Existing and proposed residential development, location
13	Petroleum refineries - Extreme Heat	**Medium**	**High**	**Low**	Petroleum is processed at refineries near Anacortes and delivered via transmission pipelines to Western County. Liquid gas is provided by Northwest Pipeline, BP Olympic Pipeline Company, and Trans Mountain Pipeline, which runs north to south along the Samish and Skagit deltas. The Trans Mountain Puget Sound Pipeline is generally located near West Skagit County and passes through the Skagit river and curves towards the industrial processing areas such as Equilon Enterprises LLC, General Chemical LLC, and Tesora Refining Marketing Company. Similarly, the BP Olympic Company is located similarly to the Trans Mountain Puget Sound Pipeline. Based on First Street data, these areas generally have minor to moderate heat risk = **Medium Sensitivity** Skagit County has developed standards for existing and future utility construction and operation conditions. For instance, utility assets must be sited underground whenever feasible. These standards apply to surface utility lines, aerial lines, water outfalls, flowlines, powerhouses for hydropower, and tidal/wave energy facilities. Utility construction, including maintenance and repair, must comply with County regulations, including the Critical Areas Ordinance and vegetation management standards. The Critical Areas Ordinance was adopted to assist in conserving the value of a property, safeguarding the public welfare, and providing protection for the following critical areas: Wetlands, Frequently Flooded Areas, Aquifer Recharge Areas, Geologically Hazardous Areas, and Fish and Wildlife Habitat Conservation Areas. To build resiliency against climate risks, Skagit County ensures that utility facilities are not sited in designated critical areas unless feasible alternatives are unavailable, as some existing gas pipelines and electricity generating and transmission facilities are located in such areas. = **High Adaptive Capacity**	Physical Design, location, design standards
14	Natural gas pipelines - Extreme Heat	**Medium**	**High**	**Low**	CNG provides natural gas and has a large transmission pipeline that extends from Anacortes in the west to Sedro-Woolley. Based on First Street, heat risk for where the large transmission pipelines are located range from minor to moderate risk. = **Medium Sensitivity** Skagit County has developed standards for existing and future utility construction and operation conditions. For instance, utility assets must be sited underground whenever feasible. These standards apply to surface utility lines, aerial lines, water outfalls, flowlines, powerhouses for hydropower, and tidal/wave energy facilities. CNG also provides rebates and other incentives for energy-efficient building appliances and educational materials for efficient building insulation. = **High Adaptive Capacity** Utility construction, including maintenance and repair, must comply with County regulations, including the Critical Areas Ordinance and vegetation management standards. The Critical Areas Ordinance was adopted to assist in conserving the value of a property, safeguarding the public welfare, and providing protection for the following critical areas: Wetlands, Frequently Flooded Areas, Aquifer Recharge Areas, Geologically Hazardous Areas, and Fish and Wildlife Habitat Conservation Areas. When technology cannot reduce risks to acceptable levels, Skagit County ensures that utility facilities are not sited in designated critical areas unless feasible alternatives are unavailable, as some existing gas pipelines and electricity generating and transmission facilities are located in such areas. = **High Adaptive Capacity**	Physical Design, location, design standards

15	Electric Utilities - Extreme Heat	**Medium**	**High**	**Low**	Temperatures that hover 10 degrees or more above the average high temperature for the region and last for several days or weeks are defined as extreme heat. As electric utilities are scattered throughout Skagit County, the overall heat risk for the County is minor. Prolonged exposure to extreme heat can reduce output, aka derating, generation capacity, and transmission efficiency and capacity, resulting in systematic energy losses. Turbines and power plants reliant on cool water can become less efficient due to a lower proportional thermal conversion. Extreme heat can also cause overhead lines to sag through thermal expansion, heightening wildfire risk and increasing voluntary power shutoffs and forced blackouts. = **Medium Sensitivity** Skagit County has developed standards for existing and future utility construction and operation conditions. For instance, utility assets must be sited underground whenever feasible. These standards apply to surface utility lines, aerial lines, water outfalls, flowlines, powerhouses for hydropower, and tidal/wave energy facilities. Utility construction, including maintenance and repair, must comply with County regulations, including the Critical Areas Ordinance and vegetation management standards. The Critical Areas Ordinance was adopted to assist in conserving the value of a property, safeguarding the public welfare, and providing protection for the following critical areas: Wetlands, Frequently Flooded Areas, Aquifer Recharge Areas, Geologically Hazardous Areas, and Fish and Wildlife Habitat Conservation Areas. When technology cannot reduce risks to acceptable levels, Skagit County ensures that utility facilities are not sited in designated critical areas unless feasible alternatives are unavailable, as some existing gas pipelines and electricity generating and transmission facilities are located in such areas. = **High Adaptive Capacity**	Physical Design, location, design standards
16	Baker River Hydroelectric Project - Extreme Heat	**Low**	**High**	**Low**	Temperatures that hover 10 degrees or more above the average high temperature for the region and last for several days or weeks are defined as extreme heat. The Baker River Hydroelectric Project covers almost 300 square miles in Washington state. The project creates more than 7,203 acres of water surface that provides public recreation, fisheries, flood risk management, and hydropower benefits for the communities in the Skagit River Valley and the greater northwest. To ensure public safety of the operation of this project, PSE complies with strict regulations and have developed a comprehensive Dam Safety Program. The project also has a early-warning siren system as part of the PSE Dam Safety Program and Emergency Action Plan. = **Low Sensitivity** Skagit County has developed standards for existing and future utility construction and operation conditions. For instance, utility assets must be sited underground whenever feasible. These standards apply to surface utility lines, aerial lines, water outfalls, flowlines, powerhouses for hydropower, and tidal/wave energy facilities. Utility construction, including maintenance and repair, must comply with County regulations, including the Critical Areas Ordinance and vegetation management standards. The Critical Areas Ordinance was adopted to assist in conserving the value of a property, safeguarding the public welfare, and providing protection for the following critical areas: Wetlands, Frequently Flooded Areas, Aquifer Recharge Areas, Geologically Hazardous Areas, and Fish and Wildlife Habitat Conservation Areas. To build resiliency against climate risks, Skagit County ensures that utility facilities are not sited in designated critical areas unless feasible alternatives are unavailable, as some existing gas pipelines and electricity generating and transmission facilities are located in such areas. = **High Adaptive Capacity**	Physical Design, location, design standards
17	Electric Utilities - Wildfire	**Medium**	**High**	**Low**	Based on the CWPP, between 2008 and August of 2019, Skagit County experienced a total of 209 wildland fires. Skagit County typically has numerous fires that occur in forestlands each year, but most fires are extremely small (less than 0.2 acres in size) and remain small due to the relative high moisture content in fire fuels. Electric utilities are scattered throughout Skagit County. Occasional large scale wildfire events have widespread impacts to electricity supply - destruction of asset, lengthy repairs required, loss of service and power. = **Medium Sensitivity** Skagit County has developed standards for existing and future utility construction and operation conditions. For instance, utility assets must be sited underground whenever feasible. These standards apply to surface utility lines, aerial lines, water outfalls, flowlines, powerhouses for hydropower, and tidal/wave energy facilities. PSE also proposes future major construction for existing transmission lines and substations such as the Sedro-Woolley substation, to retrofit and rebuild existing conditions. Rebuilding the transmission and distribution lines would strengthen the current system and reduce the frequency of outages in the area, thus concurrently building resilience to potential outages due to climate risks. PSE energy security and resiliency investments consider microgrids or infrastructure hardening where specific locations require increased resilience. These locations may include highly impacted communities, transportation hubs, emergency shelters, and areas at risk for isolation during significant weather events or wildfires. = **High Adaptive Capacity** Utility construction, including maintenance and repair, must comply with County regulations, including the Critical Areas Ordinance and vegetation management standards. The Critical Areas Ordinance was adopted to assist in conserving the value of a property, safeguarding the public welfare, and providing protection for the following critical areas: Wetlands, Frequently Flooded Areas, Aquifer Recharge Areas, Geologically Hazardous Areas, and Fish and Wildlife Habitat Conservation Areas. To build resiliency against climate risks, Skagit County ensures that utility facilities are not sited in designated critical areas unless feasible alternatives are unavailable, as some existing gas pipelines and electricity generating and transmission facilities are located in such areas. = **High Adaptive Capacity**	Physical Design, location, design standards
18	Natural Gas Pipelines - Wildfire	**Low**	**High**	**Low**	Based on the CWPP, between 2008 and August of 2019, Skagit County experienced a total of 209 wildland fires. Skagit County typically has numerous fires that occur in forestlands each year, but most fires are extremely small (less than 0.2 acres in size) and remain small due to the relative high moisture content in fire fuels. CNG provides natural gas and has a large transmission pipeline that extends from Anacortes in the west to Sedro-Woolley. Based on First Street, wildfire risk for where the large transmission pipelines are located range from moderate to major risk; however, these pipelines are buried underground with differing depths based on their conduit sizing. = **Low Sensitivity** Skagit County has developed standards for existing and future utility construction and operation conditions. For instance, utility assets must be sited underground whenever feasible. These standards apply to surface utility lines, aerial lines, water outfalls, flowlines, powerhouses for hydropower, and tidal/wave energy facilities. Utility construction, including maintenance and repair, must comply with County regulations, including the Critical Areas Ordinance and vegetation management standards. The Critical Areas Ordinance was adopted to assist in conserving the value of a property, safeguarding the public welfare, and providing protection for the following critical areas: Wetlands, Frequently Flooded Areas, Aquifer Recharge Areas, Geologically Hazardous Areas, and Fish and Wildlife Habitat Conservation Areas. To build resiliency against climate risks, Skagit County ensures that utility facilities are not sited in designated critical areas unless feasible alternatives are unavailable, as some existing gas pipelines and electricity generating and transmission facilities are located in such areas. = **High Adaptive Capacity**	Physical Design, location, design standards

19	Petroleum refineries - Wildfire	Low	High	Low	Petroleum is processed at refineries near Anacortes and delivered via transmission pipelines to Western County. Liquid gas is provided by Northwest Pipeline, BP Olympic Pipeline Company, and Trans Mountain Pipeline, which runs north to south along the Samish and Skagit deltas. The Trans Mountain Puget Sound Pipeline is generally located near West Skagit County and passes through the Skagit river and curves towards the industrial processing areas such as Equilon Enterprises LLC, General Chemical LLC, and Tesora Refining Marketing Company. Similarly, the BP Olympic Company is located similarly to the Trans Mountain Puget Sound Pipeline. Based on the CWPP and First Street data, these areas generally have low recorded wildfires and minor risk. = **Low Sensitivity** Skagit County has developed standards for existing and future utility construction and operation conditions. For instance, utility assets must be sited underground whenever feasible. These standards apply to surface utility lines, aerial lines, water outfalls, flowlines, powerhouses for hydropower, and tidal/wave energy facilities. Utility construction, including maintenance and repair, must comply with County regulations, including the Critical Areas Ordinance and vegetation management standards. The Critical Areas Ordinance was adopted to assist in conserving the value of a property, safeguarding the public welfare, and providing protection for the following critical areas: Wetlands, Frequently Flooded Areas, Aquifer Recharge Areas, Geologically Hazardous Areas, and Fish and Wildlife Habitat Conservation Areas. To build resiliency against climate risks, Skagit County ensures that utility facilities are not sited in designated critical areas unless feasible alternatives are unavailable, as some existing gas pipelines and electricity generating and transmission facilities are located in such areas. = **High Adaptive Capacity**	Physical Design, location, design standards
20	Baker River Hydroelectric Project - Wildfire	High	High	Medium	Based on the Seattle Light Wildfire Risk Reduction Strategy, portions of the 230 kW system of the Baker River Hydroelectric Project were deenergized to support evacuation and reduce risk to buildings and infrastructure. Customer accounts lost service for more than 10 minutes; however, no additional service disruption to customers occurred as additional circuits were available for meeting customer load. Further in 2015 and 2023, lighting strikes ignited wildfires in the Skagit River Watershed, which caused the City Light's company towns and a temporary shutoff of transmission lines from the project. = **High Sensitivity** Skagit County has developed standards for existing and future utility construction and operation conditions. For instance, utility assets must be sited underground whenever feasible. These standards apply to surface utility lines, aerial lines, water outfalls, flowlines, powerhouses for hydropower, and tidal/wave energy facilities. Utility construction, including maintenance and repair, must comply with County regulations, including the Critical Areas Ordinance and vegetation management standards. The Critical Areas Ordinance was adopted to assist in conserving the value of a property, safeguarding the public welfare, and providing protection for the following critical areas: Wetlands, Frequently Flooded Areas, Aquifer Recharge Areas, Geologically Hazardous Areas, and Fish and Wildlife Habitat Conservation Areas. To build resiliency against climate risks, Skagit County ensures that utility facilities are not sited in designated critical areas unless feasible alternatives are unavailable, as some existing gas pipelines and electricity generating and transmission facilities are located in such areas. = **High Adaptive Capacity**	Physical Design, location, design standards
21	Farms-Drought (Ag & Food Systems)	High	High	Medium	Skagit County has a rich agricultural industry and many important ecosystems, historically shaped by the unconfined Skagit River delta. Approximately 90% of the county's farmgate value is produced on around 60,000 acres in the Skagit and Samish Deltas, areas that rely on specialized diking, drainage, and irrigation districts to maintain productivity. In addition, local farmers produce approximately $350 million worth of crops, livestock, and dairy products on approximately 90,000 acres of land. Over 90 different crops are grown in the County. Blueberries, raspberries, strawberries, tulips, daffodils, pickling cucumbers, specialty potatoes, Jonogold apples, and vegetable seed are some of the more important crops in this maritime valley. More tulip, iris, and daffodil bulbs are produced here than in any other county in the U.S. Furthermore, 95% of the red potatoes grown in the state of Washington are from Skagit County. Agricultural use of water mainly consists of surface and groundwater for Skagit County. Reduced snowpack would indicate reduced aquifer and groundwater recharge. Based on the Economic Indicators of Agriculture in Skagit County, water use in agriculture from 1990-2005 primarily came from groundwater with approximately 30% each year coming from surface water. This suggests that majority of water consumption for agriculture in Skagit County uses groundwater; thus, reduced snowpack may heavily impact this. =**High Sensitivity** Asset benefits from initiatives like the WSU Water and Irrigation sustainability education (WISE) program, providing technical support for irrigation efficiency. In addition, farmers in Skagit County have often changed their farming practices and products to sustain their operations. For instance, Skagit County was once known for peas; however, they have shifted to producing other crops in respond to changing demands and resources. = **High Adaptive Capacity**	Agricultural supply and livelihood
22	Farms-Extreme precipitation (Ag & Food Systems)	Medium	Medium	Medium	Extreme precipitation poses a high risk to the agriculture sector in Skagit County. The secondary hazard of flooding from extreme precipitation leads to the risk of waterlogged soils from heavy rainfall has disrupted farming operations by damaging crops, eroding soil, and impacting irrigation systems. The unpredictability of precipitation patterns exacerbates the challenge, leads to economic losses and reduced agricultural productivity. = **Medium Sensitivity** Skagit County has partnerships with Washington State University and programs such as the WSU Water and Irrigation sustainability education (WISE) program. These programs and partnerships contribute to improving irrigation efficiency and offer technical assistance to mitigate the effects of climate change. Efforts that focus on the secondary hazard of flooding from extreme precipitation include riparian restoration and adaptive infrastructure. =**Medium Adaptive Capacity**	Agricultural supply and livelihood
23	Farms - Wildfire	Low	Medium	Low	Farms are mainly located in the delta where agricultural burns are permitted. Asset is predominantly not located in WUI zone (State UI webapp). Impacts to food systems are minimal. = **Low Sensitivity** Farms utilize controlled burns to reinforce nutrient density in soil. Asset is sited in areas not exposed to wildfire risk and is protected by County legacy programs to protect asset **= Medium Adaptive Capacity**	Controlled burn practices
24	Farms-Reduced snowpack (Ag & Food Systems)	High	High	Medium	Skagit County has a rich agricultural industry and many important ecosystems, historically shaped by the unconfined Skagit River delta. Approximately 90% of the county's farmgate value is produced on around 60,000 acres in the Skagit and Samish Deltas, areas that rely on specialized diking, drainage, and irrigation districts to maintain productivity. In addition, local farmers produce approximately $350 million worth of crops, livestock, and dairy products on approximately 90,000 acres of land. Over 90 different crops are grown in the County. Blueberries, raspberries, strawberries, tulips, daffodils, pickling cucumbers, specialty potatoes, Jonogold apples, and vegetable seed are some of the more important crops in this maritime valley. More tulip, iris, and daffodil bulbs are produced here than in any other county in the U.S. Furthermore, 95% of the red potatoes grown in the state of Washington are from Skagit County. Agricultural use of water mainly consists of surface and groundwater for Skagit County. Reduced snowpack would indicate reduced aquifer and groundwater recharge. Based on the Economic Indicators of Agriculture in Skagit County, water use in agriculture from 1990-2005 primarily came from groundwater with approximately 30% each year coming from surface water. This suggests that majority of water consumption for agriculture in Skagit County uses groundwater; thus, reduced snowpack may heavily impact this. =**High Sensitivity** Farmers in Skagit County have often changed their farming practices and products to sustain their operations. For instance, Skagit County was once known for peas; however, they have shifted to producing other crops in respond to changing demands and resources. = **High Adaptive Capacity**	Agricultural supply and livelihood

25	Fisheries-Drought (Cultural Resources)	High	Medium	High	Skagit River is the only Puget Sound river system with all five Pacific Salmon species and has largest remaining wild runs of threatened Chinook, with high proportion of salmon spawning streams in rural areas. Reduced water levels from less precipitation causes water temperatures to rise and/or upper tributaries to dry up - changes in water quantity, timing, and quality are projected to disrupt food webs and limit access to critical habitats for aquatic species. Swinomish and upper Skagit delta tribes have traditional hunting grounds and cultural spiritual connection and identity to salmon that are threatened by salmon's declining population. First salmon feast and ceremonial gathering takes place during first annual return of salmon - includes traditional storytelling, customs, connection to nature/Mother Earth and other tribal members. =**High Sensitivity** Species that are more tolerant to low flow conditions i.e., warmer water temperatures, low velocities, elevated hypoxia levels, etc. compete with Coldwater species that historically thrive. Tribal fisheries would be significantly affected while commercial and recreational fisheries would shift to other species i.e., crab, yellow perch, etc. or requires more deep water fishing offshore. Many restoration efforts are led by Dept of Ecology, County's Monitoring and Adaptive Management Program, and local organizations and include riparian habitat planting. County's Salmon Heritage program establishes conservation easements along riparian corridors in rural areas to preserve fish habitat and agricultural industry. Habitat is also protected under the County's critical areas ordinance and the SMP. = **Medium Adaptive Capacity**	Inconsistent conditions for spawn cycles
26	Fisheries-Flooding	High	Medium	High	Skagit River is the only Puget Sound river system with all five Pacific Salmon species and has largest remaining wild runs of threatened Chinook, with high proportion of salmon spawning streams in rural areas. In estuarine habitats, extreme precipitation can alter salinity levels, disrupting juvenile salmon habitats and stressing aquatic species. In stream and river habitats, heavy rainfall leads to increased flooding and sedimentation, which negatively affects spawning areas and water quality. Flooding causes secondary hazards such as riverbank erosion - changes in location of traditional hunting grounds and changes in water quantity, timing, and quality are projected to disrupt food webs and limit access to cultural traditions and practices. Swinomish and upper Skagit delta tribes have traditional hunting grounds and cultural spiritual connection and identity to salmon that are threatened by salmon's declining population. First salmon feast and ceremonial gathering takes place during first annual return of salmon - includes traditional storytelling, customs, connection to nature/Mother Earth and other tribal members. = **High Sensitivity** Species like Chinook and coho salmon, steelhead, and bull trout—especially those that spawn in summer or rear as juveniles for extended periods in freshwater—are sensitive to peak streamflow/high velocity conditions. Species that are more tolerant to low flow conditions i.e., warmer water temperatures, low velocities, elevated hypoxia levels, etc. compete with Coldwater species that historically thrive. Tribal fisheries would be significantly affected while commercial and recreational fisheries would shift to other species i.e., crab, yellow perch, etc. or requires more deep water fishing offshore. Many restoration efforts are led by Dept of Ecology, County's Monitoring and Adaptive Management Program, and local organizations and include riparian habitat planting. County's Salmon Heritage program establishes conservation easements along riparian corridors in rural areas to preserve fish habitat and agricultural industry. Habitat is also protected under the County's critical areas ordinance and the SMP. Technological approaches to adaptation include installing equipment to mitigate low water flow issues like in North Toutle and Puyallup (Source: HMP, 2020). = **Medium Adaptive Capacity**	Species life cycle, Water flow conditions
27	Fisheries-Sea Level Rise	High	Medium	High	Projections indicate sea levels may rise by 1.0 to 2.0 feet between 2050 and 2100, reducing intertidal marsh areas by approximately 12% and adversely affecting juvenile Chinook salmon that depend on these habitats. In estuarine habitats, SLR can alter salinity levels, disrupting juvenile salmon habitats and stressing aquatic species. Increased inundation and saltwater intrusion during winter and early spring months can lead to the loss of critical habitats for Coldwater species, particularly in estuarine and intertidal zones. Warmer water temperatures due to new shallower shorelines and increased frequency of floods and low flows during summer months threaten aquatic ecosystems that impact flow velocities and habitat access. Changes in location of traditional hunting grounds and changes in water quantity, timing, and quality are projected to disrupt food webs and limit access to cultural traditions and practices. Swinomish and upper Skagit delta tribes have traditional hunting grounds and cultural spiritual connection and identity to salmon that are threatened by salmon's declining population. First salmon feast and ceremonial gathering takes place during first annual return of salmon - includes traditional storytelling, customs, connection to nature/Mother Earth and other tribal members. = **High Sensitivity** Species like Chinook and coho salmon, steelhead, and bull trout—especially those that spawn in summer or rear as juveniles for extended periods in freshwater—are highly sensitive to low flow conditions. Species that are more tolerant to low flow conditions i.e., warmer water temperatures, low velocities, elevated hypoxia levels, etc. compete with Coldwater species that historically thrive. Tribal fisheries would be significantly affected while commercial and recreational fisheries would shift to other species i.e., crab, yellow perch, etc. or requires more deep water fishing offshore. Many restoration efforts are led by Dept of Ecology, County's Monitoring and Adaptive Management Program, and local organizations and include riparian habitat planting. Habitat is also protected under the County's critical areas ordinance and the SMP. Technological approaches to adaptation include installing equipment to mitigate low water flow issues like in North Toutle and Puyallup (Source: HMP, 2020). = **Medium Adaptive Capacity**	Species life cycle, Water flow conditions
28	Fisheries - Wildfire	Medium	Medium	Medium	Fisheries located in upper watershed tributaries are susceptible to wildfire risk. Increased wildfire risk can lead to more wildfire events that cause sedimentation and higher water temperatures - impacting habitat quality for fish. These are singular events that cause temporary impacts to fish habitat. =**Medium Sensitivity** Species like Chinook and coho salmon, steelhead, and bull trout—especially those that spawn in summer or rear as juveniles for extended periods in freshwater—are highly sensitive to low flow conditions. Species that are more tolerant to low flow conditions i.e., warmer water temperatures, low velocities, elevated hypoxia levels, etc. compete with Coldwater species that historically thrive. Tribal fisheries would be significantly affected while commercial and recreational fisheries would shift to other species i.e., crab, yellow perch, etc. or requires more deep water fishing offshore. Many restoration efforts are led by Dept of Ecology, County's Monitoring and Adaptive Management Program, and local organizations and include riparian habitat planting. Habitat is also protected under the County's critical areas ordinance and the SMP. Technological approaches to adaptation include installing equipment to mitigate low water flow issues like in North Toutle and Puyallup (Source: HMP, 2020). = **Medium Adaptive capacity**	Flow conditions
29	Farms-Drought (Economic Development)	Medium	Medium	Medium	Skagit County has a rich agricultural industry and many important ecosystems, historically shaped by the unconfined Skagit River delta. Approximately 90% of the county's farmgate value is produced on around 60,000 acres in the Skagit and Samish Deltas, areas that rely on specialized diking, drainage, and irrigation districts to maintain productivity. In addition, local farmers produce approximately $350 million worth of crops, livestock, and dairy products on approximately 90,000 acres of land. Over 90 different crops are grown in the County. =**Medium Sensitivity** Skagit County benefits from initiatives like the WSU Water and Irrigation Sustainability Education (WISE) program, which enhances irrigation efficiency and offers technical support. However, the significant impact of drought on water availability and crop health means that while adaptive measures are in place, they may not fully mitigate the severe effects of extended dry periods on agricultural operations. = **Medium Adaptive Capacity**	Economic prosperity in agricultural industry, crop production

30	Farms-Extreme precipitation	High	Medium	High	Skagit County has a rich agricultural industry and many important ecosystems, historically shaped by the unconfined Skagit River delta. Approximately 90% of the county's farmgate value is produced on around 60,000 acres in the Skagit and Samish Deltas, areas that rely on specialized diking, drainage, and irrigation districts to maintain productivity. In addition, local farmers produce approximately $350 million worth of crops, livestock, and dairy products on approximately 90,000 acres of land. Over 90 different crops are grown in the County. Extreme precipitation poses a high risk to the agriculture sector in Skagit County. The secondary hazard of flooding from extreme precipitation leads to the risk of waterlogged soils from heavy rainfall has disrupted farming operations by damaging crops, eroding soil, and impacting irrigation systems. The unpredictability of precipitation patterns exacerbates the challenge, leads to economic losses and reduced agricultural productivity. Reduced agricultural productivity may lead to millions of dollars lost for this sector. =**High Sensitivity** Skagit County has partnerships with Washington State University and programs such as the WSU Water and Irrigation sustainability education (WISE) program. These programs and partnerships contribute to improving irrigation efficiency and offer technical assistance to mitigate the effects of climate change. Efforts that focus on the secondary hazard of flooding from extreme precipitation include riparian restoration and adaptive infrastructure. =**Medium Adaptive Capacity**	Economic prosperity in agricultural industry, crop production
31	Farms-Flooding	Medium	Medium	Medium	Skagit County has a rich agricultural industry and many important ecosystems, historically shaped by the unconfined Skagit River delta. Approximately 90% of the county's farmgate value is produced on around 60,000 acres in the Skagit and Samish Deltas, areas that rely on specialized diking, drainage, and irrigation districts to maintain productivity. In addition, local farmers produce approximately $350 million worth of crops, livestock, and dairy products on approximately 90,000 acres of land. Over 90 different crops are grown in the County. Rising sea levels are projected to impact Skagit County's agricultural lands, particularly in the Skagit River delta, where inundation could damage crops and prevent future planting. Most farming and pastureland in Skagit County are located within the floodplain-delta area, making it highly susceptible to recurrent flooding. Some vulnerable crops include tulips and various vegetable crops (including seed crops), as they may still be in the ground during fall floods or need to be planted in spring before floodwaters have receded. The escalating flood risk is also expected to cause direct damage to farm infrastructure. = **Medium Sensitivity** The Swinomish Indian Tribal Community is actively enhancing its adaptive capacity in the face of climate change by implementing adaptation recommendations developed in its 2010 Climate Change Adaptation Action Plan. Some key initiatives include revising shoreline codes, creating a detailed coastal protection plan for the vulnerable 1,100 low-lying acres on the north end of the Reservation, establishing a Reservation-wide wildfire risk reduction program, and developing a system of community health indicators to measure awareness and impacts of climate change within the tribal community. Skagit County also continues to partner with the Washington State University (WSU) Agriculture Programs at WSU Skagit Extension. This collaboration helps the agricultural sector with programs such as WSU water irrigation system efficiency and cultivating success.. = **Medium Adaptive Capacity**	Economic prosperity in agricultural industry, crop production
32	Farms-Reduced snowpack	High	High	Medium	Skagit County has a rich agricultural industry and many important ecosystems, historically shaped by the unconfined Skagit River delta. Approximately 90% of the county's farmgate value is produced on around 60,000 acres in the Skagit and Samish Deltas, areas that rely on specialized diking, drainage, and irrigation districts to maintain productivity. Skagit County has a rich agricultural industry and many important ecosystems, historically shaped by the unconfined Skagit River delta. Approximately 90% of the county's farmgate value is produced on around 60,000 acres in the Skagit and Samish Deltas, areas that rely on specialized diking, drainage, and irrigation districts to maintain productivity. In addition, local farmers produce approximately $350 million worth of crops, livestock, and dairy products on approximately 90,000 acres of land. Over 90 different crops are grown in the County. Blueberries, raspberries, strawberries, tulips, daffodils, pickling cucumbers, specialty potatoes, Jonogold apples, and vegetable seed are some of the more important crops in this maritime valley. More tulip, iris, and daffodil bulbs are produced here than in any other county in the U.S. Furthermore, 95% of the red potatoes grown in the state of Washington are from Skagit County. Agricultural use of water mainly consists of surface and groundwater for Skagit County. Reduced snowpack would indicate reduced aquifer and groundwater recharge. Based on the Economic Indicators of Agriculture in Skagit County, water use in agriculture from 1990-2005 primarily came from groundwater with approximately 30% each year coming from surface water. This suggests that majority of water consumption for agriculture in Skagit County uses groundwater; thus, reduced snowpack may heavily impact revenue heavily =**High Sensitivity** Farmers in Skagit County have often changed their farming practices and products to sustain their operations. For instance, Skagit County was once known for peas; however, they have shifted to producing other crops in response to changing demands and resources. = **High Adaptive Capacity.**	Economic prosperity in agricultural industry, crop production
33	Farms-Sea level rise	High	Low	High	Skagit County has a rich agricultural industry and many important ecosystems, historically shaped by the unconfined Skagit River delta. Approximately 90% of the county's farmgate value is produced on around 60,000 acres in the Skagit and Samish Deltas, areas that rely on specialized diking, drainage, and irrigation districts to maintain productivity. In addition, local farmers produce approximately $350 million worth of crops, livestock, and dairy products on approximately 90,000 acres of land. Over 90 different crops are grown in the County. Sea level rise may lead to inundation and soil salination from saltwater intrusion. Thus, this may lead to reduced arable land which would threaten crop yields and productivity. Rising sea levels may also lead to groundwater intrusion that may disrupt aquifer recharge; consequently, contamination of local water supplies may occur. Farms are mostly located on within western Skagit county near the coastal shorelines. On the Swinomish Indian Tribal Community Reservation on Fidalgo Island in southwestern Skagit County, over 1,100 acres—including all of the reservation's agricultural lands south of SR20 and adjacent to the Swinomish Channel—face a high risk of inundation from sea level rise and storm surge. =**High Sensitivity** Skagit County has efforts that include partnerships with WSU for irrigation efficiency and flood management initiatives (e.g., for sea water intrusion). However, more targeted adaptation strategies specifically addressing sea level rise and its effects on soil salination and inundation are needed. =**Low Adaptive Capacity**	Economic prosperity in agricultural industry, crop production
34	Farms - Wildfire	Low	Medium	Low	Farms are mainly located in the delta where agricultural burns are permitted. Asset is predominantly not located in WUI zone (State UI webapp). Impacts to economic development depends on the product - products that are susceptible to slight changes in water quality and availability i.e., grass for livestock, potatoes, berries, etc. would be impacted. Diversity of crops can reduce impacts on economic depression from wildfire events on farms. = **Low Sensitivity** Skagit County benefits from initiatives like the WSU Water and Irrigation Sustainability Education (WISE) program, which enhances irrigation efficiency and offers technical support. However, the significant impact of drought on water availability and crop health means that while adaptive measures are in place, they may not fully mitigate the severe effects of extended dry periods on agricultural operations**.** **= Medium Adaptive Capacity**	Location

35	**Commercial forests-Drought & Reduced Snowpack (Economic Dev)**	**High**	**Medium**	**High**	The 332,000 acres of private forested timber lands, 282,812 acres of USFS land, and 131,203 acres of state-managed timberlands in the County are exposed to increased drought that increases wildfire risk. Projected decrease in snowpack impacts tree species' ability to store water, making them more susceptible to disease and increasing mortality that ultimately reduces economic returns. Mid-century climate change pressures on plant hardiness zones for Skagit county in degrees Celsius: 7: -17.7 to -12.2 8: -12.1 to -6.7 9: -6.6 to -1.1 Forestry species below are sensitive to increasing temperatures and drought conditions (source: Tree seed zone web app, 2024): - Douglas-Fir (highest demand) - Western Hemlock - Western Redcedar (high average value) - Red Alder - Sitka Spruce (high demand) - Alaskan Yellow Cedar (high average value) - Port Orford Cedar (high average value) - Grand Fir - Ponderosa Pine - Western White Pine - Pacific yew = **High Sensitivity** Shift to other revenue-generating tree species for drought tolerance: oaks, madrone, eucalyptus, etc. may be costly and difficult to implement. Skagit conservation district and other organizations help forestry businesses by providing resources i.e., forestry mgm't planning, funding availability, reforestation, etc. =**Medium Adaptive Capacity**	Soil moisture, Hardiness zone
36	**Commercial forests - Wildfire**	**Medium**	**Medium**	**Medium**	The 332,000 acres of private forested timber lands, 282,812 acres of USFS land, and 131,203 acres of state-managed timberlands are located in eastern County with minimal increases in high fire danger days of 5 days, which is close to the county average of 6 days. State-managed timberlands by DNR 2024 revenue = $3,856,410, lower than the 10-year average. Wildfire events in eastern County are often small scale and unpredictable but is projected to increase in frequency and severity. Impacts to economic development is dependent upon scale and extent of fire on public or private operated timberlands. Large scale wildfire events would significantly impact revenue. =**Medium Sensitivity** Shift to other revenue-generating tree species for drought tolerance: oaks, madrone, eucalyptus, etc. may be costly and difficult to implement. Skagit conservation district and other organizations help forestry businesses by providing resources i.e., forestry mgm't planning, funding availability, reforestation, etc. =**Medium Adaptive Capacity**	Wildfire scale, extent
37	**Commercial forests-Extreme precipitation & Flooding**	**Medium**	**Medium**	**Medium**	The 332,000 acres of private forested timber lands, 282,812 acres of USFS land, and 131,203 acres of state-managed timberlands are exposed to extreme precip and flooding. Forestry tree species are more likely to experience damage from secondary impacts i.e., landslides, erosion, due to extreme precip and flooding hazards. Forest lands located in unstable hillside areas or poorly drained soils with shallow root systems are more susceptible. Areas with unstable slopes are located along tributaries in the river valley near Concrete, Van Horn, Rockport, and Marblemount. = **Medium Sensitivity** Adaptation methods include relocating operations and/or reinforcing hillside areas to mitigate erosion - protective measures are managed by SMP and municipal code to protect ecological functions. = **Medium Adaptive Capacity**	Landslides
38	**Commercial forests-Sea level rise**	**Low**	**Medium**	**Low**	The 332,000 acres of private forested timber lands, 282,812 acres of USFS land, and 131,203 acres of state-managed timberlands are exposed to SLR hazards. In particular, commercial forests in southern flank of Chuckanut Mountains can be damaged due to secondary SLR hazards such as bluff toe erosion that causes landslides, and debris avalanches. This area represents a small portion of total commercial forests in the County. =**Low Sensitivity** Adaptation methods include relocating operations and/or reinforcing coastal bluffs to mitigate erosion - bluff protective measures are superseded by ecological functions per the SMP. = **Medium Adaptive Capacity**	Revenue
39	**Industrial businesses-Drought & Reduced snowpack (Economic Dev)**	**Medium**	**Medium**	**Medium**	Large manufacturing industries include food manufacturing, machinery, wood products, petroleum, and coal. Industrial manufacturing facilities such as those located and managed at the Port of Anacortes, March Point, and Fredonia i.e., soil mixing/amendment warehouses, chemical facilities, gas suppliers, etc. can experience disruptions in business continuity due to raw supply limitations. Some businesses provide energy to critical facilities and product to agricultural farms, among others creating a chain reaction of price fluctuations. Timber, biomass, wood products, and food manufacturing products would be most affected by decreased snowpack, requiring alternative sourcing of raw materials. = **Medium Sensitivity** County receives large portion of general fund and non-general fund revenue from retail sales tax, property tax, and leases - other revenue sources come from state and federal grants, and taxes levied for goods and services (FY2025 adopted revenue budget report, Skagit county). Gross business income (GBI) in 2023 was $7.81 billion; manufacturing, construction, wholesale, and retail trades are biggest contributor to County's GBI (Source: 2024 Economy Overview report, Economic Development Alliance of Skagit County repository) and comprises 9.13% of the County's economy. Manufacturing is the third largest employer (Ibid). Disruption to business continuity would result in lost profitability that can be recovered by business decisions i.e., wage compensation, supply chain change, grant funding, etc., and siting industrial/manufacturing facilities in other buildable lands able to accommodate industrial uses - 1,767 acres of taxable County land is available for industrial uses (2016 County Comp Plan). County has resources i.e., mental health, job boards, workforce training, etc. County has incentives i.e., business grants, streamlined permitting, tax exemptions, tax credits, etc. for manufacturing/industrial businesses in unincorporated County. Adaptation is restricted by budget and personnel availability. Recommend coordination with stakeholders to plan for potential impacts.=**Medium Adaptive Capacity**	Raw materials supply restrictions

40	**Industrial businesses-Extreme precipitation & Flooding**	**Medium**	**Medium**	**Medium**	Large manufacturing industries include food manufacturing, machinery, wood products, petroleum, and coal. Industrial manufacturing facilities in low-lying areas such as those located and managed at the March Point and Fredonia i.e., soil mixing/amendment warehouses, chemical facilities, gas suppliers, etc. can experience disruptions in business continuity due to peak streamflows and riverine and delta flooding. Businesses provide energy to critical facilities and product to agricultural farms, among others creating a chain reaction of price fluctuations. Inundation of chemical plants can create hazardous conditions, requiring businesses to mitigate that can be costly and time-consuming. =**Medium Sensitivity** County receives large portion of general fund and non-general fund revenue from retail sales tax, property tax, and leases - other revenue sources come from state and federal grants, and taxes levied for goods and services (FY2025 adopted revenue budget report, Skagit county). Gross business income (GBI) in 2023 was $7.81 billion; manufacturing, construction, wholesale, and retail trades are biggest contributor to County's GBI (Source: 2024 Economy Overview report, Economic Development Alliance of Skagit County repository) and comprises 9.13% of the County's economy. Manufacturing is the third largest employer (Ibid). Disruption to business continuity would result in lost profitability that can be recovered by business decisions i.e., wage compensation, supply chain change, grant funding, etc., and siting industrial/manufacturing facilities in other buildable lands able to accommodate industrial uses - 1,767 acres of taxable County land is available for industrial uses (2016 County Comp Plan). County has resources i.e., mental health, job boards, workforce training, etc. County has incentives i.e., business grants, streamlined permitting, tax exemptions, tax credits, etc. for manufacturing/industrial businesses in unincorporated County. Adaptation is restricted by budget and personnel availability. Recommend coordination with stakeholders to plan for potential impacts. =**Medium Adaptive Capacity**	Location in low-lying areas
41	**Industrial/manufacturing businesses-Sea level rise**	**Medium**	**Medium**	**Medium**	Large manufacturing industries include food manufacturing, machinery, wood products, petroleum, and coal. Industrial manufacturing facilities such as those located and managed at the Port of Anacortes, March Point, and Fredonia i.e., soil mixing/amendment warehouses, chemical facilities, gas suppliers, etc. can experience disruptions in business continuity due to SLR inundation. Businesses provide energy to critical facilities and product to agricultural farms, among others creating a chain reaction of price fluctuations. Inundation of chemical plants can create hazardous conditions, requiring businesses to mitigate that can be costly and time-consuming. Marine terminal facilities i.e., Dakota Creek shipyard, Dunlop Towing's log-rafting facility in Swinomish Village, generated $86.2 million in revenue in 2013 (Source: 2020 HMP). =**Medium Sensitivity** County receives large portion of general fund and non-general fund revenue from retail sales tax, property tax, and leases - other revenue sources come from state and federal grants, and taxes levied for goods and services (FY2025 adopted revenue budget report, Skagit county). Gross business income (GBI) in 2023 was $7.81 billion; manufacturing, construction, wholesale, and retail trades are biggest contributor to County's GBI (Source: 2024 Economy Overview report, Economic Development Alliance of Skagit County repository) and comprises 9.13% of the County's economy. Manufacturing is the third largest employer (Ibid). Disruption to business continuity would result in temporary or permanent closure and lost profitability that can be recovered by business decisions i.e., wage compensation, supply chain change, grant funding, etc., and siting industrial/manufacturing facilities in other buildable lands able to accommodate industrial uses - 1,767 acres of taxable County land is available for industrial uses (2016 County Comp Plan). County has resources i.e., mental health, job boards, workforce training, etc. County has incentives i.e., business grants, streamlined permitting, tax exemptions, tax credits, etc. for manufacturing/industrial businesses in unincorporated County. Adaptation is restricted by budget and personnel availability. Recommend coordinating with stakeholders to plan for potential impacts from SLR. =**Medium Adaptive Capacity**	Impacts to supply chain
42	**Industrial/manufacturing businesses-Wildfire**	**Medium**	**Medium**	**Medium**	Large manufacturing industries include food manufacturing, machinery, wood products, petroleum, and coal. Industrial manufacturing facilities such as those located and managed at the Port of Anacortes, March Point, and Fredonia i.e., soil mixing/amendment warehouses, chemical facilities, gas suppliers, etc. are located in WUI-interface and WUI-intermix zones and can experience disruptions in business continuity due to increased wildfire risk. High fire danger days are projected to increase significantly (twice the County average of 6 days) in western County where a majority of industrial/manufacturing businesses are located per CMRW tool. =**Medium Sensitivity** County receives large portion of general fund and non-general fund revenue from retail sales tax, property tax, and leases - other revenue sources come from state and federal grants, and taxes levied for goods and services (FY2025 adopted revenue budget report, Skagit county). Gross business income (GBI) in 2023 was $7.81 billion; manufacturing, construction, wholesale, and retail trades are biggest contributor to County's GBI (Source: 2024 Economy Overview report, Economic Development Alliance of Skagit County repository) and comprises 9.13% of the County's economy. Manufacturing is the third largest employer (Ibid). Disruption to business continuity would result in lost profitability that can be recovered by business decisions i.e., wage compensation, supply chain change, grant funding, etc., and siting industrial/manufacturing facilities in other buildable lands able to accommodate industrial uses - 1,767 acres of taxable County land is available for industrial uses (2016 County Comp Plan). County has resources i.e., mental health, job boards, workforce training, etc. County has incentives i.e., business grants, streamlined permitting, tax exemptions, tax credits, etc. for manufacturing/industrial businesses in unincorporated County. Adaptation is restricted by budget and personnel availability. Recommend coordination with stakeholders to plan for potential impacts. =**Medium Adaptive Capacity**	Impacts to supply chain
43	**Rivers/Fisheries-Drought (*Ecosystems*)**	**High**	**Medium**	**High**	Reduced water levels from less precipitation causes water temperatures to rise and/or upper tributaries to dry up - changes in water quantity, timing, and quality are projected to disrupt food webs and limit access to critical habitats for aquatic species. Sensitive fish species that are also protected under the Endangered Species Act: Chinook, coho salmon, steelhead, bull trout. During warmer periods, fish must expend more energy to regulate their metabolism, especially when water is scarce and suboptimal. Even though fish in productive areas with abundant food can grow faster in warmer conditions, the increased metabolic costs can limit growth if temperatures rise too high and increase mortality rates. Reduced late summer precip can also impact peak fall time/wintertime streamflows, altering spawning conditions for late summer species. =**High Sensitivity** Species that are more tolerant to low flow conditions i.e., warmer water temperatures, low velocities, elevated hypoxia levels, etc. compete with Coldwater species that historically thrive. Tribal fisheries would be significantly affected while commercial and recreational fisheries would shift to other species i.e., crab, yellow perch, etc. or requires more deep water fishing offshore. Technological approaches to adaptation include installing equipment to mitigate low water flow issues like in North Toutle and Puyallup (Source: HMP, 2020). =**Medium Adaptive Capacity**	Reduced optimal flows for spawning and incubation
44	**Rivers/Fisheries-Flooding & Reduced snowpack**	**High**	**Medium**	**High**	Peak streamflow is anticipated to decrease, altering timing and quantity of streamflows. Flow velocities and water depths accessible to fish for spawning and habitation are indicators of ecosystem health. Near-optimal flows for rearing range from about 7,000 to nearly 45,000 CFS. Near-optimal spawning flows are a narrower range, from about 10,000 to about 18,000 CFS (Duke engineering, 1999). Streamflow is dependent on snowmelt and precipitation. High river discharges/flooding can also occur near coastal areas from SLR inundation, or a mix of high peak streamflow conditions and SLR/coastal storm surges. = **High Sensitivity** Species like Chinook and coho salmon, steelhead, and bull trout—especially those that spawn in summer or rear as juveniles for extended periods in freshwater—are highly sensitive to low flow conditions. Species that are more tolerant to low flow conditions i.e., warmer water temperatures, low velocities, elevated hypoxia levels, etc. compete with Coldwater species that historically thrive. Tribal fisheries would be significantly affected while commercial and recreational fisheries would shift to other species i.e., crab, yellow perch, etc. or requires more deep water fishing offshore. Many restoration efforts are led by Dept of Ecology, County's Monitoring and Adaptive Management Program, and local organizations and include riparian habitat planting. County's Salmon Heritage program establishes conservation easements along riparian corridors in rural areas to preserve fish habitat and agricultural industry. Habitat is also protected under the County's critical areas ordinance and the SMP. Technological approaches to adaptation include installing equipment to mitigate low water flow issues like in North Toutle and Puyallup (Source: HMP, 2020). = **Medium Adaptive Capacity**	Reduced optimal flows for spawning and incubation

45	**Rivers/Fisheries - Extreme Heat**	**Medium**	**Medium**	**Medium**	Increased summer max temperatures i.e., ambient air temperatures, are anticipated to increase surface water temperatures. Upstream river areas with larger water columns/deeper riverbanks maintain cooler waters and lower depths for fish to migrate. Summer months- where low flows exist in conjunction with higher temperatures- can threaten migratory pathways and habitat access for juvenile fish. = **Medium Sensitivity** Species like Chinook and coho salmon, steelhead, and bull trout—especially those that spawn in summer or rear as juveniles for extended periods in freshwater—are highly sensitive to low flow conditions. Species that are more tolerant to low flow conditions i.e., warmer water temperatures, low velocities, elevated hypoxia levels, etc. compete with Coldwater species that historically thrive. Tribal fisheries would be significantly affected while commercial and recreational fisheries would shift to other species i.e., crab, yellow perch, etc. or requires more deep water fishing offshore. Many restoration efforts are led by Dept of Ecology, County's Monitoring and Adaptive Management Program, and local organizations and include riparian habitat planting. County's Salmon Heritage program establishes conservation easements along riparian corridors in rural areas to preserve fish habitat and agricultural industry. Habitat is also protected under the County's critical areas ordinance and the SMP. Technological approaches to adaptation include installing equipment to mitigate low water flow issues like in North Toutle and Puyallup (Source: HMP, 2020). = **Medium Adaptive Capacity**	Increased surface water temperatures
46	**Rivers/Fisheries - Sea level rise**	**High**	**Medium**	**High**	SLR affects extent of estuarine habitat (temperature, salinity, tidal height) that affects the abundance, diversity, spatial structure, and productivity of salmon population (Beamer et. al., 2005). SLR can alter salinity levels, vegetative distribution, and sediment distribution in nearshore environments, that alters extent of existing pocket estuaries, disrupting juvenile salmon habitats and stressing aquatic species. Projections indicate sea levels may rise by 1.0 to 2.0 feet between 2050 and 2100, reducing intertidal marsh areas by approximately 12% and adversely affecting juvenile Chinook salmon that depend on these habitats. Potential habitat loss from SLR correlates to 211,000 - 530,000 smolt capacity per year for 1.4 ft. - 2.6 ft., respectively. = **High Sensitivity** Species like Chinook and coho salmon, steelhead, and bull trout—especially those that spawn in summer or rear as juveniles for extended periods in freshwater—are highly sensitive to low flow conditions. Species that are more tolerant to low flow conditions i.e., warmer water temperatures, low velocities, elevated hypoxia levels, etc. compete with Coldwater species that historically thrive. Tribal fisheries would be significantly affected while commercial and recreational fisheries would shift to other species i.e., crab, yellow perch, etc. or requires more deep water fishing offshore. Many restoration efforts are led by Dept of Ecology, County's Monitoring and Adaptive Management Program, and local organizations and include riparian habitat planting. Habitat is also protected under the County's critical areas ordinance and the SMP. Technological approaches to adaptation include installing equipment to mitigate low water flow issues like in North Toutle and Puyallup (Source: HMP, 2020). = **Medium Adaptive Capacity**	Increased salinity levels
47	**Rivers/Fisheries - Wildfire**	**Medium**	**Medium**	**Medium**	Wildfire events impact habitat availability due to increases in sedimentation, riverbank erosion, and smoke/ash that impacts water quality and chemistry. Wildfire likelihood is expected to increase, impacting freshwater riparian and estuarine habitats. Sediment deposits in downstream estuarine areas potentially increase lagoon habitat with pocket estuaries. =**Medium Sensitivity** Species like Chinook and coho salmon, steelhead, and bull trout—especially those that spawn in summer or rear as juveniles for extended periods in freshwater—are highly sensitive to low flow conditions. Species that are more tolerant to low flow conditions i.e., warmer water temperatures, low velocities, elevated hypoxia levels, etc. compete with Coldwater species that historically thrive. Tribal fisheries would be significantly affected while commercial and recreational fisheries would shift to other species i.e., crab, yellow perch, etc. or requires more deep water fishing offshore. Many restoration efforts are led by Dept of Ecology, County's Monitoring and Adaptive Management Program, and local organizations and include riparian habitat planting. Habitat is also protected under the County's critical areas ordinance and the SMP. Technological approaches to adaptation include installing equipment to mitigate low water flow issues like in North Toutle and Puyallup (Source: HMP, 2020). = **Medium Adaptive Capacity**	Increased sedimentation
48	**Nature preserves-Drought (*Ecosystems*)**	**Medium**	**Medium**	**Medium**	Nature preserves include shoreline & estuarine habitat areas and steep mountainous inland areas. Decreased late summer precip impacts waterfowl, marine birds, and vegetative composition and plant communities, particularly eelgrass, intertidal algae, sand/mudflats, salt marshes, and rocky habitat in estuarine/shoreline areas, that provides less habitat for dependent species. Eelgrass is a protected species under the Endangered Species Act. Decreased late summer precip also impacts tree life cycles that stunt growth and decrease habitat quality for mountain animals. = **Medium Sensitivity** Many restoration efforts are led by Dept of Ecology, County's Monitoring and Adaptive Management Program, and local organizations and include riparian habitat planting. Preserves are also used as stewardship and research opportunities. County's Salmon Heritage program establishes conservation easements along riparian corridors in rural areas to preserve fish habitat and agricultural industry. Habitat is also protected under the County's critical areas ordinance and the SMP. Technological approaches to adaptation include installing equipment to mitigate low water flow issues like in North Toutle and Puyallup (Source: HMP, 2020). = **Medium Adaptive Capacity**	Habitat loss
49	**Nature preserves-Flooding & Reduced snowpack**	**Medium**	**Medium**	**Medium**	Decreased peak streamflow and reduced snowpack limits fluvial deposits in Skagit delta, resulting in seasonal shifts of habitat. Reduced snowpack results in reduced peak streamflows and provides less habitat area for riparian vegetation to grow such as eelgrass, willow, etc. Invasive species may grow to dominant landscapes once established. Vegetation reduces water velocity during peak streamflow events and provides habitat for fish/other fauna. Reduced quality of nature preserves can impact user experiences such as recreational hikers, birders, and other nature enthusiasts. = **Medium Sensitivity** Many restoration efforts are led by Dept of Ecology, County's Monitoring and Adaptive Management Program, and local organizations and include riparian habitat planting. Preserves are also used as stewardship and research opportunities. County's Salmon Heritage program establishes conservation easements along riparian corridors in rural areas to preserve fish habitat and agricultural industry. Habitat is also protected under the County's critical areas ordinance and the SMP. Technological approaches to adaptation include installing equipment to mitigate low water flow issues like in North Toutle and Puyallup (Source: HMP, 2020). = **Medium Adaptive Capacity**	Establishment of invasive species
50	**Nature preserves - Extreme Heat**	**Medium**	**Medium**	**Medium**	Increased max summer temperatures reduces soil moisture and alters vegetative communities during seasonal blooms. Dry plant materials and detritus that concentrates in waterlogged areas i.e., marsh, lagoon, estuary, etc. can result in increases of nitrogen that alters water chemistry. Reduced quality of nature preserves can impact user experiences such as recreational hikers, birders, and other nature enthusiasts. = **Medium Sensitivity** Many restoration efforts are led by Dept of Ecology, County's Monitoring and Adaptive Management Program, and local organizations and include riparian habitat planting. Preserves are also used as stewardship and research opportunities. County's Salmon Heritage program establishes conservation easements along riparian corridors in rural areas to preserve fish habitat and agricultural industry. Habitat is also protected under the County's critical areas ordinance and the SMP. =**Medium Adaptive Capacity**	Reduced water quality
51	**Nature preserves-Sea Level Rise**	**Medium**	**Medium**	**Medium**	SLR can alter salinity levels, vegetative distribution, and sediment distribution in nearshore environments, that alters extent of existing pocket estuaries. Projections indicate sea levels may rise by 1.0 to 2.0 feet between 2050 and 2100, reducing intertidal marsh areas by approximately 12%. Inland mountainous preserves are less impacted by SLR. Reduced quality of nature preserves can impact user experiences such as recreational hikers, birders, and other nature enthusiasts. = **Medium Sensitivity** Many restoration efforts are led by Dept of Ecology, County's Monitoring and Adaptive Management Program, and local organizations and include riparian habitat planting. Preserves are also used as stewardship and research opportunities. County's Salmon Heritage program establishes conservation easements along riparian corridors in rural areas to preserve fish habitat and agricultural industry. Habitat is also protected under the County's critical areas ordinance and the SMP. Technological approaches to adaptation include installing equipment to mitigate low water flow issues like in North Toutle and Puyallup (Source: HMP, 2020). = **Medium Adaptive Capacity**	Reduced habitat

52	**Nature preserves - Wildfire**	**Medium**	**Medium**	**Medium**	Wildfire events impact habitat availability due to increases in sedimentation, riverbank erosion, and smoke/ash that impacts water quality and chemistry. Asset comprises of open space that contains vegetative fuel loads. Wildfire likelihood in expected to increase, impacting riparian and wetland habitat that reduces recreational user experiences. =**Medium Sensitivity** Many restoration efforts are led by Dept of Ecology, County's Monitoring and Adaptive Management Program, and local organizations and include riparian habitat planting. Preserves area also used as stewardship and research opportunities. County's Salmon Heritage program establishes conservation easements along riparian corridors in rural areas to preserve fish habitat and agricultural industry. Habitat is also protected under the County's critical areas ordinance and the SMP. Technological approaches to adaptation include installing equipment to mitigate low water flow issues like in North Toutle and Puyallup (Source: HMP, 2020). = **Medium Adaptive Capacity**	Increased fuel loads
53	**Flood management infrastructure-Drought (*Emergency Management*)**	**Low**	**Low**	**Medium**	Flood control infrastructure i.e., dikes and levees, generally consisted of earthen materials - silt, sand, and repaired using coarser grained materials ranging from 4 to 27 feet tall (source: 2011 General Investigation Report on Skagit River Basin Levees, Shannon & Wilson, Inc.). Ground material consists of sand and loose materials that compromise structural stability of levees. Decrease in summertime precipitation can weaken earthen dikes/berms and soil moisture making foundation materials contract. Asset would be more susceptible to erosion and failure, requiring more frequent maintenance and replacement. Responsible party is the Dike Districts. = **Low Sensitivity** Asset is protected and managed under the Critical Areas ordinance for development standards, mitigation requirements, and design. Districts are responsible for managing dikes and levees along the river and delta-must advocate for local, state, and federal funding, including multi-agency coordination and emergency evacuation/response that can be time-consuming and expensive. = **Low Adaptive Capacity**	Material composition
54	**Flood management infrastructure-Extreme precipitation & Flooding**	**Medium**	**Low**	**High**	Flood control infrastructure i.e., dikes and levees, generally consisted of earthen materials - silt, sand, and repaired using coarser grained materials ranging from 4 to 27 feet tall. Ground material consists of sand and loose materials that compromise structural stability of levees. Increased extreme precip magnitude can erode and weaken dikes/levees including ground conditions that loosen soil, alters levee geometries, and changes levee composition. Assets may also conflict with habitat restoration projects that require uninterrupted flows for migratory pathways. = **Medium Sensitivity** Asset is protected and managed under the Critical Areas ordinance for development standards, mitigation requirements, and design. Districts are responsible for managing dikes and levees along the river and delta- must advocate for local, state, and federal funding, including multi-agency coordination and emergency evacuation/response that can be time-consuming and expensive. = **Low Adaptive Capacity**	Ground condition alteration
55	**Flood management infrastructure-Sea level rise**	**Medium**	**Low**	**High**	Dike Districts manage dike and drainage infrastructure in the County. Districts 1, 3, 4, 5, 9, 12, 19, and 22 have predominantly low-lying lands that are subject to flooding from SLR inundation. Various flow controls such as flood gates, pump stations, tide gates, and dikes and levees are located throughout the County along delta slough shorelines, river shorelines, coastal shorelines, and adjacent to bridges and roads (source: 2022 Dike district assessment areas map). Older earthen dikes and temporary structures are more sensitive and susceptible to failure, whereas rock revetments, seawalls, bulkheads, and other hard armoring infrastructure are less sensitive to SLR hazards. Asset is managed on a case-by-case basis and regulated by the SMP that prioritizes ecological functions. = **Medium Sensitivity** Flood gages provide indicators of elevation above a certain level. Asset is protected and managed under the Critical Areas ordinance for development standards, mitigation requirements, and design. Districts are responsible for managing dikes and levees along the river and delta- must advocate for local, state, and federal funding, including multi-agency coordination and emergency evacuation/response that can be time-consuming and expensive. = **Low Adaptive Capacity**	Dike district management, Infrastructure type
56	**Flood management infrastructure-Wildfire**	**Low**	**Low**	**Medium**	Asset is predominantly located in western County where high fire danger days are projected to double the County average of 6 days (CMRW tool). Other wildfire conditions i.e., dry vegetation, humidity, etc. would need to be present to cause wildfire events. Although fire days will increase, earthen dikes/levees have minimal sensitivity to wildfire likelihood. Asset is more likely to be sensitive to flooding, extreme precip, and SLR. = **Low Sensitivity** Asset is protected and managed under the Critical Areas ordinance for development standards, mitigation requirements, and design. Districts are responsible for managing dikes and levees along the river and delta- must advocate for local, state, and federal funding, including multi-agency coordination and emergency evacuation/response that can be time-consuming and expensive. = **Low Adaptive Capacity**	High fire danger days
57	**Fire stations-Drought (Emergency Management)**	**Medium**	**Medium**	**Medium**	Fire districts manage agricultural burning throughout the County - drought conditions can increase the need for burning due to excess dry plant material and detritus, remove weeds and prevent disease and pests. Increased precip drought can also reduce water availability for forestland and result in dry soil conditions that increase wildfire likelihood. Responders are mainly volunteers, increased emergency response services causes strain on resources and personnel. = **Medium Sensitivity** Additional funding levied from property taxes and local, state, or federal funds would be required to rebuild a fire station/critical facility. Less permits may be issued for agricultural burning. Outdoor burn bans for residential yard, and land-clearing fires, may increase in frequency to reduce wildfire risk from drought. = **Medium Adaptive Capacity**	Increased emergency response services
58	**Fire stations-Extreme precipitation & Flooding**	**Medium**	**Medium**	**Medium**	Fire districts located in low-lying delta areas and riverine valley floodplains communicate with residents and respond to emergencies related to flooding evacuation. Increased precip magnitude increases intermittent flows of peak streamflow, resulting in single-events of high velocities and high flows. Responders are mainly volunteers, increased emergency response services causes strain on resources and personnel. = **Medium Sensitivity** Additional funding levied from property taxes and local, state, or federal funds would be required to rebuild a fire station/critical facility, and provide additional services. =**Medium Adaptive Capacity**	Increased emergency response services
59	**Fire stations-Sea level rise**	**Low**	**Medium**	**Low**	Fire stations located within fire districts 5, 12, 13, 2, 3, 6, and 1 are located in low-lying coastal areas that may be subject to flooding from SLR inundation by mid-century and would be subject to flooding by end of century, impacting the local fire districts' ability to provide fire prevention and preparedness services, fire suppression services, emergency medical services, and for the protection of life and property. Flooding can result in damage to asset that reduces emergency response services to residents. =**Low Sensitivity** Additional funding levied from property taxes and local, state, or federal funds would be required to rebuild a fire station/critical facility. =**Medium Adaptive Capacity**	Emergency services
60	**Fire stations-Wildfire**	**Medium**	**Medium**	**Medium**	Fire districts are responsible for allocating resources during times of emergency - and soliciting funds and educating residents during non-emergencies. Increased high fire danger days in western County would put more strain on fire districts, and increase fire suppression activities and medical services. Wildfire likelihood is minimal throughout the County. Wildfires are unpredictable and with perfect storm conditions would be more devastating in eastern County due to increased susceptibility i.e., slope, aspect, where population is small, straining resources and reducing emergency responses for fire districts 10, 24, and 16. = **Medium Sensitivity** The CWPP outlines policies and programs to reduce risk to wildfire: neighborhood-scale CWPPs that identify location specific mitigation strategies- education, outreach, additional training for fire district personnel, fire-resistant landscaping, etc. Prescribed burning is the most popular mitigation strategy, which can be labor intensive and costly. Other opportunities for mitigation strategies would be identified in subsequent CWPP updates. = **Medium Adaptive Capacity**	Mitigation strategies

61	**Emergency staging areas-Extreme precipitation & Flooding**	**Medium**	**High**	**Low**	The County has mutual aid agreements, contracts, and memorandums of understandings with property owners throughout the county. Registered volunteers are an important asset to staging areas who provide emergency response services. Extreme precip magnitude can result in localized inundation of asset and loss of site usage as staging area, and create hazardous conditions for volunteers and staff to respond to emergencies. = **Medium Sensitivity** Volunteers are highly mobile and able, staging areas located outside of flood zones and/or hazardous areas can be utilized in the event other staging areas are affected by flooding. = **High Adaptive Capacity**	Mobility
62	**Emergency staging areas-Sea level rise**	**Low**	**High**	**Low**	The County has mutual aid agreements, contracts, and memorandums of understandings with property owners throughout the county. Registered volunteers are an important asset to staging areas who provide emergency response services. SLR can result in inundation of asset and loss of site usage as staging area. = **Low Sensitivity** Volunteers are highly mobile and able, staging areas located more inland can be utilized in the event other staging areas are affected by SLR inundation or SLR effects. = **High Adaptive Capacity**	Mobility
63	**Emergency staging areas-Wildfires**	**Medium**	**High**	**Low**	The County has mutual aid agreements, contracts, and memorandums of understandings with property owners throughout the county. Registered volunteers are an important asset to staging areas who provide emergency response services. Increased wildfire likelihood can result in more frequent wildfire events and loss of site usage as staging area, and create hazardous conditions for volunteers and staff to respond to emergencies. = **Medium Sensitivity** Volunteers are highly mobile and able, staging areas located in other areas can be utilized in the event other staging areas are affected by wildfire. = **High Adaptive Capacity**	Mobility
64	**Roadways-Drought (Transportation)**	**Medium**	**Low**	**High**	Rural roads are classified as "Principal Arterials", "Minor Arterials", "Major Collectors", "Minor Collectors" and "Locals". Interstate 5 and SR 20 west of I-5 are the only Principal Arterials. Other state highways and segments are Minor Arterials. Major and Minor Collectors are the heart of the County system. These roads connect the cities and towns and serve as farm-to-market roads in the rural area. Traffic on the County roads outside of the highways and arterials are fairly moderate. For instance, nearly half of the roads carry fewer than 250 vehicles trips per 24-hour day on average (ADT). About 10% of the roads carry more than 2,000 ADT, and fewer than 2% carry more than 5,000 ADT. Skagit County determines currents needs in several categories that include resurfacing, restoration, rehabilitation, and reconstruction. Roadway - Segment — 2014 ADT: — 2036 ADT: Cook Road: I-5 SB Ramps to NB Ramps: — 12,000 — 14,300 Cook Road: I-5 NB Ramps to Old Hwy 99: — 15,600 — 16,800 Cook Road: Old Hwy 99 to Green Road: — 12,300 — 13,200 Cook Road: Green Road to Collins Road: — 11,100 — 12,000 Cook Road: Collins Road to Klinger Street: — 10,900 — 11,600 Pioneer Hwy: County Line to Miltown Rd: — 8,000 — 10,500 Pioneer Hwy: Miltown Road to Fir Island Rd: — 7,600 — 10,000 Heavily used roadways are more subject to wear and tear. Drought conditions exacerbate heavily used roadways by cracking pavement due to earth movement from depressed groundwater levels. Roadways segments that exceed 7,000 ADT measured on an annual basis may exceed the adopted LOS; thus, would require improvements beyond normal maintenance and repair. These improvements include intersection improvements, widening, traffic controls, and other actions. Projects of regional significant, including Washington State Department of Transportation projects are coordinated for possible joint implementation and funding. = **Medium Sensitivity** It is noted at this time that work has begun in coordination with special purpose districts on drainage projects, such as culvert installations, roadway elevation in flood-prone areas, and replacing small-diameter flood control devices in known problem areas. Dedicated funding is necessary to ensure these efforts continue and to enhance drainage. = **Low Adaptive Capacity**	Traffic congestion, roadway type
65	**Roadways-Extreme precipitation**	**Medium**	**Medium**	**Medium**	Rural roads are classified as "Principal Arterials", "Minor Arterials", "Major Collectors", "Minor Collectors" and "Locals". Interstate 5 and SR 20 west of I-5 are the only Principal Arterials. Other state highways and segments are Minor Arterials. Major and Minor Collectors are the heart of the County system. These roads connect the cities and towns and serve as farm-to-market roads in the rural area. Traffic on the County roads outside of the highways and arterials are fairly moderate. For instance, nearly half of the roads carry fewer than 250 vehicles trips per 24-hour day on average (ADT). About 10% of the roads carry more than 2,000 ADT, and fewer than 2% carry more than 5,000 ADT. Skagit County determines currents needs in several categories that include resurfacing, restoration, rehabilitation, and reconstruction. Roadway - Segment — 2014 ADT: — 2036 ADT: Cook Road: I-5 SB Ramps to NB Ramps: — 12,000 — 14,300 Cook Road: I-5 NB Ramps to Old Hwy 99: — 15,600 — 16,800 Cook Road: Old Hwy 99 to Green Road: — 12,300 — 13,200 Cook Road: Green Road to Collins Road: — 11,100 — 12,000 Cook Road: Collins Road to Klinger Street: — 10,900 — 11,600 Pioneer Hwy: County Line to Miltown Rd: — 8,000 — 10,500 Pioneer Hwy: Miltown Road to Fir Island Rd: — 7,600 — 10,000 Roadways segments that exceed 7,000 ADT measured on an annual basis may exceed the adopted LOS; thus, would require improvements beyond normal maintenance and repair. These improvements include intersection improvements, widening, traffic controls, and other actions. Projects of regional significant, including Washington State Department of Transportation projects are coordinated for possible joint implementation and funding. = **Medium Sensitivity** It is noted at this time that work has begun in coordination with special purpose districts on drainage projects, such as culvert installations, roadway elevation in flood-prone areas, and replacing small-diameter flood control devices in known problem areas. Dedicated funding is necessary to ensure these efforts continue and to enhance drainage which can be costly. In the NHMP Update 2023, initiatives such as Initiative #1, #10, #13, #14, #15, and #19 are applicable as well. = **Medium Adaptive Capacity**	Traffic congestion, roadway type

66	Roadways-Flooding & Sea level rise	Medium	Medium	Medium	Rural roads are classified as "Principal Arterials", "Minor Arterials", "Major Collectors", "Minor Collectors" and "Locals". Interstate 5 and SR 20 west of I-5 are the only Principal Arterials. Other state highways and segments are Minor Arterials. Major and Minor Collectors are the heart of the County system. These roads connect the cities and towns and serve as farm-to-market roads in the rural area. Traffic on the County roads outside of the highways and arterials are fairly moderate. For instance, nearly half of the roads carry fewer than 250 vehicles trips per 24-hour day on average (ADT). About 10% of the roads carry more than 2,000 ADT, and fewer than 2% carry more than 5,000 ADT. Skagit County determines currents needs in several categories that include resurfacing, restoration, rehabilitation, and reconstruction. Roadway - Segment — 2014 ADT: — 2036 ADT: Cook Road: I-5 SB Ramps to NB Ramps: 12,000 14,300 Cook Road: I-5 NB Ramps to Old Hwy 99: 15,600 16,800 Cook Road: Old Hwy 99 to Green Road: 12,300 13,200 Cook Road: Green Road to Collins Road: 11,100 12,000 Cook Road: Collins Road to Klinger Street: 10,900 11,600 Pioneer Hwy: County Line to Miltown Rd: 8,000 10,500 Pioneer Hwy: Miltown Road to Fir Island Rd: 7,600 10,000 Roadways segments that exceed 7,000 ADT measured on an annual basis may exceed the adopted LOS; thus, would require improvements beyond normal maintenance and repair. These improvements include intersection improvements, widening, traffic controls, and other actions. Projects of regional significant, including Washington State Department of Transportation projects are coordinated for possible joint implementation and funding. = **Medium Sensitivity** It is noted at this time that work has begun in coordination with special purpose districts on drainage projects, such as culvert installations, roadway elevation in flood-prone areas, and replacing small-diameter flood control devices in known problem areas. Dedicated funding is necessary to ensure these efforts continue and to enhance drainage. In the NHMP Update 2023, initiatives such as Initiative #1, #10, #13, #14, #15, and #19 are applicable as well. = **Medium Adaptive Capacity**	Traffic congestion, roadway type
67	Roadways-Reduced snowpack	Low	Medium	Low	Rural roads are classified as "Principal Arterials", "Minor Arterials", "Major Collectors", "Minor Collectors" and "Locals". Interstate 5 and SR 20 west of I-5 are the only Principal Arterials. Other state highways and segments are Minor Arterials. Major and Minor Collectors are the heart of the County system. These roads connect the cities and towns and serve as farm-to-market roads in the rural area. Traffic on the County roads outside of the highways and arterials are fairly moderate. For instance, nearly half of the roads carry fewer than 250 vehicles trips per 24-hour day on average (ADT). About 10% of the roads carry more than 2,000 ADT, and fewer than 2% carry more than 5,000 ADT. Skagit County determines currents needs in several categories that include resurfacing, restoration, rehabilitation, and reconstruction. Roadway - Segment — 2014 ADT: — 2036 ADT: Cook Road: I-5 SB Ramps to NB Ramps: 12,000 14,300 Cook Road: I-5 NB Ramps to Old Hwy 99: 15,600 16,800 Cook Road: Old Hwy 99 to Green Road: 12,300 13,200 Cook Road: Green Road to Collins Road: 11,100 12,000 Cook Road: Collins Road to Klinger Street: 10,900 11,600 Pioneer Hwy: County Line to Miltown Rd: 8,000 10,500 Pioneer Hwy: Miltown Road to Fir Island Rd: 7,600 10,000 Roadways segments that exceed 7,000 ADT measured on an annual basis may exceed the adopted LOS; thus, would require improvements beyond normal maintenance and repair. These improvements include intersection improvements, widening, traffic controls, and other actions. Projects of regional significant, including Washington State Department of Transportation projects are coordinated for possible joint implementation and funding. = **Low Sensitivity** It is noted at this time that work has begun in coordination with special purpose districts on drainage projects, such as culvert installations, roadway elevation in flood-prone areas, and replacing small-diameter flood control devices in known problem areas. = **Medium Adaptive Capacity**	Traffic congestion, roadway type
68	Roadways-Wildfire	Medium	Medium	Medium	Roadways provide critical access to personnel to conduct fire suppression activities, and provide evacuation routes for residents and personnel during wildfire events. Wildfire likelihood is projected to increase minimally throughout the County, and high fire danger days are projected to increase twice fold than the County average in western County where a majority of the population lives. = **Medium Sensitivity** Increased wildfire likelihood increases health risk for sensitive populations, especially those living in rural areas, and may increase usage on roadways for fire response and civilian evacuation. Roads in communities with high susceptibility to wildfire includes Cape Horn, Cascade Ridge, Lake Tyee, Pinelli Road area, and more (2022 CWPP). Roadways segments that exceed 7,000 ADT measured on an annual basis may exceed the adopted LOS and can constrain responses to hazard; thus, would require improvements beyond normal maintenance and repair. These improvements include intersection improvements, widening, traffic controls, and other actions. County also requires that a cleared buffer exist along roadways and homes in zoned IF-NFR to be located in existing fire protection districts. Area specific wildfire measures are provided in respective CWPPs. **= Medium Adaptive Capacity**	Population density

69	Bridges-Drought (Transportation)	Low	Medium	Low	There is financial support identified as "The Road Fund" which is stretched thin from funding maintenance of 800 miles of roads and bridges; thus, this option is limited. Skagit County has continued to do partnerships with WSDOT and local municipalities for expanded roadway and bridge assessments; thus, potentially leading to a more resilient transportation sector. Currently there are 110 highway bridges. Skagit County has 45 bridges that are at least 50 years. Of those 45 bridges, 8 are 70 years or older and 2 are over 80 years old, built in 1930. Annually, the County prepared a bridge report in compliance with WAC 135-20-060. From this report, Skagit County has 6 structurally deficient bridges: - BNSF Railroad Overpass; Deck, Superstructure, substructure - Rated Poor - Anacortes Ferry Dock: Superstructure - Rated Poor - Guemes Island Ferry Dock sufficiency rating: Superstructure - Rated Poor - Friday Creek Bridge: Deck - Rated Poor - Thomas Creek Bridge: Deck - Rated Poor - Samish River Bridge: Deck - Rated Serious = **Low Sensitivity** Three of the six bridges have funding allocated to have them repaired or replaced. In addition, Skagit County has 18 functionally obsolete bridges. Functional obsoleteness is based on a comparison of the existing design of each bridge to current standards. These can mean substandard bridge widths, low vertical clearance that can lead to repeated damage from over height trucks, load-carrying capacity, or flood potential. = **Medium Adaptive Capacity**	Traffic congestion, roadway type
70	Bridges-Extreme precipitation	Medium	Medium	Medium	There is financial support identified as "The Road Fund" which is stretched thin from funding maintenance of 800 miles of roads and bridges; thus, this option is limited. Skagit County has continued to do partnerships with WSDOT and local municipalities for expanded roadway and bridge assessments; thus, potentially leading to a more resilient transportation sector. Currently there are 110 highway bridges. Skagit County has 45 bridges that are at least 50 years. Of those 45 bridges, 8 are 70 years or older and 2 are over 80 years old, built in 1930. Annually, the County prepared a bridge report in compliance with WAC 135-20-060. From this report, Skagit County has 6 structurally deficient bridges: - BNSF Railroad Overpass; Deck, Superstructure, substructure - Rated Poor - Anacortes Ferry Dock: Superstructure - Rated Poor - Guemes Island Ferry Dock sufficiency rating: Superstructure - Rated Poor - Friday Creek Bridge: Deck - Rated Poor - Thomas Creek Bridge: Deck - Rated Poor - Samish River Bridge: Deck - Rated Serious = **Medium Sensitivity** Three of the six bridges have funding allocated to have them repaired or replaced. In addition, Skagit County has 18 functionally obsolete bridges. Functional obsoleteness is based on a comparison of the existing design of each bridge to current standards. These can mean substandard bridge widths, low vertical clearance that can lead to repeated damage from over height trucks, load-carrying capacity, or flood potential. = **Medium Adaptive Capacity**	Bridge condition, age
71	Bridges-Flooding	Medium	Medium	Medium	There is financial support identified as "The Road Fund" which is stretched thin from funding maintenance of 800 miles of roads and bridges; thus, this option is limited. Skagit County has continued to do partnerships with WSDOT and local municipalities for expanded roadway and bridge assessments; thus, potentially leading to a more resilient transportation sector. Currently there are 110 highway bridges. Skagit County has 45 bridges that are at least 50 years. Of those 45 bridges, 8 are 70 years or older and 2 are over 80 years old, built in 1930. Annually, the County prepared a bridge report in compliance with WAC 135-20-060. From this report, Skagit County has 6 structurally deficient bridges: - BNSF Railroad Overpass; Deck, Superstructure, substructure - Rated Poor - Anacortes Ferry Dock: Superstructure - Rated Poor - Guemes Island Ferry Dock sufficiency rating: Superstructure - Rated Poor - Friday Creek Bridge: Deck - Rated Poor - Thomas Creek Bridge: Deck - Rated Poor - Samish River Bridge: Deck - Rated Serious = **Medium Sensitivity** Three of the six bridges have funding allocated to have them repaired or replaced. In addition, Skagit County has 18 functionally obsolete bridges. Functional obsoleteness is based on a comparison of the existing design of each bridge to current standards. These can mean substandard bridge widths, low vertical clearance that can lead to repeated damage from over height trucks, load-carrying capacity, or flood potential. = **Medium Adaptive Capacity**	Bridge condition, age
72	Bridges-Reduced snowpack	Low	Medium	Low	There is financial support identified as "The Road Fund" which is stretched thin from funding maintenance of 800 miles of roads and bridges; thus, this option is limited. Skagit County has continued to do partnerships with WSDOT and local municipalities for expanded roadway and bridge assessments; thus, potentially leading to a more resilient transportation sector. Currently there are 110 highway bridges. Skagit County has 45 bridges that are at least 50 years. Of those 45 bridges, 8 are 70 years or older and 2 are over 80 years old, built in 1930. Annually, the County prepared a bridge report in compliance with WAC 135-20-060. From this report, Skagit County has 6 structurally deficient bridges: - BNSF Railroad Overpass; Deck, Superstructure, substructure - Rated Poor - Anacortes Ferry Dock: Superstructure - Rated Poor - Guemes Island Ferry Dock sufficiency rating: Superstructure - Rated Poor - Friday Creek Bridge: Deck - Rated Poor - Thomas Creek Bridge: Deck - Rated Poor - Samish River Bridge: Deck - Rated Serious = **Low Sensitivity** Three of the six bridges have funding allocated to have them repaired or replaced. In addition, Skagit County has 18 functionally obsolete bridges. Functional obsoleteness is based on a comparison of the existing design of each bridge to current standards. These can mean substandard bridge widths, low vertical clearance that can lead to repeated damage from over height trucks, load-carrying capacity, or flood potential. = **Medium Adaptive Capacity**	Bridge condition, age

73	Bridges-Sea level rise	Low	Medium	Low	There is financial support identified as "The Road Fund" which is stretched thin from funding maintenance of 800 miles of roads and bridges; thus, this option is limited. Skagit County has continued to do partnerships with WSDOT and local municipalities for expanded roadway and bridge assessments; thus, potentially leading to a more resilient transportation sector. Currently there are 110 highway bridges. Skagit County has 45 bridges that are at least 50 years. Of those 45 bridges, 8 are 70 years or older and 2 are over 80 years old, built in 1930. Annually, the County prepared a bridge report in compliance with WAC 135-20-060. From this report, Skagit County has 6 structurally deficient bridges: - BNSF Railroad Overpass; Deck, Superstructure, substructure - Rated Poor - Anacortes Ferry Dock: Superstructure - Rated Poor - Guemes Island Ferry Dock sufficiency rating: Superstructure - Rated Poor - Friday Creek Bridge: Deck - Rated Poor - Thomas Creek Bridge: Deck - Rated Poor - Samish River Bridge: Deck - Rated Serious = **Low Sensitivity** Three of the six bridges have funding allocated to have them repaired or replaced. In addition, Skagit County has 18 functionally obsolete bridges. Functional obsoleteness is based on a comparison of the existing design of each bridge to current standards. These can mean substandard bridge widths, low vertical clearance that can lead to repeated damage from over height trucks, load-carrying capacity, or flood potential. =**Medium Adaptive Capacity**	Bridge condition, age
74	Bridges-Wildfire	Low	Medium	Low	Bridges provide critical junctions for evacuation and fire suppression activities. Currently there are 110 highway bridges. Skagit County has 45 bridges that are at least 50 years. Of those 45 bridges, 8 are 70 years or older and 2 are over 80 years old, built in 1930. Annually, the County prepared a bridge report in compliance with WAC 135-20-060. From this report, Skagit County has 6 structurally deficient bridges, most of which are located in coastal delta region. =**Low Sensitivity** Three of the six bridges have funding allocated to have them repaired or replaced. In addition, Skagit County has 15 functionally obsolete bridges. Functional obsoleteness is based on a comparison of the existing design of each bridge to current standards. These can mean substandard bridge widths, low vertical clearance that can lead to repeated damage from over height trucks, load-carrying capacity, or flood potential. There is financial support identified as "The Road Fund" which is stretched thin from funding maintenance of 800 miles of roads and bridges; thus, this option is limited. Skagit County has continued to do partnerships with WSDOT and local municipalities for expanded roadway and bridge assessments; thus, potentially leading to a more resilient transportation sector. = **Medium Adaptive Capacity**	Structural stability
75	Railroad-Drought (Transportation)	Low	Low	Medium	There are a total of 56 at-grade crossings in Skagit County along BNSF's North-South Mainline, the Burlington-Anacortes Branch line, and the Burlington-Sumas Branch Line. Based on the Skagit County 2016-2036 Comprehensive Plan, a functional road classification system involves facilities that have been identified in the state Freight and Goods Transportation System (FGTS) as trucking routes. This system is based on the estimated gross freight tonnage that is carried on the roads: - T-1: more than 10 million tons per year - T:2: 4 million to 10 million tons per year - T:3: 300,000 to 4 million tons per year - T-4: 100,000 to 300,000 tons per year - T-5: at least 20,000 tons in 60 days and less than 100,000 tons per year For rural Skagit County, the highest FGTS designations include the entire length of I-5 (Tier 1) and SR-20 from I-5 to Anacortes (Tier 2 to Anacortes, Tier 3 for the SR20 Spur). SR-20 from Burlington to Anacortes carries an estimated 10,000,000 annual tonnage and is considered Tier 2. Cook Road from I-5 to Sedro-Woolley is designated as Tier 2. Majority of Skagit County's FGTS designations are within the range of 3,000,000 to 34,000,000 tons per year. =**Low Sensitivity** Skagit County has partnered with the WSDOT, surrounding counties, and local municipalities to expand earthquake assessment of roadways and bridges to reduce hazard impact and transportation-related issues and potential isolation. **= Low Adaptive Capacity**	Gross freight tonnage, crossing type
76	Railroad-Extreme precipitation	High	Medium	High	Based on the Skagit County 2016-2036 Comprehensive Plan, a functional road classification system involves facilities that have been identified in the state Freight and Goods Transportation System (FGTS) as trucking routes. This system is based on the estimated gross freight tonnage that is carried on the roads: - T-1: more than 10 million tons per year - T:2: 4 million to 10 million tons per year - T:3: 300,000 to 4 million tons per year - T-4: 100,000 to 300,000 tons per year - T-5: at least 20,000 tons in 60 days and less than 100,000 tons per year For rural Skagit County, the highest FGTS designations include the entire length of I-5 (Tier 1) and SR-20 from I-5 to Anacortes (Tier 2 to Anacortes, Tier 3 for the SR20 Spur). SR-20 from Burlington to Anacortes carries an estimated 10,000,000 annual tonnage and is considered Tier 2. Cook Road from I-5 to Sedro-Woolley is designated as Tier 2. Majority of Skagit County's FGTS designations are within the range of 3,000,000 to 34,000,000 tons per year. Due to the high traffic volumes for FGTS, railroads may be more highly sensitive to extreme precipitation impacts in terms of operations disruptions or closures. Extreme precipitation may overwhelm drainage systems and flood railways; thus, operation schedules may be disrupted. = **High Sensitivity** Grade separation of existing at-grade crossings would separate vehicular traffic from train traffic to reduce conflict areas, increase safety, and eliminate delays at crossings. Grade separation would also improve emergency service response by reducing delay to response times and potential railway-roadway crashes. Grade separation projects could cost between approximately $30 million to $200 million each. Public funding for grade separation projects are difficult to secure. A variety of traditional funding sources, such as RAISE grants and Freight Mobility Strategic Investment Board (FMSIB) grants are awarded in highly competitive processes and are often insufficient to provide the amount of funds required to complete a grade separation project. The newly enacted FAST Act authorizes $305 billion from the Highway Trust Fund and the General Fund for transportation projects, including grade separation projects. The Surface Transportation Block Grant Program (STBGP), the Railway Highway Grade Crossings Program, and the Nationally Significant Highway and Freight Projects Program are some of the subcategories of the FAST Act that could provide funding for grade separation projects. State legislative funding packages can also contain funding for grade separation projects. Many grade separation projects take several years to complete once funding is secured. = **Medium Adaptive Capacity** At-grade crossings that are redundant could be closed to reduce impacts from future train traffic. However, closing an at-grade crossing could result in increased transportation impacts at other nearby crossings by shifting vehicle volumes to other roadways. Grade crossing consolidation requires a petition to be filed with the Utilities and Transportation Commission by the jurisdiction, and would include a public hearing and input from the Railroad Company and WSDOT rail.	Gross freight tonnage, crossing type, traffic congestion, operations

77	Railroad-Flooding	High	Medium	High	Based on the Skagit County 2016-2036 Comprehensive Plan, a functional road classification system involves facilities that have been identified in the state Freight and Goods Transportation System (FGTS) as trucking routes. This system is based on the estimated gross freight tonnage that is carried on the roads: - T-1: more than 10 million tons per year - T:2: 4 million to 10 million tons per year - T:3: 300,000 to 4 million tons per year - T-4: 100,000 to 300,000 tons per year - T-5: at least 20,000 tons in 60 days and less than 100,000 tons per year For rural Skagit County, the highest FGTS designations include the entire length of I-5 (Tier 1) and SR-20 from I-5 to Anacortes (Tier 2 to Anacortes, Tier 3 for the SR20 Spur). SR-20 from Burlington to Anacortes carries an estimated 10,000,000 annual tonnage and is considered Tier 2. Cook Road from I-5 to Sedro-Woolley is designated as Tier 2. Majority of Skagit County's FGTS designations are within the range of 3,000,000 to 34,000,000 tons per year. Due to the high traffic volumes for FGTS, railroads may be more highly sensitive to extreme precipitation impacts in terms of operations disruptions or closures. = **High Sensitivity** Extreme precipitation may lead to secondary impacts such as flooding that may overwhelm drainage systems and flood railways; thus, operation schedules may be disrupted. Grade separation of existing at-grade crossings would separate vehicular traffic from train traffic to reduce conflict areas, increase safety, and eliminate delays at crossings. Grade separation would also improve emergency service response by reducing delay to response times and potential railway-roadway crashes. Identified priority locations for future grade separation projects include Cook Rd in unincorporated County, and SR 538 and SR 20 in incorporated areas (2045 Regional Transportation Plan, SCOG). Grade separation projects could cost between approximately $30 million to $200 million each. A variety of traditional funding sources, such as RAISE grants and Freight Mobility Strategic Investment Board (FMSIB) grants are awarded in highly competitive processes and are often insufficient to provide the amount of funds required to complete a grade separation project. The newly enacted Infrastructure Investment and Jobs Act (IIJA) provided grant funding for multimodal transportation and safe routes for citizens within the County- this includes passenger rail- and incorporates planning for climate change resiliency and clean energy transition (2024 Unified Planning Work Program, SCOG). The Surface Transportation Block Grant Program (STBGP), the Railway Highway Grade Crossings Program, and the Nationally Significant Highway and Freight Projects Program are some of the subcategories of the FAST Act that could provide funding for grade separation projects. State legislative funding packages can also contain funding for grade separation projects. Many grade separation projects take several years to complete once funding is secured. = **Medium Adaptive Capacity** At-grade crossings that are redundant could be closed to reduce impacts from future train traffic. However, closing an at-grade crossing could result in increased transportation impacts at other nearby crossings by shifting vehicle volumes to other roadways. Grade crossing consolidation requires a petition to be filed with the Utilities and Transportation Commission by the jurisdiction, and would include a public hearing and input from the Railroad Company and WSDOT rail.	Gross freight tonnage, crossing type, traffic congestion, operations
78	Railroad-Reduced snowpack	Low	Medium	Low	Based on the Skagit County 2016-2036 Comprehensive Plan, a functional road classification system involves facilities that have been identified in the state Freight and Goods Transportation System (FGTS) as trucking routes. This system is based on the estimated gross freight tonnage that is carried on the roads: - T-1: more than 10 million tons per year - T:2: 4 million to 10 million tons per year - T:3: 300,000 to 4 million tons per year - T-4: 100,000 to 300,000 tons per year - T-5: at least 20,000 tons in 60 days and less than 100,000 tons per year For rural Skagit County, the highest FGTS designations include the entire length of I-5 (Tier 1) and SR-20 from I-5 to Anacortes (Tier 2 to Anacortes, Tier 3 for the SR20 Spur). SR-20 from Burlington to Anacortes carries an estimated 10,000,000 annual tonnage and is considered Tier 2. Cook Road from I-5 to Sedro-Woolley is designated as Tier 2. Majority of Skagit County's FGTS designations are within the range of 3,000,000 to 34,000,000 tons per year. Despite the high traffic volumes for FGTS, railroads are not anticipated to be extremely sensitive to reduced snowpack = **Low Sensitivity** Grade separation of existing at-grade crossings would separate vehicular traffic from train traffic to reduce conflict areas, increase safety, and eliminate delays at crossings. Grade separation would also improve emergency service response by reducing delay to response times and potential railway-roadway crashes. Grade separation projects could cost between approximately $30 million to $200 million each. Public funding for grade separation projects are difficult to secure. A variety of traditional funding sources, such as RAISE grants and Freight Mobility Strategic Investment Board (FMSIB) grants are awarded in highly competitive processes and are often insufficient to provide the amount of funds required to complete a grade separation project. The newly enacted FAST Act authorizes $305 billion from the Highway Trust Fund and the General Fund for transportation projects, including grade separation projects. The Surface Transportation Block Grant Program (STBGP), the Railway Highway Grade Crossings Program, and the Nationally Significant Highway and Freight Projects Program are some of the subcategories of the FAST Act that could provide funding for grade separation projects. State legislative funding packages can also contain funding for grade separation projects. Many grade separation projects take several years to complete once funding is secured. = **Medium Adaptive Capacity** At-grade crossings that are redundant could be closed to reduce impacts from future train traffic. However, closing an at-grade crossing could result in increased transportation impacts at other nearby crossings by shifting vehicle volumes to other roadways. Grade crossing consolidation requires a petition to be filed with the Utilities and Transportation Commission by the jurisdiction, and would include a public hearing and input from the Railroad Company and WSDOT rail.	Gross freight tonnage, crossing type, traffic congestion, operations

79	Railroad-Sea level rise	Medium	Medium	Medium	Based on the Skagit County 2016-2036 Comprehensive Plan, a functional road classification system involves facilities that have been identified in the state Freight and Goods Transportation System (FGTS) as trucking routes. This system is based on the estimated gross freight tonnage that is carried on the roads: - T-1: more than 10 million tons per year - T:2: 4 million to 10 million tons per year - T:3: 300,000 to 4 million tons per year - T-4: 100,000 to 300,000 tons per year - T-5: at least 20,000 tons in 60 days and less than 100,000 tons per year For rural Skagit County, the highest FGTS designations include the entire length of I-5 (Tier 1) and SR-20 from I-5 to Anacortes (Tier 2 to Anacortes, Tier 3 for the SR20 Spur). SR-20 from Burlington to Anacortes carries an estimated 10,000,000 annual tonnage and is considered Tier 2. Cook Road from I-5 to Sedro-Woolley is designated as Tier 2. Majority of Skagit County's FGTS designations are within the range of 3,000,000 to 34,000,000 tons per year. Low lying infrastructure such as railways are vulnerable to sea level rise.**= Medium Sensitivity** Grade separation of existing at-grade crossings would separate vehicular traffic from train traffic to reduce conflict areas, increase safety, and eliminate delays at crossings. Grade separation would also improve emergency service response by reducing delay to response times and potential railway-roadway crashes. Grade separation projects could cost between approximately $30 million to $200 million each. Public funding for grade separation projects are difficult to secure. A variety of traditional funding sources, such as RAISE grants and Freight Mobility Strategic Investment Board (FMSIB) grants are awarded in highly competitive processes and are often insufficient to provide the amount of funds required to complete a grade separation project. The newly enacted FAST Act authorizes $305 billion from the Highway Trust Fund and the General Fund for transportation projects, including grade separation projects. The Surface Transportation Block Grant Program (STBGP), the Railway Highway Grade Crossings Program, and the Nationally Significant Highway and Freight Projects Program are some of the subcategories of the FAST Act that could provide funding for grade separation projects. State legislative funding packages can also contain funding for grade separation projects. Many grade separation projects take several years to complete once funding is secured. **= Medium Adaptive Capacity** At-grade crossings that are redundant could be closed to reduce impacts from future train traffic. However, closing an at-grade crossing could result in increased transportation impacts at other nearby crossings by shifting vehicle volumes to other roadways. Grade crossing consolidation requires a petition to be filed with the Utilities and Transportation Commission by the jurisdiction, and would include a public hearing and input from the Railroad Company and WSDOT rail.	Gross freight tonnage, crossing type, traffic congestion, operations
80	Railroad-Wildfire	Low	Medium	Low	For rural Skagit County, the highest FGTS designations include the entire length of I-5 (Tier 1) and SR-20 from I-5 to Anacortes (Tier 2 to Anacortes, Tier 3 for the SR20 Spur). SR-20 from Burlington to Anacortes carries an estimated 10,000,000 annual tonnage and is considered Tier 2. Cook Road from I-5 to Sedro-Woolley is designated as Tier 2. Majority of Skagit County's FGTS designations are within the range of 3,000,000 to 34,000,000 tons per year. Due to the high traffic volumes for FGTS, railroads are not anticipated to experience more risk than under current conditions. Railroads are more likely to experience impacts from wildfire smoke and debris on railroad tracks. **= Low Sensitivity** Grade separation of existing at-grade crossings would separate vehicular traffic from train traffic to reduce conflict areas, increase safety, and eliminate delays at crossings. At-grade crossings that are redundant could be closed to reduce impacts from future train traffic. However, closing an at-grade crossing could result in increased transportation impacts at other nearby crossings by shifting vehicle volumes to other roadways. Grade crossing consolidation requires a petition to be filed with the Utilities and Transportation Commission by the jurisdiction, and would include a public hearing and input from the Railroad Company and WSDOT rail. **= Medium Adaptive Capacity**	Gross freight tonnage, crossing type, traffic congestion, operations
81	Public transit-Drought (Transportation)	Low	Low	Medium	Skagit County has partnered with WSDOT to expand earthquake assessment of roadways and bridges to reduce hazard impact and transportation-related issues and potential isolation.= **Low Adaptive Capacity** Skagit Transit is a public agency funded by Skagit County and several of the cities that provide transit service in some portions of the County. Rail and marine transportation facilities within Skagit County are owned and operated by ports or private companies. Skagit Transit's fixed route service includes local routes, commuter routes, and flex routes. In 2014, the number of fixed route passenger boardings (local, commuter, and flex) increased by 10.7%. Fixed route service is offered along a pattern of streets or routes, operating on a set schedule of pulses from Skagit Station, Chuchkanut Park and Ride, March's Point Park and Ride, and other designated transfer locations including Skagit Valley College, 10th Street and Q Avenue in Anacortes, and the Food Pavillion in Sedro-Woolley. In 2014, there were 19 fixed routes, including 11 local routes, two commuter routes, and six flex routes covering 322 miles of streets, roads, and highways. Local fixed routes operated between 5 and 7 days per week. Commuter routes operation hours are better 5 and 6 days per week. Flex routes on the other hand operate between 2 and 5 days per week. Major Transit stations include: - Skagit Station, Mount Vernon - Washington State Ferry Terminal and Guemes Island Ferry Terminal, Anacortes - Alger Park and Ride, Alger - Chuckanut Park and Ride, Burlington - March's Point Park and Ride, Mount Vernon - South Mount Vernon Park and Ride, Mount Vernon - Lincoln Creek Park and Ride, Bellingham - Bellingham Station, Bellingham - Everett Station, Everett **= Low Sensitivity**	Frequency of travel, operation schedule

82	Public transit-Extreme precipitation	Medium	Medium	Medium	Skagit County has partnered with WSDOT to expand earthquake assessment of roadways and bridges to reduce hazard impact and transportation-related issues and potential isolation. Existing measures include elevating and reinforcing roads, enhancing drainage systems and upgrading infrastructure. = **Medium Adaptive Capacity** Transportation services such as public transit access and ferries in the Skagit River Basin are highly vulnerable to extreme flooding. Bus Routes are particularly at risk during high flood stages of the Samish and Skagit Rivers. Due to their low-lying locations and close proximity to these rivers, these routes are susceptible to rapid inundation and severe disruptions. Skagit Transit is a public agency funded by Skagit County and several of the cities that provide transit service in some portions of the County. Rail and marine transportation facilities within Skagit County are owned and operated by ports or private companies. Skagit Transit's fixed route service includes local routes, commuter routes, and flex routes. In 2014, the number of fixed route passenger boardings (local, commuter, and flex) increased by 10.7%. Fixed route service is offered along a pattern of streets or routes, operating on a set schedule of pulses from Skagit Station, Chuchkanut Park and Ride, March's Point Park and Ride, and other designated transfer locations including Skagit Valley College, 10th Street and Q Avenue in Anacortes, and the Food Pavillion in Sedro-Woolley. In 2014, there were 19 fixed routes, including 11 local routes, two commuter routes, and six flex routes covering 322 miles of streets, roads, and highways. Local fixed routes operated between 5 and 7 days per week. Commuter routes operation hours are between 5 and 6 days per week. Flex routes on the other hand operate between 2 and 5 days per week. Major Transit stations include: - Skagit Station, Mount Vernon - Washington State Ferry Terminal and Guemes Island Ferry Terminal, Anacortes - Alger Park and Ride, Alger - Chuckanut Park and Ride, Burlington - March's Point Park and Ride, Mount Vernon - South Mount Vernon Park and Ride, Mount Vernon - Lincoln Creek Park and Ride, Bellingham - Bellingham Station, Bellingham - Everett Station, Everett **= Medium Sensitivity**	Frequency of travel, operation schedule, types of routes
83	Public transit-Flooding	High	Medium	High	Transportation services such as public transit access and ferries in the Skagit River Basin are highly vulnerable to extreme flooding. Bus Routes are particularly at risk during high flood stages of the Samish and Skagit Rivers. Due to their low-lying locations and close proximity to these rivers, these routes are susceptible to rapid inundation and severe disruptions. Skagit Transit is a public agency funded by Skagit County and several of the cities that provide transit service in some portions of the County. Rail and marine transportation facilities within Skagit County are owned and operated by ports or private companies. Skagit Transit's fixed route service includes local routes, commuter routes, and flex routes. In 2014, the number of fixed route passenger boardings (local, commuter, and flex) increased by 10.7%.Fixed route service is offered along a pattern of streets or routes, operating on a set schedule of pulses from Skagit Station, Chuchkanut Park and Ride, March's Point Park and Ride, and other designated transfer locations including Skagit Valley College, 10th Street and Q Avenue in Anacortes, and the Food Pavillion in Sedro-Woolley. In 2014, there were 19 fixed routes, including 11 local routes, two commuter routes, and six flex routes covering 322 miles of streets, roads, and highways. Local fixed routes operated between 5 and 7 days per week. Commuter routes operation hours are between 5 and 6 days per week. Flex routes on the other hand operate between 2 and 5 days per week. Major Transit stations include: - Skagit Station, Mount Vernon - Washington State Ferry Terminal and Guemes Island Ferry Terminal, Anacortes - Alger Park and Ride, Alger - Chuckanut Park and Ride, Burlington - March's Point Park and Ride, Mount Vernon - South Mount Vernon Park and Ride, Mount Vernon - Lincoln Creek Park and Ride, Bellingham - Bellingham Station, Bellingham - Everett Station, Everett **= High Sensitivity** Skagit County has partnered with WSDOT to expand earthquake assessment of roadways and bridges to reduce hazard impact and transportation-related issues and potential isolation. Existing measures include elevating and reinforcing roads, enhancing drainage systems and upgrading infrastructure. = **Medium Adaptive Capacity**	Frequency of travel, operation schedule, types of routes
84	Public transit-Reduced snowpack	Low	Medium	Low	Skagit Transit is a public agency funded by Skagit County and several of the cities that provide transit service in some portions of the County. Rail and marine transportation facilities within Skagit County are owned and operated by ports or private companies. Skagit Transit's fixed route service includes local routes, commuter routes, and flex routes. In 2014, the number of fixed route passenger boardings (local, commuter, and flex) increased by 10.7%.Fixed route service is offered along a pattern of streets or routes, operating on a set schedule of pulses from Skagit Station, Chuchkanut Park and Ride, March's Point Park and Ride, and other designated transfer locations including Skagit Valley College, 10th Street and Q Avenue in Anacortes, and the Food Pavillion in Sedro-Woolley. In 2014, there were 19 fixed routes, including 11 local routes, two commuter routes, and six flex routes covering 322 miles of streets, roads, and highways. Local fixed routes operated between 5 and 7 days per week. Commuter routes operation hours are between 5 and 6 days per week. Flex routes on the other hand operate between 2 and 5 days per week. Major Transit stations include: - Skagit Station, Mount Vernon - Washington State Ferry Terminal and Guemes Island Ferry Terminal, Anacortes - Alger Park and Ride, Alger - Chuckanut Park and Ride, Burlington - March's Point Park and Ride, Mount Vernon - South Mount Vernon Park and Ride, Mount Vernon - Lincoln Creek Park and Ride, Bellingham - Bellingham Station, Bellingham - Everett Station, Everett **= Low Sensitivity** Skagit County has partnered with WSDOT to expand earthquake assessment of roadways and bridges to reduce hazard impact and transportation-related issues and potential isolation. Existing measures include elevating and reinforcing roads, enhancing drainage systems and upgrading infrastructure. = **Medium Adaptive Capacity**	Frequency of travel, operation schedule

85	Public transit-Sea level rise	Medium	Medium	Medium	Due to their low-lying locations and close proximity to these rivers, these routes are susceptible to rapid inundation and severe disruptions. Skagit Transit is a public agency funded by Skagit County and several of the cities that provide transit service in some portions of the County. Rail and marine transportation facilities within Skagit County are owned and operated by ports o private companies. Skagit Transit's fixed route service includes local routes, commuter routes, and flex routes. In 2014, the number of fixed route passenger boardings (local, commuter, and flex) increased by 10.7%.Fixed route service is offered along a pattern of streets or routes, operating on a set schedule of pulses from Skagit Station, Chuchkanut Park and Ride, March's Point Park and Ride, and other designated transfer locations including Skagit Valley College, 10th Street and Q Avenue in Anacortes, and the Food Pavillion in Sedro-Woolley. In 2014, there were 19 fixed routes, including 11 local routes, two commuter routes, and six flex routes covering 322 miles of streets, roads, and highways. Local fixed routes operated between 5 and 7 days per week. Commuter routes operation hours are between 5 and 6 days per week. Flex routes on the other hand operate between 2 and 5 days per week. Major Transit stations include: - Skagit Station, Mount Vernon - Washington State Ferry Terminal and Guemes Island Ferry Terminal, Anacortes - Alger Park and Ride, Alger - Chuckanut Park and Ride, Burlington - March's Point Park and Ride - South Mount Vernon Park and Ride, Mount Vernon - Lincoln Creek Park and Ride, Bellingham - Bellingham Station, Bellingham - Everett Station, Everett **= Medium Sensitivity** Skagit County has partnered with WSDOT to expand earthquake assessment of roadways and bridges to reduce hazard impact and transportation-related issues and potential isolation. Existing measures include elevating and reinforcing roads, enhancing drainage systems and upgrading infrastructure. = **Medium Adaptive Capacity**	Location, operation schedule
86	Public transit-Wildfire	Low	Medium	Low	Majority of transit services and infrastructure are located in western County where high fire danger days are projected to increase twice the County average of 6 days. Wildfire likelihood is minimal and is located in the WUI-interface and WUI-intermix zones. Wildfire events can lead to disruption of services, some residents would need to rely on neighbors or other resources to evacuate. Portions of western County in WUI zones are identified as disadvantaged, particularly in incorporated areas. =**Low Sensitivity** Skagit County has an intergovernmental cooperation agreement with Skagit Transit for use of Transit buses during emergency, including wildfire events (2022 CEMP), to reduce hazard impact and transportation-related issues and potential isolation. Transit may not be able to respond in every case. Additional potential measures include identifying critical junctions for evacuation of rural communities and disadvantaged areas, coordinating with Emergency Services Dept., Red Cross and/or other relevant NGOs, local jurisdictions, and other stakeholders to continue providing services per 2022 Skagit County CEMP. = **Medium Adaptive Capacity**	Disadvantaged community in incorporated areas
87	Solid waste facility-Extreme precipitation (Waste Management)	Low	Medium	Low	The County owns and maintains three solid waste transfer facilities; an interlocal agreement between the County and cities/private companies requires disposal of solid waste at the transfer facilities. Final disposal location is the Roosevelt landfill outside the County. Three of the cities within Skagit County (Anacortes, Mount Vernon, and Sedro-Woolley) provide garbage collection services to their residents and businesses with their own equipment and personnel. These three cities have universal, or mandatory, garbage collection services. Rural residents in unincorporated County use drop boxes at designated collection facilities. Current collection system is sufficient for collecting and removing solid wastes generated by the County's residents and businesses. Waste Management (WM) is the contracted private company that provides collection services, including residential/commercial garbage, recycling, and organics collection and long-haul waste disposal from the TRS. Skagit County no longer has active solid waste landfills. This is because the County has an abundance of surface water and very shallow groundwater; thus, it is difficult for safety reasons. Skagit County Public Works performs routine groundwater monitoring around three closed county landfills. Knowing this historic data, solid waste facilities are unlikely to face high sensitivity. Based on the Skagit County Solid Waste Management Plan, the total waste (recycled and disposed) generated in 2013 was 169,983 tons/year. In 2025 and 2035, the projected total waste is 194,320 tons/year and 218,930 tons/year, respectively. =**Low Sensitivity** Extreme precipitation does not trigger loss of asset functionality, but may eventually result in contracting elsewhere if landfill were to close. Economic feasibility limits the ability of County to contract with landfills further away. Export of waste via rail continues to be a best practice for the County. Technological solutions i.e., conversion technology, or development of in-County landfill may be costly to implement and requires changes in systemic operations, but is feasible. =**Medium Adaptive Capacity**	Management, location, operations
88	Solid waste facility-Flooding	Low	Medium	Low	The County owns and maintains three solid waste transfer facilities; an interlocal agreement between the County and cities/private companies requires disposal of solid waste at the transfer facilities, which are subsequently exported to landfills outside the County. Three of the cities within Skagit County (Anacortes, Mount Vernon, and Sedro-Woolley) provide garbage collection services to their residents and businesses with their own equipment and personnel. These three cities have universal, or mandatory, garbage collection services. Current collection system is sufficient for collecting and removing solid wastes generated by the County's and City's residents and businesses. Some service gaps associated with the current collection system have been noted for recycling and organics. Skagit County no longer has active solid waste landfills. This is because the County has an abundance of surface water and very shallow groundwater; thus, it is difficult for safety reasons. Skagit County Public Works performs routine groundwater monitoring around three closed county landfills. Knowing this historic data, solid waste facilities are unlikely to face high sensitivity. Based on the Skagit County Solid Waste Management Plan, the total waste (recycled and disposed) generated in 2013 was 169,983 tons/year. In 2025 and 2035, the projected total waste is 194,320 tons/year and 218,930 tons/year, respectively. =**Low Sensitivity** Flooding would result in direct loss of asset functionality, but may eventually result in contracting elsewhere if landfill were to close. Economic feasibility limits the ability of County to contract with landfills further away. Export of waste via rail continues to be a best practice for the County. Technological solutions i.e., conversion technology, or development of in-County landfill may be costly to implement and requires changes in systemic operations, but is feasible.= **Medium Adaptive Capacity**	Management, location, operations

89	Solid waste facility-Reduced snowpack	Low	Medium	Low	Three of the cities within Skagit County (Anacortes, Mount Vernon, and Sedro-Woolley) provide garbage collection services to their residents and businesses with their own equipment and personnel. These three cities have universal, or mandatory, garbage collection services. Current collection system is sufficient for collecting and removing solid wastes generated by the County's and City's residents and businesses. Some service gaps associated with the current collection system have been noted for recycling and organics. Skagit County no longer has active solid waste landfills. This is because the County has an abundance of surface water and very shallow groundwater. Skagit County Public Works performs routine groundwater monitoring around three closed county landfills. Based on the Skagit County Solid Waste Management Plan, the total waste (recycled and disposed) generated in 2013 was 169,983 tons/year. In 2025 and 2035, the projected total waste is 194,320 tons/year and 218,930 tons/year, respectively. Reduced snowpack has minimal impact on solid waste facilities. =**Low Sensitivity** Reduced snowpack does not trigger loss of asset functionality; limited studies on impacts of reduced snowpack on solid waste facilities and landfills exist. Economic feasibility limits the ability of County to contract with landfills further away. Export of waste via rail continues to be a best practice for the County. Technological solutions i.e., conversion technology, or development of in-County landfill may be costly to implement and requires changes in systemic operations, but is feasible.=**Medium Adaptive Capacity**	Management, location, operations
90	Solid waste facility-Sea level rise	Low	Medium	Low	The County owns and maintains three solid waste transfer facilities; an interlocal agreement between the County and cities/private companies requires disposal of solid waste at the transfer facilities, which are subsequently exported to landfills outside the County. Three of the cities within Skagit County (Anacortes, Mount Vernon, and Sedro-Woolley) provide garbage collection services to their residents and businesses with their own equipment and personnel. These three cities have universal, or mandatory, garbage collection services. Current collection system is sufficient for collecting and removing solid wastes generated by the County's and City's residents and businesses. Some service gaps associated with the current collection system have been noted for recycling and organics. Skagit County no longer has active solid waste landfills. This is because the County has an abundance of surface water and very shallow groundwater; thus, it is difficult for safety reasons. Skagit County Public Works performs routine groundwater monitoring around three closed county landfills. Based on the Skagit County Solid Waste Management Plan, the total waste (recycled and disposed) generated in 2013 was 169,983 tons/year. In 2025 and 2035, the projected total waste is 194,320 tons/year and 218,930 tons/year, respectively. SLR can cause saltwater intrusion from elevated groundwater levels - causing localized flooding and exacerbates hazardous contamination in flood zones. = **Low Sensitivity** SLR does not trigger loss of asset functionality, but may eventually result in contracting elsewhere if landfill were to close due to frequent inundation and contamination of groundwater. Economic feasibility limits the ability of County to contract with landfills further away. Export of waste via rail continues to be a best practice for the County. Technological solutions i.e., conversion technology, or development of in-County landfill may be costly to implement and requires changes in systemic operations, but is feasible. =**Medium Adaptive Capacity**	Management, location, operations
91	Solid waste facility-Wildfire	Low	Medium	Low	The County owns and maintains three solid waste transfer facilities; an interlocal agreement between the County and cities/private companies requires disposal of solid waste at the transfer facilities, which are subsequently exported to landfills outside the County. Three of the cities within Skagit County (Anacortes, Mount Vernon, and Sedro-Woolley) provide garbage collection services to their residents and businesses with their own equipment and personnel. These three cities have universal, or mandatory, garbage collection services. Current collection system is sufficient for collecting and removing solid wastes generated by the County's and City's residents and businesses. Some service gaps associated with the current collection system have been noted for recycling and organics. Skagit County no longer has active solid waste landfills. This is because the County has an abundance of surface water and very shallow groundwater; thus, it is difficult for safety reasons. Skagit County Public Works performs routine groundwater monitoring around three closed county landfills. Based on the Skagit County Solid Waste Management Plan, the total waste (recycled and disposed) generated in 2013 was 169,983 tons/year. In 2025 and 2035, the projected total waste is 194,320 tons/year and 218,930 tons/year, respectively. Asset is more likely to experience secondary hazards such as wildfire smoke, minimal impact on asset.= **Low Sensitivity** Wildfire likelihood does not directly trigger loss of asset functionality, but may eventually result in contracting elsewhere if landfill were to close due to a wildfire event and contamination of groundwater. Economic feasibility limits the ability of County to contract with landfills further away. Export of waste via rail continues to be a best practice for the County. Technological solutions i.e., conversion technology, or development of in-County landfill may be costly to implement and requires changes in systemic operations, but is feasible.= **Medium Adaptive Capacity**	Management, location, operations
92	Private septic tanks-Extreme precipitation (Waste Management)	Medium	Medium	Medium	All residents of Skagit County whose homes or businesses are served by a septic system require annual inspections, unless the system is conventional gravity (3-year inspection requirement), per Skagit County Code (SCC) 12.05.160 and Washington Administrative Code (WAC) 246-272A-270. Rebates for qualified residents also exist that range up to $500 rebates fo septic system inspection, pumping, rise installation, lid replacement, or minor repairs. In anticipation of increased extreme precipitation events, septic tank inspections and improvements may become more frequent. = **Medium Adaptive Capacity** Approximately over 18,000 septic systems in Skagit County clean and recycle sewage contaminated water into clean groundwater every day in Skagit County. =**Medium Sensitivity**	Maintenance requirements, system reliance
93	Private septic tanks-Flooding	Medium	Medium	Medium	All residents of Skagit County whose homes or businesses are served by a septic system require annual inspections, unless the system is conventional gravity (3-year inspection requirement), per Skagit County Code (SCC) 12.05.160 and Washington Administrative Code (WAC) 246-272A-270. Rebates for qualified residents also exist that range up to $500 rebates fo septic system inspection, pumping, rise installation, lid replacement, or minor repairs. In anticipation of increased extreme precipitation events, septic tank inspections and improvements may become more frequent. = **Medium Adaptive Capacity** Approximately over 18,000 septic systems in Skagit County clean and recycle sewage contaminated water into clean groundwater every day in Skagit County. Septic tank systems that have been flooded should not be used. After waters have receded, the system should be checked for broken lines or sewage surfacing. Sewage systems may become backed up into the toilet, tub, or drain. There may be foul odors and/or very little water in the toilet bowl. In addition, from the Skagit County Comprehensive Plan 2016-2036, Policy 3A-3.4 can be summarized to ensure adequate wastewater treatment includes the determination of failing on-site septic systems, technical assistance to property owners, and actions to require necessary improvements. = **Medium Sensitivity**	Maintenance requirements, system reliance, general protocol
94	Private septic tanks-Sea level rise	Medium	Medium	Medium	Approximately 18,000 septic systems in Skagit County clean and recycle sewage contaminated water into clean groundwater every day in Skagit County. In addition, from the Skagit County Comprehensive Plan 2016-2036, Policy 3A-3.4 can be summarized to ensure adequate wastewater treatment includes the determination of failing on-site septic systems, technical assistance to property owners, and actions to require necessary improvements. In anticipation of increased sea levels, saltwater intrusion of groundwater can elevate water levels causing localized flooding and requiring more frequent inspections and maintenance. = **Medium Sensitivity** All residents of Skagit County whose homes or businesses are served by a septic system require annual inspections, unless the system is conventional gravity (3-year inspection requirement), per Skagit County Code (SCC) 12.05.160 and Washington Administrative Code (WAC) 246-272A-270. Rebates for qualified residents also exist that range up to $500 rebates fo septic system inspection, pumping, rise installation, lid replacement, or minor repairs. = **Medium Adaptive Capacity**	Maintenance requirements, system reliance, general protocol

95	Private septic tanks-Wildfire	Medium	Medium	Medium	Approximately 18,000 septic systems in Skagit County clean and recycle sewage contaminated water into clean groundwater every day in Skagit County. In addition, from the Skagit County Comprehensive Plan 2016-2036, Policy 3A-3.4 can be summarized to ensure adequate wastewater treatment includes the determination of failing on-site septic systems, technical assistance to property owners, and actions to require necessary improvements. In anticipation of increased wildfire likelihood, assets located in rural residences are directly exposed to destroyed systems and immediate failed operations. Secondary impacts of wildfire on septic tanks include severe water contamination; thus, leading to rehabilitation of septic tanks which may be costly and timely = **Medium Sensitivity** All residents of Skagit County whose homes or businesses are served by a septic system require annual inspections, unless the system is conventional gravity (3-year inspection requirement), per Skagit County Code (SCC) 12.05.160 and Washington Administrative Code (WAC) 246-272A-270. Rebates for qualified residents also exist that range up to $500 rebates fo septic system inspection, pumping, rise installation, lid replacement, or minor repairs. = **Medium Adaptive Capacity**	Maintenance requirements, system reliance, general protocol
96	Water treatment facility-Drought (Water Resources)	Low	Medium	Low	Rainwater and melted snow are collected throughout the year from streams surrounding Judy Reservoir and stored in the reservoir for use by the PUD's customers. The stored water is pumped to the water treatment plant, where impurities are removed, ensuring that the water delivered to customers is pure and safe. Chemicals are added to the water to remove particles and provide disinfection. The water is then gently mixed in four open basins, allowing the chemicals to react with the water. The water then passes through one of eight filters. The filter media consists of a layer of sand and coal supported on gravel. Impurities are trapped in the filter and removed periodically by pumping water through the filter in the reverse direction. The filter wash water is temporarily stored in two lagoons before being returned to Judy Reservoir. After filtration, the water is disinfected again and then flows by gravity to three steel storage reservoirs near the treatment plant. A computer system allows operators to control and monitor plant facilities at a central location. The system also provides remote monitoring, alarm indication, and data logging. All municipal wastewater treatment facilities as well as major storm water pumping systems could be inoperable for up to 45 days or perhaps longer. Based on the 2014 Natural Hazard Mitigation Plan, the approximate current value of water treatment in Skagit County is $25 million; however, critical facilities located within the 100-year floodplain include the water treatment plant. In addition, according to the 2014 Natural Hazard Mitigation Plan, there are 98 stormwater detention ponds (public) that total approximately $1,561,351 = **Low Sensitivity** Based on the 2014 Natural Hazard Mitigation Plan, existing prioritized Natural Hazard mitigation Strategies or Projects concerning Water Treatment Facilities include: - Seismic analysis of existing buildings, infrastructure and upgrade - Inter-tie with PUD water system **= Medium Adaptive Capacity**	Treatment process, structure value
97	Water treatment facility-Reduced snowpack	Low	Medium	Low	Rainwater and melted snow are collected throughout the year from streams surrounding Judy Reservoir and stored in the reservoir for use by the PUD's customers. The stored water is pumped to the water treatment plant, where impurities are removed, ensuring that the water delivered to customers is pure and safe. Chemicals are added to the water to remove particles and provide disinfection. The water is then gently mixed in four open basins, allowing the chemicals to react with the water. The water then passes through one of eight filters. The filter media consists of a layer of sand and coal supported on gravel. Impurities are trapped in the filter and removed periodically by pumping water through the filter in the reverse direction. The filter wash water is temporarily stored in two lagoons before being returned to Judy Reservoir. After filtration, the water is disinfected again and then flows by gravity to three steel storage reservoirs near the treatment plant. A computer system allows operators to control and monitor plant facilities at a central location. The system also provides remote monitoring, alarm indication, and data logging. All municipal wastewater treatment facilities as well as major storm water pumping systems could be inoperable for up to 45 days or perhaps longer. Based on the 2014 Natural Hazard Mitigation Plan, the approximate current value of water treatment in Skagit County is $25 million; however, critical facilities located within the 100-year floodplain include the water treatment plant. In addition, according to the 2014 Natural Hazard Mitigation Plan, there are 98 stormwater detention ponds (public) that total approximately $1,561,351 = **Low Sensitivity** Based on the 2014 Natural Hazard Mitigation Plan, existing prioritized Natural Hazard mitigation Strategies or Projects concerning Water Treatment Facilities include: - Seismic analysis of existing buildings, infrastructure and upgrade - Inter-tie with PUD water system **= Medium Adaptive Capacity**	Treatment process, structure value
98	Water treatment facility-Sea level rise	Medium	Low	High	Water treatment is managed by the Skagit Public Utility District (PUD) and other local districts. Water treatment is processed in a closed environment and stored in underground steel containers. Water processed and stored in lagoons and open basins can experience saltwater intrusion from the ground and surface runup, contaminating drinking water from an extensive and complex purification process. Transmission and distribution pipelines are buried underground, coastal assets are subject to SLR inundation/saltwater intrusion. Distribution lines that supply treated water to Samish Farms Water Assn and western portion of Judy System Retail service area are most impacted by mid-century scenarios. Infrastructure i.e., fish passages, drainage pipes, and various road improvements are regularly required. WA Dept of Ecology EIM Groundwater Map Search shows limited data on nearest well used for agricultural irrigation purposes. Groundwater levels vary significantly. = **Medium Sensitivity** Water System Design Criteria (Appendix C) of the Water Policy manual ensures adequate provisions of water supply via technology i.e., pipe diameter, meters, backflow prevention, pumps, power and backup power supply, pipe corrosion prevention, etc. Some treatment facilities or districts in County are managed by State Dept. of Ecology. =**Low Adaptive Capacity**	Saltwater intrusion
99	Water treatment facility-Wildfire	Medium	Low	High	Water treatment is managed by the Skagit Public Utility District (PUD) and other local districts. Water treatment is processed in a closed environment and stored in underground steel containers. Water processed and stored in lagoons and open basins can experience saltwater intrusion from the ground and surface runup, contaminating drinking water from an extensive and complex purification process. Transmission and distribution pipelines are buried underground, VOCs from thermal degradation of plastic pipes/materials, burning structures, and vegetation gets sucked into pipes (EPA, 2021). Distribution lines that supply treated water to in Skagit View Village, Cedar Grove, Rockport, Marblemount, and the CWSP future service area are most impacted by mid-century HE scenarios. = **Medium Sensitivity** Water System Design Criteria (Appendix C) of the Water Policy manual ensures adequate provisions of water supply via technology i.e., pipe diameter, meters, backflow prevention, pumps, power and backup power supply, pipe corrosion prevention, etc. Some treatment facilities or districts in County are managed by State Dept. of Ecology. =**Low Adaptive Capacity**	VOC contamination

100	Reservoirs-Drought (Water Resources)	Low	Low	Medium	Based on the 2014 Natural Hazard Mitigation Plan, existing prioritized Natural Hazard mitigation Strategies or Projects concerning Reservoirs include: - New water reservoir = **Low Adaptive Capacity** Based on the Skagit County PUD Water System Viewer, majority of the county is serviced by the Judy Reservoir. Other areas such as Alger, Cedargrove, Marblemount, Potlatch Beach, Rockport, and Skagit View Village is serviced with remote water systems. Some areas are serviced by the North Fir Island Water Association. Based on the 2014 Natural Hazard Mitigation Plan, drought first impacts the agricultural sector. Those who rely on surface water (reservoirs and lakes) and subsurface water (ground water) are usually the last impacted. Skagit County PUD#1 owns and maintains two earth-fill dams located East of Mount Vernon near Gilligan Creek. These earth-fill dams contain Judy Reservoir with a total water storage capacity of 4,630 acre-feet of 1.5 billion gallons and supplies water to more than 50,000 residents. The reservoir is located in a sparsely populated area but due to storage capacity of the reservoir and topography of the area, sudden failures could severely impact areas located downstream of the reservoir, causing damage to homes and potential loss of life. =**Low Sensitivity**	Service area and location
101	Reservoirs-Reduced snowpack	Medium	Low	High	Based on the 2014 Natural Hazard Mitigation Plan, existing prioritized Natural Hazard mitigation Strategies or Projects concerning Reservoirs include: - New water reservoir = **Low Adaptive Capacity** Based on the Skagit County PUD Water System Viewer, majority of the county is serviced by the Judy Reservoir. Other areas such as Alger, Cedargrove, Marblemount, Potlatch Beach, Rockport, and Skagit View Village is serviced with remote water systems. Some areas are serviced by the North Fir Island Water Association. Based on the 2014 Natural Hazard Mitigation Plan, drought first impacts the agricultural sector. Multiple years of reduced snowpack exacerbates drought conditions and reservoir storage capacity. Those who rely on surface water (reservoirs and lakes) and subsurface water (ground water) are usually the last impacted - multiple uses that rely on predictable snowmelt in reservoirs would be impacted i.e., recreational fishing, boating, hydropower, flood management, ecological functions, etc. Skagit County PUD#1 owns and maintains two earth-fill dams located East of Mount Vernon near Gilligan Creek. These earth-fill dams contain Judy Reservoir with a total water storage capacity of 4,630 acre-feet of 1.5 billion gallons and supplies water to more than 50,000 residents. The reservoir is located in a sparsely populated area but due to storage capacity of the reservoir and topography of the area, sudden failures could severely impact areas located downstream of the reservoir, causing damage to homes and potential loss of life. Many reservoirs are located near Western Skagit County with some immediately close to the coastal shoreline and other waterways (e.g., Skagit River). Reduced snowpack would lead to reduced reservoir recharge/aquifer recharge; thus, service areas that heavily rely on reservoirs may be impacted. = **Medium Sensitivity**	Service area and location
102	Reservoirs-Sea level rise	Medium	Low	High	Based on the 2014 Natural Hazard Mitigation Plan, existing prioritized Natural Hazard mitigation Strategies or Projects concerning Reservoirs include: - New water reservoir = **Low Adaptive Capacity** Based on the Skagit County PUD Water System Viewer, majority of the county is serviced by the Judy Reservoir. Other areas such as Alger, Cedargrove, Marblemount, Potlatch Beach, Rockport, and Skagit View Village is serviced with remote water systems. Coastal areas that are serviced by the Alger, Samish Farms Water Association Wholesale and Judy Reservoir may be impacted by sea level rise; thus disruptions to service may be come more frequent. Based on the 2014 Natural Hazard Mitigation Plan, drought first impacts the agricultural sector. Those who rely on surface water (reservoirs and lakes) and subsurface water (ground water) are usually the last impacted. Skagit County PUD#1 owns and maintains two earth-fill dams located East of Mount Vernon near Gilligan Creek. These earth-fill dams contain Judy Reservoir with a total water storage capacity of 4,630 acre-feet of 1.5 billion gallons and supplies water to more than 50,000 residents. The reservoir is located in a sparsely populated area but due to storage capacity of the reservoir and topography of the area, sudden failures could severely impact areas located downstream of the reservoir, causing damage to homes and potential loss of life. Many reservoirs are located near Western Skagit County with some immediately close to the coastal shoreline and other waterways (e.g., Skagit River). = **Medium Sensitivity**	Service area and location
103	Reservoirs - Wildfire	Medium	Low	High	Based on the Skagit County PUD Water System Viewer, majority of the county is serviced by the Judy Reservoir. Other areas such as Alger, Cedargrove, Marblemount, Potlatch Beach, Rockport, and Skagit View Village is serviced with remote water systems. Some areas are serviced by the North Fir Island Water Association. Skagit County PUD#1 owns and maintains two earth-fill dams located East of Mount Vernon near Gilligan Creek. These earth-fill dams contain Judy Reservoir with a total water storage capacity of 4,630 acre-feet of 1.5 billion gallons and supplies water to more than 50,000 residents. The reservoir is located in a sparsely populated area but due to storage capacity of the reservoir and topography of the area, sudden failures could severely impact areas located downstream of the reservoir, causing damage to homes and potential loss of life. Watersheds draining into existing reservoirs are located near Western Skagit County with some immediately close to the coastal shoreline and other waterways (e.g., Skagit River). Increased wildfire likelihood leads to more frequent wildfire events - burnt watersheds are more prone to erosion/landslides that reduce water quality i.e., increased sedimentation. Potential effects of build up in reservoirs area algae blooms and changing hydrology. = Medium Sensitivity Based on the 2014 Natural Hazard Mitigation Plan, existing prioritized Natural Hazard mitigation Strategies or Projects concerning Reservoirs include: - New water reservoir = Low Adaptive Capacity	Storage, Sedimentation
104	Schools-Drought (Zoning & Dev)	Low	Medium	Low	Based on the 2014 Natural Hazard Mitigation Plan, there will be annual maintenance of the Emergency Response Plan to ensure that all Critical facilities which include nursing homes, chemical storage facilities, schools, electric and communication stations have working emergency plan in place and that contacts are up to date. Funding for this is integrated into department budgets. Schools are scattered all throughout Skagit County; thus, some educational facilities may be located on FEMA 100 or 500 year flood plain areas. Though not common, it may still be a concern. Droughts impact school enrollment, participation, grade progression, and learning outcomes. Thus, frequency of drought may deter potential students from enrolling into educational facilities located in drought prone areas. Sectors that are most likely to face severe impacts from drought include the agricultural and forestry industries. In addition, many educational facilities (public) are generally located near coastal and/or water bodies.=**Low Sensitivity** Based on the Skagit County Multi-Jurisdictional Natural Hazard Mitigation Plan Mid-Cycle update in January 2023, a Drought Contingency Plan should be made alongside the PUD and Skagit County Soil and Water Conservation District spring of 2023 to develop an outreach plan. This plan is anticipated to address public education and water conservation plans/practices (as necessary), particularly when needed for firefighting; however, as of November 12, 2024 and the Skagit County Multi-Jurisdictional Natural Hazard Mitigation Plan Mid-Cycle update in January 2023 revised May 2023, there has been no further update. Mitigation, response, and recovery methods are outlined in the 2014 NHMP i.e., regular drills, redundant communication system, ICS training, emergency supplies, etc. = **Medium Adaptive Capacity**	Location and operation

105	Schools-Extreme precipitation	Medium	Medium	Medium	Based on the 2020 Hazard Mitigation Plan, there are 58 schools located throughout the County, 9 of which are in unincorporated County. Schools are scattered all throughout Skagit County thus, some educational facilities may be located on FEMA 100 or 500 year flood plain areas, making safe routes to school inaccessible. Continual extreme precipitation days that make road conditions hazardous can impact school enrollment, participation, grade progression, and learning outcomes. For example, La Conner School district noted 5 days of missed school (Mount Vernon school district = 6 missed days) due to severe storms/snow events during the 2008-2013 plan cycle update (2014 NHMP). Thus, frequency of extreme precipitation magnitude may deter potential students from enrolling into educational facilities located in flood prone areas. In addition, many educational facilities (public) are generally located near coastal and/or water bodies. Thus, extreme precipitation may lead to potential flooding and halt operations of these facilities for unknown periods of time. = **Medium Sensitivity** Based on the 2014 NHMP, there will be annual maintenance of the Emergency Response Plan to ensure that all Critical facilities which include nursing homes, chemical storage facilities, schools, electric and communication stations have working emergency plan in place and that contacts are up to date. Funding for this is integrated into department budgets. The 2020 HMP update identifies an initiative (C-20) to work with local school districts to retrofit facilities to better withstand severe weather and other hazardous events. Mitigation, response, and recovery methods are outlined in the 2014 NHMP i.e., regular drills, redundant communication system, ICS training, emergency supplies, etc. =**Medium Adaptive Capacity**	Location and operation
106	Schools-Flooding	Medium	Medium	Medium	Based on the 2020 Hazard Mitigation Plan, there are 58 schools located throughout the County, 9 of which are in unincorporated County. Schools are scattered all throughout Skagit County thus, some educational facilities may be located on FEMA 100 or 500 year flood plain areas, making safe routes to school inaccessible. There are no recorded flood events that have made road conditions hazardous that impact school enrollment, participation, grade progression, and learning outcomes. Future flood events doesn't preclude impacts on asset as flooding may halt operations of these facilities and potentially cause undetermined periods of closure. = **Medium Sensitivity** Based on the 2014 Natural Hazard Mitigation Plan, there will be annual maintenance of the Emergency Response Plan to ensure that all Critical facilities which include nursing homes, chemical storage facilities, schools, electric and communication stations have working emergency plan in place and that contacts are up to date. Funding for this is integrated into department budgets. Schools are required to develop and exercise hazard-specific response plans per RCW 28A.320.125. The 2020 HMP identifies methods to mitigate flood hazards i.e., developing flood hazard awareness week activities, workshops, and information exchange within schools for students, faculty, and staff. Mitigation, response, and recovery methods are outlined in the 2014 NHMP i.e., regular drills, redundant communication system, ICS training, emergency supplies, etc. =**Medium Adaptive Capacity**	Location and operation
107	Schools-Reduced snowpack	Low	Medium	Low	Based on the 2020 Hazard Mitigation Plan, there are 58 schools located throughout the County, 9 of which are in unincorporated County. Continual seasons of reduced snowpack reduces water availability for school facilities-potentially cause undetermined periods of closure, and may impact school enrollment, participation, grade progression, and learning outcomes. =**Low Sensitivity** Based on the 2014 Natural Hazard Mitigation Plan, there will be annual maintenance of the Emergency Response Plan to ensure that all Critical facilities which include nursing homes, chemical storage facilities, schools, electric and communication stations have working emergency plan in place and that contacts are up to date. Funding for this is integrated into department budgets. Based on the Skagit County Multi-Jurisdictional Natural Hazard Mitigation Plan Mid-Cycle update in January 2023, a Drought Contingency Plan should be made alongside the PUD and Skagit County Soil and Water Conservation District spring of 2023 to develop an outreach plan. This plan is anticipated to address public education and water conservation plans/practices (as necessary), particularly when needed for firefighting; however, as of November 12, 2024 and the Skagit County Multi-Jurisdictional Natural Hazard Mitigation Plan Mid-Cycle update in January 2023 revised May 2023, there has been no further update. In addition, schools are required to develop and exercise hazard-specific response plans per RCW 28A.320.125. The 2020 HMP identifies methods to mitigate hazards from reduced snowpack such as an advanced noticing system. Mitigation, response, and recovery methods are outlined in the 2014 NHMP i.e., regular drills, redundant communication system, ICS training, emergency supplies, etc. =**Medium Adaptive Capacity**	Location and operation
108	Schools-Sea level rise	Medium	Medium	Medium	Schools are scattered all throughout Skagit County; there are 58 schools located throughout the County, 9 of which are in unincorporated County (2020 Hazard Mitigation Plan). Thus, some educational facilities may be located in potential SLR inundation zones that result in flooding of asset. For example, floods reduce school attendance that impact school enrollment, participation, grade progression, and learning outcomes. Thus, SLR inundation reduces land available for facilities and road accessibility. Hazard may deter potential students from enrolling into educational facilities located in coastal flood prone areas, halting operations of these facilities and potentially cause undetermined periods of closure. =**Medium Sensitivity** Based on the 2014 Natural Hazard Mitigation Plan, there will be annual maintenance of the Emergency Response Plan to ensure that all Critical facilities which include nursing homes, chemical storage facilities, schools, electric and communication stations have working emergency plan in place and that contacts are up to date. Funding for this is integrated into department budgets. In addition, schools are required to develop and exercise hazard-specific response plans per RCW 28A.320.125. The 2020 HMP identifies methods to mitigate hazards from reduced snowpack such as an advanced noticing system. Mitigation, response, and recovery methods are outlined in the 2014 NHMP i.e., regular drills, redundant communication system, ICS training, emergency supplies, etc. = **Medium Adaptive Capacity**	Location and operation
109	Schools - Wildfire	Low	Medium	Low	Schools are scattered all throughout Skagit County; there are 58 schools located throughout the County, 9 of which are in unincorporated County (2020 Hazard Mitigation Plan). Some are located in WUI-interface and WUI-intermix zones. Increased wildfire likelihood has minimal impact on schools, however, wildfire events require evacuation and limited outdoor activities, and increased costs to retrofit buildings i.e., air filtration, fire-resistant building materials, landscaping safe space, etc. =**Low Sensitivity** Based on the 2014 Natural Hazard Mitigation Plan, there will be annual maintenance of the Emergency Response Plan to ensure that all Critical facilities which include nursing homes, chemical storage facilities, schools, electric and communication stations have working emergency plan in place and that contacts are up to date. Funding for this is integrated into department budgets. In addition, schools are required to develop and exercise hazard-specific response plans per RCW 28A.320.125. The 2020 HMP identifies methods to mitigate hazards from reduced snowpack such as an advanced noticing system. Mitigation, response, and recovery methods are outlined in the 2014 NHMP i.e., regular drills, redundant communication system, ICS training, emergency supplies, etc. = **Medium Adaptive Capacity**	Location and operation
110	Radio towers-Drought (Zoning & Dev)	Low	Medium	Low	Wireless facilities are owned/maintained by private entities, permitting authority is the County. Drought conditions can cause ground to subside and move, compromising structural integrity of asset. Movement depends on groundwater level subsidence. Maintenance of facilities do not require a permit. =**Low Sensitivity** Siting and design of wireless facilities are regulated by Skagit municipal code sect. 14.16.720 (Towers and small wireless facilities regulations). Environmentally sensitive sites must consider alternative sites and design for height, setback, massing, public right of ways, easements, etc. Engineer determines the operational and structural safety of asset, site specific. Code does not call out provisions specific to drought hazards. = **Medium Adaptive Capacity**	Site Constraints

111	**Radio towers-Extreme precipitation & Flooding**	**Medium**	**Medium**	**Medium**	Exposed assets located in delta region are more sensitive to flooding and extreme precip than inland assets that corrodes metal towers and compromises structural integrity. Extreme weather also impacts asset that limits signal transmission and accessibility - communications among private individuals i.e., elderly, mobility-impaired individuals, etc. are most impacted. Access to towers for maintenance can be restricted due to localized flooding. = **Medium Sensitivity** Siting and design of wireless facilities are regulated by Skagit municipal code sect. 14.16.720 (Towers and small wireless facilities regulations). Environmentally sensitive sites must consider alternative sites and design for height, setback, massing, public right of ways, easements, etc. Engineer determines the operational and structural safety of asset, site specific. Code does not call out provisions specific to extreme precipitation and flood hazards. =**Medium Adaptive Capacity**	Site Constraints
112	**Radio towers-Reduced snowpack**	**Low**	**Medium**	**Low**	Exposed assets located in mountainous hillside areas are more sensitive to reduced snowpack. Brangers et. al. (2024) article shows heavy snow layers can increase signal backscatter and interferes with radio wave transmission. "During snowmelt periods, wet snow absorbs the signal, and the soil backscatter becomes negligible". Reduced snowpack is anticipated to lower transmission risks. = **Low Sensitivity** Siting and design of wireless facilities are regulated by Skagit municipal code sect. 14.16.720 (Towers and small wireless facilities regulations). Environmentally sensitive sites must consider alternative sites and design for height, setback, massing, public right of ways, easements, etc. Engineer determines the operational and structural safety of asset, site specific. Code does not call out provisions specific to reduced snowpack conditions. = **Medium Adaptive Capacity**	Site Constraints
113	**Radio/Cell towers-Sea level rise**	**Medium**	**Medium**	**Medium**	Below-grade fiber optic cables located in 1-ft. SLR inundation zone per NOAA SLR viewer can be flooded by brackish or salt water that corrodes foundation of metal towers and compromises structural integrity. Land subsidence or movement from SLR can also impact asset that limits signal transmission and accessibility - communications among private individuals i.e., elderly, mobility-impaired individuals, etc. are most impacted. Access to towers for maintenance can be restricted due to flooding from SLR inundation. =**Medium Sensitivity** Measures for adaptation: relocate inland, design elevated/higher level, flood protection, reinforced tower and foundation materials to withstand saltwater corrosion, etc. Measures are dependent on funding availability and permits available for privately-managed assets to maintain and upgrade assets. =**Medium Adaptive Capacity**	Design and functionality
114	**Radio/cell towers-Wildfire**	**Medium**	**Medium**	**Medium**	Assets located in mountainous hillside areas are more exposed to increased wildfire likelihood, direct impacts include destruction of towers, indirect impacts = reduced radio wave transmission due to increased smoke/particulate matter in air. Wildfire events are unpredictable, and magnitude of destruction varies depending on asset location, material, technological upgrades, etc. = **Medium Sensitivity** Siting and design of wireless facilities are regulated by Skagit municipal code sect. 14.16.720 (Towers and small wireless facilities regulations). Environmentally sensitive sites must consider alternative sites and design for height, setback, massing, public right of ways, easements, etc. Engineer determines the operational and structural safety of asset, site specific. Code does not call out provisions specific to wildfire hazards. = **Medium Adaptive Capacity**	Siting constraints

Tasks 3.4-3.5: Characterize risk and decide course of action

In Column B [*below*], list the assets you identified in Task 3.3 as having *medium* or *high* vulnerability. In Column C, characterize the **Probability** of hazard occurrence for each asset as *low, medium, or high* . In Column E, characterize the **Magnitude** of the potential loss/consequences as *low, medium, or high.* Put each asset's number [*from Column A*] in the appropriate cell of the Risk Characterization Matrix [*right*], and note the composite risk rating in Column G. Based on the asset's risk characterization, note your decision [*Take Action of Accept Risk*] in Column H.

Number	Asset-Hazard Pair *(Note applicable sector(s) in parenthesis.)*	Probability (***Low, Medium, High***)	Notes *(Note the indicators, data, and ruleset used to characterize probability of loss.)*	Magnitude (***Low, Medium, High***)	Notes *(Note the indicators, data, and ruleset used to characterize magnitude of loss.)*	Composite Risk Rating (*Low = Green; Medium = Gold; Red = High)*	Decision (*Take Action* or *Accept Risk*)
1	Residential Neighborhood 1 - Drought	**Low**	**Loss of water:** Many residents in rural areas of the county rely on private wells or private water systems for their domestic water supply. Part of Neighborhood 1 (Anacortes, Swinomish tribal land) lies within an area identified as disadvantaged. Annual population loss due to natural hazards, homes with a lack of indoor plumbing, and lower income households are higher than average from the State. **Probability:** According to the Skagit County Multi-Jurisdiction Hazard Mitigation Plan 2020 Update, Skagit County was part of the 2015 drought declaration areas. In May 20, 2019, Skagit County was once again in a drought declaration area. According to USGS Streamflow for day of the year, Skagit has multiple streams that are classified as low, much below normal (<10) and below normal (10-24) percentile classes. According to the U.S. drought monitor (map last updated November 7,2024), northeast Skagit county is observed to have moderate drought and abnormally dry. Neighborhood 1 is located in west Skagit County and includes all portions of unincorporated Skagit County lying westerly of the Swinomish Channel including Fidalgo Island, Guemes Island, Cypress Island and Sinclair Island = **Low Probability** **Future Likelihood Indicator:** Under an RCP8.5 scenario, the likelihood of a year with summer precipitation below 75% of the historical normal is projected to be 20% by mid-century (2040-2069). **= Low Probability**	**Medium**	**Indicator: Property value and landscaping** According to the Skagit County Natural Hazards Mitigation Plan with records obtained from the Skagit county Assessor, there are 4,697 structures with an average market value of $302,150 in neighborhood 1. The total estimated value of structures at risk in this neighborhood is $354,811,380. Based on the Skagit County 2020 Base Plan, no structures will be directly affected by drought conditions. Droughts may have significant impact on landscapes, which could cause a financial burden to property owners. In addition, it has been noted Skagit County has experienced some periods of drought in the past; however these events are typically low to moderate in severity and relatively short induration. Further, the agricultural and forestry industries usually experience the greatest impact from a drought event in Skagit County. = **Medium Magnitude** Also based on the Skagit County Natural Hazards Mitigation Plan, a severe drought may severely impact this neighborhood as Guemes Island relies entirely on an island aquifer for domestic water. Further a large number of residents living on rural Fidalgo Island rely on private, stand-alone water systems for their domestic water supply. = **Medium magnitude**	**Low**	**Accept Risk**
2	Residential Neighborhood 1 - Extreme Heat (*not priority climate hazard*)	**Low**	**Health Impacts:** Certain populations are considered more vulnerable or at greater risk during extreme heat events. These populations include, but are not limited to the following: elderly age 65 and older, infants and young children under five years of age, pregnant woman, the displaced or poor, overweight, and people diagnosed with mental illnesses, disabilities, and chronic diseases. Neighborhood 1 is located in an area identified as disadvantaged. Increased annual mortality rates, lack of indoor plumbing, and lower income households are higher than average. **Probability**: Temperatures that hover 10 degrees or more above the average high temperature for the region and last for several days or weeks are deigned as extreme heat. Severe weather events usually occur during the months of October to April; however, have occurred year round as well. According to First street data, properties at risk from heat in Neighborhood 1 are anticipated to have minimal to minor heat risk. **Future Likelihood Indicator:** Steady decrease in heating degree days. Historical baseline of 7089 deg F heating days (temperature degree days divided by temperature=109 heating days or number of days to heat home). Mid century and end of century projected to be a decrease in 1199 deg F heating days (18 heating days) and 2467 deg F heating days (38 heating days). = **Low Probability**	**Medium**	**Indicator: Living conditions** Poor living conditions and substandard housing may cause county residents to experience house-related hazard such as lead paint (houses built prior to 1960), asbestos, and poor filtration may amplify public health concerns; thus, leading to increased potential hospitalizations. Vulnerable populations may also face increased poor living conditions and increased medical issues. **= Medium magnitude**	**Low**	**Accept Risk**
3	Residential Neighborhood 2 - Extreme Heat (*not priority climate hazard*)	**Low**	**Health Impacts**: Certain populations are considered more vulnerable or at greater risk during extreme heat events. These populations include, but are not limited to the following: elderly age 65 and older, infants and young children under five years of age, pregnant woman, the displaced or poor, overweight, and people diagnosed with mental illnesses, disabilities, and chronic diseases. **Probability:** Temperatures that hover 10 degrees or more above the average high temperature for the region and last for several days or weeks are deigned as extreme heat. Severe weather events usually occur during the months of October to April; however, have occurred year round as well. According to First street data, properties at risk from heat in Neighborhood 2 are anticipated to have minimal to minor heat risk. **Future Likelihood Indicator**: Steady decrease in heating degree days. Historical baseline of 7089 deg F heating days (or 109 heating days). Mid century and end of century projected to be a decrease in 1199 deg F heating days (18 heating days) and 2467 deg F heating days (38 heating days). **= Low Probability**	**Medium**	**Indicator: Living conditions** Poor living conditions and substandard housing may cause county residents to experience house-related hazard such as lead paint (houses built prior to 1960), asbestos, and poor filtration may amplify public health concerns; thus, leading to increased potential hospitalizations. Vulnerable populations may also face increased poor living conditions and increased medical issues. **= Medium magnitude**	**Low**	**Accept Risk**

4	Residential Neighborhood 3 - Extreme Heat (*not priority climate hazard*)	**Low**	**Health Impacts:** Certain populations are considered more vulnerable or at greater risk during extreme heat events. These populations include, but are not limited to the following: elderly age 65 and older, infants and young children under five years of age, pregnant woman, the displaced or poor, overweight, and people diagnosed with mental illnesses, disabilities, and chronic diseases. All of Neighborhood 3 is located in an area identified by the White House Council on Environmental Quality as disadvantaged. Population loss, projected flood risk, lower income households, and transportation barriers are higher than average for the State. **Probability:** Temperatures that hover 10 degrees or more above the average high temperature for the region and last for several days or weeks are deigned as extreme heat. Severe weather events usually occur during the months of October to April; however, have occurred year round as well. According to First street, properties at risk in Neighborhood 3 are cited to have more moderate to minor risk. = **Low Probability** **Future Likelihood Indicator**: Steady decrease in heating degree days. Historical baseline of 7089 deg F heating days (or 109 heating days). Mid century and end of century projected to be a decrease in 1199 deg F heating days (18 heating days) and 2467 deg F heating days (38 heating days).	**Medium**	**Indicator: Living conditions** Poor living conditions and substandard housing may cause county residents to experience house-related hazard such as lead paint (houses built prior to 1960), asbestos, and poor filtration may amplify public health concerns; thus, leading to increased potential hospitalizations. Vulnerable populations may also face increased poor living conditions and increased medical issues. **= Medium magnitude**	**Low**	**Accept Risk**
5	Residential Neighborhood 4 - Extreme Heat (*not priority climate hazard*)	**Low**	**Health Impacts:** Certain populations are considered more vulnerable or at greater risk during extreme heat events. These populations include, but are not limited to the following: elderly age 65 and older, infants and young children under five years of age, pregnant woman, the displaced or poor, overweight, and people diagnosed with mental illnesses, disabilities, and chronic diseases. **Probability:** Temperatures that hover 10 degrees or more above the average high temperature for the region and last for several days or weeks are deigned as extreme heat. Severe weather events usually occur during the months of October to April; however, have occurred year round as well. As Neighborhood 4 includes areas not within Neighborhoods 1-3, First street data cites tat properties are at minimal heat risk. **Future Likelihood Indicator**: Steady decrease in heating degree days. Historical baseline of 7089 deg F heating days (or 109 heating days). Mid century and end of century projected to be a decrease in 1199 deg F heating days (18 heating days) and 2467 deg F heating days (38 heating days) **. = Low Probability**	**Medium**	**Indicator: Living conditions** Poor living conditions and substandard housing may cause county residents to experience house-related hazard such as lead paint (houses built prior to 1960), asbestos, and poor filtration may amplify public health concerns; thus, leading to increased potential hospitalizations. Vulnerable populations may also face increased poor living conditions and increased medical issues. **= Medium magnitude**	**Low**	**Accept Risk**
6	Residential Neighborhood 2 - Flooding	**High**	**Structural damage**: The combined effects of high tides, peak riverine streamflow, and sea level rise can cause widespread flooding from temporary extreme high-water levels fanning out over the delta's broad and low-lying geography, exposing residential development along shoreline areas. Contains disadvantaged communities in incorporated areas per White House environmental & economic justice mapping tool. **Probability:** Neighborhood 2 comprises of the Skagit River Delta and the Puget Sound Coast that follows the boundaries of the river floodplain and can be at greater risk of flood events. Based on the Skagit County Multi-Jurisdiction Hazard Mitigation Plan 2020 Update, all coastal areas in Skagit County are at risk to tidal flooding. There are three different types of phase floods: - Phase 1 flooding inundates low areas near the Skagit River and generally does not cause significant damage in the Skagit River Valley. - Phase 2 flooding inundates a broader area and may cause significant damage. - Phase 3 flooding can cause catastrophic damage in the valley Floods in the Skagit basin are greatest in the months of November, December, and January, with events occurring as early as October or as late as February. The Skagit River poses a major flood threat in the lower valley and the Sauk River and Suitable River pose a significant threat in the upper valley. According to First Street data, Neighborhood 2 is anticipated to have areas that may face major to severe flood risk in the next 30 years. Further based on the Skagit County Natural Hazards Mitigation Plan, there is high probability of flooding events in Skagit County because of the Skagit River= **High Probability** **Future Likelihood Indicator:** Large areas within Neighborhood 2 are located in Zone A which is deigned as having a 1% chance flood event (100-year flood) with some smaller areas located in Zone X which is deigned as 0.2% annual chance of flood event (500-year event).	**Medium**	**Indicator: Living conditions and structural damage** Severity of flood damage is dependent upon ground elevation, the surrounding topography, peak flow volumes, surface flow velocities, and proximity to the river or a levee break. Neighborhood 2 has varying elevations and thus residential areas closer to the Skagit river may face more detrimental damage as compared to residential areas further away. = **Medium magnitude**	**High**	**Take Action**

7	Residential Neighborhood 2 - Sea Level Rise	Low	**Structural damage:** The combined effects of high tides, peak riverine streamflow, and sea level rise can cause widespread flooding from temporary extreme high-water levels fanning out over the delta's broad and low-lying geography, exposing residential development along shoreline areas. **Probability:** SLR is a singular event where sea levels are projected to rise 0.8-1.0 feet by 2050 and 1.1-2.0 feet by 2100. Storm events, tectonic uplift or shifts, king tides, and extreme precipitation are projected to increase in intensity and frequency, leading to increased likelihood for permanent inundation of low-lying areas, higher tidal and storm surge reach, flooding, erosion, and loss of residential parcels. **Future Likelihood Indicator:** Sea levels are anticipated to increase by mid-century, causing widespread shallow flooding along the Samish and Skagit Deltas = **Low Probability**	Medium	**Indicator: Living conditions and structural damage** Increase of sea level rise would lead to increased community flooding; thus, leading to many residential developments to evacuate and/or leave their homes. Homes would be potentially inhabitable or increased maintenance would be required. = **Medium magnitude**	Low	**Accept Risk**
8	Baker River Hydroelectric Project - Wildfire	Low	**Structural damage:** Increased likelihood of wildfire may lead to damaged infrastructure of the Baker River Hydroelectric project. This may then cascade into the loss of renewable energy while damaged infrastructure are being renovated. **Probability:** According to First Street, the areas where the Baker River Hydroelectric Project is located are anticipated to have minor to minimal heat risk in the next 30 years. There have been 5 historical wildfire events in Skagit county between 1984 to 2021.= **Low Probability** **Future Likelihood Indicator:** Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	Medium	**Indicators: Disruption of services** The Baker River Hydroelectric Project is one of the largest sources of hydroelectricity for Skagit county. The project includes two concrete damas and their associated powerhouses and facilities. The project reservoirs, Baker Lake and Lake Shannon, are fed by runoff from the flanks of Mount Baker and Mount Shuksan. The power-generating capacity for upstream and downstream of the project is 107 and 111 megawatts, respectively. Loss of this energy due to wildfire would affect the operational capacity of the project. The power production to the grid would be greatly diminished, reducing the amount of energy available for consumers when operations are down. The primary source of electricity in Skagit County comes from hydropower generated by this project. Energy mix will shift to other sources to meet demand or purchase from external sources. = **Medium magnitude**	Low	**Accept Risk**
9	**Farms-Drought (Ag & Food Systems)**	Low	**Production:** Increased drought may impact this sector because of its heavy dependence on stored water in the soil. Soil water can be rapidly depleted during extended dry periods. Normal production of crops may be heavily impacted; thus, coercing the industry to face potential shortages and supply chain issues. **Probability:** Based on the 2014 Natural Hazard Mitigation Plan, there have been a number of drought episodes, including several that have lasted for more than a single season such as the dry periods between 1928-1932 and 1992-1994. Severe drought episodes occurred in 1977 and 2001. The 2001 event was the second-worse drought year in state-recorded history. Though Skagit County has experienced some periods of drought in the past, these events are typically low to moderate in severity and relatively short in duration. The agricultural and forestry industries usually experience the greatest impact from a drought event in Skagit County. In addition, according to the 2023 Skagit County Monitoring Program Water Year, there were abnormally dry to extreme drought conditions throughout most of the water year, with most severe drought levels occurring from August through September 2023. = **Low Probability** **Future Likelihood Indicator:** Under an RCP8.5 scenario, the likelihood of a year with summer precipitation below 75% of the historical normal is projected to be 20% by mid-century (2040-2069). A short-term drought that persists for 3 to 6 months may have little impact on these sectors, depending on the characteristics of the hydrologic system and water use requirements.	High	**Indicators: Crop production** As Skagit County is home to the crop production of many vegetables and fruits, increased drought would heavily impact this industry. Over 90 different crops are grown in the County. Blueberries, raspberries, strawberries, tulips, daffodils, pickling cucumbers, specialty potatoes, Jonogold apples, and vegetable seed are some of the more important crops in this maritime valley. More tulip, iris, and daffodil bulbs are produced here than in any other county in the U.S. The implications of drought would heavily impact the crop production listed above and impact the livelihood of the county. = **High Magnitude**	Medium	**Take Action**
10	**Farms-Extreme precipitation (Ag & Food Systems)**	Medium	**Production:** Increased extreme precipitation may impact this sector because oversaturation of the soil may lead to root rot and failed production of many crops. Normal production of crops may be heavily impacted; thus, coercing the industry to face potential shortages and supply chain issues. Shift to outsourcing crops or to use of alternative crops. **Probability:** Extreme precipitation, classified as "Severe Storms" in the 2014 Local Hazard Mitigation Plan are common in Skagit County during the fall and winter months in all areas of Skagit County. Some storms are more severe and require assistance from a variety of governmental agencies or emergency responders. Thus, based on past events, the 2014 Local Hazard Mitigation Plan indicates there is a higher probability of extreme precipitation events occurring in the future. According to the 2014 Natural Hazard Mitigation Plan, precipitation in Skagit County varies significantly with some areas having rain intensity of more than 10 inches and other areas with less than 3 inches. Most farms in Skagit County are located in communities including Bow, Burlington, Concrete, Mount Vernon, Rockport, and Sedro-Woolley. These communities have recorded precipitation intensity ranging from 3-4 inches.**= Medium Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the increase in heavy precipitation magnitude is projected to range from 8% for mid century to 21% for end of century. Historical baseline was not recorded	High	**Indicators: Crop production** As Skagit County is home to the crop production of many vegetables and fruits, increased extreme precipitation would heavily impact this industry. Over 90 different crops are grown in the County. Blueberries, raspberries, strawberries, tulips, daffodils, pickling cucumbers, specialty potatoes, Jonogold apples, and vegetable seed are some of the more important crops in this maritime valley. More tulip, iris, and daffodil bulbs are produced here than in any other county in the U.S. The impacts of extreme precipitation would heavily impact the crop production listed above and impact the livelihood of the county. Asset is important to community culture and identity - economic return of asset may eventually be outpaced by other uses exacerbated by increased heavy precip magnitude. **= High Magnitude**	High	**Take Action**

11	Farms-Reduced snowpack (Ag & Food Systems)	Medium	**Production:** Reduced snowpack would lead to a decrease in groundwater/aquifer recharge. This impacts production supply of crops as many farms primarily rely on groundwater for crop irrigation instead of surface water. Reduction of snowpack would potentially lead to insufficient water for crop irrigation. **Probability:** Based on the 2014 Skagit County Natural Hazard Mitigation Plan, snowfall is seldom heavy and varies greatly from year to year. According to the 2023 Skagit County Monitoring Program Water Year, Skagit County had good snowpack at the end of winter; however, the snow melted quickly during a record-breaking warm May. Based on the 2023 Skagit River County Flood Book, snowmelt peak is expected during the spring or early summer due to the seasonable rise in temperatures in resultant melting of the accumulated snow pack. Skagit County's water supply is approximately 50-70% originated from melting snow in the Cascade Mountains. = **Medium Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), there is a steady increase of percentage of stream lengths in Skagit County winter to spring streamflow timing ratio. Historical baseline ratio for 1.0 to 1.5 is 6.1%. Mid century ratio for 1.0 to 1.5 is 13.6% and end of century 1.0 to 1.5 ratio is 51.3 percent. The ratio of winter to spring streamflow is an indicator of the timing of streamflow during the year, which affects the seasonal availability of water for hydropower and irrigation. An increase in the ratio in the future means an increase in streamflow in winter and a decrease in spring. Middle elevation streams are expected to experience the most change in streamflow timing, with a shift to higher streamflow in winter.	High	**Indicators: Crop production** As Skagit County is home to the crop production of many vegetables and fruits, reduced snowpack would heavily impact this industry. Over 90 different crops are grown in the County. Blueberries, raspberries, strawberries, tulips, daffodils, pickling cucumbers, specialty potatoes, Jonogold apples, and vegetable seed are some of the more important crops in this maritime valley. More tulip, iris, and daffodil bulbs are produced here than in any other county in the U.S. The impacts of reduced snowpack would lead to reduced irrigation and the inability for crops to be irrigated properly. This could impact the community significantly as their food systems may be impacted greatly. = **High Magnitude**	High	**Take Action**
12	Fisheries-Drought (Cultural Resources)	Medium	**Livelihood:** Drought may lead to reduced water levels where many fisheries thrive in. The livelihood of their habitat and longevity may be threatened with drought. Decreases in fish habitat and populations have a direct correlation to cultural practices and traditions that rely on predictable fish runs. **Probability:** Based on the 2014 Natural Hazard Mitigation Plan, there have been a number of drought episodes, including several that have lasted for more than a single season such as the dry periods between 1928-1932 and 1992-1994. Severe drought episodes occurred in 1977 and 2001. The 2001 event was the second-worse drought year in state-recorded history. Though Skagit County has experienced some periods of drought in the past, these events are typically low to moderate in severity and relatively short in duration. The agricultural and forestry industries usually experience the greatest impact from a drought event in Skagit County. In addition, according to the 2023 Skagit County Monitoring Program Water Year, there were abnormally dry to extreme drought conditions throughout most of the water year, with most severe drought levels occurring from August through September 2023. = **Medium Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), there is a 100% change of stream lengths in low stream flow category (-10 to 10). This indicates 100% of the streams in the county will have 10% less streamflow on average during low summer streamflows. Mid century and end of century baseline is 25.4% and 7.7%.	High	**Indicators: Livelihood** Streamflow plays a critical role in shaping and maintaining habitats for aquatic species, particularly in the Skagit River, where Pacific salmon and trout are both culturally significant and legally protected. The availability of spawning and rearing habitats for these fish is heavily influenced by the river's flow patterns, which determine which areas of the watershed are accessible. Species like Chinook and coho salmon, steelhead, and bull trout—especially those that spawn in summer or rear as juveniles for extended periods in freshwater—are highly sensitive to low flow conditions and water quality. Anticipated increase in drought conditions reduces available habitat that impacts multiple generations of fish life cycles, risking displacement of species or inability to adapt to changing habitats; thus, not survive. Healthy fish habitat and populations have a direct correlation to cultural practices and traditions that rely on predictable fish runs. Less people would be able to practice traditional cultures and customs and can span generations as well. = **High Magnitude**	High	**Take Action**
13	Fisheries-Flooding	High	**Fish Livelihood:** Flooding may destroy spawn grounds, displace fish populations, and harm eggs and larvae. Further, flooding may also affect the timing of fish migrations that are present in Skagit County. Decreases in fish habitat and populations have a direct correlation to cultural practices and traditions that rely on predictable fish runs. **Probability:** There are four types of flooding that may occur in Skagit County. 100-year floods are severe and have 1% chance of being equaled or exceeded in any given year. A 100-year flood can occur several times or never within a 100-year period. Phase 3 floods are more common and inundate low areas near the Skagit River which cover sections of roads and occur roughly every few years. Phase 3 floods generally cause minimal damage in the Skagit River Valley. Phase 2 floods inundate a wider area and may cause significant damage. In 2015, 2016, and 2018, Phase 2 flooding occurred and Skagit River reached heights above 32 feet on the flood gauge in Concrete. Phase 1 floods can cause catastrophic damage. The most recent Phase 1 flood occurred in November 2021 when the Skagit River reached a height of 38.93 feet on the flood gauge in Concrete, well above the Phase 1 criteria of 37 feet. The Skagit River has reached flood stage over 60 times in the past 100 years. = **High Probability** Future Likelihood Indicator: Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively.	High	**Indicators: Livelihood** Streamflow plays a critical role in shaping and maintaining habitats for aquatic species, particularly in the Skagit River, where Pacific salmon and trout are both culturally significant and legally protected. The availability of spawning and rearing habitats for these fish is heavily influenced by the river's flow patterns, which determine which areas of the watershed are accessible. Species like Chinook and coho salmon, steelhead, and bull trout—especially those that spawn in summer or rear as juveniles for extended periods in freshwater—are highly sensitive to low flow conditions. With the influx of flow from flooding, these species would be at risk of being displaced entirely or be unable to adapt to changing habitats; thus, not survive. Healthy fish habitat and populations have a direct correlation to cultural practices and traditions that rely on predictable fish runs. Less people would be able to practice traditional cultures and customs and can span generations. = **High Magnitude**	High	**Take Action**

14	Fisheries-Sea Level Rise	High	**Declining habitat:** SLR alters salinity levels in estuarine habitats that disrupt juvenile salmon habitats and stressing other aquatic species. Lower tidal columns and low velocities make surface waters more susceptible to increased temperatures, altering water quality and food conditions that impacts fish habitat. Decreases in fish habitat and populations have a direct correlation to less cultural practices and traditions that rely on predictable fish runs. **Probability:** SSLR is a singular event where sea levels are projected to rise 0.8-1.0 feet by 2050 and 1.1-2.0 feet by 2100. Storm events, tectonic uplift or shifts, king tides, and extreme precipitation are projected to increase in intensity and frequency, leading to increased likelihood for permanent inundation of low-lying areas, higher tidal and storm surge reach, flooding, erosion, and fish habitat. **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline for was not recorded. However, mid century and end of century sea level rise is projected to be 0.7 feet and 2.1 feet, respectively. = **High Probability**	High	**Indicators: Life cycle of fish species** Storm events and such combined with SLR will result in areas previously dry that are anticipated to be permanently inundated and can vary along the coast by elevation. Low-lying delta and unstable coastal bluffs areas where pocket estuaries exist can damage habitat for juvenile fish and fry. Potential habitat loss from SLR correlates to 211,000 - 530,000 smolt capacity per year for 1.4 ft. - 2.6 ft., respectively (Beamer et. al., 2005). Multiple extreme storm and SLR conditions impacts multiple generations, where life cycle of fish are typically 1-4 years. Healthy fish habitat and populations have a direct correlation to cultural practices and traditions that rely on predictable fish runs. Less people would be able to practice traditional cultures and customs and can span generations. = **High Magnitude**	High	Take Action
15	Fisheries-Wildfire	Medium	**Habitat degradation**: Fisheries in headwater tributaries are more susceptible to increased sedimentation that decreases habitat quality from wildfire events. Increase in wildfire likelihood and fire danger conditions can result in more frequent wildfires. **Probability:** Major fire events (20+ acres) occur every 5-10 years throughout the County. Specifically, major fire events occur every 40 years in the Chuckanut Mountains (source: 2020 CWPP). **Future Likelihood Indicator**: Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline is 48 days of high fire danger (1971-2000), while historical baseline for wildfire likelihood was not recorded. Mid century is projected to be 11 median days of high fire danger, and 4% chance of increased wildfire likelihood. = **Medium Probability**	Medium	**Indicators: Existing Conditions** Wildfire had an overall positive effect on spring Chinook in their current distribution area, while the effect of fire on salmon in the historical distribution was mixed. Wildfire may have a net positive effect on spring Chinook salmon habitat by increasing habitat diversity (Kirkland et. al., 2017-USDA; Lamborn et. al., 2023), but is highly dependent on fire severity and extent, and ecological condition of stream/watershed. = **Medium Magnitude**	Medium	Take Action
16	Farms-Drought (Economic Development)	Medium	**Revenue:** Based on the Economic Indicators of Agriculture in Skagit County, farms make up about 3% of total earnings in 2007. Similarly, employment in the farming industry in Skagit County was found to be 4%. In 2007, there were 1,215 farms, covering about 109,000 acres of land. **Probability:** Based on the 2014 Natural Hazard Mitigation Plan, there have been a number of drought episodes, including several that have lasted for more than a single season such as the dry periods between 1928-1932 and 1992-1994. Severe drought episodes occurred in 1977 and 2001. The 2001 event was the second-worse drought year in state-recorded history. Though Skagit County has experienced some periods of drought in the past, these events are typically low to moderate in severity and relatively short in duration. The agricultural and forestry industries usually experience the greatest impact from a drought event in Skagit County, and will experience 5% in the future. In addition, according to the 2023 Skagit County Monitoring Program Water Year, there were abnormally dry to extreme drought conditions throughout most of the water year, with most severe drought levels occurring from August through September 2023. = **Medium Probability** **Future Likelihood Indicator:** Under an RCP8.5 scenario, the likelihood of a year with summer precipitation below 75% of the historical normal is projected to be 20% by mid-century (2040-2069). A short-term drought that persists for 3 to 6 months may have little impact on these sectors, depending on the characteristics of the hydrologic system and water use requirements.	Medium	**Indicators: Prosperity** Within the Economic Indicators of Agriculture in Skagit County document, the value of sales (e.g., $100.000) per farm from 1987 to 2007 have met this goal or declined since 2007. With the implications of drought, it is more likely for farms to not reach this goal and contribute to revenue flow for the county. Primary markets for Skagit County farmer's crops and livestock products have been large-scale processing plants, and national purchasers and distributors. However, there has been growing consumer interest in how and where food is produced; thus, demand in this sub market has been growing that may combat the impacts from drought on crop revenue. = **Medium Magnitude**	Medium	Take Action
17	Farms-Extreme precipitation	Medium	**Revenue & working conditions:** Extreme precipitation may lead to complete crop damage, waterlogged soil, and damaged farming infrastructure/tools. Employment may also be impacted as well due to extreme precipitation days which would inhibit quality work days. **Probability:** According to the 2014 Natural Hazard Mitigation Plan, historic average (1950-2019) is 6.5-in. of rain. Precipitation in Skagit County varies significantly with some areas having rain intensity of more than 10 inches and other areas with less than 3 inches. Low-lying delta areas where most farms are located communities are also located in Bow, Burlington, Concrete, Mount Vernon, Rockport, and Sedro-Woolley. These communities have recorded precipitation intensity ranging from 3-4 inches. Greatest increase in heavy precip magnitude (2-year, 24-hour storm) will occur in eastern, northern, and western sections of County. = **Medium Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the increase in heavy precipitation magnitude is projected to range from 8% for mid century to 21% for end of century. Historical baseline was not recorded.	Medium	**Indicators: Prosperity** Based on the Economic Indicators of Agriculture in Skagit County, farms make up about 3% of total earnings in 2007. Similarly, employment in the farming industry in Skagit County was found to be 4%. In 2007, there were 1,215 farms, covering about 109,000 acres of land and has decreased since 2022. Also within this document, the value of sales (e.g., $100.000) per farm from 1987 to 2007 have met this goal or declined since 2007. Agriculture is adaptable - for example, production of peas shifted to other crops due to processing facility issues. In addition, extreme precipitation would inhibit productive workload for employees of farms as unsafe work conditions may arise. This may lead to increased days of non-working days and/or shift to less demanding crops; thus, reducing employment and crop production, or outsourcing crops. Highest and best use of ag land varies depending on marketability and value-enhancing goods/services of asset. = **Medium Magnitude**	Medium	Take Action

18	Farms-Flooding	High	**Revenue:** Flooding may completely destroy crops that have been cultivating during growing seasons; thus, leading to immediate losses of revenue. In addition, extreme precipitation would inhibit productive workload for employees of farms as unsafe work conditions may arise. This may lead to increased days of non-working days; thus, reducing employment and crop production. **Probability:** In Skagit County, floods are generally the result of either spring snowmelt or winter rain on snow. The greatest threat of flooding is in the months of November through February. Based on anecdotal newspaper reports, Skagit County farms have had to deal with flooding in 2021 which caused water submerged fields and the passing of some farm animals. In 2023, farms and businesses along the Stillaguamish River saw record flooding with water reaching over 21 feet high. Eight other rivers including the Skagit River near concrete to the Snohomish and Tolt rivers close to Carnation, were also above flood stage. = **High Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively.	High	**Indicators: Prosperity** Based on the Economic Indicators of Agriculture in Skagit County, farms make up about 3% of total earnings in 2007. Similarly, employment in the farming industry in Skagit County was found to be 4%. In 2007, there were 1,215 farms, covering about 109,000 acres of land and has decreased since 2022. Also within this document, the value of sales (e.g., $100.000) per farm from 1987 to 2007 have met this goal or declined since 2007. Further, direct crop losses due to water damage, soil erosion, and the destruction of farm infrastructure may occur due to flood damage. = **High Magnitude**	High	Take Action
19	Farms-Reduced snowpack	Medium	**Revenue:** Reduced snowpack would lead to decreased groundwater/aquifer recharge. Most of the agricultural sector relies on groundwater for irrigation instead of surface water. Crop production may decrease significantly due to reduced snowpack. **Probability:** Based on the 2014 Skagit County Natural Hazard Mitigation Plan, snowfall is seldom heavy and varies greatly from year to year. According to the 2023 Skagit County Monitoring Program Water Year, Skagit County had good snowpack at the end of winter; however, the snow melted quickly during a record-breaking warm May. Based on the 2023 Skagit River County Flood Book, snowmelt peak is expected during the spring or early summer due to the seasonable rise in temperatures in resultant melting of the accumulated snow pack. Skagit County's water supply is approximately 50-70% originated from melting snow in the Cascade Mountains. = **Medium Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), there is a steady increase of percentage of stream lengths in Skagit County winter to spring streamflow timing ratio. Historical baseline ratio for 1.0 to 1.5 is 6.1%. Mid century ratio for 1.0 to 1.5 is 13.6% and end of century 1.0 to 1.5 ratio is 51.3 percent. The ratio of winter to spring streamflow is an indicator of the timing of streamflow during the year, which affects the seasonal availability of water for hydropower and irrigation. An increase in the ratio in the future means an increase in streamflow in winter and a decrease in spring. Middle elevation streams are expected to experience the most change in streamflow timing, with a shift to higher streamflow in winter.	High	**Indicators: Prosperity** Based on the Economic Indicators of Agriculture in Skagit County, farms make up about 3% of total earnings in 2007. Similarly, employment in the farming industry in Skagit County was found to be 4%. In 2007, there were 1,215 farms, covering about 109,000 acres of land and has decreased since 2022. Also within this document, the value of sales (e.g., $100.000) per farm from 1987 to 2007 have met this goal or declined since 2007. Reduced snowpack would lead to reduced irrigation; however, it may also lead to soils becoming infertile and unable to produce crops for future growing seasons. = **High Magnitude**	High	Take Action
20	Farms-Sea level rise	High	**Revenue:** Sea level rise can inundate laterally or upward from underground saltwater intrusion seeping into groundwater that increases soil salination. Salination changes the soil chemistry that reduces arable land and threatens crop yields and productivity. **Probability:** SLR is a singular event where sea levels are projected to rise 0.8-1.0 feet by 2050 and 1.1-2.0 feet by 2100. Storm events, tectonic uplift or shifts, king tides, and extreme precipitation are projected to increase in intensity and frequency. **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline for was not recorded. However, mid century and end of century sea level rise is projected to be 0.7 feet and 2.1 feet, respectively. **= High Probability**	Medium	**Indicators: Crop value, Acreage** Storm events and such combined with SLR will result in areas previously dry that are anticipated to be permanently inundated and can vary along the coast by elevation. Low-lying delta areas where most farms are located can be damaged by SLR inundation and/or saltwater intrusion. local farmers produce approximately $350 million worth of crops, livestock, and dairy products on approximately 90,000 acres of land throughout the County. Impacts to local economy can cost millions of dollars and render thousands of acres with reduced arability or infertile. = **Medium Magnitude**	High	Take Action
21	Commercial forests-Drought (Economic Dev)	Low	**Production:** Drought may lead to reduced tree growth, increased tree mortality, and heightened susceptibility to pests and diseases; thus, leading to decreased timber yield. **Probability:** Based on the 2014 Natural Hazard Mitigation Plan, there have been a number of drought episodes, including several that have lasted for more than a single season such as the dry periods between 1928-1932 and 1992-1994. Severe drought episodes occurred in 1977 and 2001. The 2001 event was the second-worse drought year in state-recorded history. Though Skagit County has experienced some periods of drought in the past, these events are typically low to moderate in severity and relatively short in duration. The agricultural and forestry industries usually experience the greatest impact from a drought event in Skagit County. In addition, according to the 2023 Skagit County Monitoring Program Water Year, there were abnormally dry to extreme drought conditions throughout most of the water year, with most severe drought levels occurring from August through September 2023. = **Low Probability** **Future Likelihood Indicator**: Based on the CMRW tool under an RCP8.5 scenario, the likelihood of a year with summer precipitation below 75% of the historical normal is projected to be 20% by mid-century (2040-2069). A short-term drought that persists for 3 to 6 months may have little impact on these sectors, depending on the characteristics of the hydrologic system and water use requirements.	Medium	**Indicators: Prosperity** With a reduction of commercial forest production, the economy may be impacted significantly. Further, this industry affects many other aspects of the County's economy. For instance, jobs and incomes, property values, energy supply of biomass, manufacturing of raw goods, and the value of the crops and livestock. Similarly, with the increased likelihood of drought, there is anticipation for competition of resources. The supply of land suitable for commercial forest growth may not satisfy the demands for timber; thus, policies or actions may affect this heavily. **= Medium Magnitude.**	Low	Accept Risk

22	Commercial forests-Extreme precipitation	Low	**Production:** Commercial forests may become waterlogged and/or non-usable due to extreme precipitation and landslides. Reduced production and profitability of timber may occur due to failed production and cultivation of commercial forests. **Probability:** The county's commercial forest zoning consists of Secondary Forest, which is a 20-acre minimum lot size; and Industrial Forest with an 80-acre minimum lot size. These areas are zoned SF-NRL and IF-NRL and are found to be primarily located in mountain foothills and some mountain areas throughout the County. Based on the 2014 Natural Hazard Mitigation Plan, areas where precipitation intensity ranged from 3-5 inches. According to the 2023 Skagit County Monitoring Program Water Year, precipitation in Mount Vernon during the water year was only 76% of normal. From October 2022 to September 2023, Mount Vernon experienced about 24.1 inches of precipitation which is about 7.7 inches lower than the historical average of 31.8 inches. **= Low Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the increase in heavy precipitation magnitude is projected to range from 8% for mid century to 21% for end of century. Historical baseline was not recorded.	Medium	**Indicators: Prosperity** With a reduction of commercial forest production, the economy may be impacted significantly. Further, this industry affects many other aspects of the County's economy. For instance, jobs and incomes, property values, energy supply of biomass, manufacturing of raw goods, and the value of the crops and livestock. Similarly, with the increased likelihood of heavy precipitation magnitude, there is anticipation for competition of resources. The supply of land suitable for commercial forest growth may not satisfy the demands for timber; thus, policies or actions may affect this heavily. **= Medium Magnitude.**	Low	Accept Risk
23	Commercial forests-Flooding	Medium	**Production:** Flooding may damage tree root systems through soil erosion, causing oxygen deprivation to roots due to waterlogged soil. Weakened trees from flood may then lead to trees becoming more susceptible to disease and insect infestations; thus, resulting in reduced timber yield and economic losses for forest operations. **Probability:** There are four types of flooding that may occur in Skagit County. 100-year floods are severe and have 1% chance of being equaled or exceeded in any given year. A 100-year flood can occur several times or never within a 100-year period. Phase 3 floods are more common and inundate low areas near the Skagit River which cover sections of roads and occur roughly every few years. Phase 3 floods generally cause minimal damage in the Skagit River Valley. Phase 2 floods inundate a wider area and may cause significant damage. In 2015, 2016, and 2018, Phase 2 flooding occurred and Skagit River reached heights above 32 feet on the flood gauge in Concrete. Phase 1 floods can cause catastrophic damage. The most recent Phase 1 flood occurred in November 2021 when the Skagit River reached a height of 38.93 feet on the flood gauge in Concrete, well above the Phase 1 criteria of 37 feet. The Skagit River has reached flood stage over 60 times in the past 100 years. The county's commercial forest zoning consists of Secondary Forest, which is a 20-acre minimum lot size; and Industrial Forest with an 80-acre minimum lot size. These areas are zoned SF-NRL and IF-NRL and are found to be primarily located in mountain foothills and some mountain areas throughout the County. = **Medium Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively.	Medium	**Indicators: Prosperity** With a reduction of commercial forest production, the economy may be impacted significantly. Further, this industry affects many other aspects of the County's economy. For instance, jobs and incomes, property values, energy supply of biomass, manufacturing of raw goods, and the value of the crops and livestock. Similarly, with the increased likelihood of flooding frequency, there is anticipation for competition of resources. The supply of land suitable for commercial forest growth may not satisfy the demands for timber; thus, policies or actions may affect this heavily. **= Medium Magnitude.**	Medium	Take Action
24	Commercial forests-Reduced snowpack	Medium	**Production:** Similar to drought, reduced snowpack would lead to decrease groundwater and aquifer recharge. Thus irrigation of commercial forests may be lacking irrigation. **Probability:** Based on the 2014 Skagit County Natural Hazard Mitigation Plan, snowfall is seldom heavy and varies greatly from year to year. According to the 2023 Skagit County Monitoring Program Water Year, Skagit County had good snowpack at the end of winter; however, the snow melted quickly during a record-breaking warm May. Based on the 2023 Skagit River County Flood Book, snowmelt peak is expected during the spring or early summer due to the seasonable rise in temperatures in resultant melting of the accumulated snow pack. Skagit County's water supply is approximately 50-70% originated from melting snow in the Cascade Mountains. **= Medium Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively.	Medium	**Indicators: Prosperity** With a reduction of commercial forest production, the economy may be impacted significantly. Further, this industry affects many other aspects of the County's economy. For instance, jobs and incomes, property values, energy supply of biomass, manufacturing of raw goods, and the value of the crops and livestock. Similarly, with anticipated reduced April 1 snowpack, there is anticipation for competition of resources. The supply of land suitable for commercial forest growth may not satisfy the demands for timber; thus, policies or actions may affect this heavily. = **Medium Magnitude.**	Medium	Take Action
25	Commercial forests-Wildfire	Medium	**Variable wildfire conditions:** Increased wildfire likelihood and high fire danger days may result in more frequent and potentially larger scale wildfire events. Wildfire events are unpredictable. Impacts on timber economy varies depending on wildfire extent. **Probability:** Major fire events (20+ acres) occur every 5-10 years throughout the County. Specifically, major fire events occur every 40 years in the Chuckanut Mountains (source: 2020 CWPP). **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline is 48 days of high fire danger (1971-2000), while historical baseline for wildfire likelihood was not recorded. Mid century is projected to be 11 median days of high fire danger, and 4% chance of increased wildfire likelihood. = **Medium Probability**	High	**Indicators: Suppression costs** Cost of wildfire suppression Statewide was $37 million annually from 2008-2012, and $153 million from 2013-2018. Dollar impacts of wildfire on commercial forests are not available at the County level but is anticipated to increase. Suppression activity costs may outpace revenue generated resulting in net loss. With a reduction of commercial forest production, the economy may be impacted significantly. Further, this industry affects many other aspects of the County's economy i.e., biomass products, raw goods, jobs and incomes, property values, and the value of the crops and livestock. = **High Magnitude**	High	Take Action

26	**Industrial/manufacturing businesses-Extreme precipitation**	**Low**	**Revenue:** Extreme precipitation events may lead to reduced productivity from delayed commute, structural damage, unsafe working conditions, etc. **Probability:** According to the 2014 Skagit County Natural Hazard Mitigation Plan, generally Central Skagit county experience a range of 3 to more than 10 inches of rain. Areas in Central County are seen to experience more than 10 inches of rain and areas radially around Central County decrease to range in 4-7 inches of precipitation intensity. Eastern County generally ranges from 5-7 inches of precipitation intensity to some small areas nearing 8-10 inches of precipitating intensity. Western County generally showcases lower precipitating intensity ranging from less than 3 inches to highs of 5 inches. = **Low Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the increase in heavy precipitation magnitude is projected to range from 8% for mid century to 21% for end of century. Historical baseline was not recorded.	**Medium**	**Indicators: Operations** Industrial businesses may face disruptions to operations due to flooding, damage to infrastructure, supply issues, unsafe work conditions, potential power outages, and increased costs for repair and cleanup. Costs for repairs will be dependent on the type of severe storm and the structural durability of businesses. = **Medium Magnitude.**	**Low**	**Accept Risk**
27	**Industrial/manufacturing businesses-Flooding**	**Medium**	**Revenue:** Flooding would impact operations of industrial businesses preventing workers from working and revenue generation. Further, flooding may inflict direct physical damage to industrial businesses, further preventing operations of facilities. **Probability:** There are four types of flooding that may occur in Skagit County. 100-year floods are severe and have 1% chance of being equaled or exceeded in any given year. A 100-year flood can occur several times or never within a 100-year period. Phase 3 floods are more common and inundate low areas near the Skagit River which cover sections of roads and occur roughly every few years. Phase 3 floods generally cause minimal damage in the Skagit River Valley. Phase 2 floods inundate a wider area and may cause significant damage. In 2015, 2016, and 2018, Phase 2 flooding occurred and Skagit River reached heights above 32 feet on the flood gauge in Concrete. Phase 1 floods can cause catastrophic damage. The most recent Phase 1 flood occurred in November 2021 when the Skagit River reached a height of 38.93 feet on the flood gauge in Concrete, well above the Phase 1 criteria of 37 feet. The Skagit River has reached flood stage over 60 times in the past 100 years. Based on the County zoning map, industrial businesses are located generally in Western County with some other areas such as the along the Skagit River. = **Medium Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively.	**Medium**	**Indicators: Operations** Industrial businesses may face disruptions to operations due to flooding, damage to infrastructure, supply issues, unsafe work conditions, potential power outages, and increased costs for repair and cleanup. Costs for repairs will be dependent on the type of severe storm and the structural durability of businesses. = **Medium Magnitude.**	**Medium**	**Take Action**
28	**Industrial/manufacturing businesses-Reduced snowpack**	**Low**	**Revenue:** Industrial businesses that rely heavily on water or similar resources may face operational difficulties due to the lack of water from snowmelt. **Probability:** Based on the 2014 Skagit County Natural Hazard Mitigation Plan, snowfall is seldom heavy and varies greatly from year to year. According to the 2023 Skagit County Monitoring Program Water Year, Skagit County had good snowpack at the end of winter; however, the snow melted quickly during a record-breaking warm May. Based on the 2023 Skagit River County Flood Book, snowmelt peak is expected during the spring or early summer due to the seasonable rise in temperatures in resultant melting of the accumulated snow pack. Skagit County's water supply is approximately 50-70% originated from melting snow in the Cascade Mountains. = **Low Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively.	**Medium**	**Indicators: Operations** Industrial businesses may race disruptions to operations due to decreased water supply. This may lead to increased water costs and forced closures for industrial businesses that heavily rely on water for their business.= **Medium Magnitude.**	**Low**	**Accept Risk**
29	**Industrial/manufacturing businesses-Sea level rise**	**Low**	**Flooding:** Flooding from SLR inundation would impact operations of industrial businesses preventing workers from working and revenue generation. Further, flooding may inflict direct physical damage to industrial businesses, further preventing operations of facilities. **Probability:** SLR is a singular event where sea levels are projected to rise 0.8-1.0 feet by 2050 and 1.1-2.0 feet by 2100. Storm events, tectonic uplift or shifts, king tides, and extreme precipitation are projected to increase in intensity and frequency. **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline was not recorded. However, mid century and end of century is projected to be 0.7 feet and 2.1 feet, respectively. = **Low probability**	**High**	**Indicators: Operations** Industrial businesses may face disruptions to operations due to flooding, damage to infrastructure, supply issues, unsafe work conditions, potential power outages, and increased costs for repair and cleanup. Costs for repairs will be dependent on the type of severe storm and the structural durability of businesses. In addition, "road, railroad and pipeline transportation to the refineries would be in jeopardy forcing shutdowns for an industry employing more than 800 workers with annual payrolls exceeding $57 million and thousands of people would possibly be unable to commute from their homes to work". (source: 2020 HMP) = **High Magnitude**	**Medium**	**Take Action**

30	**Industrial/manufacturing businesses-Wildfire**	**Medium**	**Raw materials:** Wildfire can reduce available timber products and byproducts for industrial/manufacturing businesses that rely on raw materials for economic development. Other products such as minerals, fisheries, etc. can also be impacted. **Probability:** Major fire events (20+ acres) occur every 5-10 years throughout the County. Specifically, major fire events occur every 40 years in the Chuckanut Mountains (source: 2020 CWPP). **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline is 48 days of high fire danger (1971-2000), while historical baseline for wildfire likelihood was not recorded. Mid century is projected to be 11 median days of high fire danger, and 4% chance of increased wildfire likelihood. = **Medium Probability**	**Medium**	In 2022, gross business income (GBI) was the highest recorded at $8.02 billion. This value fell to $7.81 billion in 2023, and sees continual growth since 2010 similar to the State trend. Main contributors to GBI in Skagit County are manufacturing, construction, wholesale trade, and retail trade (Center for Economic and Business Research, WWU, 2023). More frequent occurrences of large scale wildfire events have cumulative impact on supply chains; business decision to outsource materials causes temporary inflation of consumer pricing impacting County and statewide GBI. = **Medium Magnitude**	**Medium**	**Take Action**
31	**Rivers-Drought (*Ecosystems*)**	**Low**	**River Health:** Rivers may face reduced water flow; thus, jeopardizing surrounding habitats for organisms. Water temperatures may also increase due to reduced water flows. Further, fish that rely on these rivers may decline in population significantly due to unsuitable habitats and reduced food availability. **Probability:** Based on the 2014 Natural Hazard Mitigation Plan, there have been a number of drought episodes, including several that have lasted for more than a single season such as the dry periods between 1928-1932 and 1992-1994. Severe drought episodes occurred in 1977 and 2001. The 2001 event was the second-worse drought year in state-recorded history. Though Skagit County has experienced some periods of drought in the past, these events are typically low to moderate in severity and relatively short in duration. The agricultural and forestry industries usually experience the greatest impact from a drought event in Skagit County. In addition, according to the 2023 Skagit County Monitoring Program Water Year, there were abnormally dry to extreme drought conditions throughout most of the water year, with most severe drought levels occurring from August through September 2023. = **Low Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the steady decrease in percent change in total precipitation for July 15-September 15. Historical baseline is 3 inches of late summer precipitation. Mid century and end of century negative percentage changes are 10.7% and 11.9 percent, respectively.	**High**	**Indicators: Ecosystem Health** A severe drought could result in inadequate river flows that may result in the implementation of strict water conservation measures. Competition for water from river sources may also be sought after while also considering the surrounding habitat and wildlife that heavily depend on rivers. Habitat and wildfire that rely heavily on rivers for food and shelter may become endangered or even extinct. This may alter the river ecosystem drastically and potentially cause irreversible damage. = **High Magnitude**	**Medium**	**Take Action**
32	**Rivers-Flooding**	**Medium**	**River Health:** Flooding impacts rivers in terms of riverbank erosion and sediment deposition in the riverbeds. Therefore, surrounding habitat and wildlife may be severely impacted. **Probability:** According to the 2014 Natural Hazards Mitigation Plan, major flooding has occurred in the Skagit River Basin throughout the years. Due to its geographic location, the Skagit River Basin is subject to winter rain floods and an increase in discharge during spring due to snowmelt runoff. Rain-type floods occur usually in November or December; however, may occur as early as October or as late as February. Based on RiskMap, rivers in Skagit County are generally classified as Zone AQ (Floodway) with a 1% annual chance of flood event. According to the Natural Hazard Mitigation Plan, the Skagit River, Samish River, Sauk River, Suitable River, and Cascade River are all susceptible to river flooding = **Medium Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3% and 4.4%, respectively.	**Medium**	**Indicators: Ecosystem Health** River flooding occurs on rivers and streams where excessive water discharge causes river or stream channels to overflow. Further, flooding of rivers may completely destroy river banks and temporarily displace local species. Riverbanks and the local ecosystem may take some time to recover before reaching life before the flood. = **Medium Magnitude**	**Medium**	**Take Action**
33	**Rivers-Wildfire**	**Medium**	**Cascading effects**: Wildfires deposit logs and sediment into streams that can increase habitat quality for fisheries and other fauna. Largescale wildfire events deposit large amounts of sediment and detritus that can change hydrology and destroy habitat. Cascading impacts include algae blooms, reservoir impacts, reduced water quality, etc. that impact economy. **Probability:** Major fire events (20+ acres) occur every 5-10 years throughout the County. Specifically, major fire events occur every 40 years in the Chuckanut Mountains (source: 2020 CWPP). Warmer, wetter winters combined with warmer, drier summers and increased moisture stress are likely to cause increases in wintertime vegetation and larger summertime accumulations of woody and leafy debris on the forest floor, suggesting elevated risk of more frequent and large wildfires (URL 1; SITC, 2009; Littell et al., 2010). The average number of acres burned each year in Washington State (WA) has increased from 6,000 in the 1970s to about 30,000 in 2001 (URL 1) and is projected to increase further under climate change (SITC, 2009; Littell et al., 2010) (Lee et. al., 2011). **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline is 48 days of high fire danger (1971-2000), while historical baseline for wildfire likelihood was not recorded. Mid century is projected to be 11 median days of high fire danger, and 4% chance of increased wildfire likelihood. = **Medium Probability**	**Low**	**Indicators: Human activities impacted** Larger extents and more frequent wildfire events have cascading effects on watershed hydrology i.e., increased sedimentation, change in water chemistry and temperatures. Headwater tributaries surrounded by high slope timber lands provide habitat for fish spawning, and for recreational activities. Fishing, water activities, and other activities are most impacted. **= Low Magnitude**	**Low**	**Accept Risk**

34	Fisheries-Drought (Ecosystems)	Low	**Water temperatures:** Drought may lead to increased water temperatures in rivers where fisheries are located. Unsuitable water temperatures lead to dissatisfactory conditions for fisheries to spawn and thrive in. **Probability:** Based on the 2014 Natural Hazard Mitigation Plan, there have been a number of drought episodes, including several that have lasted for more than a single season such as the dry periods between 1928-1932 and 1992-1994. Severe drought episodes occurred in 1977 and 2001. The 2001 event was the second-worse drought year in state-recorded history. Though Skagit County has experienced some periods of drought in the past, these events are typically low to moderate in severity and relatively short in duration. The agricultural and forestry industries usually experience the greatest impact from a drought event in Skagit County. In addition, according to the 2023 Skagit County Monitoring Program Water Year, there were abnormally dry to extreme drought conditions throughout most of the water year, with most severe drought levels occurring from August through September 2023. = **Low Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the steady decrease in percent change in total precipitation for July 15-September 15. Historical baseline is 3 inches of late summer precipitation. Mid century and end of century negative percentage changes are 10.7% and 11.9 percent, respectively.	High	**Indicators: Life cycle of fish species** Streamflow plays a critical role in shaping and maintaining habitats for aquatic species, particularly in the Skagit River, where Pacific salmon and trout are both culturally significant and legally protected. The availability of spawning and rearing habitats for these fish is heavily influenced by the river's flow patterns, which determine which areas of the watershed are accessible. Species like Chinook and coho salmon, steelhead, and bull trout—especially those that spawn in summer or rear as juveniles for extended periods in freshwater—are highly sensitive to low flow conditions and water quality. Anticipated increase in drought conditions reduces available habitat that impacts multiple generations of fish life cycles, risking displacement of species or inability to adapt to changing habitats; thus, not survive. = **High Magnitude**	Medium	Take Action
35	Fisheries-Flooding	High	**Fish Livelihood:** Flooding can significantly impact fisheries by directing impacting their habitats and spawning grounds. Further, fish populations may become displaced, water quality may become declined due to influx of sediment and other contaminants from flooding. **Probability:** There are four types of flooding that may occur in Skagit County. 100-year floods are severe and have 1% chance of being equaled or exceeded in any given year. A 100-year flood can occur several times or never within a 100-year period. Phase 3 floods are more common and inundate low areas near the Skagit River which cover sections of roads and occur roughly every few years. Phase 3 floods generally cause minimal damage in the Skagit River Valley. Phase 2 floods inundate a wider area and may cause significant damage. In 2015, 2016, and 2018, Phase 2 flooding occurred and Skagit River reached heights above 32 feet on the flood gauge in Concrete. Phase 1 floods can cause catastrophic damage. The most recent Phase 1 flood occurred in November 2021 when the Skagit River reached a height of 38.93 feet on the flood gauge in Concrete, well above the Phase 1 criteria of 37 feet. The Skagit River has reached flood stage over 60 times in the past 100 years. = **High Probability** **Future Likelihood Indicator**: Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively.	High	**Indicators: Survival of fish species** Streamflow plays a critical role in shaping and maintaining habitats for aquatic species, particularly in the Skagit River, where Pacific salmon and trout are both culturally significant and legally protected. The availability of spawning and rearing habitats for these fish is heavily influenced by the river's flow patterns, which determine which areas of the watershed are accessible. Species like Chinook and coho salmon, steelhead, and bull trout—especially those that spawn in summer or rear as juveniles for extended periods in freshwater—are highly sensitive to low flow conditions. With the influx of flow from flooding, these species would be at risk of being displaced entirely or be unable to adapt to changing habitats; thus, not survive. = **High Magnitude**	High	Take Action
36	Fisheries-Wildfire	Medium	**Cascading effects:** Wildfires deposit logs and sediment into streams that can increase habitat quality for fisheries and other fauna. Largescale wildfire events deposit large amounts of sediment and detritus that can change hydrology and destroy habitat. Cascading impacts include algae blooms, reservoir impacts, reduced water quality, etc. that impact economy. **Probability:** Major fire events (20+ acres) occur every 5-10 years throughout the County. Specifically, major fire events occur every 40 years in the Chuckanut Mountains (source: 2020 CWPP). Warmer, wetter winters combined with warmer, drier summers and increased moisture stress are likely to cause increases in wintertime vegetation and larger summertime accumulations of woody and leafy debris on the forest floor, suggesting elevated risk of more frequent and large wildfires (URL 1; SITC, 2009; Littell et al., 2010). The average number of acres burned each year in Washington State (WA) has increased from 6,000 in the 1970s to about 30,000 in 2001 (URL 1) and is projected to increase further under climate change (SITC, 2009; Littell et al., 2010) (Lee et. al., 2011). **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline is 48 days of high fire danger (1971-2000), while historical baseline for wildfire likelihood was not recorded. Mid century is projected to be 11 median days of high fire danger, and 4% chance of increased wildfire likelihood. = **Medium Probability**	Low	**Indicators: Human activities impacted** Larger extents and more frequent wildfire events have cascading effects on watershed hydrology i.e., increased sedimentation, change in water chemistry and temperatures that reduce fish habitat. Headwater tributaries surrounded by high slope timber lands provide habitat for fish spawning, and for recreational activities. Fishing, water activities, and other activities are most impacted. Sedimentation transport to sea level basin that can also change water chemistry/temperatures and impact habitat quality. = **Low Magnitude**	Low	Accept Risk

37	Nature preserves-Drought (Ecosystems)	Low	**Livelihood:** Drought impacts on nature preserves include reduced recreation, changes to surrounding habitat and wildfire, and imbalances to the local ecosystem. **Probability:** Based on the 2014 Natural Hazard Mitigation Plan, there have been a number of drought episodes, including several that have lasted for more than a single season such as the dry periods between 1928-1932 and 1992-1994. Severe drought episodes occurred in 1977 and 2001. The 2001 event was the second-worse drought year in state-recorded history. Though Skagit County has experienced some periods of drought in the past, these events are typically low to moderate in severity and relatively short in duration. The agricultural and forestry industries usually experience the greatest impact from a drought event in Skagit County. In addition, according to the 2023 Skagit County Monitoring Program Water Year, there were abnormally dry to extreme drought conditions throughout most of the water year, with most severe drought levels occurring from August through September 2023. = **Low Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the steady decrease in percent change in total precipitation for July 15-September 15. Historical baseline is 3 inches of late summer precipitation. Mid century and end of century negative percentage changes are 10.7% and 11.9 percent, respectively.	Medium	**Indicators: Ecosystem Health** Nature preserves rely on water heavily for the wildlife and plants located in the area. Thus, wildlife population may become altered which may lead to vegetation overgrowth. Further, communities that often visit nature preserves may become less inclined due to failing ecosystem health. = **Medium Magnitude**	Low	**Accept Risk**
38	Nature preserves-Flooding & Reduced snowpack	High	**Livelihood:** Flooding can destroy nature preserves entirely (i.e., displace wildfire, erode soil, alter plant communities, and contaminate water sources. **Probability:** There are four types of flooding that may occur in Skagit County. 100-year floods are severe and have 1% chance of being equaled or exceeded in any given year. A 100-year flood can occur several times or never within a 100-year period. Phase 3 floods are more common and inundate low areas near the Skagit River which cover sections of roads and occur roughly every few years. Phase 3 floods generally cause minimal damage in the Skagit River Valley. Phase 2 floods inundate a wider area and may cause significant damage. In 2015, 2016, and 2018, Phase 2 flooding occurred and Skagit River reached heights above 32 feet on the flood gauge in Concrete. Phase 1 floods can cause catastrophic damage. The most recent Phase 1 flood occurred in November 2021 when the Skagit River reached a height of 38.93 feet on the flood gauge in Concrete, well above the Phase 1 criteria of 37 feet. The Skagit River has reached flood stage over 60 times in the past 100 years. = **High probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively.	High	**Indicators: Legacy** Many nature preserves in Skagit County were established well before the 2000s such as the Skagit County Parks and Recreation Department, Skagit River Bald Eagle Natural Area (SRBENA), Farmland Legacy Program, and Skagit Land Trust. These preserves are highly celebrated by communities in Skagit County; thus, flooding of these preserves which may completely destroy them may heavily impact the community's core. = **High Magnitude**	High	**Take Action**
39	Nature preserves - SLR	Medium	**Decreased user experience**: Coastal assets i.e., estuarine reserves, fir island are susceptible to flood risk due to increased sea levels by mid-century, requiring more closures and decreasing user experiences. **Probability:** SLR is a singular event where sea levels are projected to rise 0.8-1.0 feet by 2050 and 1.1-2.0 feet by 2100. Storm events, tectonic uplift or shifts, king tides, and extreme precipitation are projected to increase in intensity and frequency. **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline was not recorded. However, mid century and end of century is projected to be 0.7 feet and 2.1 feet, respectively. **= Medium probability**	High	**Indicators: Legacy** Many nature preserves in Skagit County were established well before the 2000s such as the Skagit County Parks and Recreation Department, Skagit River Bald Eagle Natural Area (SRBENA), Farmland Legacy Program, and Skagit Land Trust. These preserves are highly celebrated by communities in Skagit County; thus, flooding of these preserves which may completely destroy them may heavily impact the community's core. = **High Magnitude**	High	**Take Action**
40	Nature preserves-Wildfire	Medium	**User experience:** Increased wildfire likelihood increases wildfire events due to fuel loads, impacting recreational user experiences. More frequent restoration activities throughout County. Coastal assets are less affected by increased wildfire likelihood. **Probability:** Major fire events (20+ acres) occur every 5-10 years throughout the County. Specifically, major fire events occur every 40 years in the Chuckanut Mountains (source: 2020 CWPP). Warmer, wetter winters combined with warmer, drier summers and increased moisture stress are likely to cause increases in wintertime vegetation and larger summertime accumulations of woody and leafy debris on the forest floor, suggesting elevated risk of more frequent and large wildfires (URL 1; SITC, 2009; Littell et al., 2010). The average number of acres burned each year in Washington State (WA) has increased from 6,000 in the 1970s to about 30,000 in 2001 (URL 1) and is projected to increase further under climate change (SITC, 2009; Littell et al., 2010) (Lee et. al., 2011). **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline is 48 days of high fire danger (1971-2000), while historical baseline for wildfire likelihood was not recorded. Mid century is projected to be 11 median days of high fire danger, and 4% chance of increased wildfire likelihood. = **Medium Probability**	High	**Indicators: Legacy** Many nature preserves in Skagit County were established well before the 2000s such as the Skagit County Parks and Recreation Department, Skagit River Bald Eagle Natural Area (SRBENA), Farmland Legacy Program, and Skagit Land Trust. These preserves are highly celebrated by communities in Skagit County; thus, flooding of these preserves which may completely destroy them may heavily impact the community's core. **= High Magnitude**	High	**Take Action**

41	**Flood management infrastructure-Drought (*Emergency Management*)**	**Low**	**Compromised foundations:** Increased drought conditions can cause dike/levee soil foundations to contract and crack, compromising foundations that make them more susceptible to failure. **Probability:** Based on the 2014 Natural Hazard Mitigation Plan, there have been a number of drought episodes, including several that have lasted for more than a single season such as the dry periods between 1928-1932 and 1992-1994. Severe drought episodes occurred in 1977 and 2001. The 2001 event was the second-worse drought year in state-recorded history. Though Skagit County has experienced some periods of drought in the past, these events are typically low to moderate in severity and relatively short in duration. The agricultural and forestry industries usually experience the greatest impact from a drought event in Skagit County. In addition, according to the 2023 Skagit County Monitoring Program Water Year, there were abnormally dry to extreme drought conditions throughout most of the water year, with most severe drought levels occurring from August through September 2023. = **Low Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the steady decrease in percent change in total precipitation for July 15-September 15. Historical baseline is 3 inches of late summer precipitation. Mid century and end of century negative percentage changes are 10.7% and 11.9 percent, respectively.	**Low**	**Indicators: Functionality** Dikes and levees provide flood protection, where drought is not considered a significant threat that impedes the functionality of the asset. The magnitude of decreasing summer precipitation on the asset is little to none. = **Low Magnitude**	**Low**	**Accept Risk**
42	**Flood management infrastructure-Extreme precipitation & Flooding**	**High**	**Tidal flooding:** Flooding from SLR inundation and peak streamflow is anticipated to increase, and is exacerbated by extreme storm events. Localized flooding from high groundwater levels, poor drainage, and saltwater intrusion can also occur. Dikes and levees are at increased risk of de-stabilization and damage due to erosion **Probability:** There are four types of flooding that may occur in Skagit County. 100-year floods are severe and have 1% chance of being equaled or exceeded in any given year. A 100-year flood can occur several times or never within a 100-year period. Phase 3 floods are more common and inundate low areas near the Skagit River which cover sections of roads and occur roughly every few years. Phase 3 floods generally cause minimal damage in the Skagit River Valley. Phase 2 floods inundate a wider area and may cause significant damage. In 2015, 2016, and 2018, Phase 2 flooding occurred and Skagit River reached heights above 32 feet on the flood gauge in Concrete. Phase 1 floods can cause catastrophic damage. The most recent Phase 1 flood occurred in November 2021 when the Skagit River reached a height of 38.93 feet on the flood gauge in Concrete, well above the Phase 1 criteria of 37 feet. The Skagit River has reached flood stage over 60 times in the past 100 years. **= High probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively.	**High**	**Indicators: Infrastructure damages and costs** 1921 - Dike break just north of Great Northern Railway bridge between Mount Vernon and Burlington discharged 60,000 cfs of water in Samish River Delta. Major dike failures caused millions of dollars of damage throughout Fir Island in 1990. (Source: Flood book). Estimated value of buildings located in flood hazard zones per FEMA's 2017 risk map is $3.2 billion (17,736 buildings). Estimated dollar loss for buildings located in 2% annual-chance flood zones is around $82.7 million for unincorporated County. Number of infrastructure and dollar losses increase significantly with more extreme flood events i.e., 1% event (100 year), 0.2% event (500 year). = **High Magnitude**	**High**	**Take Action**
43	**Flood management infrastructure-Sea level rise**	**Medium**	**Tidal flooding**: Tidal flooding is anticipated to increase due to SLR, and is exacerbated by storm events and tectonic shifts. Dikes and levees are at increased risk of de-stabilization and damage due to erosion **Probability:** SLR is a singular event where sea levels are projected to rise 0.8-1.0 feet by 2050 and 1.1-2.0 feet by 2100. Storm events, tectonic uplift or shifts, king tides, and extreme precipitation are projected to increase in intensity and frequency. **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline was not recorded. However, mid century and end of century is projected to be 0.7 feet and 2.1 feet, respectively. **= Medium probability**	**High**	**Indicators: Infrastructure damages and costs** 1921 - Dike break just north of Great Northern Railway bridge between Mount Vernon and Burlington discharged 60,000 cfs of water in Samish River Delta. Major dike failures caused millions of dollars of damage throughout Fir Island in 1990. (Source: Flood book). Estimated value of buildings located in flood hazard zones per FEMA's 2017 risk map is $3.2 billion (17,736 buildings). Estimated dollar loss for buildings located in 2% annual-chance flood zones is around $82.7 million for unincorporated County. Number of infrastructure and dollar losses increase significantly with more extreme flood events i.e., 1% event (100 year), 0.2% event (500 year). = **High Magnitude**	**High**	**Take Action**
44	**Flood management infrastructure-Wildfire**	**Medium**	**Materials:** Levees/dikes that are in WUI-intermix and -interface zones have minimal direct impact from increased wildfire likelihood which is associated with dry vegetation/detritus, dry soil, humidity, slope/aspect, and other conditions. **Probability:** Major fire events (20+ acres) occur every 5-10 years throughout the County. Specifically, major fire events occur every 40 years in the Chuckanut Mountains (source: 2020 CWPP). Warmer, wetter winters combined with warmer, drier summers and increased moisture stress are likely to cause increases in wintertime vegetation and larger summertime accumulations of woody and leafy debris on the forest floor, suggesting elevated risk of more frequent and large wildfires (URL 1; SITC, 2009; Littell et al., 2010). The average number of acres burned each year in Washington State (WA) has increased from 6,000 in the 1970s to about 30,000 in 2001 (URL 1) and is projected to increase further under climate change (SITC, 2009; Littell et al., 2010) (Lee et. al., 2011). **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline is 48 days of high fire danger (1971-2000), while historical baseline for wildfire likelihood was not recorded. Mid century is projected to be 11 median days of high fire danger, and 4% chance of increased wildfire likelihood. = **Medium Probability**	**Low**	**Indicator: Materials** Asset is made of earthen materials located in basin floodplain zone. Asset is more likely to be compromised due to flooding, SLR, and drought events than wildfire. = **Low Magnitude**	**Low**	**Accept Risk**

45	**Fire stations-Drought (*Emergency Management*)**	**Low**	Burn regulations: Decreased summer time precipitation can increase the frequency of agricultural burns due to dry plant material/detritus that are managed by fire department. Probability: Based on the 2014 Natural Hazard Mitigation Plan, there have been a number of drought episodes, including several that have lasted for more than a single season such as the dry periods between 1928-1932 and 1992-1994. Severe drought episodes occurred in 1977 and 2001. The 2001 event was the second-worse drought year in state-recorded history. Though Skagit County has experienced some periods of drought in the past, these events are typically low to moderate in severity and relatively short in duration. The agricultural and forestry industries usually experience the greatest impact from a drought event in Skagit County. In addition, according to the 2023 Skagit County Monitoring Program Water Year, there were abnormally dry to extreme drought conditions throughout most of the water year, with most severe drought levels occurring from August through September 2023. = **Low Probability** Future Likelihood Indicator: Based on the CMRW tool under a high emissions scenario (RCP8.5), the steady decrease in percent change in total precipitation for July 15-September 15. Historical baseline is 3 inches of late summer precipitation. Mid century and end of century negative percentage changes are 10.7% and 11.9 percent, respectively.	**Low**	**Indicators: Value - dollar losses** Fire stations respond to fire emergencies and evacuation support, drought conditions may increase the need for emergency response services due to wildfires, agricultural burns, or unplanned urban burns that strain resources and personnel. = **Low Magnitude**	**Low**	**Accept Risk**
46	**Fire stations-Extreme precipitation & Flooding**	**High**	**Delay in emergency response services**: Assets along river floodplains and delta areas are anticipated to experience increased flooding from peak streamflows. Wintertime where storm events and extreme precipitation coincide will exacerbate flooding, delaying evacuation and emergency responses. **Probability:** There are four types of flooding that may occur in Skagit County. 100-year floods are severe and have 1% chance of being equaled or exceeded in any given year. A 100-year flood can occur several times or never within a 100-year period. Phase 3 floods are more common and inundate low areas near the Skagit River which cover sections of roads and occur roughly every few years. Phase 3 floods generally cause minimal damage in the Skagit River Valley. Phase 2 floods inundate a wider area and may cause significant damage. In 2015, 2016, and 2018, Phase 2 flooding occurred and Skagit River reached heights above 32 feet on the flood gauge in Concrete. Phase 1 floods can cause catastrophic damage. The most recent Phase 1 flood occurred in November 2021 when the Skagit River reached a height of 38.93 feet on the flood gauge in Concrete, well above the Phase 1 criteria of 37 feet. The Skagit River has reached flood stage over 60 times in the past 100 years. **= High probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively.	**High**	**Indicators: Value - dollar losses** Estimated value of buildings located in flood hazard zones per FEMA's 2017 risk map is $3.2 billion (17,736 buildings). Estimated dollar loss for buildings located in 2% annual-chance flood zones is around $82.7 million for unincorporated County. Number of infrastructure and dollar losses increase significantly with more extreme flood events i.e., 1% event (100 year), 0.2% event (500 year). = **High Magnitude**	**High**	**Take Action**
47	**Fire stations-Sea level rise**	**High**	**Delay in emergency response services**: Assets along river floodplains and delta areas are anticipated to experience increased flooding from peak streamflows. Wintertime where storm events and extreme precipitation coincide will exacerbate flooding, delaying evacuation and emergency responses. **Probability:** There are four types of flooding that may occur in Skagit County. 100-year floods are severe and have 1% chance of being equaled or exceeded in any given year. A 100-year flood can occur several times or never within a 100-year period. Phase 3 floods are more common and inundate low areas near the Skagit River which cover sections of roads and occur roughly every few years. Phase 3 floods generally cause minimal damage in the Skagit River Valley. Phase 2 floods inundate a wider area and may cause significant damage. In 2015, 2016, and 2018, Phase 2 flooding occurred and Skagit River reached heights above 32 feet on the flood gauge in Concrete. Phase 1 floods can cause catastrophic damage. The most recent Phase 1 flood occurred in November 2021 when the Skagit River reached a height of 38.93 feet on the flood gauge in Concrete, well above the Phase 1 criteria of 37 feet. The Skagit River has reached flood stage over 60 times in the past 100 years. **= High probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively.	**High**	**Indicators: Value - dollar losses** Estimated value of buildings located in flood hazard zones per FEMA's 2017 risk map is $3.2 billion (17,736 buildings). Estimated dollar loss for buildings located in 2% annual-chance flood zones is around $82.7 million for unincorporated County. Number of infrastructure and dollar losses increase significantly with more extreme flood events i.e., 1% event (100 year), 0.2% event (500 year). = **High Magnitude**	**High**	**Take Action**

48	Fire stations-Wildfire	Medium	**Available resources and personnel:** Increased wildfire likelihood and high fire danger days increase need for prescribed burns and fire suppression activities, straining resources and personnel that delay emergency response services. **Probability:** Major fire events (20+ acres) occur every 5-10 years throughout the County. Specifically, major fire events occur every 40 years in the Chuckanut Mountains (source: 2020 CWPP). Warmer, wetter winters combined with warmer, drier summers and increased moisture stress are likely to cause increases in wintertime vegetation and larger summertime accumulations of woody and leafy debris on the forest floor, suggesting elevated risk of more frequent and large wildfires (URL 1; SITC, 2009; Littell et al., 2010). The average number of acres burned each year in Washington State (WA) has increased from 6,000 in the 1970s to about 30,000 in 2001 (URL 1) and is projected to increase further under climate change (SITC, 2009; Littell et al., 2010) (Lee et. al., 2011). **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline is 48 days of high fire danger (1971-2000), while historical baseline for wildfire likelihood was not recorded. Mid century is projected to be 11 median days of high fire danger, and 4% chance of increased wildfire likelihood. **= Medium Probability**	Medium	**Indicators: Personnel** Direct magnitude impact on asset varies, where wildfire events are unpredictable. Fire stations respond to fire emergencies and evacuation support, increased wildfire likelihood and high fire danger days increase the need for education, prescribed burns that is labor intensive and costly. Increased emergency response services due to wildfires, agricultural burns, or unplanned urban burns that strain resources and personnel. **= Medium Magnitude**	Medium	Take Action
49	Roadways-Drought (Transportation)	Low	**Structural Integrity:** Drought may lead to roadways (dependent on their material, design age, and structure) may face cracking, buckling, and warping. **Probability:** Based on the 2014 Natural Hazard Mitigation Plan, there have been a number of drought episodes, including several that have lasted for more than a single season such as the dry periods between 1928-1932 and 1992-1994. Severe drought episodes occurred in 1977 and 2001. The 2001 event was the second-worse drought year in state-recorded history. Though Skagit County has experienced some periods of drought in the past, these events are typically low to moderate in severity and relatively short in duration. The agricultural and forestry industries usually experience the greatest impact from a drought event in Skagit County. In addition, according to the 2023 Skagit County Monitoring Program Water Year, there were abnormally dry to extreme drought conditions throughout most of the water year, with most severe drought levels occurring from August through September 2023. **= Low Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), there is a steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	Medium	**Indicators: Operations** Roadways that are structurally unsound would lead to travelers having unsafe routes. Thus, roadways that are impacted by drought leading to structural damage could halt the community's livelihood for undetermined periods of times until damages are repaired. = **Medium Magnitude**	Low	Accept Risk
50	Roadways-Extreme precipitation	Medium	**Operations:** Roadways may not be operable in terms of people not being able to safely travel across them due to extreme precipitation. Unusually heavy rainfall may also cause surface flooding in low lying areas where some roadways are located; thus operations may be halted for unknown periods of time. **Probability:** According to the 2023 Skagit County Monitoring Program Water Year, precipitation in Mount Vernon during the water year was only 76% of normal. From October 2022 to September 2023, Mount Vernon experienced about 24.1 inches of precipitation which is about 7.7 inches lower than the historical average of 31.8 inches. Severe storms generally occur in December and January (wettest months). Roadways are scattered all throughout Skagit County and may face impacts from extreme precipitation. Further, extreme precipitation events that affected Skagit County include November 1990, October 2003, December 2007, and November 2021. = **Medium Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the increase in heavy precipitation magnitude is projected to range from 8% for mid century to 21% for end of century. Historical baseline was not recorded.	Medium	**Indicators: Operations** Roadways that are experience extreme precipitation would lead to unsafe driving conditions. Extreme precipitation would lead to sheet flow in areas of roadways which further decrease safe conditions of driving. For instance, many vehicles may face hydroplaning and car accidents may increase significantly. = **Medium Magnitude**	Medium	Take Action

51	Roadways-Flooding & Sea level rise	High	**Operations:** Roadways may not be operable in terms of people not being able to safely travel across them due to flooding. Road closures may become more common as roadway travel would not be operable (safe) to drive on. Portions of Interstate 5, State Route 9, State Route 11, State Route 20, State Route 536 and possibly portions of State Route 530 would be inundated and impassable to traffic (HMP 2020) **Probability:** There are four types of flooding that may occur in Skagit County. 100-year floods are severe and have 1% chance of being equaled or exceeded in any given year. A 100-year flood can occur several times or never within a 100-year period. Phase 3 floods are more common and inundate low areas near the Skagit River which cover sections of roads and occur roughly every few years. Phase 3 floods generally cause minimal damage in the Skagit River Valley. Floods from the Skagit River can cause damage and close roads such as the I-5, State route 9, 20, and 536 as they all lie in the flood plain. Further, it is important to note that the Skagit River has reached flood stage over 60 times in the last 100 years. = **High Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively.	Medium	**Indicators: Cost** Roadways inundated by riverine flooding and/or SLR due to peak streamflows would lead to unsafe driving conditions. Wide range of population are impacted i.e., users livelihood, businesses, emergency response services, etc. Low income rural households are most impacted by road closures. Road improvements are costly; for example, Farm to Market Road intersection improvements cost $1.8 million in 2022. Road improvements are managed by County Public Works. = **Medium Magnitude**	High	Take Action
52	Roadways-Wildfire	Medium	**Road conditions:** Increased wildfire likelihood and high fire danger days require cleared roadways to respond to prescribed burns, wildfire events, and evacuation. **Probability**: Major fire events (20+ acres) occur every 5-10 years throughout the County. Specifically, major fire events occur every 40 years in the Chuckanut Mountains (source: 2020 CWPP). Warmer, wetter winters combined with warmer, drier summers and increased moisture stress are likely to cause increases in wintertime vegetation and larger summertime accumulations of woody and leafy debris on the forest floor, suggesting elevated risk of more frequent and large wildfires (URL 1; SITC, 2009; Littell et al., 2010). The average number of acres burned each year in Washington State (WA) has increased from 6,000 in the 1970s to about 30,000 in 2001 (URL 1) and is projected to increase further under climate change (SITC, 2009; Littell et al., 2010) (Lee et. al., 2011). **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline is 48 days of high fire danger (1971-2000), while historical baseline for wildfire likelihood was not recorded. Mid century is projected to be 11 median days of high fire danger, and 4% chance of increased wildfire likelihood. = **Medium Probability**	Medium	Roads become impassable due to flooding, downed trees, ice or snow, or a landslide following wildfire events. Power lines and utilities alongside roadways would also impact services to residents and critical facilities. Increase in voluntary power shutoffs and utilization of unblocked roadway to deliver emergency response services and evacuation. Magnitude increases in eastern County where rural residents live, identified as disadvantaged census tract. = **Medium Magnitude**	Medium	Take Action
53	Bridges-Extreme precipitation	Low	**Operations:** Bridges may not be operable in terms of people not being able to safely travel across them due to extreme precipitation. Unusually heavy rainfall may also cause surface flooding in low lying areas where some bridges are located; thus operations may be halted for unknown periods of time. **Probability:** According to the 2023 Skagit County Monitoring Program Water Year, precipitation in Mount Vernon during the water year was only 76% of normal. From October 2022 to September 2023, Mount Vernon experienced about 24.1 inches of precipitation which is about 7.7 inches lower than the historical average of 31.8 inches. As cited in the 2023 Bridge Report, the North Osterman Creek culvert failed due to storms and massive head cutting from the unpredictable migration of the Sauk River. Further, extreme precipitation events that affected Skagit County include November 1990, October 2003, December 2007, and November 2021. = **Low Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the increase in heavy precipitation magnitude is projected to range from 8% for mid century to 21% for end of century. Historical baseline was not recorded.	High	**Indicators: Ability to travel** Based on the 2022 Annual Bridge Report, Skagit County has 45 bridges that are at least 50 years. Of those 45 bridges, 8 are 70 years or older and 2 are over 80 years old, built in 1930. Annually, the County prepared a bridge report in compliance with WAC 135-20-060. From the 2023 Annual Bridge Report, Skagit County has 109 bridges in the National Bridge Inventory System plus 3 short span bridges that are routinely inspected. In addition, from the 2023 Annual Bridge Report, Skagit County has 5 structurally deficient bridges: - South Skagit Highway at Mill Creek with waterway and adequacy deficiency - Bay View Edison at Joe Leary with deck deficiency - F&S Grade Samish River with deck deficiency - Old Highway 99 at Thomas Creek with deck/substructure deficiency - Skagit River Marblemount with superstructure deficiency Thus, extreme precipitation may further damage these cited bridges and/or damage other ones. **= High Magnitude**	Medium	Take Action

54	Bridges-Flooding	Medium	**Operations:** Bridges may not be operable in terms of people not being able to safely travel across them due to flooding. Bridge closures may become more common as travel would not be operable (safe) to drive on. **Probability:** Based on anecdotal experience, Skagit Talk, three floods occurred in the year 1896. Specifically the flood that occurred on November 16, 1896 where one brick building was destroyed, several wooden structures were pulled from foundations, and several bridges were destroyed. Further in 1917, a large flood occurred in La Conner where a bridge was lost. Besides this damage, there were no other significant structural damages. = **Medium Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively.	High	**Indicators: Ability to travel** Based on the 2022 Annual Bridge Report, Skagit County has 45 bridges that are at least 50 years. Of those 45 bridges, 8 are 70 years or older and 2 are over 80 years old, built in 1930. Annually, the County prepared a bridge report in compliance with WAC 135-20-060. From the 2023 Annual Bridge Report, Skagit County has 109 bridges in the National Bridge Inventory System plus 3 short span bridges that are routinely inspected. In addition, from the 2023 Annual Bridge Report, Skagit County has 5 structurally deficient bridges: - South Skagit Highway at Mill Creek with waterway and adequacy deficiency - Bay View Edison at Joe Leary with deck deficiency - F&S Grade Samish River with deck deficiency - Old Highway 99 at Thomas Creek with deck/substructure deficiency - Skagit River Marblemount with superstructure deficiency Thus, flooding may further damage these cited bridges and/or damage other ones. = **High Magnitude**	High	Take Action
55	Railroad-Drought (Transportation)	Low	**Structural Integrity:** Drought may cause rail lines to buckle due to heat damage. Thus, potential derailments may occur and stability of surrounding soil would cause further damage. **Probability:** Based on the 2014 Natural Hazard Mitigation Plan, there have been a number of drought episodes, including several that have lasted for more than a single season such as the dry periods between 1928-1932 and 1992-1994. Severe drought episodes occurred in 1977 and 2001. The 2001 event was the second-worse drought year in state-recorded history. Though Skagit County has experienced some periods of drought in the past, these events are typically low to moderate in severity and relatively short in duration. The agricultural and forestry industries usually experience the greatest impact from a drought event in Skagit County. In addition, according to the 2023 Skagit County Monitoring Program Water Year, there were abnormally dry to extreme drought conditions throughout most of the water year, with most severe drought levels occurring from August through September 2023. = **Low Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), there is a steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	Low	**Indicators: Operations** **Based on the 2016 Skagit Council of Governments Rail Crossing Study, there are a total of 56 at-grade crossings in Skagit County along BNSF's North-South mainline, the Burlington-Anacortes Branch Line, and the Burlington-Sumas Branch Line were analyzed in this report. It was found that crossings occur on a variety of roadways, from relatively high traffic volume locations such as Kincaid Street in Downtown Mount Vernon and SR 538 (East College Way, Mount Vernon), to locations with lower traffic volumes such as Bow Hill Road north of Burlington. Concurrent with WSDOT in the 2014 Washington Department of Transportation, economic and demographic growth will likely increase rail demand in the future as rail is used for freight for global sourcing fluctuations, fuel costs, labor availability, and highway congestion. WSDOT estimates that the State's rail system will accommodate more than double the volume of cargo in 2040 when compared to 2010.** **Drought may impact the distribution of the gross freight tonnage as rail lines may buckle due to heat damage. However, extreme heat was not identified as a priority hazard for the County; thus, magnitude of drought impacts accompanied with heat damage would not be high. = Low Magnitude**	Low	Accept Risk
56	Railroad-Extreme precipitation	Low	**Operations:** Railroad operations may be impacted due to extreme precipitation. Unusually heavy rainfall may also cause surface flooding in low lying areas where some railways may be located; thus operations may be halted for unknown periods of time. **Probability:** According to the 2023 Skagit County Monitoring Program Water Year, precipitation in Mount Vernon during the water year was only 76% of normal. From October 2022 to September 2023, Mount Vernon experienced about 24.1 inches of precipitation which is about 7.7 inches lower than the historical average of 31.8 inches. Further, extreme precipitation events that affected Skagit County include November 1990, October 2003, and December 2007. **= Low Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the increase in heavy precipitation magnitude is projected to range from 8% for mid century to 21% for end of century. Historical baseline was not recorded.	High	**Indicators: Operations** Based on the 2016 Skagit Council of Governments Rail Crossing Study, there are a total of 56 at-grade crossings in Skagit County along BNSF's North-South mainline, the Burlington-Anacortes Branch Line, and the Burlington-Sumas Branch Line were analyzed in this report. It was found that crossings occur on a variety of roadways, from relatively high traffic volume locations such as Kincaid Street in Downtown Mount Vernon and SR 538 (East College Way, Mount Vernon), to locations with lower traffic volumes such as Bow Hill Road north of Burlington. Concurrent with WSDOT in the 2014 Washington Department of Transportation, economic and demographic growth will likely increase rail demand in the future as rail is used for freight for global sourcing fluctuations, fuel costs, labor availability, and highway congestion. WSDOT estimates that the State's rail system will accommodate more than double the volume of cargo in 2040 when compared to 2010. As Skagit County depends greatly on rail operations, extreme precipitation may inhabit safe operation conditions and cause severe accidents. Thus, operations may need to halt and delay of goods may become more common = **High Magnitude**	Medium	Take Action

57	Railroad-Flooding	Medium	**Operations:** Railroad operations may be impacted by flooding. Surface flooding in low lying areas where some railways may be located may be more heavily impacted; thus, operations may be halted for unknown periods of time. **Probability:** According to the 2023 Skagit County flood book, in 1892-1893, disastrous floods occurred washing up railroads in every direction; therefore, no trains ran on the Great Northern for 5 days. Similarly in 1894, railroads once again suffered due to flooding with numerous sections of track being washed out and ceasing operation for days. Based on anecdotal experience, Skagit Talk, three floods occurred in the year 1896. Six hundred feet of the Great Northern railroad track between Burlington and a river-crossing bride were washed out. Further in 1917, there was a large flood which caused damage to the Interurban Railroad tracks; consequently, service between Mount Vernon and Bellingham was out of service for at least a month while repairs were managed. = **Medium Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively.	High	**Indicators: Operations** Based on the 2016 Skagit Council of Governments Rail Crossing Study, there are a total of 56 at-grade crossings in Skagit County along BNSF's North-South mainline, the Burlington-Anacortes Branch Line, and the Burlington-Sumas Branch Line were analyzed in this report. It was found that crossings occur on a variety of roadways, from relatively high traffic volume locations such as Kincaid Street in Downtown Mount Vernon and SR 538 (East College Way, Mount Vernon), to locations with lower traffic volumes such as Bow Hill Road north of Burlington. Concurrent with WSDOT in the 2014 Washington Department of Transportation, economic and demographic growth will likely increase rail demand in the future as rail is used for freight for global sourcing fluctuations, fuel costs, labor availability, and highway congestion. WSDOT estimates that the State's rail system will accommodate more than double the volume of cargo in 2040 when compared to 2010. As Skagit County relies heavily on rail operations, flooding may inhabit safe operation conditions and cause severe accidents. Flooding may even leave railroad tracks flooding for days and repairs/drainage of water may take long periods of time. Thus, operations may need to halt and delay of goods may become more common = **High Magnitude**	High	Take Action
58	Railroad-Sea level rise	Medium	**Operations:** The BNSF railroad runs parallel to the coast, an R1 fright railway l from Burlington to Everett carries the highest volume of freight - Rising sea levels can result in soil liquefaction, uplifting, and subsidence in which railroad tracks are highly vulnerable. SLR may also cover railroad tracks entirely; thus, halting operations for days while water is pumped our or repairs take place. **Probability:** According to the 2023 Skagit County flood book, in 1895, salt water swept over the dikes at the mouth of the Skagit River covering the Swinomish and Samish flats and all fertile lowlands for many miles along the coast. The Great Northern track was swept out in several places by the high tide and no train reached Mount Vernon from the south for many days. The Seattle and Northern track at Whitney station were covered by three feet of salt water. In 1897, the coastline of the Great northern was once again overflowed and resulted in train delays. = **Medium Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline is not recorded. Mid century and end of century projected increases are 0.7 feet and 2.1 feet, respectively.	High	**Indicators: Cost to livelihood/jobs** "Road, railroad and pipeline transportation to the refineries would be in jeopardy forcing shutdowns for an industry employing more than 800 workers with annual payrolls exceeding $57 million and thousands of people would possibly be unable to commute from their homes to work". (source: 2020 HMP). Freight revenue will also decrease temporarily but can be significant depending on delay time. = **High Magnitude**	High	Take Action
59	Public transit-Drought (Transportation)	Low	**Structural Integrity:** Drought impacts to public transit may include warping and deterioration of road surfaces. **Probability:** Based on the 2014 Natural Hazard Mitigation Plan, there have been a number of drought episodes, including several that have lasted for more than a single season such as the dry periods between 1928-1932 and 1992-1994. Severe drought episodes occurred in 1977 and 2001. The 2001 event was the second-worse drought year in state-recorded history. Though Skagit County has experienced some periods of drought in the past, these events are typically low to moderate in severity and relatively short in duration. The agricultural and forestry industries usually experience the greatest impact from a drought event in Skagit County. In addition, according to the 2023 Skagit County Monitoring Program Water Year, there were abnormally dry to extreme drought conditions throughout most of the water year, with most severe drought levels occurring from August through September 2023. = **Low Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), there is a steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	Medium	**Indicators: Operations** Public transit that are structurally unsound would lead to travelers having unsafe routes. Thus, public transit areas that are impacted by drought leading to structural damage could halt the community's livelihood for undetermined periods of times until damages are repaired. Communities that heavily rely on public transit may face more significant impacts than other communities have multiple options of travel.= **Medium Magnitude**	Low	Accept Risk

60	Public transit-Extreme precipitation	Low	**Operations:** Public transit stations may not be operable in terms of drivers not being able to safely navigate to typical travel routes due to extreme precipitation. Unusually heavy rainfall may also cause surface flooding in low lying areas where some public transit stations may be located; thus operations may be halted for unknown periods of time. **Probability:** According to the 2023 Skagit County Monitoring Program Water Year, precipitation in Mount Vernon during the water year was only 76% of normal. From October 2022 to September 2023, Mount Vernon experienced about 24.1 inches of precipitation which is about 7.7 inches lower than the historical average of 31.8 inches. Public transit stations are located throughout Skagit County and impacts are dependent on location. Further, extreme precipitation events that affected Skagit County include November 1990, October 2003, December 2007, and November 2021. = **Low Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the increase in heavy precipitation magnitude is projected to range from 8% for mid century to 21% for end of century. Historical baseline was not recorded.	Medium	**Indicators: Operations** Public transit that experience extreme precipitation would lead to unsafe driving conditions. Extreme precipitation would lead to sheet flow in areas of roadways which further decrease safe conditions of driving for many public transit modes of travel. For instance, many public transit transportation may face hydroplaning and accidents may increase significantly. = **Medium Magnitude**	Low	**Accept Risk**
61	Public transit-Flooding	High	**Operations:** Public transit stations may not be operable in terms of drivers not being able to safely navigate to typical travel routes due to flooding. Surface flooding in low lying areas where some public transit stations may be located may be more heavily impacted; thus, operations may be halted for unknown periods of time. **Probability:** There are four types of flooding that may occur in Skagit County. 100-year floods are severe and have 1% chance of being equaled or exceeded in any given year. A 100-year flood can occur several times or never within a 100-year period. Phase 3 floods are more common and inundate low areas near the Skagit River which cover sections of roads and occur roughly every few years. Phase 3 floods generally cause minimal damage in the Skagit River Valley. Floods from the Skagit River can cause damage and close roads such as a portion of the I-5, State route 9, 20, and 536 as they all lie in the flood plain. Many public transit stations and routes utilize these routes. Further, it is important to note that the Skagit River has reached flood stage over 60 times in the last 100 years. = **High Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively.	Medium	**Indicators: Operations** Public transit that experience flooding would lead to unsafe driving conditions. Extreme precipitation would lead to sheet flow in areas of roadways which further decrease safe conditions of driving for many public transit modes of travel. For instance, many public transit transportation may face hydroplaning and accidents may increase significantly. Further, flooding may completely destroy some public transit stations and close roads that public transit transportation typically utilize. = **Medium Magnitude**	High	**Take Action**
62	Public transit-Sea level rise	Medium	**Operations:** Coastal transit routes are at increased risk of inundation from SLR and SLR-related hazards. Households who rely on public transit for work are most impacted. **Probability:** SLR is a singular event where sea levels are projected to rise 0.8-1.0 feet by 2050 and 1.1-2.0 feet by 2100. Storm events, tectonic uplift or shifts, king tides, and extreme precipitation are projected to increase in intensity and frequency. **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline is not recorded. Mid century and end of century projected increases are 0.7 feet and 2.1 feet, respectively. = **Medium Probability**	Medium	**Indicators: Access** Roads and facilities for public transit can be structurally compromised due to SLR hazards, leading to unsafe driving conditions and shutdown of services. SLR inundation can lead to permanent closure of route 615 which serves households in coastal unincorporated County (census tract 53057952100). The CT ranks highest for no access to private vehicles, making mobility and access to resources difficult if reliant on public transit. This census area comprises mainly of farmland, rural housing, and La Conner community. = **Medium Magnitude**	Medium	**Take Action**
63	Private septic tanks-Extreme precipitation (Waste Management)	Medium	**Maintenance:** Septic tanks are typically designed to handle extreme water loads; however, excessive extreme precipitation may overload systems and lead to waste overflow. **Probability:** Over 18,000 septic tanks are located in Skagit County and serve for water treatment. extreme precipitation events that affected Skagit County include November 1990, October 2003, December 2007, and November 2021. = **Medium Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline is not recorded. Mid century and end of century projected increases are 8% and 30%, respectively.	Low	**Indicators: Operations** There are over 18,000 septic tanks operating all over the county, these tanks are designed to hold up against large water volumes. In addition, the County has strict guidelines and precautions on how to combat septic tank problems in the case overflow or contamination occur = **Low Magnitude**	Low	**Accept Risk**

64	Private septic tanks-Flooding	Medium	**Operations:** Drain fields of septic tanks may become overall saturated; thus, preventing proper wastewater absorption and potentially filling the tank with water from rising groundwater. This would lead to sewage backup and potential contamination. **Probability:** Septic tanks normally do not flood under typical usage; however, it can become overwhelmed and "flood" due to heavy rainfall or flooding. There are four types of flooding that may occur in Skagit County. 100-year floods are severe and have 1% chance of being equaled or exceeded in any given year. A 100-year flood can occur several times or never within a 100-year period. Phase 3 floods are more common and inundate low areas near the Skagit River which cover sections of roads and occur roughly every few years. Phase 3 floods generally cause minimal damage in the Skagit River Valley. Phase 2 floods inundate a wider area and may cause significant damage. In 2015, 2016, and 2018, Phase 2 flooding occurred and Skagit River reached heights above 32 feet on the flood gauge in Concrete. Phase 1 floods can cause catastrophic damage. The most recent Phase 1 flood occurred in November 2021 when the Skagit River reached a height of 38.93 feet on the flood gauge in Concrete, well above the Phase 1 criteria of 37 feet. The Skagit River has reached flood stage over 60 times in the past 100 years. In addition, there are over 18,000 septic systems in Skagit County that clean and recycle sewage contaminated water into clean groundwater every day. = **Medium Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline is not recorded. Mid century and end of century projected increases are 28.5% and 14.5%, respectively.	Low	**Indicators: Operations** There are over 18,000 septic tanks operating all over the county, these tanks are designed to hold up against large water volumes. In addition, the County has strict guidelines and precautions on how to combat septic tank problems in the case overflow or contamination occur = **Low Magnitude**	Low	**Accept Risk**
65	Private septic tanks-Sea level Rise	Medium	**Water quality:** Assets are underground - SLR can raise groundwater levels which vary depending soil and bedrock conditions. Assets located in coastal zones are more exposed to increasing sea levels, contaminating water quality. **Probability:** SLR is a singular event where sea levels are projected to rise 0.8-1.0 feet by 2050 and 1.1-2.0 feet by 2100. Storm events, tectonic uplift or shifts, king tides, and extreme precipitation are projected to increase in intensity and frequency. **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline is not recorded. Mid century and end of century projected increases are 0.7 feet and 2.1 feet, respectively. = **Medium Probability**	Low	**Indicators: Operations** There are over 18,000 septic tanks operating all over the county, these tanks are designed to hold up against large water volumes. In addition, the County has strict guidelines and precautions on how to combat septic tank problems in the case overflow or contamination occur = **Low Magnitude**	Low	**Accept Risk**
66	Private septic tanks-Wildfire	Medium	**Materials:** Increased wildfire likelihood and high fire danger days can result in more frequent wildfire events - increased VOC contamination and destruction to plastic tanks and pipes. **Probability:** Major fire events (20+ acres) occur every 5-10 years throughout the County. Specifically, major fire events occur every 40 years in the Chuckanut Mountains (source: 2020 CWPP). Warmer, wetter winters combined with warmer, drier summers and increased moisture stress are likely to cause increases in wintertime vegetation and larger summertime accumulations of woody and leafy debris on the forest floor, suggesting elevated risk of more frequent and large wildfires (URL 1; SITC, 2009; Littell et al., 2010). The average number of acres burned each year in Washington State (WA) has increased from 6,000 in the 1970s to about 30,000 in 2001 (URL 1) and is projected to increase further under climate change (SITC, 2009; Littell et al., 2010) (Lee et. al., 2011). **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline is 48 days of high fire danger (1971-2000), while historical baseline for wildfire likelihood was not recorded. Mid century is projected to be 11 median days of high fire danger, and 4% chance of increased wildfire likelihood. = **Medium Probability**	Low	**Indicators: Operations** There are over 18,000 septic tanks operating all over the county, these tanks are designed to hold up against large water volumes. In addition, the County has strict guidelines and precautions on how to combat septic tank problems in the case overflow or contamination occur = **Low Magnitude**	Low	**Accept Risk**
67	Water treatment facility-Sea level rise	Low	**Costly repairs:** SLR can inundate below-ground pipeline infrastructure and above-ground reservoirs that contaminate water and cost millions in repairs. **Probability:** SLR is a singular event where sea levels are projected to rise 0.8-1.0 feet by 2050 and 1.1-2.0 feet by 2100. Storm events, tectonic uplift or shifts, king tides, and extreme precipitation are projected to increase in intensity and frequency. **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), there is a steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively. = **Low Probability**	Medium	**Indicators: Capital improvements** $89.7 million in project costs over the 5-year planning horizon and $154 million during the ten-year period are planned for capital improvement projects. Approximately $500,000 to $1,000,000 per year is set aside to address the replacement of these pipelines as well as gridding of the District's system. Funds would be re-routed if inundation from SLR and storms causes infrastructure break. Services to over 50,000 residents, dike districts, Samish farms, tribal governments, and other retail customers would be affected. = **Medium Magnitude**	Low	**Accept Risk**

68	Water treatment facility-Wildfire	Medium	**Increased Costs:** Increased wildfire likelihood and high fire danger days can result in more frequent wildfire events that increase maintenance needs, technological solutions to water treatment of wildfire-contaminated water is labor intensive and costly. **Probability**: Major fire events (20+ acres) occur every 5-10 years throughout the County. Specifically, major fire events occur every 40 years in the Chuckanut Mountains (source: 2020 CWPP). Warmer, wetter winters combined with warmer, drier summers and increased moisture stress are likely to cause increases in wintertime vegetation and larger summertime accumulations of woody and leafy debris on the forest floor, suggesting elevated risk of more frequent and large wildfires (URL 1; SITC, 2009; Littell et al., 2010). The average number of acres burned each year in Washington State (WA) has increased from 6,000 in the 1970s to about 30,000 in 2001 (URL 1) and is projected to increase further under climate change (SITC, 2009; Littell et al., 2010) (Lee et. al., 2011). **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline is 48 days of high fire danger (1971-2000), while historical baseline for wildfire likelihood was not recorded. Mid century is projected to be 11 median days of high fire danger, and 4% chance of increased wildfire likelihood. = **Medium Probability**	Medium	**Indicators: Capital improvements** $89.7 million in project costs over the 5-year planning horizon and $154 million during the ten-year period are planned for capital improvement projects. Approximately $500,000 to $1,000,000 per year is set aside to address the replacement of these pipelines as well as gridding of the District's system. Funds would be re-routed if wildfire events causes infrastructure break. Services to over 50,000 residents, dike districts, Samish farms, tribal governments, and other retail customers would be affected. = **Medium Magnitude**	Medium	**Take Action**
69	Reservoirs-Drought (Water Resources)	Medium	**Storage Capacity:** Drought would lead to a dramatic decrease in water levels due to reduced rainfall and snowmelt; thus storage capacity would decrease significantly. **Probability:** Based on the 2014 Natural Hazard Mitigation Plan, there have been a number of drought episodes, including several that have lasted for more than a single season such as the dry periods between 1928-1932 and 1992-1994. Severe drought episodes occurred in 1977 and 2001. The 2001 event was the second-worse drought year in state-recorded history. Though Skagit County has experienced some periods of drought in the past, these events are typically low to moderate in severity and relatively short in duration. The agricultural and forestry industries usually experience the greatest impact from a drought event in Skagit County. In addition, according to the 2023 Skagit County Monitoring Program Water Year, there were abnormally dry to extreme drought conditions throughout most of the water year, with most severe drought levels occurring from August through September 2023. However, prolonged drought events occurring frequently can significantly impact reservoir storage. Drought conditions is anticipated to occur 5% in the future. = **Medium Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), there is a steady increase in percent change in total annual precipitation. Historical baseline recorded to be 80 inches. Mid century and end of century projected to be 5.3% and 10%, respectively.	High	**Indicators: Reservoir Health** Drought may completely deplete a reservoir's water storage capacity. As the county relies heavily on the Judy Reservoir for a number of sectors such as agricultural, water/wastewater treatment, recreational, ecosystems, etc. Depletion of the Judy's reservoir water storage capacity could devastate many sectors and communities. = **High magnitude**	High	**Take Action**
70	Reservoirs-Reduced snowpack	High	**Storage Capacity:** Reduced snowpack would lead to reduced groundwater recharge which could drastically impact the storge capacity of reservoirs utilized in the County. **Probability:** Based on the 2014 Skagit County Natural Hazard Mitigation Plan, snowfall is seldom heavy and varies greatly from year to year. According to the 2023 Skagit County Monitoring Program Water Year, Skagit County had good snowpack at the end of winter; however, the snow melted quickly during a record-breaking warm May. Based on the 2023 Skagit River County Flood Book, snowmelt peak is expected during the spring or early summer due to the seasonable rise in temperatures in resultant melting of the accumulated snow pack. Skagit County's water supply is approximately 50-70% originated from melting snow in the Cascade Mountains. = **High Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), there is a steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	High	**Indicators: Reservoir Health** Reduced snowpack may completely deplete a reservoir's water storage capacity. As the county relies heavily on the Judy Reservoir for a number of sectors such as agricultural, water/wastewater treatment, recreational, ecosystems, etc. Depletion of the Judy's reservoir water storage capacity could devastate many sectors and communities. = **High magnitude**	High	**Take Action**
71	Reservoirs-Sea level rise	High	**Seawater intrusion:** Groundwater levels vary throughout Skagit county coast; saltwater intrusion levels vary and depends on soil conditions. Guemes Island already experiences seawater intrusion of sole source groundwater. WA Dept of Ecology is authorized to protect aquifers from saltwater intrusion/pollution. **Probability:** SLR is a singular event where sea levels are projected to rise 0.8-1.0 feet by 2050 and 1.1-2.0 feet by 2100. Storm events, tectonic uplift or shifts, king tides, and extreme precipitation are projected to increase in intensity and frequency. **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), there is a steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively. = **High Probability**	Medium	**Indicators: Urban water supply** Groundwater wells and surface water reservoirs are primary sources of potable water for the County. Per aquifer recharge map, potential saltwater intrusion to groundwater sources encompasses roughly 60 miles of coastline and affects dense population centers in La Conner, south Fidalgo island, Anacortes, Bay view, Samish island, and Blanchard ~ 33 well systems that impacts thousands of residents. Failure of groundwater wells in coastal zone would require Skagit PUD water supply mix to reconsider other sources. = **Medium Magnitude**	High	**Take Action**

72	Reservoirs-Wildfire	Medium	**Decreased Water quality:** Increased wildfire likelihood and high fire danger days can result in more frequent wildfire events that increase sedimentation in reservoirs, contaminating water supply due to elevated water temperatures i.e., algae blooms. **Probability:** Major fire events (20+ acres) occur every 5-10 years throughout the County. Specifically, major fire events occur every 40 years in the Chuckanut Mountains (source: 2020 CWPP). Warmer, wetter winters combined with warmer, drier summers and increased moisture stress are likely to cause increases in wintertime vegetation and larger summertime accumulations of woody and leafy debris on the forest floor, suggesting elevated risk of more frequent and large wildfires (URL 1; SITC, 2009; Littell et al., 2010). The average number of acres burned each year in Washington State (WA) has increased from 6,000 in the 1970s to about 30,000 in 2001 (URL 1) and is projected to increase further under climate change (SITC, 2009; Littell et al., 2010) (Lee et. al., 2011). **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline is 48 days of high fire danger (1971-2000), while historical baseline for wildfire likelihood was not recorded. Mid century is projected to be 11 median days of high fire danger, and 4% chance of increased wildfire likelihood. = **Medium Probability**	Low	**Indicators: Urban water supply** Groundwater wells and surface water reservoirs are primary sources of potable water for the County. Per aquifer recharge map, closed and low flow streams require a 0.5-mile non-development buffer. Group A wells (water system that serves 15 or more connections or 25 or more people for at least 60 days per year) include a buffer. Potential sedimentation from wildfire events for upper watershed tributaries i.e., Diobsud Creek, Grandy Creek, Jones Creek, Coal Creek, Hill Ditch, require additional maintenance services from water districts, labor intensive. = **Low Magnitude**	Low	Accept Risk
73	Schools-Extreme precipitation	Medium	**Operations:** Increased extreme precipitation may lead to school closures due to safety reasons that impacts educational outcomes and economic potential as students cannot access facilities. **Probability:** Schools are located all throughout Skagit County with some located near coastal areas and/or water bodies. According to the 2014 Skagit County Natural Hazard Mitigation Plan, generally Central Skagit county experience a range of 3 to more than 10 inches of rain. Areas in Central County are seen to experience more than 10 inches of rain and areas radially around Central County decrease to range in 4-7 inches of precipitation intensity. Eastern County generally ranges from 5-7 inches of precipitation intensity to some small areas nearing 8-10 inches of precipitation intensity. Western County generally showcases lower precipitation intensity ranging from less than 3 inches to highs of 5 inches. = **Medium Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), there is a increase in heavy precipitation magnitude from 8% for mid century to 21% for end of century. Historical baseline was not recorded.	Low	**Indicators: Location** School district records show that schools in incorporated areas have resulted in missed school days due to severe weather- no school days have been missed in unincorporated Skagit County due to extreme precipitation from severe weather (2014 NHMP). = **Low Magnitude**	Low	Accept Risk
74	Schools-Flooding	Low	**Limited flood record:** Asset is not located within FEMA floodplain zone as identified in FIRM panel maps. But unique events can occur and risk increases due to increased peak streamflows and precipitation. This impacts educational outcomes and economic potential as students cannot access facilities. **= Low Probability** **Probability:** There are four types of flooding that may occur in Skagit County. 100-year floods are severe and have 1% chance of being equaled or exceeded in any given year. A 100-year flood can occur several times or never within a 100-year period. Phase 3 floods are more common and inundate low areas near the Skagit River which cover sections of roads and occur roughly every few years. Phase 3 floods generally cause minimal damage in the Skagit River Valley. **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline for percentage of stream lengths in Skagit County in annual maximum streamflow for 10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively.	Low	**Indicators: Location** Historic records show that school districts have resulted in missed school days due to severe weather- no school days have been missed in unincorporated Skagit County due to flooding (2014 NHMP). Although some schools are located in 500-year FEMA flood zones, none are in 100-year FEMA flood zones. Siting of asset in urban centers has little exposure and magnitude of hazard on asset. = **Low Magnitude**	Low	Accept Risk
75	Schools-Reduced snowpack	Low	**No record:** Decrease in snowpack can decrease peak streamflow at months otherwise expected. Asset is not located within FEMA flood zone. **Probability:** Based on the 2014 Skagit County Natural Hazard Mitigation Plan, snowfall is seldom heavy and varies greatly from year to year. According to the 2023 Skagit County Monitoring Program Water Year, Skagit County had good snowpack at the end of winter; however, the snow melted quickly during a record-breaking warm May. Based on the 2023 Skagit River County Flood Book, snowmelt peak is expected during the spring or early summer due to the seasonable rise in temperatures in resultant melting of the accumulated snow pack. Skagit County's water supply is approximately 50-70% originated from melting snow in the Cascade Mountains. **= Low Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), there is a steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	Low	**Indicators: Limited data** Records on impacts of reduced snowpack on schools is limited. Lack of records and siting of asset in urban centers has little exposure and magnitude of hazard on asset. = **Low Magnitude**	Low	Accept Risk

76	Schools-Sea level rise	Low	**Enrollment:** SLR inundation impacts student housing in coastal zone that may reduce enrollment and learning experiences. Asset provides staging area, personnel, and resources for emergency staging and response services. Historic records of asset impacts from SLR is none. **Probability:** SLR is a singular event where sea levels are projected to rise 0.8-1.0 feet by 2050 and 1.1-2.0 feet by 2100. Storm events, tectonic uplift or shifts, king tides, and extreme precipitation are projected to increase in intensity and frequency. = **Low Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline was not recorded. Mid century and end of century projected to be 0.7 feet and 2.1 feet, respectively.	Low	**Indicators: Limited data** SLR inundation and impacts to schools as emergency response centers is very limited. Lack of records and siting of asset in urban centers has little exposure and magnitude of hazard on asset. = **Low Magnitude**	Low	**Accept Risk**
77	Schools-Wildfire	Medium	**Community asset:** Assets are temporary evacuation shelters for rural communities affected by wildfire events and smoke. **Probability**: Major fire events (20+ acres) occur every 5-10 years throughout the County. Specifically, major fire events occur every 40 years in the Chuckanut Mountains (source: 2020 CWPP). Warmer, wetter winters combined with warmer, drier summers and increased moisture stress are likely to cause increases in wintertime vegetation and larger summertime accumulations of woody and leafy debris on the forest floor, suggesting elevated risk of more frequent and large wildfires (URL 1; SITC, 2009; Littell et al., 2010). The average number of acres burned each year in Washington State (WA) has increased from 6,000 in the 1970s to about 30,000 in 2001 (URL 1) and is projected to increase further under climate change (SITC, 2009; Littell et al., 2010) (Lee et. al., 2011). **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline is 48 days of high fire danger (1971-2000), while historical baseline for wildfire likelihood was not recorded. Mid century is projected to be 11 median days of high fire danger, and 4% chance of increased wildfire likelihood. = **Medium Probability**	Low	**Indicators: Limited data** Wildfire likelihood impacts on schools is limited. Lack of records regarding direct wildfire impacts. Assets provide educational opportunities for wildfire mitigation for local residents and students. = **Low Magnitude**	Low	**Accept Risk**
78	Radio towers-Extreme precipitation	Medium	**Operations / service delays:** Radio towers and fiber optic cables are usually located throughout the County. Towers are typically located in remote hillside areas. **Probability:** Due to confidential information, radio tower locations are not disclosed. Thus, according to the 2014 Skagit County Natural Hazard Mitigation Plan, generally Central Skagit county experience a range of 3 to more than 10 inches of rain. Areas in Central County are seen to experience more than 10 inches of rain and areas radially around Central County decrease to range in 4-7 inches of precipitation intensity. Eastern County generally ranges from 5-7 inches of precipitation intensity to some small areas nearing 8-10 inches of precipitation intensity. Western County generally showcases lower precipitation intensity ranging from less than 3 inches to highs of 5 inches. = **Medium Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), there is a increase in heavy precipitation magnitude from 8% for mid century to 21% for end of century. Historical baseline was not recorded.	High	**Indicators: Private ownership responsibilities** Current investments $750,000 in fiber optic improvements throughout the County primarily occurring in urban centers - Anacortes, Mt. Vernon, Burlington, and the airport. Rural areas of more sparse development is not justifiable in regards to profitability. Infrastructure information is privileged, other groups i.e., telecom consortium (TMC), County, Skagit PUD, and Port district would need to contract with private owners using funds, political will, and technical resources to provide a unified approach to public fiber optic broadband network (source: 2004, TMC), including response to impacts from extreme precipitation hazards. Private owners are responsible for repairing assets, depending on economic returns. = **High Magnitude**	High	**Take Action**
79	Radio towers-Flooding	Low	**Corrosion:** Increased peak streamflows and extreme precip can flood fiber optic cables, towers, and other infrastructure that corrode copper and precious metal wirings. Provision of communication and wireless services to residents would be limited. Limited historic records of flood impacts to asset exists. **= Low Probability** **Probability:** There are four types of flooding that may occur in Skagit County. 100-year floods are severe and have 1% chance of being equaled or exceeded in any given year. A 100-year flood can occur several times or never within a 100-year period. Phase 3 floods are more common and inundate low areas near the Skagit River which cover sections of roads and occur roughly every few years. Phase 3 floods generally cause minimal damage in the Skagit River Valley. **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline for percentage of stream lengths in Skagit County in annual maximum streamflow for 10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively.	High	**Indicators: Private ownership responsibilities** Current investments $750,000 in fiber optic improvements throughout the County primarily occurring in urban centers - Anacortes, Mt. Vernon, Burlington, and the airport. Rural areas of more sparse development is not justifiable in regards to profitability. Infrastructure information is privileged, other groups i.e., telecom consortium (TMC), County, Skagit PUD, and Port district would need to contract with private owners using funds, political will, and technical resources to provide a unified approach to public fiber optic broadband network (source: 2004, TMC), including response to impacts from flood hazards. Private owners are responsible for repairing assets, depending on economic returns. = **High Magnitude**	Medium	**Take Action**

80	Radio/Cell towers-Sea level rise	Low	**Corrosion:** SLR inundation of fiber optic cables, towers, and other infrastructure can corrode copper and precious metal wirings that provide communication and wireless services to residents. Limited historic records of SLR impacts to asset exists. **Probability:** SLR is a singular event where sea levels are projected to rise 0.8-1.0 feet by 2050 and 1.1-2.0 feet by 2100. Storm events, tectonic uplift or shifts, king tides, and extreme precipitation are projected to increase in intensity and frequency. = **Low Probability** **Future Likelihood Indicator:** Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline was not recorded. Mid century and end of century projected to be 0.7 feet and 2.1 feet, respectively.	High	**Indicators: Private ownership responsibilities** Current investments $750,000 in fiber optic improvements throughout the County primarily occurring in urban centers - Anacortes, Mt. Vernon, Burlington, and the airport. Rural areas of more sparse development is not justifiable in regards to profitability. Infrastructure information is privileged, other groups i.e., telecom consortium (TMC), County, Skagit PUD, and Port district would need to contract with private owners using funds, political will, and technical resources to provide a unified approach to public fiber optic broadband network (source: 2004, TMC), including response to impacts from SLR hazards. Private owners are responsible for repairing assets, depending on economic returns. = **High Magnitude**	Medium	Take Action
81	Radio/cell towers-Wildfire	Medium	**Location:** Assets are typically located on high elevation mountainous areas, WUI-interface zones and are exposed to increased wildfire likelihood and high fire danger days. **Probability**: Major fire events (20+ acres) occur every 5-10 years throughout the County. Specifically, major fire events occur every 40 years in the Chuckanut Mountains (source: 2020 CWPP). Warmer, wetter winters combined with warmer, drier summers and increased moisture stress are likely to cause increases in wintertime vegetation and larger summertime accumulations of woody and leafy debris on the forest floor, suggesting elevated risk of more frequent and large wildfires (URL 1; SITC, 2009; Littell et al., 2010). The average number of acres burned each year in Washington State (WA) has increased from 6,000 in the 1970s to about 30,000 in 2001 (URL 1) and is projected to increase further under climate change (SITC, 2009; Littell et al., 2010) (Lee et. al., 2011). **Future Likelihood Indicator**: Based on the CMRW tool under a high emissions scenario (RCP8.5), the historical baseline is 48 days of high fire danger (1971-2000), while historical baseline for wildfire likelihood was not recorded. Mid century is projected to be 11 median days of high fire danger, and 4% chance of increased wildfire likelihood. = **Medium Probability**	High	**Indicators: Private ownership responsibilities** Current investments $750,000 in fiber optic improvements throughout the County primarily occurring in urban centers - Anacortes, Mt. Vernon, Burlington, and the airport. Rural areas of more sparse development is not justifiable in regards to profitability. Infrastructure information is privileged, other groups i.e., telecom consortium (TMC), County, Skagit PUD, and Port district would need to contract with private owners using funds, political will, and technical resources to provide a unified approach to public fiber optic broadband network (source: 2004, TMC), including response to impacts from wildfire hazards. Private owners are responsible for repairing assets, depending on economic returns. = **High Magnitude**	High	Take Action

Appendix B: Sources and References

Topic/Title	Year Published	Publisher/Author	Access Link	
Community Characteristics/Environmental Justice				
White House Council on Environmental Quality's Climate & Economic Justice Screening Tool	2022	US Council on Environmental Quality	https://fortress.wa.gov/doh/wtnibl/WTNIBL/	
iMap Skagit County Comprehensive Mapping Tool		Skagit County	https://www.skagitcounty.net/Maps/iMap/?mapid=95bc6f46f03248749dfa564d137f2cfb	
Skagit County Chart Comparisons		Eastern WA University; Skagit County	https://skagitcountytrends.org/compare.cfm	
Skagit County, WA Extreme Heat Map and Heat Wave Forecast | First Street		First Street Tech	https://firststreet.org/county/skagit-county-washington/53057_fsid/heat	
Economy				
Skagit County Economic Recovery Plan	2022	Economic Development Alliance of Skagit County	https://www.skagit.org/about-edasc/strategic-plan-and-annual-reports/p/item/15596/skagit-county-economic-recovery-plan	
Budget 2025	2024	Skagit County	https://www.skagitcounty.net/Departments/BudgetFinance/2025Budget.htm	
Unified Planning work program	2024	Skagit Council of Governments	https://www.scog.net/UPWP/2025-UPWP-Amended.pdf	
Sea Level Rise				
Sea level rise viewer	2023	NOAA	https://coast.noaa.gov/slr/#/layer/slr/1/-13628327.656239381/6183125.225599197/14/satellite/none/0.8/2050/interHigh/midAccretion	
Salt water intrusion of aquifers		Department of Ecology	https://ecology.wa.gov/water-shorelines/water-supply/water-rights/seawater-intrusion	
Fisheries				
Beamer, E., McBride, A., Greene, C., Henderson, R., Hood, G., Wolf, K., Skagit River System Cooperative, NOAA Fisheries, & USGS Western Fisheries Research Center. (2005). Delta and nearshore restoration for the recovery of wild Skagit river chinook salmon: linking estuary restoration to wild chinook salmon populations.			https://skagitcoop.org/wp-content/uploads/Appendix-D-Estuary1.pdf	
Social and Ecological Impacts of Fire to Coastal Fisheries...	2023	Vol 15, Issue 3	https://afspubs.onlinelibrary.wiley.com/doi/10.1002/mcf2.10240	
Adaptation to Wildfire: A fish story		Kirkland et. al., 2017-USDA	https://www.fs.usda.gov/pnw/sciencef/scifi198.pdf	
Chapter 7 Ecosystems, Climate Change (Envision skagit)		Skagit County	https://www.skagitcounty.net/EnvisionSkagit/Documents/ClimateChange/ch7_ecosystems.pdf	
Wildfire				
WA State's Wildland Urban Interface (WUI)		WA State Building Code Council	https://wadnr.maps.arcgis.com/apps/View/index.html?appid=21683af70ece4bd495c319915f7a9232	
Wildland Urban Interface Code Resources	2024	WA State Building Code Council	https://sbcc.wa.gov/state-codes-regulations-guidelines/state-building-code/wildland-urban-interface-code-resources	
Water Resources				
Skagit Water Supply and Demand Synthesis	2021	Water Research center	https://wsuniv.maps.arcgis.com/apps/MapSeries/index.html?appid=1ff96129ebf04d728c56d35c0b04efc5	
Skagit Water Plan 2021 Limtied Update	2022	Skagit PUD	https://www.skagitpud.org/home/showpublisheddocument/2722/638435948696030000	
EIM Groundwater Map Search		Dept of Ecology	https://apps.ecology.wa.gov/eim/search/Map/Map.aspx?MapType=Groundwater&MapLocationExtent=-13873343.3370332%2C5711716.75429741%2C-13028904.807647%2C6275212.03415398&HasGroundwaterData=True	
Skagit Ground Water Model - Hydrographs: Wells in Skagit River Delta	1993-2007	US Geologic Service	https://wa.water.usgs.gov/projects/skagit/hydrographs.htm	

Addressing VOC Contamination of Drinking Water Systems	2021	EPA	https://www.epa.gov/system/files/documents/2021-09/addressing-contamination-of-drinking-water-distribution-systems-from-volatile-organic-compounds-after-wildfires_508.pdf	
Roads/Transportation				
Annual Report	2022	Skagit County Public works	https://www.skagitcounty.net/PublicWorks/Documents/2022%20Public%20Works%20Annual%20Report.pdf?utm_medium=email&utm_source=govdelivery	
Class 1 Annual Railroad Report	2022	BNSF Railway Company	https://www.bnsf.com/about-bnsf/financial-information/pdf/22R1.pdf	
Transit Development Plan 2024-2029	2023	Skagit Transit	https://www.skagittransit.org/assets/1/7/2024-2029_TDP_-_FINAL1.pdf	
Regional Transportation Plan		Skagit Council of Governments	https://www.scog.net/transportation-plans/regional-transportation-plan/	
Flood Control				
Dike District Assessment Areas Map	2022	Skagit County GIS	https://www.skagitcounty.net/GIS/Documents/Drainage/dike.pdf	
FEMA Flood map service center	2025	Homeland Security	https://msc.fema.gov/portal/search	
Risk Map - Increasing Resilience Together map	2025	Homeland Security	https://experience.arcgis.com/experience/e8456664263d4cbbb0c6a306c016f437	
FEMA Q3 100 year floodplain map exhibit	2017	County	https://skagitcounty.net/GIS/Documents/Flood/FEMA%20Q3%20100%20Year%20Floodplain%20Map.pdf	
Flood Hazard Maps	2025	Dept. of Ecology	https://apps.ecology.wa.gov/coastalatlas/tools/Flood.aspx	
USGS 12200500 SKAGIT RIVER NEAR MOUNT VERNON, WA Gauge Information	2025	US Geological Service	https://waterdata.usgs.gov/nwis/inventory?site_no=12200500	
Discharge Information by Gauge Site, Skagit County	2025	US Geological Service	https://dashboard.waterdata.usgs.gov/app/nwd/en/	
Energy/Utilities/Telecommunications				
State Broadband Office 2020 Report- Bienniel Report per RCW 43.330.538	2021	Dept. of Commerce	https://www.commerce.wa.gov/wp-content/uploads/2021/04/032921-2020-WA-State-Broadband-Report-FINAL.pdf	
Report: Economic Development and County-Wide Broadband Fiber	2004	County	https://www.skagitcounty.net/BudgetFinance/Documents/Fiber/TMC%20Report%20for%20Skagit%20County%20Fiber%202004.pdf	
Community Profile for Skagit County	2019	Puget Sound Energy	https://www.pse.com/-/media/PDFs/2019_Skagit_County_Profile.pdf	
Electricity Supply	2024	Puget Sound Energy	https://www.pse.com/en/pages/energy-supply/electric-supply	
Pipeline Operators by County	2024	WA Utilities and Transportation Commission	https://www.utc.wa.gov/pipeline-operators-county	
Extreme Weather and Climate Vulnerabilities of the Electric Grid: A Summary of Environmental Sensitivity Quantification Methods	2019	US Department of Energy	https://www.energy.gov/sites/prod/files/2019/09/f67/Oak%20Ridge%20National%20Laboratory%20EIS%20Response.pdf	
Extreme heat, hurricanes, wildfires: How summer's extremes disrupt the power grid	2024	Pacific Northwest National Laboratory	https://www.pnnl.gov/news-media/extreme-heat-hurricanes-wildfires-how-summers-extremes-disrupt-power-grid#:~:text=Heatwaves%3A%20Less%20efficient%20power%20flow%2C%20more%20power%20demand&text=Any%20power%20plants%20that%20rely,so%20does%20the%20water%20temperature.&text=Even%20solar%20panels%20are%20less,an%20electrical%20engineer%20at%20PNNL	
Integrated resources plan	2021, 2023	Puget Sound Energy	https://www.pse.com/en/IRP/Past-IRPs/2023-IRP	
Biennial Conservation Plan 2024-2025 plan	2023	Cascade Natural Gas Corporation	https://www.cngc.com/wp-content/uploads/PDFs/Conservation/plans_and_reports/2024/230937-CNGC-BCP-2024-2025-Plan-11-15-2023.pdf	
2023 Electric Progress Report	2023	Puget Sound Energy	https://www.pse.com/-/media/Media/PERs/IRP/2023/electric/chapters/00_EPR23_ChapterBook_Final.pdf	
US Energy Sector Vulnerabilities to Climate Change and Extreme Weather	2013	US Department of Energy	https://www.energy.gov/sites/prod/files/2013/07/f2/20130716-Energy%20Sector%20Vulnerabilities%20Report.pdf	
Utility Policy Update	2000	County Public Works	https://skagitcountywa.gov/PublicWorksDevelopmentReview/Documents/Skagit%20County%20Utility%20Policy%20Final.pdf	
Reduced snowpack				

Brangers, I., Marshall, H.-P., De Lannoy, G., Dunmire, D., Mätzler, C., and Lievens, H.: Tower-based C-band radar measurements of an alpine snowpack, The Cryosphere, 18, 3177–3193, https://doi.org/10.5194/tc-18-3177-2024, 2024.			https://doi.org/10.5194/tc-18-3177-2024	
Drought Conditions for Skagit County	2024	NIDIS, NOAA	https://www.drought.gov/states/washington/county/Skagit	
Forestry				
Forest Statistics for Skagit County		WASHINGTON FOREST PROTECTION ASSOCIATION	https://www.wfpa.org/climate-change-solutions/forest-statistics/#/skagit	
Milled Log prices	2024	Department of Natural Resources	https://www.dnr.wa.gov/publications/psl_ts_2410_logprices.pdf	
Tree Seedzones by tree species	2024	WA Association of Conservation Districts	https://wacds.maps.arcgis.com/apps/webappviewer/index.html?id=cff1e4325bf14e2986707f335fd14627	
Skagit County Q3 Income Report - Timber	2024	Dept of Natural Resources	https://www.dnr.wa.gov/publications/fm_skagit_co_0324.pdf	
Table 1 - 10 year revenue history	2024	Dept of Natural Resources	https://www.dnr.wa.gov/publications/fm_county_income_table.pdf	
Skagit County Economic Profile	2024	Western Wa University	https://cbe.wwu.edu/sites/cbe.wwu.edu/files/2024-09/2024%20Skagit%20County%20Profile.pdf	

Kimley»Horn

MEMORANDUM

January 31, 2025

To: Robby Eckroth, Senior Planner
Tara Satushek, Senior Planner
Skagit County, Washington

From: Heidi Rous Climate Director, Kimley-Horn

RE: SUMMARY OF CLIMATE HAZARDS AND POLICY GAPS & OPPORTUNITIES, CLIMATE ELEMENT AND RESILIENCY SUB-ELEMENT 2025 COMP PLAN UPDATE, SKAGIT COUNTY

Purpose

This memorandum summarizes potential climate impacts to Skagit County assets and potential policy opportunities to address climate impacts. The memorandum further informs the new Climate Element and Resiliency Sub-Element, consistent with House Bill 1181 ("HB 1181") and Washington State's Growth Management Act ("GMA"). A memorandum summarizing climate vulnerability and risks of identified assets will be provided separately. This memorandum and the memorandum summarizing climate vulnerability and risk of identified assets work cohesively to inform potential priority climate risks to the identified critical assets of the County. Under HB 1181 and the GMA (RCW 36.70A.070(9)) for Skagit County, a resiliency sub element must, among other things, equitably enhance resiliency to, and avoid or substantially reduce the adverse impacts of, climate change in human communities and ecological systems through goals, policies, and programs consistent with the best available science and scientifically credible climate projections and impact scenarios RCW 36.70A.070(9)(e)(i).

Scope

Critical infrastructure located within the County are identified and assessed for exposure to climate hazard scenarios (see "Analysis" section below). Assets identified are located within Skagit County and are either owned and operated by the County, quasi-public agencies, or private entities. Assets include administrative buildings, transportation infrastructure and facilities, natural preserves, historical buildings, radio communication, and emergency management facilities that are owned and managed by the County. Other critical facilities operating under a special purpose district, public utility district, and private entities were assessed including educational institutions, water, sewer, and energy facilities. Identifying local assets owned or managed by non-County entities provides an opportunity to coordinate with responsible agencies and protect critical facilities and communities against climate hazards. Other assets may include community groups, places, and services which will be identified through community stakeholder interviews in mid-June of this year. Other assets identified by stakeholders will be updated in the workbook and incorporated into Climate Element goals and policies.

Methodology

Under the Washington State Department of Commerce's Intermediate Planning Guidance document[1], Section 3: Resilience Sub-element provides step-by-step guidance for developing a new climate and resiliency element, as shown below:

1. Explore Climate Impacts
2. Audit Plan and Policies
3. Assess Vulnerability and Risk
4. Pursue Pathways
    a. Select and/or adapt existing goals and policies
    b. Develop new goals and policies
    c. Update and adopt hazard mitigation plan
5. Integrate Goals and Policies

Following the guidance document, the Climate Element Workbook was utilized (See **Appendix A: Skagit County Climate Element Workbook**). The intermediary tasks within Steps 1-5 are included below and are further detailed in the Analysis section.

1. Identifying and organizing County and community assets under specific sectors;
2. Identifying potential climate hazards per sector;
3. Pairing assets and hazards;
4. Describing potential climate impacts, asset exposure, non-climate stressors, and climate impact consequences of each asset-hazard pair;
5. Identifying priority climate hazards affecting the County; and
6. Reviewing existing plans for climate gaps and opportunities.

The Climate & Resilience Element is required to have one (1) goal and supportive policy for each climate-exacerbated hazard which is relevant to the County, as required by FEMA and HB 1181. Recommendations include new measures that enhances beneficial opportunities among the eleven sectors which are not typically included in a FEMA-approved hazard mitigation plan.

Analysis

Identify Community Assets

Over 80 County assets were identified, including administrative and civic buildings, parks, recreation facilities, transportation infrastructure and facilities, farms, natural preserves, solid waste facilities, water distribution infrastructure, radio communication infrastructure, water wells and reservoirs, and other critical facilities co-managed with special districts i.e., fire stations, hydroelectrical dams, telecommunication facilities, etc. Many of these assets are located sparsely throughout the County with some having distinct boundaries. For instance, the unincorporated County includes four neighborhoods: Neighborhood #1 (Fidalgo), Neighborhood #2 (Lower Elevation), Neighborhood #3 (Higher Elevation), Neighborhood #4 (Wildlands)[2]. The Fidalgo includes all portions of

[1] Washington State Department of Commerce, *Intermediate Planning Guidance,* https://deptofcommerce.app.box.com/s/fpg3h0lbwln2ctqjg7jg802h54ie19jx, accessed January 2025

[2] Neighborhoods were identified by grouping common characteristics of natural hazard exposure to residential areas together. This was done during the Jurisdiction-Specific Vulnerability Assessment (Mitigation Goals and Strategies) process of the Hazard Mitigation Plan in order to streamline analyses due to the large extent of the County. These are not officially designated districts and are identified for

unincorporated County lying westerly of the Swinomish Channel including Fidalgo Island, Guemes Island, Cypress Island, and Sinclair Island. The Lower Elevation includes all portions of the unincorporated County below 500 feet in elevation and lying westerly of Range 7 East, Willamette Meridian, and easterly of the Swinomish Channel. The Higher Elevation includes all portions of unincorporated County below 500 feet in elevation and lying easterly of Range 6 East, Willamette Meridian to the crest of the Cascades. The Wildlands includes all portions of the unincorporated County above 500 feet in elevation. In addition to the assets listed above with distinct boundaries, assets co-managed and located sparsely include transmission pipelines, roads (e.g, Interstate 5, State Highway, etc.) For more detail regarding identified assets, refer to **Appendix A.**

The assets were pulled from existing reports, documents, and the County website. Existing reports and documents include:

- 2024-2029 Capital Facilities Plan
- 2024 Seattle City Light Wildfire Risk Reduction Strategy
- 2023 Skagit County Flood Book
- 2023 Skagit River Delta Flood Drainage Project Flood Modeling, Mapping, and Mitigation Analysis
- 2023 Puget Sound Energy Electric Progress Report Chapters 1-9
- 2023 Skagit County Multi-Jurisdictional Natural Hazard Mitigation Plan
- 2021 Skagit County Comprehensive Emergency Management Plan, Basin Plan
- 2019 Skagit County Community Wildfire Protection Plan
- 2016 -2036 Skagit County Comprehensive Plan
- 2016 Skagit County Drainage Utility Annual Report
- 2014 Skagit County Natural Hazard Mitigation Plan
- 2010 Skagit County Climate Action Plan

It is important to note that the 2023 Skagit County Multi-Jurisdictional Natural Hazard Mitigation Plan as mentioned above, was last revised in May 2023; therefore, major changes to this plan are not anticipated and was utilized for this analysis. In addition, the latest update regarding the Skagit County Shoreline Master Program ("program"), was found to be in February 2022 classified as a public hearing draft; thus, the program was not utilized for this analysis. The community assets were thematically grouped and generalized under a singular term such as "buildings", "transportation", "utilities", "parks", and such. Each term was subsequently assigned a sector based on definitions provided in the Guidance document. One asset may be applicable in multiple sectors; for example, farms are applicable in agriculture and food systems and economic development sectors.

Exploration of Hazards and Changes in the Climate

Hazards, climate indicators, and climate impacts specific to Skagit County were identified for each sector utilizing the Climate Mapping for a Resilient Washington ("CMRW") webtool. The CMRW tool provided a long list of climate indicators within various sectors such as agriculture, buildings and energy, cultural resources and practices, economic development, ecosystems, emergency management, human health, transportation, waste management, water resources, and zoning and development. Within these sectors, hazards such as drought, extreme heat, extreme precipitation, flooding, reduced snowpack, sea level rise, and wildfire were analyzed under the higher greenhouse gas scenario (RCP 8.5) with its respective climate indicator. The RCP 8.5 scenario was utilized as

planning purposes only. See "Jurisdiction-Specific Vulnerability Assessment & Mitigation Strategies Overview" under Unincorporated Skagit County for additional details.

compared to the lower greenhouse gas scenario (RCP 4.5) as the scenarios do not differ significantly prior to 2050. Selected climate hazards and indicators can be found in **Appendix A.**

Pairing Assets and Hazards

Approximately 143 asset-hazard pairs were identified by selecting the sector in the CMRW tool, which automatically populated select hazard data that would impact the sector. For example, Agricultural & Food Systems sector yielded hazard data for drought, extreme heat, extreme precipitation, reduced snowpack, and wildfire, but not for flooding or sea level rise and are marked as "N/A". Asset hazard pairs with "N/A" indicates that there is no significant change of climate projections from the baseline, which is the historical 30-year average. However, no significant variations in climate projections does not exclude the asset from being assessed for impacts under climate scenarios; therefore, local studies were used to further assess vulnerability and risk and is further described in a separate memo, as previously mentioned.

Assets which were grouped with each hazard data; for example, farms (identified within the Agricultural and Food Systems sector) would be listed as "Farms – Drought" and "Farms– Extreme Heat". Asset hazard pairs can also be listed under more than one sector. For example, farms in Skagit County are found to be important to the community because it provides produce on a national and international scale, and as a result renders significant revenue. The asset-hazard pairs were then assessed for climate impacts focusing on how the hazard particularly impacted the asset within the sectors (i.e., "Farms – Wildfire" is analyzed under two different sectors: Agricultural & Food Systems and Economic Development), how each asset is exposed to the hazard, non-climate stressors that may exacerbate climate impacts, and past/future consequences of previous factors that are specific to the County asset. This exercise builds off the previous two exercises of identifying County assets and potential climate hazards.

Exposure, Impacts, Stressors, Consequences

Climate impacts to the appropriate County assets were assessed based on disruptions to the specific sector under the RCP 8.5 climate scenario.

The following summarizes key take-aways:

- Wildfire, extreme heat, drought, and flooding were the most recurring hazards when paired with assets.
- Skagit County is anticipated to experience a decrease below 75% of the historical normal summer precipitation by mid-century.
- Warmer summers are expected to increase physiological stress for some plants and animals. For example, cold water fish such as Coastal cutthroat trout and yellow perch that rely on lower summer temperatures. Many fisheries are in transition zones: Beaver Lake, Big Lake, Clear Lake, Lake Erie, Lake Cambell, Lake McMurray, Lake Cavanaugh, Lake Shannon, Pass Lake, Whistle Lake, could potentially be exposed.
- Anticipated increase in summer (June to August) maximum temperature from 5.1◦ Fahrenheit for mid-century to 10.7◦ Fahrenheit at the end of the century. The historical baseline is 69◦ Fahrenheit. Warmer ambient temperatures can increase concentrations of air pollutants such as ozone and introduce secondary impacts such as vector-born illnesses. In addition, the County is expected to experience an overall decrease in heating degree days, meaning energy demand for heating is anticipated to decrease by 18 days and is similar to statewide trends.
- There is an anticipated decrease in heating degree days with a historical baseline of 109 days used for heating a building (7089 ◦ Fahrenheit-days). A decrease in both mid-century and end of century

projections compared to the historical baseline of 65◦ F is 18 days (1199 ◦ Fahrenheit-days) and 38 days (2467 ◦ Fahrenheit-days) less for heating a building, respectively. [3]

- The historical baseline of April 1st snowpack is 22 inches. Projections for mid century and end of century are anticipated to be a decrease in 53% and 79%, respectively. This may lead to transportation routes in mountainous areas may experience more damage from heavier rainfall and associated flooding, erosion, and washouts.
- Numerous County infrastructure are located in remote areas and are at higher risk of exposure to climate impacts, including roads, bridges, radio towers, transportation facilities, and utility substations.
- Non-climate stressors such as increased impervious surfaces, housing and population increases, aging infrastructure, limited personnel and equipment capabilities, incompatible land uses, invasive species, development in WUI zones, and others can exacerbate climate impacts.
- Snowmelt is projected to shift 3 to 4 weeks earlier than the 20th century average, impacting wildlife migration patterns and hydroelectricity demands.
- Summer stream flows are expected to substantially diminish due to changing snowmelt patterns, shifting energy supply to other sectors or industries.
- Roadways such as State Route 20 at Sharps Corner faces increased risks from climate change due to its critical role in supporting the movement of people and goods across Skagit County.
- Wildland urban interface (WUI) intermix and interface zones are located along the Skagit River Valley, Samish Valley/hillsides along State Route 9, Alger, Humphrey Hill, outer regions of incorporated areas, Skagit River, and Samish River basins.

The list is non-exhaustive and may expand based on the best available science and community input. Future community engagement events may identify other assets such as community groups, places, and services that will be analyzed for climate hazard impacts provided in an updated workbook and memo. A community engagement plan and community engagement summary report will be provided as a separate appendix with the updated memo.

Identify Priority Climate Hazards

Priority climate hazards were identified based on the County's existing plans and anecdotal information. The existing plans include the Comprehensive Plan, Shoreline Master Program, 2023 Natural Hazard Mitigation Plan, and Countywide Planning Policies. The climate hazards most relevant to the County include:

- Drought
- Extreme Precipitation
- Flooding
- Reduced snowpack
- Sea level rise

Other hazards such as earthquakes, volcanos, and avalanches are relevant to the jurisdiction. However, the impacts of climate change on earthquake and volcanic activity probability cannot be confirmed; thus, such hazards are not assessed for gaps and opportunities.

[3] A historical baseline of 7089 ◦ Fahrenheit (i.e. a baseline of 65 ◦ Fahrenheit) as referenced from the CMRW tool is used to calculate the heating degree days for mid- century and end of century projections. Thus, the historical baseline of heating degree days is 7089 ◦ Fahrenheit divided by 65 ◦ Fahrenheit to 109 heating degree days. Using the same calculation, there is drastic decrease of heating degree days for mid century and end of century of approximately 19 and 38 heating degree days, respectively.

Policy Audit – Climate Gaps and Opportunities

Existing plans were reviewed to identify gaps, opportunities, and barriers to climate resiliency. Staff identified 60 goals, policies ("measure"), or initiatives that implicitly or explicitly support climate resilience[4], including related sectors, climate indicators, hazards, climate impacts, and assets affected for each measure. The measure was assessed in the context of climate impacts as to whether the measure can be amended or supplemented to better address local climate hazards and impacts.

The existing measures needed specificity to better address climate hazards and impacts. Next steps were identified for each measure to amend, consolidate, add, or keep the existing measure. Staff recommends the following:

- Amend existing Comprehensive Plan measures to consider climate impacts and add amended measures to the new Climate Resiliency Element.
- Amend existing Shoreline Master Program measures to consider climate impacts or leave as-is and integrate into new climate resiliency element.
- Amend existing Natural Hazard Mitigation Plan initiatives to consider climate impacts or leave as-is and integrate into new climate resiliency element.

New Climate Element measures should remain consistent throughout the Comprehensive Plan. The recommendations include actions to enhance resiliency among all sectors and to advance environmental justice through economic development and land use while ensuring consistency with the Natural Hazard Mitigation Plan, Shoreline Master Program, and Countywide Planning Policies.

Sincerely,

Heidi Rous,
Kimley-Horn

On Behalf of:
County of Skagit, Washington State

[4] Resilience is defined as "The on-going process of anticipating, preparing for, and adapting to changes in climate and minimizing negative impacts to our natural systems, infrastructure, and communities."

References:

1. Raymond, C., M. Rogers, 2022. Climate Mapping for a Resilient Washington. Prepared by the Climate Impacts Group, University of Washington, Seattle and Research Data & Computing Services, University of Idaho, Moscow.

Task 1.1: Identify community assets

Sectors	Assets *(examples below; revise list as desired)*
Agriculture & Food Systems	Farms
Buildings & Energy	Administrative buildings, Electricity generating stations, Residential neighborhoods, Gas pipelines, Flood pump stations, Baker dam, Petroleum gas refinery
Cultural Resources & Practices	Fisheries
Economic Development	Port, Farms, Commercial forests, Industrial businesses
Ecosystems	Rivers, Fisheries, Nature preserves
Emergency Management	Flood management infrastructure (levees/dikes/pumps/tidegates), Fire station, Emergency staging areas, Hospital
Health & Well-being	Community centers
Transportation	Roadways, Bridges, Railroad, Public transit (Sea ferry, bus, shuttles), Port, Airport
Waste Management	Solid waste facility, Private septic tanks
Water Resources	Water treatment facility, Reservoirs
Zoning & Development	Museum, Schools, Radio towers

Task 1.2: Explore hazards and changes in the climate				
Sector *(Use the CMRW webtool and other resources, as needed, to fill out this column.)*	**Climate Indicator** *(Use the CMRW webtool and other resources, as needed, to fill out this column.)*	**Hazard** *(Use the CMRW webtool and other resources, as needed, to fill out this column.)*	**Climate Impacts** *(Use the CMRW webtool's "Understanding the Importance" tab, Figure 5 of the climate element planning guidance, and other information sources to fill out this column.)*	**Notes** *(Note the emissions scenario(s) and time periods you explored. You may also wish to identify potential information gaps that might warrant further analysis.)*
Agriculture & Food Systems	Increase in precipitation drought	Drought	**Importance:** Washington State's legal definition of drought for a declaration and associated response is 75% of normal water supply and hardship. Summer precipitation is one component of water supply considered in the determination. A greater likelihood of below normal summer precipitation indicates a greater likelihood of drought in any year. **Exposure:** Most of Washington state already receives little summer precipitation; areas that receive more summer precipitation currently will be more exposed to changes in the frequency of precipitation droughts. **Sensitivity:** The degree to which agricultural production in your county or community will be affected by changes in the frequency of precipitation drought will depend on the proportion of irrigated vs. non-irrigated agriculture and the types of water sources for irrigation. **Impact:** More frequent and severe droughts due to low summer precipitation will reduce the amount of water available for livestock and irrigation during the same time that warmer temperatures and longer growing seasons are expected to increase the demand for irrigation water.	High emissions scenario. Mid century baseline (2040-2069). End of century baseline (2070-2099). Any given year in the future 30-year period will have total summer precipitation (June-August) below 75% of the historical normal summer precipitation. The historical normal summer precipitation is the average total summer precipitation for 1980-2009. For example, a value of 0.20 means that there is a 20% chance that a year in the selected 30-year period will have summer precipitation at or below 75% of normal. Historical baseline is 0. Steady increase of likelihood of a year with summer precipitation below 75% ranges from 0.26 mid century to 0.39 end of century. The closer the value is to 1, the higher likelihood of snowpack drought; value closer to 0 area lower likelihood.
Agriculture & Food Systems	Increase in summer maximum temperature	Extreme Heat	**Importance:** Warming is expected to be greatest in summer months. Warmer summers directly affect the health and well-being of people and stress and water availability for crops and ecosystems. **Exposure:** Exposure to increases in summer temperatures does not vary substantially across Washington State. In your county or community, the exposure of agriculture will depend on local land use features that ameliorate or exacerbate high summer temperatures. **Sensitivity:** The degree to which agricultural crops and producers in your county or community will be affected by higher summer temperatures will depend on the physiological tolerances of crops and the timing of their growing season. **Impact**: Warmer summers are expected to increase the potential for heat stress on some crops and livestock and decrease crop yields. Some agricultural pests are expected to have greater survival rates and population size with warming. Warmer summer temperatures are expected to increase demand for irrigation water.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). A value of 4.0 means that the average summer maximum temperature is expected to increase by 4.0 degrees Fahrenheit for the county. The change in average summer maximum temperature is an indicator of heat stress for people, ecosystems and infrastructure. Increase in summer maximum temperature from 5.1 deg F for mid century to 10.7 deg F. end of century. Historical baseline is 69 deg F.
Agriculture & Food Systems	Increase in heavy precipitation magnitude	Extreme Precipitation	**Importance:** Change in the intensity of heavy precipitation events are more likely to cause damages to infrastructure and agricultural operations than changes in seasonal and annual precipitation. **Exposure:** In your county or community, agricultural land and infrastructure located in low-lying areas, within or near current floodplains or regulatory flood zones, or adjacent to unstable slopes are expected to be more exposed to an increase in heavy precipitation. **Sensitivity:** The degree to which agricultural crops, land and infrastructure in your county or community will be affected by flooding will depend on the tolerances of different crops, the timing of the growing season, and the extent of existing flood protection. **Impact:** Heavier precipitation is expected to intensify flooding and inundation of agricultural lands, which can delay spring planting, affect crop quality and quantity, increase erosion and runoff, and increase susceptibility to root diseases.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). A heavy precipitation day is the maximum daily precipitation that occurs with the 2-year storm, or on average once every two years. For example, a value of 15% means a county is expected to experience an increase in the total precipitation of the 2-year storm of 15%. Heavy precipitation is an indicator of flooding that can affect infrastructure and operations. Increase in heavy precipitation magnitude from 8% for mid century to 21% for end of century. Historical baseline was not recorded.
Agriculture & Food Systems	N/A	Flooding	N/A	N/A

Agriculture & Food Systems	Increase in Streamflow Timing	Reduced Snowpack	**Importance:** The ratio of winter to spring streamflow is an indicator of the change in the seasonal timing of streamflow. The timing of snowmelt and streamflow influences the seasonal availability of water for hydropower generation and irrigation. **Exposure**: Middle-elevation watersheds strongly influenced by both rain and snow are expected to have the largest changes in streamflow timing. In your county or community, the exposure of agriculture will depend on the location of water sources for crops and livestock. **Sensitivity:** The degree to which agricultural production in your county or community will be affected by changes in streamflow timing will depend on types of crops and timing of the growing season, the sources of water for irrigation, and the seniority and timing of water rights. Surface water sources will be more affected, as will junior water rights holders and producers with greater late season water demands. **Impact:** A shift in streamflow timing, with more streamflow in winter and early spring, will change the timing of water available for irrigated agriculture. This may or may not align with changes in the timing of the growing season for different crops.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The percent of stream lengths in a county that fall within each category of the winter (November - February) to spring (March - June) streamflow timing ratio for 30-year future periods. For example, 10% of the stream segments in the 0.5 to 1 category means that 10% of the streams in the county will have a winter to spring streamflow ratio between 0.5 and 1. All streamflow values here are natural flows, and do not include any influence from withdrawals or hydropower projects. The ratio of winter to spring streamflow is an indicator of the timing of streamflow during the year, which affects the seasonal availability of water for hydropower and irrigation. An increase in the ratio in the future means an increase in streamflow in winter and a decrease in spring. Middle elevation streams are expected to experience the most change in streamflow timing, with a shift to higher streamflow in winter. Steady increase of percentage of stream lengths in Skagit County winter to spring streamflow timing ratio. Historical baseline ratio for 1.0 to 1.5 is 6.1%. Mid century ratio for 1.0 to 1.5 is 13.6% and end of century 1.0 to 1.5 ratio is 51.3 percent.
Agriculture & Food Systems	N/A	Sea Level Rise	N/A	N/A
Agriculture & Food Systems	Increase in Wildfire Likelihood	Wildfire	**Importance:** An increasing likelihood of wildfire indicates a greater potential for wildfire to damage infrastructure, interrupt businesses, or affect public health and well-being. **Exposure:** In your county or community, agricultural lands and infrastructure located in the wildland-urban interface and areas with high wildfire risk historically will be most exposed to increases in the likelihood of wildfire. **Sensitivity:** The degree to which agricultural infrastructure and crops in your county or community will be affected by wildfire depends on the sensitivity of crop quality to smoke and the systems in place to support wildfire loss and recovery. Industries that depend more heavily on outdoor laborers are likely to be more affected. **Impact:** More frequent wildfires have the potential to increase damage to crops, livestock, agriculture infrastructure and operations. Wildfire smoke may reduce the quality of some crops and adversely affect farm workers and other outdoor laborers in the industry.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The likelihood of climate and fuel conditions favorable for wildfire in the county for future 30-year periods. For example, a value of 0.50 means that there is a 50% chance that a year in that time period will have climate and fuel conditions that are favorable for wildfire. The likelihood of wildfire is simulated using a fire process model. An increasing likelihood of wildfire indicates a greater potential for wildfire to damage infrastructure, interrupt businesses, or affect public health and well-being. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.
Buildings & Energy	N/A	Drought	N/A	N/A
Buildings & Energy	Decrease in heating Degree Days	Extreme Heat	**Importance:** A decrease in heating degree days indicates lower potential energy demand for heating buildings in winter. **Exposure:** In your county or community, buildings and utilities located in areas with mild winter climates will be most exposed to decreases in heating degree days. **Sensitivity:** The degree to which utilities will be affected by decreases in energy demand for heating will depend on current seasonal patterns of demand. Energy utilities with a higher dependence on revenue from winter sales will be more sensitive to this change. **Impact:** A decrease in heating degree days is expected to reduce energy demand for heating. This has the potential to reduce energy costs for businesses and residents, but decrease utility revenue to support infrastructure and operations.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The change in heating degree days for future 30-year periods compared to 1980-2009. heating degree days are the annual number of degree-days below a threshold of average daily temperature of 65°F. The change in the number of heating degree days is an indicator of change in potential energy demand for heating buildings. Steady decrease in heating degree days. Historical baseline of 7089 def F heating days. Mid century and end of century projected to be a decrease in 1199 deg F heating days and 2467 deg F heating days.
Buildings & Energy	N/A	Extreme Precipitation	N/A	N/A
Buildings & Energy	N/A	Flooding	N/A	N/A
Buildings & Energy	N/A	Reduced Snowpack	N/A	N/A
Buildings & Energy	N/A	Sea Level Rise	N/A	N/A

Buildings & Energy	Increase in Wildfire Likelihood	Wildfire	**Importance:** An increasing likelihood of wildfire indicates a greater potential for wildfire to damage infrastructure, interrupt businesses, or affect public health and well-being. **Exposure:** In your county or community, buildings and energy infrastructure located in the wildland-urban interface and areas with high wildfire risk historically will be most exposed to increases in the likelihood of wildfire. **Sensitivity:** Energy infrastructure built to standards that do not account for wildfire risk, such as untreated wooden poles, or with inadequate vegetation management along transmission and distribution lines will be more sensitive. Building design and codes can affect sensitivity to wildfire, including age, construction materials and degree of fire resistance. Older and less well maintained buildings may be more affected by poor air quality from wildfire smoke. **Impact:** More frequent wildfires have the potential to affect energy transmission by damaging infrastructure and interrupting transmission and distribution. More frequent wildfires are expected to cause property damage and loss. Poor air quality due to wildfire smoke could increase demand for air filtration systems in buildings.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The likelihood of climate and fuel conditions favorable for wildfire in the county for future 30-year periods. For example, a value of 0.50 means that there is a 50% chance that a year in that time period will have climate and fuel conditions that are favorable for wildfire. The likelihood of wildfire is simulated using a fire process model. An increasing likelihood of wildfire indicates a greater potential for wildfire to damage infrastructure, interrupt businesses, or affect public health and well-being. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.
Cultural Resources & Practices	Increase in Low Streamflow	Drought	**Importance:** The 7Q2 is the minimum seven day streamflow that occurs on average every two years. The 7Q2 is an indicator of low streamflows that are important for aquatic habitat quality. **Exposure:** The largest decrease in water during low flow periods in summer is projected for middle-elevation watersheds strongly influenced by both rain and snow. Streams on the western slopes of the Cascade and Olympic mountains are most exposed to the change, with streams in the Columbia basin exposed later in the century. In your county or community, the exposure of cultural and historical resources will depend on presence in these areas. **Sensitivity:** The degree to which aquatic cultural resources will be affected by lower flows will depend on the resources of concern and their individual sensitivity to low flow conditions. Streams affected by non-climatic stressors that also contributed to lower flows, such as water withdrawals, will be more sensitive to changes due to climate change. **Impact:** Lower streamflows in summer are expected to reduce habitat quantity and quality for salmonids and other aquatic species that are culturally important to Northwest Tribes.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The percent of stream lengths in a county that fall within a category of change from 1980-2009 low streamflow in summer (June-September). For example, 10% of the stream segments in the -50 to -30 category means that 10% of the streams in the county will have 50% to 30% less streamflow on average during their low summer streamflow. All streamflow values here are natural flows, and do not include any influence from withdrawals or hydropower projects. Less summer streamflow is an indicator of potential stress for fish and aquatic ecosystems due to reduced water availability. Historical baseline: 100% change of stream lengths in low stream flow category (-10 to 10). Indicates 100% of the streams in the county will have 10% less streamflow on average during low summer streamflows. Mid century and end of century baseline is 25.4% and 7.7%.
Cultural Resources & Practices	Increase in august stream temperature	Extreme Heat	**Importance:** Stream temperature during August, which is typically the hottest month for most streams, is an indicator of water quality for salmon and other species that depend on cold water. **Exposure:** In your county or community, the exposure of water bodies to increasing temperatures will vary locally depending on elevation and surrounding land use. Water bodies located at lower elevations with limited input from snowmelt and glaciers and in more developed areas will be more exposed to warming. **Sensitivity:** The degree to which aquatic resources will be affected by increases in summer water temperatures will depend on historical conditions relative to thresholds for salmon and other cold-water species. Streams affected by non-climatic stressors that also increase water temperature will be more sensitive to warming due to climate change. **Impact:** Warmer stream temperatures are expected to reduce habitat quality for salmonids and other aquatic species that depend on cold water. This reduces the abundance of and access to these culturally important species for Northwest Tribes.	**Moderate emissions scenario (A1B) only available.** Historical baseline (1993-2011). Mid century baseline (2030-2059). End of century baseline (2070-2099). The percentage of stream lengths in categories of average August stream temperature for future 30-year periods. For example, 10% of the stream segments in the 18 to 20C category means that 10% of the stream length in the county have an average August stream temperature value between 18 and 20C. An increase in August stream temperature is an indicator of water quality for salmon and other species that depend on cold water. Historical baseline of august stream temperature: 3.4% increase in range 16-18 deg C. 16.1% increase in range 14-16 deg C. 21.9% increase in range 12-14 deg C. 23.9% increase below 8 deg C. Mid Century: 13.2% increase in range 16-18 deg C. 20.9% increase in range 14-16 deg C. 21.2% increase in range 12-14 deg C. 15% increase in range 10-12 deg C. 15.2% increase in range below 8 deg C. End of Century: 15.4% increase in range 16-18 deg C. 21.7% increase in range 14-16 deg C. 18.8% increase in range 12-14 deg C. 12.3% increase in range 10-12 deg C. 8% increase in range below 8 deg C.
Cultural Resources & Practices	N/A	Extreme Precipitation	N/A	N/A

Cultural Resources & Practices	Decrease in peak streamflow	Flooding	**Importance**: An increase in the annual peak streamflow indicates a potential for higher streamflows and larger areas inundated every year at high flows. **Exposure:** Middle and high-elevation streams that currently receive a large fraction of winter precipitation as snow, rather than rain, will be more exposed to increases in high streamflows with warming. **Sensitivity:** The degree to which aquatic cultural resources will be affected by higher peak flows depends on habitat quality for salmon and other cold-water species under historical flow conditions. Streams affected by non-climatic stressors that also increase flows will be more sensitive to climate changes. **Impact**: Higher streamflows are expected to directly affect salmonid populations and alter salmonid habitat, reducing the quantity of a culturally important species for Northwest Tribes.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2050-2079). End of century baseline (2070-2099). Data shows the percent of stream lengths in a county that fall within a category of change from 1980-2009 peak streamflow. For example, 10% of the stream segments in the 50 to 30 category means that 10% of the streams in the county will have 50% to 30% more streamflow on the day of the year with the highest streamflow. All streamflow values here are natural flows, and do not include any influence from withdrawals or hydropower projects. More peak streamflow is an indicator of flood potential and larger areas inundated every year at high flows. Historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively.
Cultural Resources & Practices	N/A	Reduced Snowpack	N/A	N/A
Cultural Resources & Practices	Increase in likely sea level rise	Sea Level Rise	**Importance:** Relative sea level rise indicates how much the average water level is expected to rise due to the combined effects of climate change and movement of the land. **Exposure:** In your county or community, exposure of cultural and historical resources to sea level rise will vary locally with differences in the rate of geologic uplift or subsidence. The extent of inundation, coastal flooding, and erosion will vary based on shoreline topography and characteristics. **Sensitivity:** Indigenous people with many coastal-dependent cultural practices, resources, and sites will be more sensitive to sea level rise impacts. **Impact:** Moderate sea level rise will increase the frequency and extent of coastal flooding. Sea level rise is expected to increase beach and bluff erosion in some areas. Increasing coastal hazards have the potential to damage cultural and historical sites and buildings, reducing access to these areas.	High emissions scenario. Historical baseline (1991-2009). Mid century baseline 2050. End of century baseline 2100. Data shows relative sea level rise with a 50% likelihood of occurring for future 30-year periods compared to the average sea level in 1991-2009. For example, a value of 2.0 means that there is a 50% chance that the county will experience 2.0 feet of relative sea level rise. Puget Sound and the central and southern outer coast on the Pacific Ocean are likely to experience more sea level rise than the northwest Olympia Peninsula due to differences in vertical movement of the land, sedimentation, and current coastal storm patterns. Increasing sea level contributes to future flooding, inundation, and coastal erosion. Historical baseline not recorded. Mid century and end of century projected to be 0.7 feet and 2.1 feet, respectively.
Cultural Resources & Practices	Increase in Wildfire Likelihood	Wildfire	**Importance:** An increasing likelihood of wildfire indicates a greater potential for wildfire to damage infrastructure, interrupt businesses, or affect public health and well-being. **Exposure:** In your county or community, cultural and historical sites located in the wildland-urban interface and areas with high wildfire risk historically will be most exposed to increases in the likelihood of wildfire. **Sensitivity:** Cultural or historical resources and sites that cannot easily be protected from wildfire will be more affected by increases in wildfire likelihood. **Impact:** More frequent wildfires have the potential to damage cultural and historical sites, buildings, and cultural resources. More frequent wildfires can also reduce access to culturally important sites and resources for Northwest Tribes.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The likelihood of climate and fuel conditions favorable for wildfire in the county for future 30-year periods. For example, a value of 0.50 means that there is a 50% chance that a year in that time period will have climate and fuel conditions that are favorable for wildfire. The likelihood of wildfire is simulated using a fire process model. An increasing likelihood of wildfire indicates a greater potential for wildfire to damage infrastructure, interrupt businesses, or affect public health and well-being. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.

Economic Development	Decrease in snowpack	Drought	**Importance:** Snowpack in the mountains in the beginning of spring indicates the amount of natural water storage in snowpack that will be available in the melt season. April 1st snowpack (snow water equivalent) is one source of water for uses including hydropower generation, drinking water, irrigation, and instream flows for ecosystems. **Exposure:** Snowpack exposure to warming varies by elevation. In your county or community, the exposure of snow-dependent businesses and industries will depend on elevation. The low-elevation Cascade and Olympic foothills will be exposed first because these areas currently receive substantial snowfall at temperatures near freezing. By the end of the century, snowpack is expected to remain relatively unaffected only in the high-elevations of the Northern Cascade Mountains. **Sensitivity:** The degree to which economic development in your county or community will be affected by reduced snowpack depends on the economic importance of outdoor recreation to the local economy and the flexibility of the industry to seasonal demand changes. **Impact:** Reductions in snowpack are expected to decrease opportunities for winter outdoor recreation and shorten the winter recreation season, with adverse effects on the economy and character of some communities. Warm season outdoor recreation opportunities may increase, shifting tourism from one recreation sector to another and into different seasons.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The percent change in April 1st snowpack for future 30-year periods compared to the 1980-2009 average. April 1st snowpack is used as an indicator for the amount of stored water that becomes available during the melt season. A decrease in April 1st snowpack indicates that less stored water will be available to supply streams, soil, and reservoirs during the melt season. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.
Economic Development	Increase in summer maximum temperature	Extreme Heat	**Importance:** Warming is expected to be greatest in summer months. Warmer summers directly affect the health and well-being of people and stress and water availability for crops and ecosystems. **Exposure:** Exposure to increases in summer temperatures does not vary substantially across Washington State. In your county or community, exposure of the recreation industry or other outdoor industries will depend on local features that can ameliorate or exacerbate the effects of high summer temperature on residents and visitors. **Sensitivity:** The degree to which businesses and economic development in your county or community will be affected by warmer summer temperatures will depend on the importance of outdoor recreation to the local economy and the current temperature range, with hotter areas being more adversely affected. **Impact:** Warmer summer temperatures could decrease opportunities for warm season recreation activities in some areas and increase them in others.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). A value of 4.0 means that the average summer maximum temperature is expected to increase by 4.0 degrees Fahrenheit for the county. The change in average summer maximum temperature is an indicator of heat stress for people, ecosystems and infrastructure. Increase in summer maximum temperature from 5.1 deg F for mid century to 10.7 deg F. end of century. Historical baseline is 69 deg F.
Economic Development	Increase in heavy precipitation magnitude	Extreme Precipitation	**Importance:** Change in the intensity of heavy precipitation events are more likely to cause damages to infrastructure and agricultural operations than changes in seasonal and annual precipitation. **Exposure:** In your county or community, businesses located in low-lying areas, within current floodplains or regulatory flood zones, or adjacent to unstable slopes are expected to be more exposed to an increase in heavy precipitation. **Sensitivity:** The degree to which businesses and economic development in your county or community will be affected by heavier precipitation will depend on the extent of flood protection infrastructure, the capacity of stormwater systems, and relative isolation of communities susceptible to flooding. **Impact:** Heavier precipitation is expected to intensify flooding in low-lying areas and require higher capacity storm water drainage systems.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). A heavy precipitation day is the maximum daily precipitation that occurs with the 2-year storm, or on average once every two years. For example, a value of 15% means a county is expected to experience an increase in the total precipitation of the 2-year storm of 15%. Heavy precipitation is an indicator of flooding that can affect infrastructure and operations. Increase in heavy precipitation magnitude from 8% for mid century to 21% for end of century. Historical baseline was not recorded.

Economic Development	Increase in return interval of 25-year Peak Streamflow	Flooding	**Importance:** The 25-year peak streamflow is the streamflow that occurs on average every 25 years, similar to the 100-year high flow but more frequent. The return interval of the historical 25-year peak streamflow indicates how much more frequently streamflows of this magnitude are expected to occur in the future with heavier precipitation and more rain in the winter. **Exposure:** In your county or community, businesses located in low-lying areas and in or near current and historical flood zones will be most exposed to projected increases in the frequency of high streamflows. **Sensitivity:** The degree to which businesses and economic development in your county or community will be affected by more frequent flooding will depend on the extent of flood protection infrastructure, the capacity of stormwater systems, and relative isolation of communities susceptible to flooding. **Impact:** More frequent high streamflows are expected to increase the frequency of flooding impacts to businesses and the economy by disrupting travel and shipping routes and damaging property. More frequent flooding has the potential to increase insurance premiums or make some properties more difficult to insure.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The percent of stream lengths in a county that fall within a category of future frequency of high streamflow for future 30-year periods using the 1980-2009 high streamflow value. The high streamflow value is the daily maximum streamflow that occurs, on average, once every twenty-five years. For example, 10% of the stream segments in the 10 to 16 category means that 10% of the streams in the county will have their historical peak streamflow occur on average once every 10 to 16 years, rather than once every 25 years. All streamflow values here are natural flows, and do not include any influence from withdrawals or hydropower projects. The future frequency of high annual streamflow is an indicator of flooding potential. Historical baseline for 10 to 20 percentage of stream lengths in Skagit County is 0. Mid century and end of century projections are 28.5% and 14.5%.
Economic Development	Decrease in snowpack	Reduced Snowpack	**Importance**: Snowpack in the mountains in the beginning of spring indicates the amount of natural water storage in snowpack that will be available in the melt season. April 1st snowpack (snow water equivalent) is one source of water for uses including hydropower generation, drinking water, irrigation, and instream flows for ecosystems. **Exposure:** Snowpack exposure to warming varies by elevation. In your county or community, the exposure of snow-dependent businesses and industries will depend on elevation. The low-elevation Cascade and Olympic foothills will be exposed first because these areas currently receive substantial snowfall at temperatures near freezing. By the end of the century, snowpack is expected to remain relatively unaffected only in the high-elevations of the Northern Cascade Mountains. **Sensitivity:** The degree to which economic development in your county or community will be affected by reduced snowpack depends on the economic importance of outdoor recreation to the local economy and the flexibility of the industry to seasonal demand changes. **Impact:** Reductions in snowpack are expected to decrease opportunities for winter outdoor recreation and shorten the winter recreation season, with adverse effects on the economy and character of some communities. Warm season outdoor recreation opportunities may increase, shifting tourism from one recreation sector to another and into different seasons.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The percent change in April 1st snowpack for future 30-year periods compared to the 1980-2009 average. April 1st snowpack is used as an indicator for the amount of stored water that becomes available during the melt season. A decrease in April 1st snowpack indicates that less stored water will be available to supply streams, soil, and reservoirs during the melt season. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.
Economic Development	Increase in likely sea level rise	Sea Level Rise	**Importance**: Relative sea level rise indicates how much the average water level is expected to rise due to the combined effects of climate change and movement of the land. **Exposure:** In your county or community, exposure to sea level rise will vary locally with differences in the rate of geologic uplift or subsidence. The extent of inundation, coastal flooding, and erosion will vary based on shoreline topography and characteristics. **Sensitivity:** The degree to which businesses and economic development will be affected by sea level rise in your county or community depends on the extent of flood protection, and the effects of other economic drivers in coastal business centers. **Impact:** Moderate sea level rise will intensify coastal flooding during storms or extreme weather events, which can disrupt business operations and damage property.	High emissions scenario. Historical baseline (1991-2009). Mid century baseline 2050. End of century baseline 2100. Data shows relative sea level rise with a 50% likelihood of occurring for future 30-year periods compared to the average sea level in 1991-2009. For example, a value of 2.0 means that there is a 50% chance that the county will experience 2.0 feet of relative sea level rise. Puget Sound and the central and southern outer coast on the Pacific Ocean are likely to experience more sea level rise than the northwest Olympia Peninsula due to differences in vertical movement of the land, sedimentation, and current coastal storm patterns. Increasing sea level contributes to future flooding, inundation, and coastal erosion. Historical baseline not recorded. Mid century and end of century projected to be 0.7 feet and 2.1 feet, respectively.

Economic Development	Increase in wildfire danger	Wildfire	**Importance:** More high fire danger days indicates a greater potential for wildfire activity, assuming ignition sources and sufficient fuels are present. **Exposure:** In your county or community, the exposure of business located in the wildland-urban interface and areas with high wildfire risk historically will be most exposed to increases in the likelihood of wildfire. **Sensitivity:** The degree to which economic development in your county or community will be affected by more days with high fire danger depends on the economic importance of outdoor industries operating during the fire season. **Impact:** More days with high wildfire danger are expected to affect businesses through more frequent closures of recreation areas and restrictions on outdoor activities during the wildfire season. More high fire danger days will interrupt timber operations and outdoor recreation.	High emissions scenario. Historical baseline (1971-2000). Mid century baseline (2010-2039). End of century baseline (2070-2099). A high fire danger day is a day in which 100-hour fuel moisture is less than the historical 20th percentile. For example, a value of 2 means that there are 2 additional days in which 100-hour fuel moisture is less than the 20th percentile in the county. An increase in high fire danger days indicates greater potential for wildfire danger to damage infrastructure, interrupt businesses, and affect public health and well-being. Steady increase in change in high fire danger days. Historical baseline is 48 days of high fire danger days. Mid century and end of century change in additional high fire danger days is 6 and 11, respectively.
Ecosystems	Decrease in late summer precipitation	Drought	**Importance:** Summer precipitation affects water availability for non-irrigated agriculture and fuel moisture during the height of the fire season. **Exposure:** Most of Washington State already receives little summer precipitation, areas that receive more summer precipitation currently will be more exposed to changes. **Sensitivity:** Plants species growing at the lower end of their range for water availability will be more affected by decreases in summer precipitation. Species that are currently affected by non-climatic stressors, such as invasive species, development, and changes in land use will be more sensitive to warming. **Impact:** Less summer precipitation is expected to affect ecosystem types differently. In freshwater ecosystems, less summer precipitation will contribute to lower streamflows, reduce water quality, and increase water temperatures. In terrestrial ecosystems, less summer precipitation will contribute to drought stress and reduce the growth and productivity of some plants.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2050-2079). End of century baseline (2070-2099). Data shows percent change in total late summer (July 15th - September 15) precipitation for future 30-year periods compared to the 1980-2009 average. The change in late summer precipitation indicates changes to available water for multiple uses during the period that is typically driest and low fuel moistures during fire season. Steady decrease in percent change in total precipitation for July 15-September 15. Historical baseline is 3 inches of late summer precipitation. Mid century and end of century negative percentage changes are 10.7% and 11.9 percent, respectively.
Ecosystems	Increase in summer maximum temperature	Extreme Heat	**Importance:** Warming is expected to be greatest in summer months. Warmer summers directly affect the health and well-being of people and stress and water availability for crops and ecosystems. **Exposure:** Exposure of ecosystems to extreme heat is expected to be greater in transitional zones between ecosystems and where plant and animal species are already living at temperature margins of suitable habitat. In your county or community, the exposure of ecosystems to increases in summer temperatures will depend on the presence of critical habitats or sensitive species. **Sensitivity:** The degree to which ecosystems and species are affected by warmer summers depends on the physiological tolerances of species to hot temperatures. Species living at the upper edge of their temperature ranges will be more sensitive to warmer summers. Species that are currently affected by non-climatic stressors, such as invasive species and habitat fragmentation, will be more affected by warming. **Impact:** Warmer summers are expected to reduce summer soil moisture and increase physiological stress for some plants and animals. Warmer summer temperatures are expected to reduce tree growth and forest productivity in some areas and increase growth and productivity in mild climates. Outbreaks of some forest pests, such as mountain pine beetles, are expected to increase.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). A value of 4.0 means that the average summer maximum temperature is expected to increase by 4.0 degrees Fahrenheit for the county. The change in average summer maximum temperature is an indicator of heat stress for people, ecosystems and infrastructure. Increase in summer maximum temperature from 5.1 deg F for mid century to 10.7 deg F. end of century. Historical baseline is 69 deg F.
Ecosystems	N/A	Extreme Precipitation	N/A	N/A

Ecosystems	Decrease in peak streamflow	Flooding	**Importance:** An increase in the annual peak streamflow indicates a potential for higher streamflows and larger areas inundated every year at high flows. An increase in the annual peak streamflow indicates a potential for higher streamflows and larger areas inundated every year at high flows. **Exposure:** Middle and high-elevation streams that currently receive a large fraction of winter precipitation as snow, rather than rain, will be more exposed to increases in high streamflows with warming. **Sensitivity:** The degree to which aquatic species and habitats are affected by higher peak streamflows depends on the physiological tolerances of species to high flows and the extent of non-climatic stressors that increase high flows, such as paved surfaces. Streams in which flow regimes are already susceptible to high flows will be more sensitive to the change. **Impact:** Higher streamflows can scour the streambed and remove or crush salmon eggs, increasing mortality and reducing return rates. Higher streamflows reduce the availability of slow-water habitat and can increase sedimentation that affects habitat quality.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2050-2079). End of century baseline (2070-2099). Data shows the percent of stream lengths in a county that fall within a category of change from 1980-2009 peak streamflow. For example, 10% of the stream segments in the 50 to 30 category means that 10% of the streams in the county will have 50% to 30% more streamflow on the day of the year with the highest streamflow. All streamflow values here are natural flows, and do not include any influence from withdrawals or hydropower projects. More peak streamflow is an indicator of flood potential and larger areas inundated every year at high flows. Historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively.
Ecosystems	Decrease in snowpack	Reduced Snowpack	**Importance:** The ratio of winter to spring streamflow is an indicator of the change in the seasonal timing of streamflow. The timing of snowmelt and streamflow influences the seasonal availability of water for hydropower generation and irrigation. **Exposure**: Middle-elevation watersheds strongly influenced by both rain and snow are expected to have the largest changes in streamflow timing. **Sensitivity:** The degree to which aquatic species will be sensitive to changes in the timing of seasonal streamflow will depend on life stages that are timed with seasonal streamflow. **Impact:** Earlier spring snowmelt and associated changes in streamflow timing are expected to alter migration timing and survival rates for salmonids.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The percent change in April 1st snowpack for future 30-year periods compared to the 1980-2009 average. April 1st snowpack is used as an indicator for the amount of stored water that becomes available during the melt season. A decrease in April 1st snowpack indicates that less stored water will be available to supply streams, soil, and reservoirs during the melt season. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.
Ecosystems	Increase in likely sea level rise	Sea Level Rise	**Importance:** Relative sea level rise indicates how much the average water level is expected to rise due to the combined effects of climate change and movement of the land. **Exposure:** Exposure of ecosystems and coastal habitats to sea level rise will vary locally with differences in the rate of geologic uplift or subsidence. The extent of inundation, coastal flooding, and erosion will vary based on shoreline topography and characteristics. **Sensitivity:** The degree to which coastal habitats are affected by sea level rise depends on the physiological tolerances of species to salt water, waves, erosion, and coastal flooding. Coastal habitats adjacent to development, shoreline armoring, or steep slopes that prevent habitats from migrating inland are expected to be more sensitive to sea level rise. **Impact:** Moderate sea level rise is expected to increase beach and bluff erosion and the frequency of flooding in coastal marshes and tidal flats. Changes in coastal ecosystems can reduce habitats for some aquatic, wildlife, and plant species.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The percent change in April 1st snowpack for future 30-year periods compared to the 1980-2009 average. April 1st snowpack is used as an indicator for the amount of stored water that becomes available during the melt season. A decrease in April 1st snowpack indicates that less stored water will be available to supply streams, soil, and reservoirs during the melt season. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.
Ecosystems	Increase in Wildfire Likelihood	Wildfire	**Importance:** An increasing likelihood of wildfire indicates a greater potential for wildfire to damage infrastructure, interrupt businesses, or affect public health and well-being. **Exposure:** Ecosystem exposure to changes in wildfire likelihood will depend on historical wildfire frequency and the presence of critical resources and habitats. **Sensitivity:** The degree to which species and ecosystems will be affected by an increased likelihood of wildfire depends on current species adaptations to wildfire and the extent of non-climatic factors that reduce ecosystem health, such as invasive species, habitat fragmentation, and low diversity. **Impact:** More frequent wildfires have the potential to reduce timber, non-timber forest products, carbon storage, and forest habitat for some wildlife. Wildfires also increase establishment of invasive species. More frequent wildfires have the potential to increase runoff and sediment to streams, which can reduce aquatic habitat quality.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The likelihood of climate and fuel conditions favorable for wildfire in the county for future 30-year periods. For example, a value of 0.50 means that there is a 50% chance that a year in that time period will have climate and fuel conditions that are favorable for wildfire. The likelihood of wildfire is simulated using a fire process model. An increasing likelihood of wildfire indicates a greater potential for wildfire to damage infrastructure, interrupt businesses, or affect public health and well-being. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.

Emergency Management	Increase in precipitation drought	Drought	**Importance:** Washington State's legal definition of drought for a declaration and associated response is 75% of normal water supply and hardship. Summer precipitation is one component of water supply considered in the determination. A greater likelihood of below normal summer precipitation indicates a greater likelihood of drought in any year. **Exposure:** Most of Washington state already receives little summer precipitation; areas that receive more summer precipitation currently will be more exposed to changes in the frequency of precipitation droughts. **Sensitivity:** The degree to which your county or community is affected by drought-related water emergencies will depend on the sources of drinking water and the types and condition of drinking water systems. **Impact:** More frequent and severe droughts due to low summer precipitation are expected to increase the need for emergency services to plan, prepare, and respond to water shortages.	High emissions scenario. Mid century baseline (2040-2069). End of century baseline (2070-2099). Any given year in the future 30-year period will have total summer precipitation (June-August) below 75% of the historical normal summer precipitation. The historical normal summer precipitation is the average total summer precipitation for 1980-2009. For example, a value of 0.20 means that there is a 20% chance that a year in the selected 30-year period will have summer precipitation at or below 75% of normal. Steady increase of likelihood of a year with summer precipitation below 75% ranges from 0.26 mid century to 0.39 end of century. The close the value is to 1, the higher likelihood of snowpack drought; value closer to 0 area lower likelihood. The baseline is 0.
Emergency Management	Increase in 90 deg F Max Humidex Days	Extreme Heat	**Importance:** An increase in days over a maximum humidex of 90° is an indicator of day-time heat stress for people. **Exposure:** In your county or community, exposure of people to extreme heat will vary locally based on features that exacerbate or ameliorate extreme heat, such as the extent of paved surfaces, tree canopy for shade, or proximity to water bodies. **Sensitivity:** Emergency management services with limited capacity and those that serve communities with more vulnerable populations and less social cohesion will be more affected by increases in the demand for services related to extreme heat emergencies. **Impact:** More frequent extreme daytime heat events are expected to increase the demand for emergency services to plan, prepare, and respond to human health impacts. Extreme heat may also impact emergency services due to transportation and travel disruptions such as warped and buckling pavement on roads.	High emissions scenario. Mid century baseline (2040-2069). End of century baseline (2070-2099). Historical baseline is 1980-2009. Data shows the change in annual 90°F maximum humidex days, or the average number of days in a year with a maximum humidex greater than 90°F in a 30-year period compared to the 1980-2009 average. The humidex is a measure of experienced heat conditions, and takes into consideration both temperature and humidity. The change in the number of 90°F maximum humidex days is an indicator of stress on public health. Steady increase of 90 deg F Max Humidex Days from 2 days for the historical baseline. Mid century and end of century projected to be an increase of 21.6 days and 34.0 days, respectively.
Emergency Management	Increase in extreme precipitation magnitude	Extreme Precipitation	**Importance:** Changes in the intensity of extreme precipitation events are more likely to cause damages to infrastructure and agricultural operations than changes in seasonal and annual precipitation. **Exposure:** In your county or community, emergency services that serve people located in low-lying areas, within current floodplains or regulatory flood zones, or adjacent to unstable slopes are expected to be more exposed to the impacts of heavier precipitation events. **Sensitivity:** Emergency management services with limited capacity and those that serve communities with more vulnerable populations and less social cohesion will be more affected by the demand for services related to increases in flooding and associated hazards. **Impact:** Heavier precipitation has the potential to increase the demand for emergency response services by intensifying flood events and increasing other emergencies associated with heavy precipitation.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). A heavy precipitation day is the maximum daily precipitation that occurs with the 2-year storm, or on average once every two years. For example, a value of 15% means a county is expected to experience an increase in the total precipitation of the 2-year storm of 15%. Heavy precipitation is an indicator of flooding that can affect infrastructure and operations. Increase in heavy precipitation magnitude from 8% for mid century to 30% for end of century. Historical baseline was not recorded.
Emergency Management	Decrease in peak streamflow	Flooding	**Importance:** An increase in the annual peak streamflow indicates a potential for higher streamflows and larger areas inundated every year at high flows. **Exposure:** In your county or community, people and infrastructure located in river valleys and in or near current and historical flood zones will be most exposed to increases in high streamflows that can cause flooding and increase the need for emergency services. **Sensitivity:** Emergency management services with limited capacity and those that serve communities with more vulnerable populations and less social cohesion will be more affected by the demand for services related to larger floods and associated hazards. **Impact:** Higher streamflows are expected to increase riverine flooding within existing floodplains and could expand flooding to new areas not currently in existing floodplains. More flooding has the potential to increase the demand for emergency services to plan, prepare, and respond to flood events.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2050-2079). End of century baseline (2070-2099). Data shows the percent of stream lengths in a county that fall within a category of change from 1980-2009 peak streamflow. For example, 10% of the stream segments in the 50 to 30 category means that 10% of the streams in the county will have 50% to 30% more streamflow on the day of the year with the highest streamflow. All streamflow values here are natural flows, and do not include any influence from withdrawals or hydropower projects. More peak streamflow is an indicator of flood potential and larger areas inundated every year at high flows. Historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively.
Emergency Management	N/A	Reduced Snowpack	N/A	N/A

Emergency Management	Increase in likely sea level rise	Sea Level Rise	**Importance:** Relative sea level rise indicates how much the average water level is expected to rise due to the combined effects of climate change and movement of the land. **Exposure:** In your county or community, exposure will vary locally with differences in the rate of geologic uplift or subsidence. The extent of inundation, coastal flooding, and erosion will vary based on shoreline topography and characteristics. Emergency management serving low-lying coastal communities will be most exposed to the impacts of more coastal flooding. **Sensitivity:** Emergency management services with limited capacity and those that serve communities with more vulnerable populations and infrastructure will be more affected by more frequent coastal hazards. **Impact:** Moderate sea level rise is expected to inundate some coastal land and intensify coastal flooding during storms, which could increase the need for emergency services to plan, respond to and recover from coastal flooding.	High emissions scenario. Historical baseline (1991-2009). Mid century baseline 2050. End of century baseline 2100. Data shows relative sea level rise with a 50% likelihood of occurring for future 30-year periods compared to the average sea level in 1991-2009. For example, a value of 2.0 means that there is a 50% chance that the county will experience 2.0 feet of relative sea level rise. Puget Sound and the central and southern outer coast on the Pacific Ocean are likely to experience more sea level rise than the northwest Olympia Peninsula due to differences in vertical movement of the land, sedimentation, and current coastal storm patterns. Increasing sea level contributes to future flooding, inundation, and coastal erosion. Historical baseline not recorded. Mid century and end of century projected to be 0.7 feet and 2.1 feet, respectively.
Emergency Management	Increase on wildfire danger	Wildfire	**Importance:** More high fire danger days indicates a greater potential for wildfire activity, assuming ignition sources and sufficient fuels are present. **Exposure:** In your county or community, people and infrastructure located in the wildland-urban interface and areas with high wildfire risk historically will be most exposed to increases in the likelihood of wildfire. **Sensitivity:** Emergency management services with limited capacity and those that serve communities with more vulnerable populations and less social cohesion will be more affected by an increase in demand for services related to higher fire danger. **Impact:** More days with high fire danger will increase the need for fire bans and associated enforcement and capacity to respond to wildfires.	High emissions scenario. Historical baseline (1971-2000). Mid century baseline (2010-2039). End of century baseline (2070-2099). A high fire danger day is a day in which 100-hour fuel moisture is less than the historical 20th percentile. For example, a value of 2 means that there are 2 additional days in which 100-hour fuel moisture is less than the 20th percentile in the county. An increase in high fire danger days indicates greater potential for wildfire danger to damage infrastructure, interrupt businesses, and affect public health and well-being. Steady increase in change in high fire danger days. Historical baseline is 48 days of high fire danger days. Mid century and end of century change in additional high fire danger days is 6 and 11, respectively.
Health & Well-being	N/A	Drought	N/A	N/A
Health & Well-being	Increase in summer maximum temperature	Extreme Heat	**Importance:** Warming is expected to be greatest in summer months. Warmer summers directly affect the health and well-being of people and stress and water availability for crops and ecosystems. **Exposure:** In your county or community, the exposure of people to warmer summers and associated ozone and vector-borne illnesses will vary locally based on features that exacerbate or ameliorate these conditions. Areas with existing poor air or water quality will be more exposed. **Sensitivity:** Certain populations in your county or community are expected to be more affected by health impacts associated with warmer summers. The elderly, very young, and people with preexisting health conditions are more likely to be affected. **Impact:** Warmer summers are expected to increase concentrations of air pollutants, such as ozone and some vector-borne illnesses, such as West Nile virus.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). A value of 4.0 means that the average summer maximum temperature is expected to increase by 4.0 degrees Fahrenheit for the county. The change in average summer maximum temperature is an indicator of heat stress for people, ecosystems and infrastructure. Increase in summer maximum temperature from 5.1 deg F for mid century to 10.7 deg F. end of century. Historical baseline is 69 deg F.
Health & Well-being	N/A	Extreme Precipitation	N/A	N/A
Health & Well-being	N/A	Flooding	N/A	N/A
Health & Well-being	N/A	Reduced Snowpack	N/A	N/A
Health & Well-being	N/A	Sea Level Rise	N/A	N/A

Health & Well-being	Increase in Wildfire Likelihood	Wildfire	**Importance:** An increasing likelihood of wildfire indicates a greater potential for wildfire to damage infrastructure, interrupt businesses, or affect public health and well-being. **Exposure:** In your county or community, people living in the wildland-urban interface and areas with high wildfire risk historically will be most exposed to increases in the likelihood of wildfire. **Sensitivity:** Certain populations in your county or community are expected to be more affected by an increased likelihood of wildfires and associated smoke. Low-income and non-English speaking populations, people with preexisting health conditions, and people living in substandard housing are more likely to be affected by evacuations, property damage, and poor air quality. **Impact:** More frequent wildfires are expected to reduce human health through loss of life, injury and reduced mental health associated with displacement. Poor air quality due to more wildfire smoke can cause adverse respiratory health effects.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The likelihood of climate and fuel conditions favorable for wildfire in the county for future 30-year periods. For example, a value of 0.50 means that there is a 50% chance that a year in that time period will have climate and fuel conditions that are favorable for wildfire. The likelihood of wildfire is simulated using a fire process model. An increasing likelihood of wildfire indicates a greater potential for wildfire to damage infrastructure, interrupt businesses, or affect public health and well-being. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.
Transportation	Decrease in snowpack	Drought	**Importance:** Snowpack in the mountains in the beginning of spring indicates the amount of natural water storage in snowpack that will be available in the melt season. April 1st snowpack (snow water equivalent) is one source of water for uses including hydropower generation, drinking water, irrigation, and instream flows for ecosystems. **Exposure:** Snowpack exposure to warming varies by elevation. In your county or community, the exposure of transportation routes and infrastructure will depend on elevation with assets in mountainous areas more exposed. The low-elevation Cascade and Olympic foothills will be exposed first because these areas currently receive substantial snowfall at temperatures near freezing. By the end of the century, snowpack is expected to remain relatively unaffected only in the high-elevations of the Northern Cascade Mountains. **Sensitivity:** The degree to which transportation systems and assets in your county or community will be affected by reduced snowpack depends on design standards for winter temperature and precipitation. **Impact:** Reductions in snowpack have the potential to reduce snow-related road maintenance, road closures, and transportation delays. However, as more cold-season precipitation falls as rain rather than snow, transportation routes in mountainous areas may experience more damage from heavier winter rainfall and associated flooding, erosion, and washouts.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The percent change in April 1st snowpack for future 30-year periods compared to the 1980-2009 average. April 1st snowpack is used as an indicator for the amount of stored water that becomes available during the melt season. A decrease in April 1st snowpack indicates that less stored water will be available to supply streams, soil, and reservoirs during the melt season. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.
Transportation	Increase in hot days	Extreme Heat	**Importance:** Days with a temperature over 100°F is an indicator of potential damage to transportation infrastructure such as roads and bridges. **Exposure:** In your county or community, the exposure of road surfaces to extreme heat will vary locally based on features that exacerbate or ameliorate extreme heat such as the extent of urban heat islands and tree canopy cover for shade. **Sensitivity:** The degree to which road surfaces and bridges in your county or community will be sensitive to extreme heat will depend on the age and condition of assets, materials, and heat-related design standards. **Impact:** More very hot days have the potential to damage the surfaces of roads and bridges, leading to greater maintenance and repair costs and more frequent traffic and service disruptions.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). Data shows the change in the number of annual hot days, or the average number of days per year with a maximum temperature greater than 100°F, in a county for future 30-year periods compared to the 1980-2009 average. For example, a value of 4.0 means that the number of annual hot days in the county is expected to increase by 4 days. An increase in the number of days above 100°F is an indication of more stress on transportation infrastructure. Steady increase in hot days above 100 deg F. Historical baseline is 4 days. Mid century and end of century is projected to be an increase of 22.7 days and 34.2 days, respectively.

Transportation	Increase in heavy precipitation magnitude	Extreme Precipitation	**Importance:** Change in the intensity of heavy precipitation events are more likely to cause damages to infrastructure and agricultural operations than changes in seasonal and annual precipitation. **Exposure:** In your county or community, transportation routes and infrastructure located in low-lying areas, within or near current floodplains or regulatory flood zones, or adjacent to unstable slopes are expected to be more exposed to an increase in heavy precipitation. **Sensitivity:** The degree to which transportation systems and assets in your county or community will be affected by increases in heavy precipitation depends on the current infrastructure condition and age, design standards, and redundancy in the system. Older assets or those built to older design standards are likely to be more affected by heavier precipitation. **Impact:** Heavier precipitation events are expected to intensify flooding, landslides, and erosion, which can interrupt transportation routes, damage infrastructure, and increase maintenance and repair costs.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). A heavy precipitation day is the maximum daily precipitation that occurs with the 2-year storm, or on average once every two years. For example, a value of 15% means a county is expected to experience an increase in the total precipitation of the 2-year storm of 15%. Heavy precipitation is an indicator of flooding that can affect infrastructure and operations. Increase in heavy precipitation magnitude from 8% for mid century to 21% for end of century. Historical baseline was not recorded.
Transportation	Decrease in peak streamflow	Flooding	**Importance:** Change in the intensity of heavy precipitation events are more likely to cause damages to infrastructure and agricultural operations than changes in seasonal and annual precipitation. **Exposure:** In your county or community, transportation routes and infrastructure located in low-lying areas, within or near current floodplains or regulatory flood zones, or adjacent to unstable slopes are expected to be more exposed to an increase in heavy precipitation. **Sensitivity:** The degree to which transportation systems and assets in your county or community will be affected by increases in heavy precipitation depends on the current infrastructure condition and age, design standards, and redundancy in the system. Older assets or those built to older design standards are likely to be more affected by heavier precipitation. **Impact:** Heavier precipitation events are expected to intensify flooding, landslides, and erosion, which can interrupt transportation routes, damage infrastructure, and increase maintenance and repair costs.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2050-2079). End of century baseline (2070-2099). Data shows the percent of stream lengths in a county that fall within a category of change from 1980-2009 peak streamflow. For example, 10% of the stream segments in the 50 to 30 category means that 10% of the streams in the county will have 50% to 30% more streamflow on the day of the year with the highest streamflow. All streamflow values here are natural flows, and do not include any influence from withdrawals or hydropower projects. More peak streamflow is an indicator of flood potential and larger areas inundated every year at high flows. Historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively.
Transportation	Decrease in snowpack	Reduced Snowpack	**Importance:** Snowpack in the mountains in the beginning of spring indicates the amount of natural water storage in snowpack that will be available in the melt season. April 1st snowpack (snow water equivalent) is one source of water for uses including hydropower generation, drinking water, irrigation, and instream flows for ecosystems. **Exposure:** Snowpack exposure to warming varies by elevation. In your county or community, the exposure of transportation routes and infrastructure will depend on elevation with assets in mountainous areas more exposed. The low-elevation Cascade and Olympic foothills will be exposed first because these areas currently receive substantial snowfall at temperatures near freezing. By the end of the century, snowpack is expected to remain relatively unaffected only in the high-elevations of the Northern Cascade Mountains. **Sensitivity:** The degree to which transportation systems and assets in your county or community will be affected by reduced snowpack depends on design standards for winter temperature and precipitation. **Impact:** Reductions in snowpack have the potential to reduce snow-related road maintenance, road closures, and transportation delays. However, as more cold-season precipitation falls as rain rather than snow, transportation routes in mountainous areas may experience more damage from heavier winter rainfall and associated flooding, erosion, and washouts.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The percent change in April 1st snowpack for future 30-year periods compared to the 1980-2009 average. April 1st snowpack is used as an indicator for the amount of stored water that becomes available during the melt season. A decrease in April 1st snowpack indicates that less stored water will be available to supply streams, soil, and reservoirs during the melt season. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.

Transportation	Increase in likely sea level rise	Sea Level Rise	**Importance:** Relative sea level rise indicates how much the average water level is expected to rise due to the combined effects of climate change and movement of the land. **Exposure:** In your county or community, exposure to sea level rise will vary locally with differences in the rate of geologic uplift or subsidence. The extent of inundation, coastal flooding, and erosion will vary based on shoreline topography and characteristics. Transportation routes and infrastructure located in low-lying coastal zones or near coastal bluffs will be more exposed. **Sensitivity:** The degree to which transportation systems and assets in your county or community will be affected by sea level rise and associated coastal flooding and erosion depends on how much design standards can accommodate these hazards. A lack of redundancy in transportation networks in coastal areas is likely to increase overall system sensitivity to sea level rise. **Impact:** With moderate sea level rise, Washington's seaports and the connected distribution networks are expected to flood more often. Coastal transportation infrastructure may be subject to more frequent closures due to coastal flooding and erosion, and require more frequent maintenance and repairs.	High emissions scenario. Historical baseline (1991-2009). Mid century baseline 2050. End of century baseline 2100. Data shows relative sea level rise with a 50% likelihood of occurring for future 30-year periods compared to the average sea level in 1991-2009. For example, a value of 2.0 means that there is a 50% chance that the county will experience 2.0 feet of relative sea level rise. Puget Sound and the central and southern outer coast on the Pacific Ocean are likely to experience more sea level rise than the northwest Olympia Peninsula due to differences in vertical movement of the land, sedimentation, and current coastal storm patterns. Increasing sea level contributes to future flooding, inundation, and coastal erosion. Historical baseline not recorded. Mid century and end of century projected to be 0.7 feet and 2.1 feet, respectively.
Transportation	Increase in Wildfire Likelihood	Wildfire	**Importance:** An increasing likelihood of wildfire indicates a greater potential for wildfire to damage infrastructure, interrupt businesses, or affect public health and well-being. **Exposure:** In your county or community, transportation routes and infrastructure wildland-urban interface and areas with high wildfire risk historically will be most exposed to increases in the likelihood of wildfire. **Sensitivity:** The degree to which transportation systems and assets in your county or community will be affected by an increased likelihood of wildfire depends on redundancy in the transportation network. **Impact:** More frequent wildfires, and related smoke, can disrupt travel, increase road closures and delay construction projects. Wildfire smoke has the potential to affect labor in the transportation sector because of health effects on outdoor laborers. More roadside brush fires can create safety hazards and disrupt transportation.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The likelihood of climate and fuel conditions favorable for wildfire in the county for future 30-year periods. For example, a value of 0.50 means that there is a 50% chance that a year in that time period will have climate and fuel conditions that are favorable for wildfire. The likelihood of wildfire is simulated using a fire process model. An increasing likelihood of wildfire indicates a greater potential for wildfire to damage infrastructure, interrupt businesses, or affect public health and well-being. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.
Waste Management	N/A	Drought	N/A	N/A
Waste Management	N/A	Extreme Heat	N/A	N/A
Waste Management	Increase in extreme precipitation magnitude	Extreme Precipitation	**Importance:** Changes in the intensity of extreme precipitation events are more likely to cause damages to infrastructure and agricultural operations than changes in seasonal and annual precipitation. **Exposure:** In your county or community, waste management services that serve people located in low-lying areas, within current floodplains or regulatory flood zones, or adjacent to unstable slopes are expected to be more exposed to the impacts of heavier precipitation events. **Sensitivity:** The degree to which waste management services will be affected by increases in debris and waste will depend on current capacity. **Impact:** Heavier precipitation has the potential to increase storm damage to infrastructure and generate more waste and debris. More waste will strain municipal cleanup and refuse capacity.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). Data shows the percent change in total precipitation for a day with extreme precipitation for future 30-year periods compared to 1980-2009. An extreme precipitation day is the maximum daily precipitation that occurs with the 25-year storm, or on average once every two years. For example, a value of 15% means a county is expected to experience an increase in the total precipitation of the 25-year storm of 15%. Heavy precipitation is an indicator of flooding that can affect infrastructure and operations. Historical baseline not recorded. Mid century and end of century projected to be 8% and 30%, respectively.

Waste Management	Increase in return interval of 25-year Peak Streamflow	Flooding	**Importance:** The 25-year peak streamflow is the streamflow that occurs on average every 25 years, similar to the 100-year high flow but more frequent. The return interval of the historical 25-year peak streamflow indicates how much more frequently streamflows of this magnitude are expected to occur in the future with heavier precipitation and more rain in the winter. **Exposure:** In your county or community, waste management services that serve development located in low-lying areas and in current and historical flood zones will be most exposed to projected increases in the frequency of high streamflows that can cause flooding and generate more waste. **Sensitivity:** The degree to which waste management services will be affected by increases in debris and waste will depend on current capacity. Facilities with older design standards or standards that do not account for flooding will be more affected. **Impact:** More frequent high streamflows are expected to increase flooding, which can generate more debris and waste. More waste will strain municipal cleanup and refuse capacity. Flooding of waste management facilities can release contaminants and hazardous materials.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The percent of stream lengths in a county that fall within a category of future frequency of high streamflow for future 30-year periods using the 1980-2009 high streamflow value. The high streamflow value is the daily maximum streamflow that occurs, on average, once every twenty-five years. For example, 10% of the stream segments in the 10 to 16 category means that 10% of the streams in the county will have their historical peak streamflow occur on average once every 10 to 16 years, rather than once every 25 years. All streamflow values here are natural flows, and do not include any influence from withdrawals or hydropower projects. The future frequency of high annual streamflow is an indicator of flooding potential. Historical baseline for 10 to 20 percentage of stream lengths in Skagit County is 0. Mid century and end of century projections are 28.5% and 14.5%.
Waste Management	N/A	Reduced Snowpack	N/A	N/A
Waste Management	N/A	Sea Level Rise	N/A	N/A
Waste Management	Increase in Wildfire Likelihood	Wildfire	**Importance:** An increasing likelihood of wildfire indicates a greater potential for wildfire to damage infrastructure, interrupt businesses, or affect public health and well-being. **Exposure:** In your county or community, waste management facilities that serve areas in the wildland-urban interface will be more exposed to increases in waste with more wildfire. **Sensitivity:** The degree to which waste management services will be affected by increases in debris and waste will depend on current capacity. **Impact:** More frequent wildfires have the potential to generate greater amounts of debris and waste. More waste will strain municipal cleanup and refuse capacity.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The likelihood of climate and fuel conditions favorable for wildfire in the county for future 30-year periods. For example, a value of 0.50 means that there is a 50% chance that a year in that time period will have climate and fuel conditions that are favorable for wildfire. The likelihood of wildfire is simulated using a fire process model. An increasing likelihood of wildfire indicates a greater potential for wildfire to damage infrastructure, interrupt businesses, or affect public health and well-being. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.
Water Resources	Increase in total annual precipitation	Drought	**Importance:** Total annual precipitation is the total input of water each year which limits the overall amount of water available for human uses and ecosystems. **Exposure:** The exposure of water resources to changes in annual precipitation in your county or community depends on the presence of critical groundwater aquifer recharge areas and the location of wells. **Sensitivity:** The degree to which water resources in your county or community will be affected by changes in annual precipitation will depend on the sources of water and the effects of non-climatic stressors on water supplies. Groundwater sources are sensitive to changes in annual precipitation. Non-climatic stressors that increase demand, such as population growth and development, will increase the sensitivity of water resources to changes in annual precipitation. **Impact:** Increases in annual precipitation have the potential to increase groundwater recharge. Changes in the timing and intensity of precipitation and increases in water demand and evaporation are expected to offset increases in groundwater recharge due to more annual precipitation.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The likelihood of climate and fuel conditions favorable for wildfire in the county for future 30-year periods. For example, a value of 0.50 means that there is a 50% chance that a year in that time period will have climate and fuel conditions that are favorable for wildfire. The likelihood of wildfire is simulated using a fire process model. An increasing likelihood of wildfire indicates a greater potential for wildfire to damage infrastructure, interrupt businesses, or affect public health and well-being. Steady increase in percent change in total annual precipitation. Historical baseline recorded to be 80 inches. Mid century and end of century projected to be 5.3% and 10%, respectively.
Water Resources	N/A	Extreme Heat	N/A	N/A
Water Resources	N/A	Extreme Precipitation	N/A	N/A
Water Resources	N/A	Flooding	N/A	N/A

Water Resources	Decrease in snowpack	Reduced Snowpack	**Importance:** Snowpack in the mountains in the beginning of spring indicates the amount of natural water storage in snowpack that will be available in the melt season. April 1st snowpack (snow water equivalent) is one source of water for uses including hydropower generation, drinking water, irrigation, and instream flows for ecosystems. **Exposure:** Snowpack exposure to warming varies by elevation. In your county or community, the exposure of water resources will depend on the location of water sources. The low-elevation Cascade and Olympic foothills will be exposed first because these areas currently receive substantial snowfall at temperatures near freezing. By the end of the century, snowpack is expected to remain relatively unaffected only in the high-elevations of the Northern Cascade Mountains. **Sensitivity:** The degree to which water and energy resources in your county or community will be affected by reduced snowpack depends on sources of water and energy. Surface water sources and hydropower are sensitive to changes in snowpack. A lack of redundancy in sources, limited storage, high demand, and less efficient infrastructure will increase sensitivity of water resources to reduced snowpack. **Impact:** Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The percent change in April 1st snowpack for future 30-year periods compared to the 1980-2009 average. April 1st snowpack is used as an indicator for the amount of stored water that becomes available during the melt season. A decrease in April 1st snowpack indicates that less stored water will be available to supply streams, soil, and reservoirs during the melt season. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.
Water Resources	Increase in likely sea level rise	Sea Level Rise	**Importance:** Relative sea level rise indicates how much the average water level is expected to rise due to the combined effects of climate change and movement of the land. **Exposure:** In your county or community, exposure will vary locally with differences in the rate of geologic uplift or subsidence. The extent of inundation, coastal flooding, and erosion will vary based on shoreline topography and characteristics. Shallow aquifers and wells located in low-lying coastal zones will be more exposed to saltwater intrusion. **Sensitivity:** The degree to which water resources in your county or community will be affected by sea level rise depends on the type of water sources and the redundancy in sources. **Impact:** Sea level rise is expected to increase salt water intrusion into groundwater and coastal aquifers, which could reduce water quality.	High emissions scenario. Historical baseline (1991-2009). Mid century baseline 2050. End of century baseline 2100. Data shows relative sea level rise with a 50% likelihood of occurring for future 30-year periods compared to the average sea level in 1991-2009. For example, a value of 2.0 means that there is a 50% chance that the county will experience 2.0 feet of relative sea level rise. Puget Sound and the central and southern outer coast on the Pacific Ocean are likely to experience more sea level rise than the northwest Olympia Peninsula due to differences in vertical movement of the land, sedimentation, and current coastal storm patterns. Increasing sea level contributes to future flooding, inundation, and coastal erosion. Historical baseline not recorded. Mid century and end of century projected to be 0.7 feet and 2.1 feet, respectively.
Water Resources	Increase in Wildfire Likelihood	Wildfire	**Importance:** An increasing likelihood of wildfire indicates a greater potential for wildfire to damage infrastructure, interrupt businesses, or affect public health and well-being. **Exposure:** In your county or community, the local exposure of water resources to increases in wildfire will depend on the extent of water distribution infrastructure and water resources located in the wildland-urban interface or wildlands. **Sensitivity:** The degree to which water resources in your county or community will be affected by an increased likelihood of wildfire depends on the current condition of water treatment and distribution infrastructure. Surface water sources and systems with limited treatment will be more sensitive to wildfire-related changes in water quality. Older infrastructure with a lack of redundancy will be more sensitive to wildfire damage. **Impact:** More frequent wildfires have the potential to damage water distribution infrastructure and reduce water quality in reservoirs due to more runoff, erosion, and turbidity. Changes in water quality could increase the need for water treatment and filtration.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The likelihood of climate and fuel conditions favorable for wildfire in the county for future 30-year periods. For example, a value of 0.50 means that there is a 50% chance that a year in that time period will have climate and fuel conditions that are favorable for wildfire. The likelihood of wildfire is simulated using a fire process model. An increasing likelihood of wildfire indicates a greater potential for wildfire to damage infrastructure, interrupt businesses, or affect public health and well-being. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.

Zoning & Development	Decrease in snowpack	Drought	**Importance:** Snowpack in the mountains in the beginning of spring indicates the amount of natural water storage in snowpack that will be available in the melt season. April 1st snowpack (snow water equivalent) is one source of water for uses including hydropower generation, drinking water, irrigation, and instream flows for ecosystems. **Exposure:** Snowpack exposure to warming varies by elevation. In your county or community, the exposure of snow-dependent businesses and industries will depend on elevation. The low-elevation Cascade and Olympic foothills will be exposed first because these areas currently receive substantial snowfall at temperatures near freezing. By the end of the century, snowpack is expected to remain relatively unaffected only in the high-elevations of the Northern Cascade Mountains. **Sensitivity:** The degree to which development in your county or community will be affected by reductions in snowpack will vary based on the dependence of the recreation sector to snowpack and seasons, as well as flexibility to shift among seasons. **Impact:** Reductions in snowpack are expected to decrease opportunities for winter outdoor recreation and shorten the winter recreation season with adverse effects on the economy and character of some communities. Warm season outdoor recreation opportunities are expected to increase, shifting tourism revenue from one recreation sector to another.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The percent change in April 1st snowpack for future 30-year periods compared to the 1980-2009 average. April 1st snowpack is used as an indicator for the amount of stored water that becomes available during the melt season. A decrease in April 1st snowpack indicates that less stored water will be available to supply streams, soil, and reservoirs during the melt season. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.
Zoning & Development	Increase in august stream temperature	Extreme Heat	**Importance:** Stream temperature during August, which is typically the hottest month for most streams, is an indicator of water quality for salmon and other species that depend on cold water. **Exposure:** Undefined. **Sensitivity:** The degree to which water bodies and compliance with water temperature standards are affected by warmer water temperatures depends on the extent of non-climatic stressors that also increase water temperatures. **Impact:** Warmer stream temperatures have the potential to reduce the ability to meet water quality standards and the effluent limits (amount discharge to the water body) set on existing wastewater treatment facilities.	**Moderate emissions scenario (A1B) only available.** Historical baseline (1993-2011). Mid century baseline (2030-2059). End of century baseline (2070-2099). The percentage of stream lengths in categories of average August stream temperature for future 30-year periods. For example, 10% of the stream segments in the 18 to 20C category means that 10% of the stream length in the county have an average August stream temperature value between 18 and 20C. An increase in August stream temperature is an indicator of water quality for salmon and other species that depend on cold water. Historical baseline of august stream temperature: 3.4% increase in range 16-18 deg C. 16.1% increase in range 14-16 deg C. 21.9% increase in range 12-14 deg C. 23.9% increase below 8 deg C. Mid Century: 13.2% increase in range 16-18 deg C. 20.9% increase in range 14-16 deg C. 21.2% increase in range 12-14 deg C. 15% increase in range 10-12 deg C. 15.2% increase in range below 8 deg C. End of Century: 15.4% increase in range 16-18 deg C. 21.7% increase in range 14-16 deg C. 18.8% increase in range 12-14 deg C. 12.3% increase in range 10-12 deg C. 8% increase in range below 8 deg C.
Zoning & Development	Increase in heavy precipitation magnitude	Extreme Precipitation	**Importance:** Change in the intensity of heavy precipitation events are more likely to cause damages to infrastructure and agricultural operations than changes in seasonal and annual precipitation. **Exposure:** In your county or community, certain land uses and development located in low-lying areas, within current floodplains or regulatory flood zones, or adjacent to unstable slopes are expected to be more exposed to an increase in heavy precipitation. **Sensitivity:** The degree to which development is affected by increases in precipitation intensity depends on the type of land use, building codes in flood and steep slope zones, and the capacity of stormwater systems. **Impact:** Heavier precipitation events are expected to intensify urban flooding and demands on storm water systems, which can affect zoning restrictions on new buildings, and require revised building codes for development in more frequently flooded areas.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). A heavy precipitation day is the maximum daily precipitation that occurs with the 2-year storm, or on average once every two years. For example, a value of 15% means a county is expected to experience an increase in the total precipitation of the 2-year storm of 15%. Heavy precipitation is an indicator of flooding that can affect infrastructure and operations. Increase in heavy precipitation magnitude from 8% for mid century to 21% for end of century. Historical baseline was not recorded.

Zoning & Development	Decrease in peak streamflow	Flooding	**Importance:** An increase in the annual peak streamflow indicates a potential for higher streamflows and larger areas inundated every year at high flows. **Exposure:** In your county or community, development located in river valleys and in or near current and historical flood zones will be most exposed to projected increases in high streamflows that cause flooding. **Sensitivity:** The degree to which development in your county or community is affected by higher streamflows that can cause more flooding depends on the types of land use in flood zones and the extent of flood protection. **Impact:** Higher streamflows are expected to increase damage to all types of infrastructure in flood zones and could expand the flood zone in some areas leading to damage of development not currently in flood zones.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2050-2079). End of century baseline (2070-2099). Data shows the percent of stream lengths in a county that fall within a category of change from 1980-2009 peak streamflow. For example, 10% of the stream segments in the 50 to 30 category means that 10% of the streams in the county will have 50% to 30% more streamflow on the day of the year with the highest streamflow. All streamflow values here are natural flows, and do not include any influence from withdrawals or hydropower projects. More peak streamflow is an indicator of flood potential and larger areas inundated every year at high flows. Historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively.
Zoning & Development	Decrease in snowpack	Reduced Snowpack	**Importance:** Snowpack in the mountains in the beginning of spring indicates the amount of natural water storage in snowpack that will be available in the melt season. April 1st snowpack (snow water equivalent) is one source of water for uses including hydropower generation, drinking water, irrigation, and instream flows for ecosystems. **Exposure:** Snowpack exposure to warming varies by elevation. In your county or community, the exposure of snow-dependent businesses and industries will depend on elevation. The low-elevation Cascade and Olympic foothills will be exposed first because these areas currently receive substantial snowfall at temperatures near freezing. By the end of the century, snowpack is expected to remain relatively unaffected only in the high-elevations of the Northern Cascade Mountains. **Sensitivity:** The degree to which development in your county or community will be affected by reductions in snowpack will vary based on the dependence of the recreation sector to snowpack and seasons, as well as flexibility to shift among seasons. **Impact:** Reductions in snowpack are expected to decrease opportunities for winter outdoor recreation and shorten the winter recreation season with adverse effects on the economy and character of some communities. Warm season outdoor recreation opportunities are expected to increase, shifting tourism revenue from one recreation sector to another.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The percent change in April 1st snowpack for future 30-year periods compared to the 1980-2009 average. April 1st snowpack is used as an indicator for the amount of stored water that becomes available during the melt season. A decrease in April 1st snowpack indicates that less stored water will be available to supply streams, soil, and reservoirs during the melt season. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.
Zoning & Development	Increase in likely sea level rise	Sea Level Rise	**Importance:** Relative sea level rise indicates how much the average water level is expected to rise due to the combined effects of climate change and movement of the land. **Exposure:** In your county or community, exposure to sea level rise will vary locally with differences in the rate of geologic uplift or subsidence. The extent of inundation, coastal flooding, and erosion will vary based on shoreline topography and characteristics. Development located in low-lying coastal zones or near coastal bluffs will be more exposed. **Sensitivity:** The degree to which development in your county or community is affected by sea level rise and associated coastal hazards depends on the types of land use in coastal flood zones and the extent of flood protection. **Impact:** Moderate sea level rise is expected to inundate some coastal land and intensify coastal flooding of infrastructure. Sea level rise is expected to increase beach and bluff erosion in some areas. Increasing coastal hazards are expected to decrease the area of coastal land that is suitable for some types of development and increase the need for relocation.	High emissions scenario. Historical baseline (1991-2009). Mid century baseline 2050. End of century baseline 2100. Data shows relative sea level rise with a 50% likelihood of occurring for future 30-year periods compared to the average sea level in 1991-2009. For example, a value of 2.0 means that there is a 50% chance that the county will experience 2.0 feet of relative sea level rise. Puget Sound and the central and southern outer coast on the Pacific Ocean are likely to experience more sea level rise than the northwest Olympia Peninsula due to differences in vertical movement of the land, sedimentation, and current coastal storm patterns. Increasing sea level contributes to future flooding, inundation, and coastal erosion. Historical baseline not recorded. Mid century and end of century projected to be 0.7 feet and 2.1 feet, respectively.

Zoning & Development	Increase in Wildfire Likelihood	Wildfire	**Importance:** An increasing likelihood of wildfire indicates a greater potential for wildfire to damage infrastructure, interrupt businesses, or affect public health and well-being. **Exposure:** In your county or community, the extent of development and the types of land use in the wildland-urban interface will affect local exposure to increases in the likelihood of wildfire. **Sensitivity:** The degree to which development will be affected by increases in wildfire depends on the types of land use in the wildland-urban interface. Other non-climatic factors affecting development, such as population growth, will also affect sensitivity of development to wildfire. **Impact:** More frequent wildfires are expected to increase damage to homes and infrastructure and displace residents.	High emissions scenario. Historical baseline (1980-2009). Mid century baseline (2030-2059). End of century baseline (2070-2099). The likelihood of climate and fuel conditions favorable for wildfire in the county for future 30-year periods. For example, a value of 0.50 means that there is a 50% chance that a year in that time period will have climate and fuel conditions that are favorable for wildfire. The likelihood of wildfire is simulated using a fire process model. An increasing likelihood of wildfire indicates a greater potential for wildfire to damage infrastructure, interrupt businesses, or affect public health and well-being. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.

Task 1.3: Pair assets and hazards, and describe exposure and consequences						
Number	**Asset-Hazard Pair** *(Note applicable sector(s) in parenthesis.)*	**Climate Indicator** *(Use the CMRW webtool and other resources, as needed, to fill out this column.)*	**Climate Impacts** *(Use the CMRW webtool and other resources, as needed, to fill out this column.)*	**Exposure** *(Describe how each asset is exposed to the hazard, utilizing information from the CMRW webtool's "Understanding the Importance" tab, local knowledge, and other resources)*	**Non-Climate Stressors** *(Describe non-climate stressors that may exacerbate climate impacts.)*	**Consequences** *(Describe the consequences of the climate impacts, factoring in exposure, non-climate stressors, and your knowledge of how this hazard has impacted your community in the past. You may find it useful to divide consequences into past and future.)*
1	Farms-Drought (Ag & Food Systems)	Increase in precipitation drought	Total summer precipitation (June-August) is anticipated to be below 75% of the historical normal summer precipitation by mid-century under high emissions scenario (RCP8.5). Steady increase of likelihood of a year with summer precipitation below 75% ranges from 0.26 mid century to 0.39 end of century. More frequent and severe droughts due to low summer precipitation will reduce the amount of water available for livestock and irrigation during the same time that warmer temperatures and longer growing seasons are expected to increase the demand for irrigation water.	Skagit County has a rich agricultural industry and many important ecosystems, historically shaped by the unconfined Skagit River delta. Approximately 90% of the county's farmgate value is produced on around 60,000 acres in the Skagit and Samish Deltas, areas that rely on specialized diking, drainage, and irrigation districts to maintain productivity. This transformation of marsh and floodplains into productive farmland has made Skagit County one of the largest agricultural communities west of the Cascade Mountains, generating approximately $261 million annually. The land is primarily cultivated by large and mid-scale farms that support critical practices such as crop rotation and land-sharing agreements.	Economic constraints, logistical limitations, additional water use during land preparation or harvest	Projected warmer temperatures and changing precipitation patterns are likely to raise water demand for irrigation by mid-century, adding strain on already limited water resources, particularly during peak growing seasons.
2	Farms-Extreme Heat (Ag & Food Systems)	Increase in summer max temperature	Warmer summers are expected to increase the potential for heat stress on some crops and livestock and decrease crop yields. Some agricultural pests are expected to have greater survival rates and population size with warming. Warmer summer temperatures are expected to increase demand for irrigation water. Increase in summer maximum temperature from 5.1 deg F for mid century to 10.7 deg F. end of century. Historical baseline is 69 deg F.	Skagit County has a rich agricultural industry and many important ecosystems, historically shaped by the unconfined Skagit River delta. Approximately 90% of the county's farmgate value is produced on around 60,000 acres in the Skagit and Samish Deltas, areas that rely on specialized diking, drainage, and irrigation districts to maintain productivity. This transformation of marsh and floodplains into productive farmland has made Skagit County one of the largest agricultural communities west of the Cascade Mountains, generating approximately $261 million annually. The land is primarily cultivated by large and mid-scale farms that support critical practices such as crop rotation and land-sharing agreements. Although farm labor in Skagit County is significantly smaller than in the rest of the state, the region still cultivates labor-intensive crops, resulting in a compressed labor market. The H-2A guest worker program has become increasingly relied upon as a labor source; however, the overall migrant farmworker population is shrinking, with a notable shift toward more resident migrant populations	Economic constraints, logistical limitations, employment constraints	Projected warmer temperatures and changing precipitation patterns are likely to raise water demand for irrigation by mid-century, adding strain on already limited water resources, particularly during peak growing seasons.
3	Farms-Extreme precipitation (Ag & Food Systems)	Increase in heavy precipitation magnitude	Heavier precipitation is expected to intensify flooding and inundation of agricultural lands, which can delay spring planting, affect crop quality and quantity, increase erosion and runoff, and increase susceptibility to root diseases. Increase in heavy precipitation magnitude from 8% for mid century to 21% for end of century. Historical baseline was not recorded.	Skagit County has a rich agricultural industry and many important ecosystems, historically shaped by the unconfined Skagit River delta. Approximately 90% of the county's farmgate value is produced on around 60,000 acres in the Skagit and Samish Deltas, areas that rely on specialized diking, drainage, and irrigation districts to maintain productivity. This transformation of marsh and floodplains into productive farmland has made Skagit County one of the largest agricultural communities west of the Cascade Mountains, generating approximately $261 million annually. The land is primarily cultivated by large and mid-scale farms that support critical practices such as crop rotation and land-sharing agreements.	Economic constraints, logistical limitations, additional water use during land preparation or harvest	Projected warmer temperatures and changing precipitation patterns are likely to raise water demand for irrigation by mid-century, adding strain on already limited water resources, particularly during peak growing seasons.
4	Farms-Reduced snowpack (Ag & Food Systems)	Increase in streamflow timing	A shift in streamflow timing, with more streamflow in winter and early spring, will change the timing of water available for irrigated agriculture. This may or may not align with changes in the timing of the growing season for different crops. Steady increase of percentage of stream lengths in Skagit County winter to spring streamflow timing ratio. Historical baseline ratio for 1.0 to 1.5 is 6.1%. Mid century ratio for 1.0 to 1.5 is 13.6% and end of century 1.0 to 1.5 ratio is 51.3 percent.	Skagit County has a rich agricultural industry and many important ecosystems, historically shaped by the unconfined Skagit River delta. Approximately 90% of the county's farmgate value is produced on around 60,000 acres in the Skagit and Samish Deltas, areas that rely on specialized diking, drainage, and irrigation districts to maintain productivity. This transformation of marsh and floodplains into productive farmland has made Skagit County one of the largest agricultural communities west of the Cascade Mountains, generating approximately $261 million annually. The land is primarily cultivated by large and mid-scale farms that support critical practices such as crop rotation and land-sharing agreements.	Economic constraints, logistical limitations, additional water use during land preparation or harvest	Projected warmer temperatures and changing precipitation patterns are likely to raise water demand for irrigation by mid-century, adding strain on already limited water resources, particularly during peak growing seasons.
5	Farms-Wildfire (Ag & Food Systems)	Increase in wildfire likelihood	More frequent wildfires have the potential to increase damage to crops, livestock, agriculture infrastructure and operations. Wildfire smoke may reduce the quality of some crops and adversely affect farm workers and other outdoor laborers in the industry. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	Skagit County has a rich agricultural industry and many important ecosystems, historically shaped by the unconfined Skagit River delta. Approximately 90% of the county's farmgate value is produced on around 60,000 acres in the Skagit and Samish Deltas, areas that rely on specialized diking, drainage, and irrigation districts to maintain productivity. This transformation of marsh and floodplains into productive farmland has made Skagit County one of the largest agricultural communities west of the Cascade Mountains, generating approximately $261 million annually. The land is primarily cultivated by large and mid-scale farms that support critical practices such as crop rotation and land-sharing agreements. Although farm labor in Skagit County is significantly smaller than in the rest of the state, the region still cultivates labor-intensive crops, resulting in a compressed labor market. The H-2A guest worker program has become increasingly relied upon as a labor source; however, the overall migrant farmworker population is shrinking, with a notable shift toward more resident migrant populations	Economic constraints, logistical limitations, employment constraints	Increased risk of wildfires, exacerbated by higher temperatures, can lead to smoke stress and respiratory problems, further impacting farmers' ability to work during periods of smoke or high heat.
6	Administrative Buildings - Extreme Heat (Buildings & Energy)	Decrease in heating degree days	A decrease in heating degree days is expected to reduce energy demand for heating. This has the potential to reduce energy costs for businesses and residents, but decrease utility revenue to support infrastructure and operations. Steady decrease in heating degree days. Historical baseline of 7089 def F heating days (109 days for heating). Mid century and end of century projected to be a decrease in 1199 deg F heating days (-18 days) and 2467 deg F heating days (-38 days).	Buildings and utilities located in areas with mild winter climates will be most exposed to decreases in heating degree days. Skagit county is expected to experience -1199 °F-days in heating degree days by mid-century under RCP8.5 scenarios, meaning there will be a decrease in total annual degree-days below an average daily temperature of 65°F. The Cascades mountain region in eastern County is anticipated to experience more decrease in total annual degree-days, indicating that the region will experience more warming other parts of the County.	Increased personnel; Increased impervious surfaces/urban development; Work environment (work from home vs. in office)	Longer durations of heating and cooling degree days are expected to occur. An increase in cooling degree days is expected to increase energy demand for air conditioning and industrial cooling systems in summer when regional hydropower supply is expected to decrease, increasing demand on external energy sources and causing potential widespread power outages (Source: CMRW tool). Power outages may inhibit the County from administering services and emergency relief
7	Administrative Buildings - Wildfire (Buildings & Energy)	Increased likely wildfire	More frequent wildfires have the potential to affect energy transmission by damaging infrastructure and interrupting transmission and distribution. More frequent wildfires are expected to cause property damage and loss. Poor air quality due to wildfire smoke could increase demand for air filtration systems in buildings. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	Skagit County has a low likelihood of wildfire (0.04) with 4% likelihood that conditions exist to support wildfire events, including assumptions of ignition presence and suppression methods. Infrastructure located in the wildland-urban interface and areas with high wildfire risk historically will be most exposed to increases in the likelihood of wildfire. County administrative buildings are mainly located in incorporated areas surrounded by urban development, and are more likely to experience secondary hazards such as smoke, ash, loss of power, etc.	Limited personnel; Development in WUI zone	Wildfires are anticipated to occur more frequently. More frequent wildfires are expected to cause property damage and loss, and building filtration upgrades.
8	Electricity generating stations - Extreme Heat (Buildings & Energy)	Decrease in heating degree days	A decrease in heating degree days is expected to reduce energy demand for heating. This has the potential to reduce energy costs for businesses and residents, but decrease utility revenue to support infrastructure and operations. Steady decrease in heating degree days. Historical baseline of 7089 def F heating days (109 days for heating). Mid century and end of century projected to be a decrease in 1199 deg F heating days (-18 days) and 2467 deg F heating days (-38 days).	County is anticipated to experience decreases in total annual degree-days below an average daily temperature of 65°F, reducing demand on electricity for heating. Exposure of generating stations to decreased heating degree days may reduce electricity generating efficiencies due to warming effects.	Increased population; Increased development; Lack of technology; Lack of capital expenditure funds	Prolonged exposure to extreme heat can reduce output, aka derating, generation capacity, and transmission efficiency and capacity, resulting in systematic energy losses. Turbines and power plants reliant on cool water can become less efficient due to a lower proportional thermal conversion. Extreme heat can also cause overhead lines to sag through thermal expansion, heightening wildfire risk and increasing voluntary power shutoffs and forced blackouts. Impacts to residents with preexisting health conditions can lead to increased emergency response services.

9	Electricity generating stations - Wildfire (Buildings & Energy)	Increased likely wildfire	More frequent wildfires have the potential to affect energy transmission by damaging infrastructure and interrupting transmission and distribution. More frequent wildfires are expected to cause property damage and loss. Poor air quality due to wildfire smoke could increase demand for air filtration systems in buildings. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	Skagit County has a low likelihood of wildfire (0.04) with 4% likelihood that conditions exist to support wildfire events, including assumptions of ignition presence and suppression methods. Generating stations that are located in forested areas/WUI zones are more exposed to wildfire likelihood and wildfire events.	Increased development; Lack of technology; Lack of capital expenditure funds; Site constraints	Prolonged exposure to extreme heat can reduce output, aka derating, generation capacity, and transmission efficiency and capacity, resulting in systematic energy losses. Turbines and power plants reliant on cool water can become less efficient due to a lower proportional thermal conversion. Extreme heat can also cause overhead lines to sag through thermal expansion, heightening wildfire risk and increasing voluntary power shutoffs and forced blackouts. Impacts to residents with preexisting health conditions can lead to increased emergency response services.
10	Residential Neighborhood 1 - Drought	Summer precipitation	Under an RCP8.5 scenario, the likelihood of a year with summer precipitation below 75% of the historical normal is projected to be 20% by mid-century (2040-2069).	Neighborhoods 1, 3, and 4 are located outside of the 100-year floodplain and can be more susceptible to summer drought conditions and wildland fires because a high percentage of homes are located in timbered interface areas. Almost 20,000 residents reside in these hazard mitigation neighborhoods, making them more exposed to climate-related risks such as drought, fires, and landslides. Those areas most vulnerable to drought situations are Fidalgo Island and Guemes Island in western Skagit County. Guemes Island relies totally on an island aquifer for domestic water. There are only a small number of full-time residents living on Guemes Island; however, a lot of residents live on rural Fidalgo Island rely on private, stand-alone water systems for their domestic water supply.	Housing development patterns and development standards.	With increased drought conditions and wildfire likelihood in WUI zones, housing communities will likely become more vulnerable and susceptible to structural damage. Higher temperatures and reduced moisture levels during droughts increase the likelihood of regional wildfires. These fires can degrade air quality, posing health risks to residents. A severe or long-term drought situation could severely impact a large number of citizens living and working on Fidalgo Island. A severe or long-term drought would subject persons living on Guemes Island and portions of Fidalgo Island to a significant fire risk.
11	Residential Neighborhood 3 - Drought	Summer precipitation	Under an RCP8.5 scenario, the likelihood of a year with summer precipitation below 75% of the historical normal is projected to be 20% by mid-century (2040-2069).	Neighborhoods 1, 3, and 4 are located outside of the 100-year floodplain and can be more susceptible to summer drought conditions and wildland fires because a high percentage of homes are located in timbered interface areas. Almost 20,000 residents reside in these hazard mitigation neighborhoods, making them more exposed to climate-related risks such as drought, fires, and landslides.	Housing development patterns and development standards.	With increased drought conditions and wildfire likelihood in WUI zones, housing communities will likely become more vulnerable and susceptible to structural damage. Higher temperatures and reduced moisture levels during droughts increase the likelihood of regional wildfires. These fires can degrade air quality, posing health risks to residents
12	Residential Neighborhood 4 - Drought	Summer precipitation	Under an RCP8.5 scenario, the likelihood of a year with summer precipitation below 75% of the historical normal is projected to be 20% by mid-century (2040-2069).	Neighborhoods 1, 3, and 4 are located outside of the 100-year floodplain and can be more susceptible to summer drought conditions and wildland fires because a high percentage of homes are located in timbered interface areas. Almost 20,000 residents reside in these hazard mitigation neighborhoods, making them more exposed to climate-related risks such as drought, fires, and landslides.	Housing development patterns and development standards.	With increased drought conditions and wildfire likelihood in WUI zones, housing communities will likely become more vulnerable and susceptible to structural damage. Higher temperatures and reduced moisture levels during droughts increase the likelihood of regional wildfires. These fires can degrade air quality, posing health risks to residents
13	Residential Neighborhood 1 - Extreme Heat	Decrease in heating degree days	A decrease in heating degree days is expected to reduce energy demand for heating. This has the potential to reduce energy costs for businesses and residents, but decrease utility revenue to support infrastructure and operations. Steady decrease in heating degree days. Historical baseline of 7089 def F heating days (109 days for heating). Mid century and end of century projected to be a decrease in 1199 deg F heating days (-18 days) and 2467 deg F heating days (-38 days).	Buildings and utilities located in areas with mild winter climates will be most exposed to decreases in heating degree days. Within Skagit County, there are four hazard mitigation neighborhoods (1 through 4) which have distinct boundaries. Almost 20,000 residents reside in these hazard mitigation neighborhoods, making them more exposed to climate-related risks such as drought, fires, and landslides. Poor living conditions and substandard housing are associated with poor public health outcomes. In Skagit County, 30.4% of housing units are built prior to 1960 and 70.3% are owner-occupied.	Increase in population (more demand on energy use); More impervious surface development	County residents may experience increased vulnerability to climate threats as housing-related hazards such as lead paint (houses built prior to 1960), asbestos, and poor filtration may amplify public health concerns due to increased extreme heat days. Extreme heat events exacerbate the hot, dry conditions that help wildfires catch and spread. Thus, extreme heat and wildfire smoke can heighten poor air quality, human heart and respiratory issues, and overall hospitalizations.
14	Residential Neighborhood 2 - Extreme Heat	Decrease in heating degree days	A decrease in heating degree days is expected to reduce energy demand for heating. This has the potential to reduce energy costs for businesses and residents, but decrease utility revenue to support infrastructure and operations. Steady decrease in heating degree days. Historical baseline of 7089 def F heating days (109 days for heating). Mid century and end of century projected to be a decrease in 1199 deg F heating days (-18 days) and 2467 deg F heating days (-38 days).	Buildings and utilities located in areas with mild winter climates will be most exposed to decreases in heating degree days. Within Skagit County, there are four hazard mitigation neighborhoods (1 through 4) which have distinct boundaries. Almost 20,000 residents reside in these hazard mitigation neighborhoods, making them more exposed to climate-related risks such as drought, fires, and landslides. Poor living conditions and substandard housing are associated with poor public health outcomes. In Skagit County, 30.4% of housing units are built prior to 1960 and 70.3% are owner-occupied.	Increase in population (more demand on energy use); More impervious surface development	County residents may experience increased vulnerability to climate threats as housing-related hazards such as lead paint (houses built prior to 1960), asbestos, and poor filtration may amplify public health concerns due to increased extreme heat days. Extreme heat events exacerbate the hot, dry conditions that help wildfires catch and spread. Thus, extreme heat and wildfire smoke can heighten poor air quality, human heart and respiratory issues, and overall hospitalizations.
15	Residential Neighborhood 3 - Extreme Heat	Decrease in heating degree days	A decrease in heating degree days is expected to reduce energy demand for heating. This has the potential to reduce energy costs for businesses and residents, but decrease utility revenue to support infrastructure and operations. Steady decrease in heating degree days. Historical baseline of 7089 def F heating days (109 days for heating). Mid century and end of century projected to be a decrease in 1199 deg F heating days (-18 days) and 2467 deg F heating days (-38 days).	Buildings and utilities located in areas with mild winter climates will be most exposed to decreases in heating degree days. Within Skagit County, there are four hazard mitigation neighborhoods (1 through 4) which have distinct boundaries. Almost 20,000 residents reside in these hazard mitigation neighborhoods, making them more exposed to climate-related risks such as drought, fires, and landslides. Poor living conditions and substandard housing are associated with poor public health outcomes. In Skagit County, 30.4% of housing units are built prior to 1960 and 70.3% are owner-occupied.	Increase in population (more demand on energy use); More impervious surface development	County residents may experience increased vulnerability to climate threats as housing-related hazards such as lead paint (houses built prior to 1960), asbestos, and poor filtration may amplify public health concerns due to increased extreme heat days. Extreme heat events exacerbate the hot, dry conditions that help wildfires catch and spread. Thus, extreme heat and wildfire smoke can heighten poor air quality, human heart and respiratory issues, and overall hospitalizations.
16	Residential Neighborhood 4 - Extreme Heat	Decrease in heating degree days	A decrease in heating degree days is expected to reduce energy demand for heating. This has the potential to reduce energy costs for businesses and residents, but decrease utility revenue to support infrastructure and operations. Steady decrease in heating degree days. Historical baseline of 7089 def F heating days (109 days for heating). Mid century and end of century projected to be a decrease in 1199 deg F heating days (-18 days) and 2467 deg F heating days (-38 days).	Buildings and utilities located in areas with mild winter climates will be most exposed to decreases in heating degree days. Within Skagit County, there are four hazard mitigation neighborhoods (1 through 4) which have distinct boundaries. Almost 20,000 residents reside in these hazard mitigation neighborhoods, making them more exposed to climate-related risks such as drought, fires, and landslides. Poor living conditions and substandard housing are associated with poor public health outcomes. In Skagit County, 30.4% of housing units are built prior to 1960 and 70.3% are owner-occupied.	Increase in population (more demand on energy use); More impervious surface development	County residents may experience increased vulnerability to climate threats as housing-related hazards such as lead paint (houses built prior to 1960), asbestos, and poor filtration may amplify public health concerns due to increased extreme heat days. Extreme heat events exacerbate the hot, dry conditions that help wildfires catch and spread. Thus, extreme heat and wildfire smoke can heighten poor air quality, human heart and respiratory issues, and overall hospitalizations.

17	Residential Neighborhood 2 - Flooding	Increase in peak streamflow frequency	Similarly, storms, high tides, and extreme precipitation may exacerbate flooding events due to sea level rise, isolating specific neighborhoods and compromising residential septic tank infrastructure, private water wells, aerobic systems, and energy systems. Historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 percent is 100. Meaning 100% of stream segments experience 25-year peak volumes once every 20 to 30 years. Mid century and end of century projections are 19.3 and 4.4, respectively, of river segments with little to no change in peak streamflow, whereas 80.4 and 29.5 river segments are projected to experience 25-year peak volumes once every 10 to 20 years. Meaning peak streamflow will occur more frequently.	Neighborhood 2 comprises of the Skagit River delta and Puget Sound coast that follows the boundaries of the river floodplain and can be at greater risk of sea level rise and flood events.	Housing development patterns and development standards.	Extreme precipitation and sea level rise can increase the risk of coastal erosion and flooding, thus undermining the foundations of buildings, leading to structural damage and eventual destruction. The combined effects of high tides, peak riverine streamflow, and sea level rise can cause widespread flooding from temporary extreme high-water levels fanning out over the delta's broad and low-lying geography, exposing residential development along shoreline areas. Neighborhood 2 follows the boundaries of the 100-year floodplain of the Skagit River and can be exposed to flooding from sea level rise and Skagit River flood events. There are three different types of phase floods: - Phase 1 flooding inundates low areas near the Skagit River and generally does not cause significant damage in the Skagit River Valley. - Phase 2 flooding inundates a broader area and may cause significant damage. - Phase 3 flooding can cause catastrophic damage in the valley
18	Residential Neighborhood 2 - Sea Level Rise	Likely sea level rise	Sea levels are anticipated to increase by mid-century, causing widespread shallow flooding along the Samish and Skagit Deltas	Neighborhood 2 comprises of the Skagit River delta and Puget Sound coast that follows the boundaries of the river floodplain and can be at greater risk of sea level rise and flood events.	Housing development patterns and development standards.	Sea level rise can increase the risk of coastal erosion and flooding, thus undermining the foundations of buildings, leading to structural damage and eventual destruction. The combined effects of high tides, peak riverine streamflow, and sea level rise can cause widespread flooding from temporary extreme high-water levels fanning out over the delta's broad and low-lying geography, exposing residential development along shoreline areas.
19	Residential Neighborhood 1 - Wildfire	Increased likely wildfire	More frequent wildfires have the potential to affect energy transmission by damaging infrastructure and interrupting transmission and distribution. More frequent wildfires are expected to cause property damage and loss. Poor air quality due to wildfire smoke could increase demand for air filtration systems in buildings. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	Neighborhoods 1, 3, and 4 are located outside of the 100-year floodplain and can be more susceptible to summer drought conditions and wildland fires because a high percentage of homes are located in timbered interface areas. Housing along Highway 20, Highway 530, Highway 9, Cedardale, Lake Cavanaugh, northeast Burlington, and island communities in western Skagit County exhibit high susceptibility to wildfire threats.	Housing development patterns and development standards.	With increased drought conditions and wildfire likelihood in WUI zones, housing communities will likely become more vulnerable and susceptible to structural damage. Higher temperatures and reduced moisture levels during droughts increase the likelihood of regional wildfires. These fires can degrade air quality, posing health risks to residents
20	Residential Neighborhood 3 - Wildfire	Increased likely wildfire	More frequent wildfires have the potential to affect energy transmission by damaging infrastructure and interrupting transmission and distribution. More frequent wildfires are expected to cause property damage and loss. Poor air quality due to wildfire smoke could increase demand for air filtration systems in buildings. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	Neighborhoods 1, 3, and 4 are located outside of the 100-year floodplain and can be more susceptible to summer drought conditions and wildland fires because a high percentage of homes are located in timbered interface areas. Housing along Highway 20, Highway 530, Highway 9, Cedardale, Lake Cavanaugh, northeast Burlington, and island communities in western Skagit County exhibit high susceptibility to wildfire threats.	Housing development patterns and development standards.	With increased drought conditions and wildfire likelihood in WUI zones, housing communities will likely become more vulnerable and susceptible to structural damage. Higher temperatures and reduced moisture levels during droughts increase the likelihood of regional wildfires. These fires can degrade air quality, posing health risks to residents
21	Residential Neighborhood 4 - Wildfire	Increased likely wildfire	More frequent wildfires have the potential to affect energy transmission by damaging infrastructure and interrupting transmission and distribution. More frequent wildfires are expected to cause property damage and loss. Poor air quality due to wildfire smoke could increase demand for air filtration systems in buildings. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	Neighborhoods 1, 3, and 4 are located outside of the 100-year floodplain and can be more susceptible to summer drought conditions and wildland fires because a high percentage of homes are located in timbered interface areas. Housing along Highway 20, Highway 530, Highway 9, Cedardale, Lake Cavanaugh, northeast Burlington, and island communities in western Skagit County exhibit high susceptibility to wildfire threats.	Housing development patterns and development standards.	With increased drought conditions and wildfire likelihood in WUI zones, housing communities will likely become more vulnerable and susceptible to structural damage. Higher temperatures and reduced moisture levels during droughts increase the likelihood of regional wildfires. These fires can degrade air quality, posing health risks to residents
22	Petroleum refineries - Extreme Heat	Decrease in heating degree days	A decrease in heating degree days is expected to reduce energy demand for heating. This has the potential to reduce energy costs for businesses and residents, but decrease utility revenue to support infrastructure and operations. Steady decrease in heating degree days. Historical baseline of 7089 def F heating days (109 days for heating). Mid century and end of century projected to be a decrease in 1199 deg F heating days (-18 days) and 2467 deg F heating days (-38 days).	Petroleum is processed at refineries near Anacortes and delivered via transmission pipelines to Western County. Liquid gas is provided by Northwest Pipeline, BP Olympic Pipeline Company, and Trans Mountain Pipeline, which runs north to south along the Samish and Skagit deltas.	Increase in population (more demand on energy use); More impervious surface development	Refineries are typically designed to operate between 32 and 95 degree Fahrenheit; extreme temperatures could cause the plant to become inefficient, shut down, or create potentially dangerous working conditions.
23	Natural gas pipelines - Extreme Heat	Decrease in heating degree days	A decrease in heating degree days is expected to reduce energy demand for heating. This has the potential to reduce energy costs for businesses and residents, but decrease utility revenue to support infrastructure and operations. Steady decrease in heating degree days. Historical baseline of 7089 def F heating days (109 days for heating). Mid century and end of century projected to be a decrease in 1199 deg F heating days (-18 days) and 2467 deg F heating days (-38 days).	Cascade Natural Gas provides natural gas and has a large transmission pipeline that extends from Anacortes in the west to Sedro-Woolley. Cascade Natural Gas serves over 260,000 customers. 82.6% of occupied housing units in Skagit County use utility gas and electricity as primary heating sources with the second highest use being wood.	Increase in population (more demand on energy use); More impervious surface development	Natural gas pipelines may face reduced operational efficiency, potential pipeline damage due to thermal expansion, increased demand for cooling, and disruptions to gas production facilities.
24	Electric Utilities - Extreme Heat	Decrease in heating degree days	A decrease in heating degree days is expected to reduce energy demand for heating. This has the potential to reduce energy costs for businesses and residents, but decrease utility revenue to support infrastructure and operations. Steady decrease in heating degree days. Historical baseline of 7089 def F heating days (109 days for heating). Mid century and end of century projected to be a decrease in 1199 deg F heating days (-18 days) and 2467 deg F heating days (-38 days).	Large utility providers such as Puget Sound Energy (PSE) serve 65,000 customers. PSE has approximately 1,015 miles of overhead wire, 744 miles of underground cables, and 24 substations that serve more than 60,000 customers (84% residential, 15% commercial, and 1% industrial). 82.6% of occupied housing units in Skagit County use utility gas and electricity as primary heating sources with the second highest use being wood.	Increase in population (more demand on energy use); More impervious surface development and demand.	More frequent severe weather events can damage utility assets, resulting in widespread power outages, lengthier response times, and increased public safety power shutoffs. Extreme heat days may exacerbate the hot dry conditions that help wildfires catch and spread. However, with a decrease in heating degree days, these consequences may be less likely to occur. Extreme heat can also cause overhead lines to sag through thermal expansion, heightening wildfire risk and increasing voluntary power shutoffs and forced blackouts. Blackouts may leave many consumers vulnerable to the impacts of extreme heat during elongated periods, as the outdoor ambient temperature is directly associated with the amount of electricity consumed.
25	Baker River Hydroelectric Project - Extreme Heat	Decrease in heating degree days	A decrease in heating degree days is expected to reduce energy demand for heating. This has the potential to reduce energy costs for businesses and residents, but decrease utility revenue to support infrastructure and operations. Steady decrease in heating degree days. Historical baseline of 7089 def F heating days (109 days for heating). Mid century and end of century projected to be a decrease in 1199 deg F heating days (-18 days) and 2467 deg F heating days (-38 days).	The Baker River Hydroelectric Project is located on a tributary of the Skagit River in northwest Skagit County and is one of the largest sources of hydroelectricity. Lake Shannon reservoir, which supplies water to the Lower Baker dam in the County, has a storage capacity of 160,000 acre-feet of water that can be used for electricity during low streamflow and high energy demand seasons.	Increase in population (more demand on energy use); More impervious surface development	Changes in extreme heat may reduce hydropower production potential; thus, the production and supply of electricity and energy may be significantly impacted.

26	Electric Utilities - Wildfire	Increase in wildfire likelihood	Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	Large utility providers such as Puget Sound Energy (PSE) serve 65,000 customers. PSE has approximately 1,015 miles of overhead wire, 744 miles of underground cables, and 24 substations that serve more than 60,000 customers (84% residential, 15% commercial, and 1% industrial). 82.6% of occupied housing units in Skagit County use utility gas and electricity as primary heating sources with the second highest use being wood.	Increase in population (more demand on energy use); More impervious surface development	Blackouts may leave many consumers vulnerable to the impacts of extreme heat during elongated periods, as the outdoor ambient temperature is directly associated with the amount of electricity consumed.
27	Natural Gas Pipelines - Wildfire	Increase in wildfire likelihood	Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	Cascade Natural Gas provides natural gas and has a large transmission pipeline that extends from Anacortes in the west to Sedro-Woolley. Cascade Natural Gas serves over 260,000 customers. 82.6% of occupied housing units in Skagit County use utility gas and electricity as primary heating sources with the second highest use being wood.	Increase in population (more demand on energy use); More impervious surface development	Natural gas pipelines may face direct damage from exposure of extreme heat from increased wildfires. Pipelines may also face potential leaks, ruptures, and displacement.
28	Petroleum refineries - Wildfire	Increase in wildfire likelihood	Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	Petroleum is processed at refineries near Anacortes and delivered via transmission pipelines to Western County. Liquid gas is provided by Northwest Pipeline, BP Olympic Pipeline Company, and Trans Mountain Pipeline, which runs north to south along the Samish and Skagit deltas.	Increase in population (more demand on energy use); More impervious surface development	Refineries may face reductions in oil production and significant damage to critical infrastructure due to wildfire.
29	Baker River Hydroelectric Project - Wildfire	Increase in wildfire likelihood	Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	The Baker River Hydroelectric Project is located on a tributary of the Skagit River in northwest Skagit County and is one of the largest sources of hydroelectricity. Lake Shannon reservoir, which supplies water to the Lower Baker dam in the County, has a storage capacity of 160,000 acre-feet of water that can be used for electricity during low streamflow and high energy demand seasons.	Increase in population (more demand on energy use); More impervious surface development	However, as energy demand shifts to summer months throughout the century, hydropower sources may reduce if consecutive and prolonged seasons of reduced snowmelt persist. Skagit County is more likely to experience a shift in hydropower supply from snowmelt to precipitation.
30	Fisheries-Drought (Cultural Resources)	Increase in Low streamflow	Lower streamflows in summer are expected to reduce habitat quantity and quality for salmonids and other aquatic species that are culturally important to Northwest Tribes. Historical baseline: 100% change of stream lengths in low stream flow category (-10 to 10). Indicates 100% of the streams in the county will have 10% less streamflow on average during low summer streamflow's. Mid century and end of century baseline is 25.4% and 7.7%.	The largest decrease in water during low flow periods in summer is projected for middle-elevation watersheds strongly influenced by both rain and snow. Streams on the western slopes of the Cascade and Olympic mountains are most exposed to the change, with streams in the Columbia basin exposed later in the century.	Economic constraints; Competing land use; Traditional ecological knowledge gaps	Traditional Salish tribe fishing grounds and methods along Skagit riverbanks and river basin would be impacted due to decreased quality and quantity of fisheries. Fishing seasons may be more restricted due to low populations.
31	Fisheries-Extreme Heat	Increase in August stream temperature	Warmer stream temperatures are expected to reduce habitat quality for salmonids and other aquatic species that depend on cold water. This reduces the abundance of and access to these culturally important species for Northwest Tribes.	Skagit basin and shoreline areas with wide, low-lying topography is more exposed to increased stream temperatures. Increased temperatures increase likelihood of hypoxia.	Economic constraints; Site constraints; Competing land use; Traditional ecological knowledge gaps	Lower streamflows in summer and increased summer temperatures are expected to cause hypoxic conditions that reduce habitat quantity and quality for salmonids and other aquatic species that are culturally important to coastal Salish tribes and recreational anglers.
32	Fisheries-Flooding	Decrease in peak streamflow	A decrease in the annual peak streamflow indicates a potential for lower streamflows and less areas inundated every year at high flows. Higher streamflows are expected to directly affect salmonid populations and alter salmonid habitat, reducing the quantity of a culturally important species for Northwest Tribes. Historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively. Meaning annual maximum streamflow for 19.3% of stream segments Countywide will not change by mid century (hence decrease from 100 to 19.3%), while 80.4% of stream segments Countywide will be 10 to 30% greater than the 1980-2009 average annual maximum streamflow by mid century.	Middle and high-elevation streams that currently receive a large fraction of winter precipitation as snow, rather than rain, will be more exposed to increases in high streamflows with warming. Downstream flooding along Skagit basin is anticipated to increase while upstream flooding remains relatively stable. Fisheries and aquatic farming operations are anticipated to experience increased exposure to flooding and sedimentation. Increased sedimentation impacts quality of fisheries, reducing consumption, economic activity, and cultural practices.	Economic constraints; Site constraints; Competing land use; Traditional ecological knowledge gaps	Decrease in peak streamflow would lead to more intense, intermittent flows during spring time, washing out habitat and reducing fish populations that impacts traditional ecological knowledge of indigenous peoples and fishermen.
33	Fisheries-Sea Level Rise	Increase in likely sea level rise	Moderate sea level rise will increase the frequency and extent of coastal flooding. Sea level rise is expected to increase beach and bluff erosion in some areas. Increasing coastal hazards have the potential to damage cultural and historical sites and buildings, reducing access to these areas. Steady increase in likely sea level rise as mid century and end of century projections are 0.7 feet and 2.1 feet, respectively.	Exposure of cultural and historical resources to sea level rise will vary locally with differences in the rate of geologic uplift or subsidence. The extent of inundation, coastal flooding, and erosion *varies* based on shoreline topography and characteristics. Skagit basin is wide and low-lying, extent of SLR would be over a relatively large area, impacting fisheries and aquatic farming operations. Operations depend on water quality, temperature, sedimentation, dissolved oxygen, and other conditions.	Economic constraints; Site constraints; Competing land use; Traditional ecological knowledge gaps	SLR inundation and storm surges in coastal and low-lying areas such as the river basin can erode unstable areas, impacting fish habitat and decreasing population, habitat quality.
34	Fisheries-Wildfire	Increase in wildfire likelihood	More frequent wildfires have the potential to damage cultural and historical sites, buildings, and cultural resources. More frequent wildfires can also reduce access to culturally important sites and resources for Northwest Tribes. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	Skagit County is anticipated to experience 4% increase in wildfire likelihood supporting dry conditions prone to wildfire events. Cultural and historical sites located in the wildland-urban interface and areas with high wildfire risk historically will be most exposed to increases in the likelihood of wildfire. Fisheries in upstream areas near forest are more exposed than downstream areas i.e., basin, coast.	Competing land use; Increased deforestation	Secondary hazards to fisheries include sedimentation and reduced fisheries quality/presence, decreasing population that impacts cultural resources, and subsistence fishing. In addition, wildfire may lead to reduced recreational fishing; thus, economic activity related to recreational fishing may decrease.
35	Farms-Drought (Economic Development)	Decrease in snowpack	Reductions in snowpack are expected to decrease opportunities for winter outdoor recreation and shorten the winter recreation season, with adverse effects on the economy and character of some communities. Warm season outdoor recreation opportunities may increase, shifting tourism from one recreation sector to another and into different seasons. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	Skagit County has a rich agricultural industry and many important ecosystems, historically shaped by the unconfined Skagit River delta. Approximately 90% of the county's farmgate value is produced on around 60,000 acres in the Skagit and Samish Deltas, areas that rely on specialized diking, drainage, and irrigation districts to maintain productivity. This transformation of marsh and floodplains into productive farmland has made Skagit County one of the largest agricultural communities west of the Cascade Mountains, generating approximately $261 million annually. The land is primarily cultivated by large and mid-scale farms that support critical practices such as crop rotation and land-sharing agreements.	Competing land use; Policy changes; Economic constraints; Site constraints; Lack of investments or funds	Farms may have to explore crop rotation opportunities (i.e., drought resistant crops) and research other adaptation strategies.
36	Farms-Extreme Heat	Increase in summer max temperature	Warmer summer temperatures could alter crop varieties and increase outsourcing of produce that reduces value and revenue for locally sourced products. Increase in summer maximum temperature from 5.1 deg F for mid century to 10.7 deg F. end of century. Historical baseline is 69 deg F.	Skagit County has a rich agricultural industry and many important ecosystems, historically shaped by the unconfined Skagit River delta. Approximately 90% of the county's farmgate value is produced on around 60,000 acres in the Skagit and Samish Deltas, areas that rely on specialized diking, drainage, and irrigation districts to maintain productivity. This transformation of marsh and floodplains into productive farmland has made Skagit County one of the largest agricultural communities west of the Cascade Mountains, generating approximately $261 million annually. The land is primarily cultivated by large and mid-scale farms that support critical practices such as crop rotation and land-sharing agreements. Although farm labor in Skagit County is significantly smaller than in the rest of the state, the region still cultivates labor-intensive crops, resulting in a compressed labor market. The H-2A guest worker program has become increasingly relied upon as a labor source; however, the overall migrant farmworker population is shrinking, with a notable shift toward more resident migrant populations	Competing land use; Policy changes; Economic constraints; Site constraints; Lack of investments or funds	Farms may have to explore crop rotation opportunities (i.e., drought resistant crops) and research other adaptation strategies.

37	**Farms-Extreme precipitation**	Increase in heavy precipitation magnitude	Heavier precipitation is expected to intensify flooding in low-lying areas and require higher capacity storm water drainage systems. Impacts also include use of crops that require more water or are resilient to water logged soils. Increase in heavy precipitation magnitude from 8% for mid century to 21% for end of century. Historical baseline was not recorded.	Skagit County has a rich agricultural industry and many important ecosystems, historically shaped by the unconfined Skagit River delta. Approximately 90% of the county's farmgate value is produced on around 60,000 acres in the Skagit and Samish Deltas, areas that rely on specialized diking, drainage, and irrigation districts to maintain productivity. This transformation of marsh and floodplains into productive farmland has made Skagit County one of the largest agricultural communities west of the Cascade Mountains, generating approximately $261 million annually. The land is primarily cultivated by large and mid-scale farms that support critical practices such as crop rotation and land-sharing agreements. However, it is important to note current dike and drainage infrastructure may be at or near full capacity.	Policy changes; Site constraints; Lack of investments or funds	Farms may have to explore crop rotation opportunities (i.e., drought resistant crops) and research other adaptation strategies.
38	**Farms-Flooding**	Decrease from baseline of streams with return interval of 25-yr peak streamflow	More frequent high streamflow's are expected to increase the frequency of flooding impacts to businesses and the economy by disrupting travel and shipping routes and damaging property. More frequent flooding has the potential to increase insurance premiums or make some properties more difficult to insure. Historical baseline is 100% of streams with return interval of 25-yr peak streamflow occurring once every 20 to 30 years. Mid century and end of century projections are 28.5% and 14.5%, respectively, of streams with return interval of 25-year peak streamflow occurring once every 10 to 20 years. Meaning peak streamflows will occur more frequently.	Skagit County has a rich agricultural industry and many important ecosystems, historically shaped by the unconfined Skagit River delta. Approximately 90% of the county's farmgate value is produced on around 60,000 acres in the Skagit and Samish Deltas, areas that rely on specialized diking, drainage, and irrigation districts to maintain productivity. This transformation of marsh and floodplains into productive farmland has made Skagit County one of the largest agricultural communities west of the Cascade Mountains, generating approximately $261 million annually. The land is primarily cultivated by large and mid-scale farms that support critical practices such as crop rotation and land-sharing agreements. However, it is important to note current dike and drainage infrastructure may be at or near full capacity.	Policy changes; Site constraints; Lack of investments or funds	Farms may have to explore crop rotation opportunities (i.e., drought resistant crops) and research other adaptation strategies.
39	**Farms-Reduced snowpack**	Decrease in snowpack	Reductions in snowpack are expected to decrease groundwater and surface water availability for crop production. Reduced crop production can reduce revenue for locally sourced products. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	Skagit County has a rich agricultural industry and many important ecosystems, historically shaped by the unconfined Skagit River delta. Approximately 90% of the county's farmgate value is produced on around 60,000 acres in the Skagit and Samish Deltas, areas that rely on specialized diking, drainage, and irrigation districts to maintain productivity. This transformation of marsh and floodplains into productive farmland has made Skagit County one of the largest agricultural communities west of the Cascade Mountains, generating approximately $261 million annually. The land is primarily cultivated by large and mid-scale farms that support critical practices such as crop rotation and land-sharing agreements. However, it is important to note current dike and drainage infrastructure may be at or near full capacity.	Policy changes; Site constraints; Lack of investments or funds	Farms may have to explore crop rotation opportunities (i.e., drought resistant crops) and research other adaptation strategies.
40	**Farms-Sea level rise**	Increase in likely sea level rise	Moderate sea level rise will intensify coastal flooding during storms or extreme weather events, which can disrupt business operations and damage property. Historical baseline not recorded. Mid century and end of century projected to be 0.7 feet and 2.1 feet, respectively.	Skagit County has a rich agricultural industry and many important ecosystems, historically shaped by the unconfined Skagit River delta. Approximately 90% of the county's farmgate value is produced on around 60,000 acres in the Skagit and Samish Deltas, areas that rely on specialized diking, drainage, and irrigation districts to maintain productivity. This transformation of marsh and floodplains into productive farmland has made Skagit County one of the largest agricultural communities west of the Cascade Mountains, generating approximately $261 million annually. The land is primarily cultivated by large and mid-scale farms that support critical practices such as crop rotation and land-sharing agreements. However, it is important to note current dike and drainage infrastructure may be at or near full capacity.	Policy changes; Site constraints; Lack of investments or funds	Farms may have to explore crop rotation opportunities (i.e., drought resistant crops) and research other adaptation strategies.
41	**Farms-Wildfire**	Increase in wildfire danger	More days with high wildfire danger are expected to affect businesses through more frequent closures of recreation areas and restrictions on outdoor activities during the wildfire season. More high fire danger days will interrupt timber operations and outdoor recreation. Steady increase in change in high fire danger days. Historical baseline is 48 days of high fire danger days. Mid century and end of century change in additional high fire danger days is 6 and 11, respectively.	Skagit County has a rich agricultural industry and many important ecosystems, historically shaped by the unconfined Skagit River delta. Approximately 90% of the county's farmgate value is produced on around 60,000 acres in the Skagit and Samish Deltas, areas that rely on specialized diking, drainage, and irrigation districts to maintain productivity. This transformation of marsh and floodplains into productive farmland has made Skagit County one of the largest agricultural communities west of the Cascade Mountains, generating approximately $261 million annually. The land is primarily cultivated by large and mid-scale farms that support critical practices such as crop rotation and land-sharing agreements. Although farm labor in Skagit County is significantly smaller than in the rest of the state, the region still cultivates labor-intensive crops, resulting in a compressed labor market. The H-2A guest worker program has become increasingly relied upon as a labor source; however, the overall migrant farmworker population is shrinking, with a notable shift toward more resident migrant populations	Competing land uses; Policy changes; Site constraints; Lack of investments or funds	Farms may have to explore crop rotation opportunities (i.e., drought resistant crops) and research other adaptation strategies.
42	**Commercial forests-Drought (Economic Dev)**	Decrease in snowpack	Snowpack in the mountains in the beginning of spring indicates the amount of natural water storage in snowpack that will be available in the melt season. April 1st snowpack (snow water equivalent) is one source of water for uses including instream flows for ecosystems. Decreased snowpack is expected to stunt tree growth that reduces financial returns. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	Skagit County 2022 Timber Harvest Volume is 80,920, equivalent to more than 10,719 homes, ~3,000 jobs, ~$169.2 million in wages, ~$9.4 million in taxes and fees (WA Forest Protection Association, 2024). Forested areas in Culture Mountain, Mount Josephine, Chuckanut Mountain, Anderson Mountain, west of Bald Mountain/east of Lake Shannon, Rinker Ridge along Sauk River, and south of Lookout Mountain near Marblemount are zoned IF-NRL for Industrial Forest - Natural Resource Lands (SCC 14.16.410) allows commercial forest industries and limited recreational activities to promote sustainable economic growth. Snowpack exposure to warming varies by elevation. The low-elevation Cascade and Olympic foothills will be exposed first because these areas currently receive substantial snowfall at temperatures near freezing. By the end of the century, snowpack is expected to remain relatively unaffected only in the high-elevations of the Northern Cascade Mountains.	Competing land uses; Policy changes; Site constraints	Projected decrease in snowpack will impact tree species ability to store water, more susceptible to disease and increasing mortality, reducing economic returns.
43	**Commercial forests-Extreme Heat**	Increase in summer max temperature	Warmer summer temperatures could decrease tree growth, increase tree mortality, and disrupt ecosystem functions. These impacts could impact the economic activity regarding commercial forests. Increase in summer maximum temperature from 5.1 deg F for mid century to 10.7 deg F. end of century. Historical baseline is 69 deg F.	Skagit County 2022 Timber Harvest Volume is 80,920, equivalent to more than 10,719 homes, ~3,000 jobs, ~$169.2 million in wages, ~$9.4 million in taxes and fees (WA Forest Protection Association, 2024). Exposure to increases in summer temperatures does not vary substantially across Washington State due to the region's temperate climate. Minor increases in summer max temperatures can stunt growth for heat-sensitive trees impacting revenue and funds for counties.	Policy changes; Site constraints; Economic changes	Increases in summer temperature can stunt growth that impacts revenue generated from timber production. Ancillary uses such as biomass would require diversification of energy sources to meet consumption demand.
44	**Commercial forests-Extreme precipitation**	Increase in heavy precipitation magnitude	Heavier precipitation is expected to intensify flooding in low-lying areas and require higher capacity storm water drainage systems. Increase in heavy precipitation magnitude from 8% for mid century to 21% for end of century. Historical baseline was not recorded.	Skagit County 2022 Timber Harvest Volume is 80,920, equivalent to more than 10,719 homes, ~3,000 jobs, ~$169.2 million in wages, ~$9.4 million in taxes and fees (WA Forest Protection Association, 2024). Commercial forest lands located in low-lying areas (Iron Mtn. foothills), within current floodplains or regulatory flood zones (Mt. Josephine foothills along Skagit River), or adjacent to unstable slopes (usually tributaries near river valleys throughout County - reference unstable slope exhibit) are exposed to increases in heavy precipitation magnitude, impacting revenue and publicly available funds.	Competing land use; Site constraints	Commercial forests can be more exposed to landslide due to an increase in heavy precipitation in erosion hazard areas, leading to increased tree mortality rates and decreased economic returns.

45	**Commercial forests-Flooding**	Decrease from baseline of streams with return interval of 25-yr peak streamflow	More frequent high streamflow's are expected to increase the frequency of flooding impacts to businesses and the economy by disrupting travel and shipping routes and damaging property. More frequent flooding has the potential to increase insurance premiums or make some properties more difficult to insure. Historical baseline is 100% of streams with return interval of 25-yr peak streamflow occurring once every 20 to 30 years. Mid century and end of century projections are 28.5% and 14.5%, respectively, of streams with return interval of 25-year peak streamflow occurring once every 10 to 20 years. Meaning peak streamflows will occur more frequently.	Skagit County 2022 Timber Harvest Volume is 80,920, equivalent to more than 10,719 homes, ~3,000 jobs, ~$169.2 million in wages, ~$9.4 million in taxes and fees (WA Forest Protection Association, 2024). Commercial forest lands located in low-lying areas (Iron Mtn. foothills) and in or near current and historical flood zones (Mt. Josephine foothills along Skagit River, Skagit river, Sauk River, Marblemount area, Concrete area, Lake Shannon area) will be most exposed to projected increases in the frequency of high streamflows impacting revenue and publicly available funds. Commercial tree species i.e., Sitka Spruce, Western Hemlock, Western Red Cedar, etc. are more tolerant to flooding. Douglas Firs are not tolerant to flooding.	Competing land use; Site constraints	Commercial forests can be more exposed to landslide due to an increase in heavy precipitation in erosion hazard areas, leading to increased tree mortality rates and decreased economic returns. Commercial forest lands are limited to hillside areas away from river floodplains and are typically zoned for mineral extraction.
46	**Commercial forests-Reduced snowpack**	Decrease in snowpack	Snowpack in the mountains in the beginning of spring indicates the amount of natural water storage in snowpack that will be available in the melt season. April 1st snowpack (snow water equivalent) is one source of water for uses including irrigation and instream flows for ecosystems. Reductions in snowpack are expected to have little to no direct impact on commercial forest lands. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	Skagit County 2022 Timber Harvest Volume is 80,920, equivalent to more than 10,719 homes, ~3,000 jobs, ~$169.2 million in wages, ~$9.4 million in taxes and fees (WA Forest Protection Association, 2024). Snowpack exposure to warming varies by elevation. In Skagit county, commercial forest operations may depend on reliable snowpack to maintain soil moisture for tree health. The low-elevation Cascade and Olympic foothills will be exposed first because these areas currently receive substantial snowfall at temperatures near freezing. By the end of the century, snowpack is expected to remain relatively unaffected only in the high-elevations of the Northern Cascade Mountains.	Economic constraints; Land use constraints	Reductions in snowpack can leave topsoil drier, making it more susceptible to wildfire and tree mortality. Snowpack decreases are expected to have little to no direct impact on commercial forest lands.
47	**Commercial forests-Sea level rise**	Increase in likely sea level rise	Moderate sea level rise will intensify coastal flooding during storms or extreme weather events, which can disrupt business operations and damage property. Historical baseline not recorded. Mid century and end of century projected to be 0.7 feet and 2.1 feet, respectively.	Skagit County 2022 Timber Harvest Volume is 80,920, equivalent to more than 10,719 homes, ~3,000 jobs, ~$169.2 million in wages, ~$9.4 million in taxes and fees (WA Forest Protection Association, 2024). Commercial forest lands in unstable slope areas along the coast are subject to landslide/erosion and flooding inundation from SLR. Commercial forest lands along the southern flank of Chuckanut Mountains are located in WA DOE-designated unstable slope areas and erosion hazard areas. Most coastal areas in the County are zoned for open space. Islands of the County i.e., Cypress Island, Strawberry island, Burrows island, Young island, Allan island, allow for commercial forest use.	Economic constraints; Land use constraints	Landslide/erosion and flooding inundation from land movement/SLR can directly impact commercial forest trees, decreasing economic returns.
48	**Commercial forests-Wildfire**	Increase in wildfire danger	More days with high wildfire danger are expected to affect businesses through more frequent closures of recreation areas and restrictions on outdoor activities during the wildfire season. More high fire danger days will interrupt timber operations and outdoor recreation. Steady increase in change in high fire danger days. Historical baseline is 48 days of high fire danger days. Mid century and end of century change in additional high fire danger days is 6 and 11, respectively.	Skagit County 2022 Timber Harvest Volume is 80,920, equivalent to more than 10,719 homes, ~3,000 jobs, ~$169.2 million in wages, ~$9.4 million in taxes and fees (WA Forest Protection Association, 2024). Commercial forest lands located in the wildland-urban interface and areas with high wildfire risk historically are more exposed to increases in wildfire likelihood. WUI-Intermix and -Interface zones are located along the Skagit River valley, Samish valley/hillsides along State Route 9, Alger, Humphrey Hill, outer regions of incorporated areas, Skagit river and Samish river basin, and island communities. Wildfire risk increases under "perfect storm" conditions i.e., soil moisture, fuel loads, air humidity, etc.	Increasing urban development; Population growth; Water supply constraints	Commercial forest areas with dry soils and dead vegetation are more susceptible to increased wildfire dangers and cascading effects like landslides, reducing habitat quality and economic returns.
49	**Industrial businesses-Drought (Economic Dev)**	Decrease in snowpack	Industrial businesses are important to job security and wealth building for lower income/disadvantaged communities. Decreases in snowpack would impact raw materials used to supply manufacturing processes in industrial businesses i.e. timber production, water for cooling thermal reactors in generating electricity, etc. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	Drought conditions can impact raw goods that industrial manufacturing businesses rely on. For example, a biomass facility in County relies in part on remnants from timber production to provide electricity. Petroleum and other energy facilities use river water/streamflow for electricity generation. Otherwise, decrease in snowpack has little to no direct impacts on industrial businesses.	Market fluctuations; Site constraints; Competing land uses	Energy sources will be more diversified if decreases in snowpack impact reduce timber and water supplies - goals to reach renewable energy efforts are accelerated to meet future demands.
50	**Industrial businesses-Extreme Heat**	Increase in summer max temperature	Warmer summer temperatures could decrease opportunities for warm season recreation activities in some areas and increase them in others. Extreme heat is expected to impact raw goods used to supply manufacturers. Increase in summer maximum temperature from 5.1 deg F for mid century to 10.7 deg F. end of century. Historical baseline is 69 deg F.	The County's industrial manufacturing businesses comprise of uses such as fabrication, fertilizer manufacturing, wood container/products manufacturing, lumber yards, industrial machinery sale, etc. (SCC sections 14.16.180, .190, .195). Increase in summer max temp is expected to have little to no direct impacts on industrial businesses.	Market fluctuations; Site constraints; Competing land uses	Energy sources will be more diversified where increases in summer max temperatures reduce timber and water supplies - goals to reach renewable energy efforts are accelerated to meet future demands.
51	**Industrial businesses-Extreme precipitation**	Increase in heavy precipitation magnitude	Heavier precipitation is expected to intensify flooding in low-lying areas and require higher capacity storm water drainage systems. Increase in heavy precipitation magnitude from 8% for mid century to 21% for end of century. Historical baseline was not recorded.	Manufacturing businesses located in low-lying areas, within current floodplains or regulatory flood zones, or adjacent to unstable slopes are expected to be more exposed to an increase in heavy precipitation. Some assets are located in the upper river basin and west of Padilla Bay and are exposed to secondary hazards from extreme precip such as power outages and landslide/erosion that disrupts business continuity.	Market fluctuations; Site constraints; Competing land uses	Increased heavy precipitation magnitude can down powerlines and reduce energy efficiencies that disrupt business continuity and production, causing prices to fluctuate and increase due to low supply.
52	**Industrial businesses-Flooding**	Decrease from baseline of streams with return interval of 25-yr peak streamflow	More frequent high streamflow's are expected to increase the frequency of flooding impacts to businesses and the economy by disrupting travel and shipping routes and damaging property. More frequent flooding has the potential to increase insurance premiums or make some properties more difficult to insure. Historical baseline is 100% of streams with return interval of 25-yr peak streamflow occurring once every 20 to 30 years. Mid century and end of century projections are 28.5% and 14.5%, respectively, of streams with return interval of 25-year peak streamflow occurring once every 10 to 20 years. Meaning peak streamflows will occur more frequently.	Industrial manufacturing businesses located in low-lying areas and in or near current and historical flood zones will be most exposed to projected increases in the frequency of high streamflows. Some assets are located in the upper basin of Sauk and Skagit rivers and are exposed to secondary hazards from flooding such as landslide/erosion that disrupts business continuity.	Market fluctuations; Site constraints; Competing land uses	Disruptions to business continuity and production causes prices to fluctuate and/or increase due to low supply. Business decisions may result in outsourcing materials for industrial manufacturing that also impacts consumer prices.
53	**Industrial businesses-Reduced snowpack**	Decrease in snowpack	Reductions in snowpack are expected to decrease opportunities for winter outdoor recreation and shorten the winter recreation season, with adverse effects on the economy and character of some communities. Warm season outdoor recreation opportunities may increase, shifting tourism from one recreation sector to another and into different seasons. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	Snowpack exposure to warming varies by elevation. In Skagit County, reduced snowpack would more likely impact raw materials that industrial businesses use. Low-elevation timber, streamflow, and other raw goods are exposed to reduced snowpack. Otherwise, reduced snowpack has little to no direct impact on industrial businesses.	Market fluctuations; Site constraints; Competing land uses	Disruptions to business continuity and production causes prices to fluctuate and/or increase due to low supply. Business decisions may result in outsourcing materials for industrial manufacturing that also impacts consumer prices.

54	**Industrial businesses-Sea level rise**	Increase in likely sea level rise	Moderate sea level rise will intensify coastal flooding during storms or extreme weather events, which can disrupt business operations and damage property. Historical baseline not recorded. Mid century and end of century projected to be 0.7 feet and 2.1 feet, respectively.	Exposure to sea level rise will vary locally with differences in the rate of geologic uplift or subsidence. The extent of inundation, coastal flooding, and erosion will vary based on shoreline topography and characteristics. Assets are located in relatively level and stable coastal areas and have little exposure to SLR impacts.	Market fluctuations; Site constraints; Competing land uses	Disruptions to business continuity and production causes prices to fluctuate and/or increase due to low supply. Business decisions may result in outsourcing materials for industrial manufacturing that also impacts consumer prices.
55	**Industrial businesses-Wildfire**	Increase in wildfire danger	More days with high wildfire danger are expected to affect businesses through more frequent closures of recreation areas and restrictions on outdoor activities during the wildfire season. More high fire danger days will interrupt timber operations and outdoor recreation. Steady increase in change in high fire danger days. Historical baseline is 48 days of high fire danger days. Mid century and end of century change in additional high fire danger days is 6 and 11, respectively.	Industrial businesses located in the wildland-urban interface and areas with high wildfire risk historically are more exposed to increases in wildfire likelihood. WUI-Intermix and -Interface zones are located along the Skagit River valley, Samish valley/hillsides along State Route 9, Alger, Humphrey Hill, outer regions of incorporated areas, Skagit river and Samish river basin, and island communities. Wildfire risk increases under "perfect storm" conditions i.e., soil moisture, fuel loads, air humidity, etc.	Market fluctuations; Site constraints; Competing land uses; Design constraints	Disruptions to business continuity and production causes prices to fluctuate and/or increase due to low supply. Business decisions may result in outsourcing materials for industrial manufacturing that also impacts consumer prices.
56	**Rivers-Drought (*Ecosystems*)**	Decrease in late summer precipitation	Less summer precipitation is expected to affect ecosystem types differently. In freshwater ecosystems, less summer precipitation will contribute to lower streamflow's, reduce water quality, and increase water temperatures. In terrestrial ecosystems, less summer precipitation will contribute to drought stress and reduce the growth and productivity of some plants. Steady decrease in percent change in total precipitation for July 15-September 15. Historical baseline is 3 inches of late summer precipitation. Mid century and end of century negative percentage changes are 10.7% and 11.9 percent, respectively.	Skagit county receives small amounts of summer precipitation, areas that receive more summer precipitation currently will be more exposed to changes. Precipitation changes are mostly moderate throughout the county - northeast county where Cascade mountains and Okanogan mountains exist are more likely to experience abnormal drought conditions. Gauges along Skagit river, Sauk river, Finney creek, Bacon Creek, and Cascade river have reported much below and low streamflow conditions.	Competing land uses; Urban development; Policy changes	Decreases in summer precipitation would occur due to decreases in snowpack - impacting reservoirs that are fed by snowmelt along rivers. Tributaries are most likely to be impacted, decreasing habitat quality and forest health in mountainous areas.
57	**Rivers-Extreme Heat**	Increase in summer max temperature	Warmer summers are expected to reduce summer soil moisture and increase physiological stress for some plants and animals. Warmer summer temperatures are expected to reduce tree growth and forest productivity in some areas and increase growth and productivity in mild climates. Outbreaks of some forest pests, such as mountain pine beetles, are expected to increase. Increase in summer maximum temperature from 5.1 deg F for mid century to 10.7 deg F. end of century. Historical baseline is 69 deg F.	Exposure of ecosystems to extreme heat is expected to be greater in transitional zones between ecosystems and where plant and animal species are already living at temperature margins of suitable habitat. Skagit county critical areas i.e., wetlands, frequently flooded areas, aquifer recharge, geologically hazardous areas, and fish and wildlife habitat conservation areas, contain sensitive habitats or species that are more exposed to increases in summer temperatures.	Competing land uses; Urban development; Policy changes	Warmer water temperatures and more frequent extreme events, such as floods and low flows, are projected to impact aquatic ecosystems in western Washington due to climate change. Sea level rise is likely to reduce streamflow, which will impact flow velocities and water depths accessible to fish affecting the species that depend on these environments. Changes in water quantity, timing, and quality are projected to disrupt food webs and limit access to critical habitats for aquatic species.
58	**Rivers-Flooding**	Decrease in peak streamflow	Higher streamflow's can scour the streambed and remove or crush salmon eggs, increasing mortality and reducing return rates. Higher streamflow's reduce the availability of slow-water habitat and can increase sedimentation that affects habitat quality. Historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively. Meaning annual maximum streamflow for 19.3% of stream segments Countywide will not change by mid century (hence decrease from 100 to 19.3%), while 80.4% of stream segments Countywide will be 10 to 30% greater than the 1980-2009 average annual maximum streamflow by mid century.	Potential flood damage in the Skagit River Basin is greatest in the floodplain. The floodplain is primarily agricultural, but includes a large proportion of the County's residents, manufacturing plants, and major transportation routes. Middle and high-elevation streams such as tributaries along Skagit river and Sauk river valleys receive a large fraction of winter precipitation as snow, rather than rain, and can be more exposed to increases in high streamflows with warming.	Competing land uses; Policy changes	Increase in peak streamflow would lead to more intense, intermittent flows during spring time that impacts water quality i.e., sedimentation, and fish habitat.
59	**Rivers-Wildfire**	Increase in wildfire likelihood	More frequent wildfires have the potential to reduce timber, non-timber forest products, carbon storage, and forest habitat for some wildlife. Wildfires also increase establishment of invasive species. More frequent wildfires have the potential to increase runoff and sediment to streams, which can reduce aquatic habitat quality. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	County riverine exposure to changes in wildfire likelihood will depend on historical wildfire frequency and the presence of critical resources and habitats. Low flow rivers and other critical areas i.e., wetlands, frequently flooded areas, aquifer recharge, geologically hazardous areas, and fish and wildlife habitat conservation areas, that overlap with WUI zones are more susceptible to increases in wildfire likelihood that impact ecosystem health and integrity. Wildfire risk increases under "perfect storm" conditions i.e., soil moisture, fuel loads, air humidity, etc.	Competing land uses; Policy changes	Low flow rivers with perfect storm conditions can decrease habitat ecosystem quality that fisheries, timber, and other resources depend on. Protections under the shoreline master plan can also be reduced/taken away.
60	**Fisheries-Drought (Ecosystems)**	Decrease in late summer precipitation	Less summer precipitation is expected to affect ecosystem types differently. In freshwater ecosystems, less summer precipitation will contribute to lower streamflow's, reduce water quality, and increase water temperatures. In terrestrial ecosystems, less summer precipitation will contribute to drought stress and reduce the growth and productivity of some plants. Steady decrease in percent change in total precipitation for July 15-September 15. Historical baseline is 3 inches of late summer precipitation. Mid century and end of century negative percentage changes are 10.7% and 11.9 percent, respectively.	The County already receives little amounts of summer precipitation, areas that receive more summer precipitation currently will be more exposed to changes. Coldwater fish such as Coastal cutthroat trout and Yellow perch that rely on high stream flows and lower temperatures for spawning during summer will be exposed to decreased summertime precipitation. This will be evident in recreational fishing areas throughout the County: Beaver Lake, Big Lake, Clear Lake, Lake Erie, Lake Cambell, Lake McMurray, Lake Cavanaugh, Lake Shannon, Pass lake, Whistle lake.	Policy changes; competing land uses; Lack of funds	Fisheries in the County are managed by WA Dept of Fish & Wildlife - changing environmental conditions i.e., drought, wildfire, etc. aims to preserve habitat and reduces opportunities for recreational fishing. Reduced late summer precip increases water temperature at shoreline or other low water level areas and impacts winter streamflows, resulting in habitat changes.
61	**Fisheries-Extreme Heat**	Increase in summer max temperature	Warmer summers are expected to reduce summer soil moisture and increase physiological stress for some plants and animals. Warmer summer temperatures are expected to reduce tree growth and forest productivity in some areas and increase growth and productivity in mild climates. Outbreaks of some forest pests, such as mountain pine beetles, are expected to increase. Increase in summer maximum temperature from 5.1 deg F for mid century to 10.7 deg F. end of century. Historical baseline is 69 deg F.	Warmer water temperatures and more frequent extreme events, such as floods and low flows, are projected to impact aquatic ecosystems in western Washington due to climate change. Sea level rise is likely to reduce streamflow, which will impact flow velocities and water depths accessible to fish affecting the species that depend on these environments. Exposure of ecosystems to extreme heat is expected to be greater in transitional zones between ecosystems and where plant and animal species are already living at temperature margins of suitable habitat. Skagit county experiences temperate climate where transitional zone encompasses foothill and mountain regions. Coldwater fish such as Coastal cutthroat trout and Yellow perch that rely on lower temperatures during summer will be exposed to increased temperatures. Fisheries located in transition zones: Beaver Lake, Big Lake, Clear Lake, Lake Erie, Lake Cambell, Lake McMurray, Lake Cavanaugh, Lake Shannon, Pass lake, Whistle lake, would be exposed.	Policy changes; competing land uses;	Changes in water quantity, timing, and quality due to increased temperatures are projected to disrupt food webs and limit access to critical habitats for aquatic species, reducing fish populations that impact subsistence fishing, cultural use, and fish habitat.

62	**Fisheries-Flooding**	Decrease in peak streamflow	Higher streamflow's can scour the streambed and remove or crush salmon eggs, increasing mortality and reducing return rates. Higher streamflow's reduce the availability of slow-water habitat and can increase sedimentation that affects habitat quality. Historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively. Meaning annual maximum streamflow for 19.3% of stream segments Countywide will not change by mid century (hence decrease from 100 to 19.3%), while 80.4% of stream segments Countywide will be 10 to 30% greater than the 1980-2009 average annual maximum streamflow by mid century.	Altered timing and quantity of water flows can disrupt food webs and affect species that rely on specific flow conditions for spawning or feeding. Changes in water quantity, timing, and quality are projected to disrupt food webs and limit access to critical habitats for aquatic species. Skagit County's ecosystems, while somewhat resilient, are increasingly vulnerable to the impacts of climate change, particularly sea level rise and habitat alterations. Streamflow plays a critical role in shaping and maintaining habitats for aquatic species, particularly in the Skagit River, where Pacific salmon and trout are both culturally significant and legally protected. The availability of spawning and rearing habitats for these fish is heavily influenced by the river's flow patterns, which determine which areas of the watershed are accessible. Species like Chinook and coho salmon, steelhead, and bull trout—especially those that spawn in summer or rear as juveniles for extended periods in freshwater—are highly sensitive to low flow conditions.	Policy changes; competing land uses;	Low flows, which can result from natural variability and increased water demand, are becoming more pronounced due to climate change, potentially reducing habitat availability and impacting fish populations. SLR poses a significant threat to estuarine habitats, with projections indicating a reduction in intertidal marsh areas and constrained habitat migration due to land use practices. This threatens critical habitats for species like juvenile Chinook salmon, impacting their growth and survival.
63	**Fisheries-Wildfire**	Increase in wildfire likelihood	More frequent wildfires have the potential to reduce timber, non-timber forest products, carbon storage, and forest habitat for some wildlife. Wildfires also increase establishment of invasive species. More frequent wildfires have the potential to increase runoff and sediment to streams, which can reduce aquatic habitat quality. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	Fisheries exposure to changes in wildfire likelihood will depend on historical wildfire frequency and the presence of critical resources and habitats. All waterbodies with fishing is located in WUI zones and are more susceptible to increases in wildfire likelihood that impact ecosystem health and integrity. Wildfire risk increases under "perfect storm" conditions i.e., soil moisture, fuel loads, air humidity, etc.	Competing land uses; Policy changes	Increased wildfire likelihood are more likely to cause secondary impacts such as sedimentation from wildfire debris that reduces fish populations.
64	**Nature preserves-Drought (Ecosystems)**	Decrease in late summer precipitation	Less summer precipitation is expected to affect ecosystem types differently. In freshwater ecosystems, less summer precipitation will contribute to lower streamflow's, reduce water quality, and increase water temperatures. In terrestrial ecosystems, less summer precipitation will contribute to drought stress and reduce the growth and productivity of some plants. Steady decrease in percent change in total precipitation for July 15-September 15. Historical baseline is 3 inches of late summer precipitation. Mid century and end of century negative percentage changes are 10.7% and 11.9 percent, respectively.	Most of Washington State already receives little summer precipitation. The Skagit River basin upstream of Mount Vernon is expected to receive less summer precipitation and will be more exposed to changes in habitat quality for water, fish, vegetation, soil, and others.	Competing land uses; Policy changes	Reduced quality of nature preserves can impact user experiences such as recreational hikers, birders, and other nature enthusiasts.
65	**Nature preserves-Extreme Heat**	Increase in summer max temperature	Warmer summers are expected to reduce summer soil moisture and increase physiological stress for some plants and animals. Warmer summer temperatures are expected to reduce tree growth and forest productivity in some areas and increase growth and productivity in mild climates. Outbreaks of some forest pests, such as mountain pine beetles, are expected to increase. Increase in summer maximum temperature from 5.1 deg F for mid century to 10.7 deg F. end of century. Historical baseline is 69 deg F.	Exposure of ecosystems to extreme heat is expected to be greater in transitional zones between ecosystems and where plant and animal species are already living at temperature margins of suitable habitat. Eastern County area where the Cascade mountain foothills exists are more exposure to increases in summer temperatures, impacting critical habitats or sensitive species and local tributaries/waterways.	Competing land uses; Policy changes	Reduced quality of nature preserves can impact user experiences such as recreational hikers, birders, and other nature enthusiasts.
66	**Nature preserves-Flooding**	Decrease in peak streamflow	Higher streamflow's can scour the streambed and remove or crush salmon eggs, increasing mortality and reducing return rates. Higher streamflow's reduce the availability of slow-water habitat and can increase sedimentation that affects habitat quality. Historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively. Meaning annual maximum streamflow for 19.3% of stream segments Countywide will not change by mid century (hence decrease from 100 to 19.3%), while 80.4% of stream segments Countywide will be 10 to 30% greater than the 1980-2009 average annual maximum streamflow by mid century.	Middle and high-elevation streams that currently receive a large fraction of winter precipitation as snow, rather than rain, will be more exposed to increases in high streamflows with warming.	Competing land uses; Policy changes	Reduced quality of nature preserves can impact user experiences such as recreational hikers, birders, and other nature enthusiasts.
67	**Nature preserves-Wildfire**	Increase in wildfire likelihood	More frequent wildfires have the potential to reduce timber, non-timber forest products, carbon storage, and forest habitat for some wildlife. Wildfires also increase establishment of invasive species. More frequent wildfires have the potential to increase runoff and sediment to streams, which can reduce aquatic habitat quality. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	Ecosystem exposure to changes in wildfire likelihood will depend on historical wildfire frequency and the presence of critical resources and habitats. Nature preserves are located throughout County in shoreline and inland mountainous areas, predominantly in low-lying frequently flooded areas or historic farmlands. Assets are located in WUI zones and are more susceptible to increases in wildfire likelihood that impact ecosystem health and integrity. Wildfire risk increases under "perfect storm" conditions i.e., soil moisture, fuel loads, air humidity, etc.	Competing land uses; Policy changes	Reduced quality of nature preserves can impact user experiences such as recreational hikers, birders, and other nature enthusiasts.
68	**Flood management infrastructure-Drought (Emergency Management)**	Increase in precipitation drought	More frequent and severe droughts due to low summer precipitation are expected to increase the need for emergency services to plan, prepare, and respond to water shortages. Steady increase of likelihood of a year with summer precipitation below 75% ranges from 0.26 mid century to 0.39 end of century. The close the value is to 1, the higher likelihood of snowpack drought; value closer to 0 area lower likelihood. The historical baseline is 0.	Most of Washington State already receives little summer precipitation. The Skagit River basin upstream of Mount Vernon is expected to receive less summer precipitation. Dike districts and infrastructure i.e., tidegates, dikes, etc. exist primarily along Skagit River, Samish River, and Joe Leary Slough basins in western Skagit County. Drought conditions will have little impact on asset.	Policy changes; Urban development; Lack of personnel, Capital Improvement financial constraints	Decrease in summertime precipitation can weaken earthen dikes/berms and make them more susceptible to erosion and failure, requiring more frequent updates.
69	**Flood management infrastructure-Extreme Heat**	Increase in 90 deg F max Humidex days	More frequent extreme daytime heat events are expected to increase the demand for emergency services to plan, prepare, and respond to human health impacts. Extreme heat may also impact emergency services due to transportation and travel disruptions such as warped and buckling pavement on roads. Steady increase of 90 deg F Max Humidex Days from 2 days for the historical baseline. Mid century and end of century projected to be an increase of 21.6 days and 34.0 days, respectively.	Exposure of people to extreme heat will vary locally based on features that exacerbate or ameliorate extreme heat, such as the extent of paved surfaces, tree canopy for shade, or proximity to water bodies. Asset exist primarily along Skagit River, Samish River, and Joe Leary Slough basins in western Skagit County. Extreme heat will have little impact on asset.	Policy changes; Urban development; Lack of personnel, Capital Improvement financial constraints	Increase in high temperature days can weaken earthen dikes/berms and make them more susceptible to erosion and failure, requiring more frequent updates.
70	**Flood management infrastructure-Extreme precipitation**	Increase in extreme precipitation magnitude	Heavier precipitation has the potential to increase the demand for emergency response services by intensifying flood events and increasing other emergencies associated with heavy precipitation. Increase in heavy precipitation magnitude from 8% for mid century to 30% for end of century. Historical baseline was not recorded.	Emergency services that serve people located in low-lying areas, within current floodplains or regulatory flood zones, or adjacent to unstable slopes are expected to be more exposed to the impacts of heavier precipitation events. Dike districts and infrastructure i.e., tidegates, dikes, etc. exist primarily along Skagit River, Samish River, and Joe Leary Slough basins in western Skagit County. Increased precip magnitude can lead to flood events that	Policy changes; Urban development; Lack of personnel, Capital Improvement financial constraints	Increased extreme precipitation magnitude can cause erosion and/or lead to flood events that weaken earthen dikes/berms and undermine other systems, making them more susceptible to erosion and failure, requiring more frequent updates.

71	**Flood management infrastructure-Flooding**	Decrease in peak streamflow	Higher streamflow's are expected to increase riverine flooding within existing floodplains and could expand flooding to new areas not currently in existing floodplains. More flooding has the potential to increase the demand for emergency services to plan, prepare, and respond to flood events. Historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively. Meaning annual maximum streamflow for 19.3% of stream segments Countywide will not change by mid century (hence decrease from 100 to 19.3%), while 80.4% of stream segments Countywide will be 10 to 30% greater than the 1980-2009 average annual maximum streamflow by mid century.	People and infrastructure located in river valleys and in or near current and historical flood zones will be most exposed to increases in high streamflows that can cause flooding and increase the need for emergency services. All dike management districts and infrastructure are exposed to flooding. Issue of flooding is very important to County - October 20-26 declared Skagit County Flood Awareness Week.	Policy changes; Urban development; Lack of personnel, Capital Improvement financial constraints	Increased riverine flooding with limited personnel (flood fighters) can exacerbate damage to existing and new areas.
72	**Flood management infrastructure-Sea level rise**	Increase in likely sea level rise	Moderate sea level rise is expected to inundate some coastal land and intensify coastal flooding during storms, which could increase the need for emergency services to plan, respond to and recover from coastal flooding. Historical baseline not recorded. Mid century and end of century projected to be 0.7 feet and 2.1 feet, respectively.	Exposure will vary locally with differences in the rate of geologic uplift or subsidence. The extent of inundation, coastal flooding, and erosion will vary based on shoreline topography and characteristics. Emergency management serving low-lying coastal communities and unstable bluffs will be most exposed to the impacts of more coastal flooding. South of Sedro-Wooley is a valley that descends into almost sea level and widens to flat fertile floodplain joined at Samish Valley to north and extends west through Mount Vernon to La Conner and south to Stillaguamish River (2020 HMP).	Policy changes; Urban development; Lack of personnel, Capital Improvement financial constraints	Increased sea levels combined with future increases in precipitation can inundate new areas. Limited personnel (flood fighters) can exacerbate damage to existing and new areas.
73	**Flood management infrastructure-Wildfire**	Increase in wildfire danger	More days with high fire danger will increase the need for fire bans and associated enforcement and capacity to respond to wildfires. Steady increase in change in high fire danger days. Historical baseline is 48 days of high fire danger days. Mid century and end of century change in additional high fire danger days is 6 and 11, respectively.	In your county or community, people and infrastructure located in the wildland-urban interface and areas with high wildfire risk historically will be most exposed to increases in the likelihood of wildfire.	Policy changes; Urban development; Lack of personnel, Capital Improvement financial constraints	N/a
74	**Fire stations-Drought (Emergency Management)**	Increase in likelihood of below-normal summer precipitation	More frequent and severe droughts due to low summer precipitation are expected to increase the need for emergency services to plan, prepare, and respond to water shortages. Steady increase of likelihood of a year with summer precipitation below 75% ranges from 0.26 mid century to 0.39 end of century. The close the value is to 1, the higher likelihood of snowpack drought; value closer to 0 area lower likelihood.	Skagit County has a total of 19 fire districts, in addition to the local municipalities' fire departments. Within these fire districts and departments, there are a total of 44 fire stations (including City Departments) which protect the county during emergency situations. The purpose of Skagit County Fire Districts is the provision of fire prevention and preparedness services, fire suppression services, emergency medical services, and for the protection of life and property. Most of Washington State already receives little summer precipitation. The Skagit River basin upstream of Mount Vernon is expected to receive less summer precipitation. Fire stations that rely on reservoirs and others water supply infrastructure for fireflow are exposed to increases in precipitation drought.	Policy changes; Urban development; Lack of personnel	Increased likelihood of below-normal summer precipitation can make it more difficult for fire stations to source water for firefighting purposes and respond to emergencies.
75	**Fire stations-Extreme Heat**	Increase in 90 deg F max Humidex days	More frequent extreme daytime heat events are expected to increase the demand for emergency services to plan, prepare, and respond to human health impacts. Extreme heat may also impact emergency services due to transportation and travel disruptions such as warped and buckling pavement on roads. Steady increase of 90 deg F Max Humidex Days from 2 days for the historical baseline. Mid century and end of century projected to be an increase of 21.6 days and 34.0 days, respectively.	In your county or community, exposure of people to extreme heat will vary locally based on features that exacerbate or ameliorate extreme heat, such as the extent of paved surfaces, tree canopy for shade, or proximity to water bodies.	Policy changes; Urban development; Lack of personnel	Increased high temperature days can increase emergency calls and demand for response services.
76	**Fire stations-Extreme precipitation**	Increase in extreme precipitation magnitude	Heavier precipitation has the potential to increase the demand for emergency response services by intensifying flood events and increasing other emergencies associated with heavy precipitation. Increase in heavy precipitation magnitude from 8% for mid century to 30% for end of century. Historical baseline was not recorded.	In your county or community, emergency services that serve people located in low-lying areas, within current floodplains or regulatory flood zones, or adjacent to unstable slopes are expected to be more exposed to the impacts of heavier precipitation events. In addition, there may be increased response times from emergency management as existing transportation network may be impacted by extreme precipitation.	Policy changes; Urban development; Lack of personnel	Increased extreme precipitation magnitude can increase emergency calls and demand for response services.
77	**Fire stations-Flooding**	Decrease in peak streamflow	Higher streamflow's are expected to increase riverine flooding within existing floodplains and could expand flooding to new areas not currently in existing floodplains. More flooding has the potential to increase the demand for emergency services to plan, prepare, and respond to flood events. Historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively. Meaning annual maximum streamflow for 19.3% of stream segments Countywide will not change by mid century (hence decrease from 100 to 19.3%), while 80.4% of stream segments Countywide will be 10 to 30% greater than the 1980-2009 average annual maximum streamflow by mid century.	In your county or community, people and infrastructure located in river valleys and in or near current and historical flood zones will be most exposed to increases in high streamflows that can cause flooding and increase the need for emergency services.	Policy changes; Urban development; Lack of personnel	More flooding has the potential to increase the demand for emergency services to plan, prepare, and respond to flood events. Increased flooding can also directly damage asset.
78	**Fire stations-Sea level rise**	Increase in likely sea level rise	Moderate sea level rise is expected to inundate some coastal land and intensify coastal flooding during storms, which could increase the need for emergency services to plan, respond to and recover from coastal flooding. Historical baseline not recorded. Mid century and end of century projected to be 0.7 feet and 2.1 feet, respectively.	Exposure will vary locally with differences in the rate of geologic uplift or subsidence. The extent of inundation, coastal flooding, and erosion will vary based on shoreline topography and characteristics. Emergency management serving low-lying coastal communities and unstable bluffs will be most exposed to the impacts of more coastal flooding.	Policy changes; Urban development; Lack of personnel	Increased sea levels combined with future increases in precipitation can inundate new areas. Limited personnel (flood fighters) can exacerbate damage to existing and new areas.
79	**Fire stations-Wildfire**	Increase in wildfire danger	More days with high fire danger will increase the need for fire bans and associated enforcement and capacity to respond to wildfires. Steady increase in change in high fire danger days. Historical baseline is 48 days of high fire danger days. Mid century and end of century change in additional high fire danger days is 6 and 11, respectively.	In your county or community, people and infrastructure located in the wildland-urban interface and areas with high wildfire risk historically will be most exposed to increases in the likelihood of wildfire.	Policy changes; Urban development; Lack of personnel	Increased wildfire likelihood can cause smoke inhalation, resulting in increased emergency services/care and use of asset for sheltering.
80	**Emergency staging areas-Drought (Emergency Management)**	Increase in precipitation drought	More frequent and severe droughts due to low summer precipitation are expected to increase the need for emergency services to plan, prepare, and respond to water shortages. Steady increase of likelihood of a year with summer precipitation below 75% ranges from 0.26 mid century to 0.39 end of century. The close the value is to 1, the higher likelihood of snowpack drought; value closer to 0 area lower likelihood.	Most of Washington State already receives little summer precipitation. The Skagit River basin upstream of Mount Vernon is expected to receive less summer precipitation. Emergency staging areas are located throughout the county as MOUs/MOAs with private businesses - and have little exposure to increased drought conditions.	Policy changes; Urban development; Lack of personnel	Emergency staging areas may be affected by drought conditions that cause pavement and road surfaces to crack, undermining buildings, and delaying emergency responses.

81	**Emergency staging areas-Extreme Heat**	Increase in 90 deg F max Humidex days	More frequent extreme daytime heat events are expected to increase the demand for emergency services to plan, prepare, and respond to human health impacts. Extreme heat may also impact emergency services due to transportation and travel disruptions such as warped and buckling pavement on roads. Steady increase of 90 deg F Max Humidex Days from 2 days for the historical baseline. Mid century and end of century projected to be an increase of 21.6 days and 34.0 days, respectively.	In your county or community, exposure of people to extreme heat will vary locally based on features that exacerbate or ameliorate extreme heat, such as the extent of paved surfaces, tree canopy for shade, or proximity to water bodies.	Policy changes; Urban development; Lack of personnel	Increased high temperature days can increase emergency calls and demand for response services.
82	**Emergency stating areas-Extreme precipitation**	Increase in extreme precipitation magnitude	Heavier precipitation has the potential to increase the demand for emergency response services by intensifying flood events and increasing other emergencies associated with heavy precipitation. Increase in heavy precipitation magnitude from 8% for mid century to 30% for end of century. Historical baseline was not recorded.	In your county or community, emergency services that serve people located in low-lying areas, within current floodplains or regulatory flood zones, or adjacent to unstable slopes are expected to be more exposed to the impacts of heavier precipitation events.	Policy changes; Urban development; Lack of personnel	Increased extreme precipitation magnitude can increase emergency calls and demand for response services.
83	**Emergency staging areas-Flooding**	Decrease in peak streamflow	Higher streamflow's are expected to increase riverine flooding within existing floodplains and could expand flooding to new areas not currently in existing floodplains. More flooding has the potential to increase the demand for emergency services to plan, prepare, and respond to flood events. Historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively. Meaning annual maximum streamflow for 19.3% of stream segments Countywide will not change by mid century (hence decrease from 100 to 19.3%), while 80.4% of stream segments Countywide will be 10 to 30% greater than the 1980-2009 average annual maximum streamflow by mid century.	In your county or community, people and infrastructure located in river valleys and in or near current and historical flood zones will be most exposed to increases in high streamflows that can cause flooding and increase the need for emergency services.	Policy changes; Urban development; Lack of personnel	Increase in peak streamflow and flood events can increase emergency calls and demand for response services.
84	**Emergency staging areas-Sea level rise**	Increase in likely sea level rise	Moderate sea level rise is expected to inundate some coastal land and intensify coastal flooding during storms, which could increase the need for emergency services to plan, respond to and recover from coastal flooding. Historical baseline not recorded. Mid century and end of century projected to be 0.7 feet and 2.1 feet, respectively.	Exposure will vary locally with differences in the rate of geologic uplift or subsidence. The extent of inundation, coastal flooding, and erosion will vary based on shoreline topography and characteristics. Emergency management serving low-lying coastal communities and unstable bluffs will be most exposed to the impacts of more coastal flooding.	Policy changes; Urban development; Lack of personnel	Increased sea levels combined with future increases in precipitation can inundate new areas. Limited personnel (flood fighters) can exacerbate damage to existing and new areas.
85	**Emergency staging areas-Wildfire**	Increase in wildfire danger	More days with high fire danger will increase the need for fire bans and associated enforcement and capacity to respond to wildfires. Steady increase in change in high fire danger days. Historical baseline is 48 days of high fire danger days. Mid century and end of century change in additional high fire danger days is 6 and 11, respectively.	In your county or community, people and infrastructure located in the wildland-urban interface and areas with high wildfire risk historically will be most exposed to increases in the likelihood of wildfire.	Policy changes; Urban development; Lack of personnel	Increased wildfire likelihood can cause smoke inhalation, resulting in increased emergency services/care.
86	Community centers-Extreme Heat (*Health & Well-being*)	Increase in summer max temperature	Warmer summers are expected to increase concentrations of air pollutants, such as ozone and some vector-borne illnesses, such as West Nile virus. Increase in summer maximum temperature from 5.1 deg F for mid century to 10.7 deg F. end of century. Historical baseline is 69 deg F.	Exposure of people to warmer summers and associated ozone and vector-borne illnesses will vary locally based on features that exacerbate or ameliorate these conditions. Areas with existing poor air or water quality will be more exposed. Air quality changes are episodic - however, urban areas generally have poorer air quality than forested/open space areas. Skagit county overall has good air quality.	Lack of personnel; Site constraints; Lack of funding; Increased demand in cooling shelters.	Increased high temperature days can increase emergency calls and demand for response services.
87	Community centers-Wildfire	Increase in wildfire likelihood	More frequent wildfires are expected to reduce human health through loss of life, injury and reduced mental health associated with displacement. Poor air quality due to more wildfire smoke can cause adverse respiratory health effects. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	Residents living in the wildland-urban interface and areas with high wildfire risk historically will be most exposed to increases in the likelihood of wildfire. Asset is not located in WUI zone, but does not consider "perfect storm" conditions i.e., humidity, soil moisture, etc. Asset is more likely to be exposed to wildfire smoke.	Lack of personnel; Site constraints; Lack of funding	Increased wildfire likelihood can cause smoke inhalation, resulting in increased emergency services/care and use of asset for sheltering.
88	**Roadways-Drought (Transportation)**	Decrease in snowpack	Reductions in snowpack have the potential to reduce snow-related road maintenance, road closures, and transportation delays. However, as more cold-season precipitation falls as rain rather than snow, transportation routes in mountainous areas may experience more damage from heavier winter rainfall and associated flooding, erosion, and washouts. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	State Route 20 at Sharps Corner faces risks from climate change due to its critical role in supporting the movement of people and goods across Skagit County. This corridor links communities on Whidbey, Fidalgo, and San Juan Islands, as well as the Swinomish Reservation and Burlington, making it vital for regional connectivity. As part of the Strategic Highway Network, it provides essential access to the Whidbey Naval Air Station, which employs 10,000 people. The route also connects the mainland to island ferries, including the Port Townsend/Coupeville ferry and the Anacortes/San Juan/Sydney B.C. ferry. Samish Island Road, a critical two-lane access route for residents of Samish Island, faces significant climate risks due to surrounding privately owned dikes, which are in various stages of disrepair.	Lack of funds; Lack of personnel	While drought conditions primarily impact water availability, they have a limited direct effect on transportation infrastructure compared to other climate risks like flooding. However, prolonged drought could cause roads to crack due to depressed soil levels from reduced water levels, indirectly affect operations in essential areas, such as ferry routes, and potentially impacting dust and surface conditions on roads.
89	**Roadways-Extreme Heat**	Increase in hot days	More very hot days have the potential to damage the surfaces of roads and bridges, leading to greater maintenance and repair costs and more frequent traffic and service disruptions. Steady increase in hot days above 100 deg F. Historical baseline is 4 days. Mid century and end of century is projected to be an increase of 22.7 days and 34.2 days, respectively.	State Route 20 at Sharps Corner faces risks from climate change due to its critical role in supporting the movement of people and goods across Skagit County. This corridor links communities on Whidbey, Fidalgo, and San Juan Islands, as well as the Swinomish Reservation and Burlington, making it vital for regional connectivity. As part of the Strategic Highway Network, it provides essential access to the Whidbey Naval Air Station, which employs 10,000 people. The route also connects the mainland to island ferries, including the Port Townsend/Coupeville ferry and the Anacortes/San Juan/Sydney B.C. ferry. Samish Island Road, a critical two-lane access route for residents of Samish Island, faces significant climate risks due to surrounding privately owned dikes, which are in various stages of disrepair.	Lack of personnel; Site constraints; Lack of funding	Rising temperatures can cause stress on transportation infrastructure, such as the warping of pavement and foundations, and deterioration of road surfaces, leading to delays, increased maintenance costs, and potential safety hazards for transportation services.

90	Roadways-Extreme precipitation	Increase in heavy precipitation magnitude	Heavier precipitation events are expected to intensify flooding, landslides, and erosion, which can interrupt transportation routes, damage infrastructure, and increase maintenance and repair costs. For example, extreme precipitation may temporarily isolate Fidalgo Island from the rest of Skagit County. Increase in heavy precipitation magnitude from 8% for mid century to 21% for end of century. Historical baseline was not recorded.	Transportation services – such as public transit access and ferries – in the Skagit River Basin is highly vulnerable to extreme flooding. Some public transportation services in Skagit County, such as bus routes, are particularly at risk during high flood stages of the Samish and Skagit Rivers. Due to their low-lying locations and close proximity to these rivers, these routes are susceptible to rapid inundation and severe disruptions. Extreme weather events can exacerbate these issues through levee breaches, debris accumulation, and intense rainfall, leading to significant interruptions in transportation services. Several roads in Skagit County, such as Highway 20, are particularly vulnerable to flooding and closures during the high flood stages of the Samish and Skagit Rivers. these roads, located in low-lying areas near the rivers, face increased risks of rapid inundation during extreme weather events. Levee breaches, dike failure or overtopping, debris accumulation, and intense rainfall can all exacerbate flooding, leading to significant disruptions in transportation and access for residents.	Lack of personnel; Site constraints; Lack of funding	Increased heavy precipitation magnitude can cause stress on transportation infrastructure, such as the warping of pavement and foundations, and deterioration of road surfaces, leading to delays, increased maintenance costs, and potential safety hazards for transportation services.
91	Roadways-Flooding	Decrease in peak streamflow	Heavier precipitation events are expected to intensify flooding, landslides, and erosion, which can interrupt transportation routes, damage infrastructure, and increase maintenance and repair costs. Historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for 10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively. Meaning annual maximum streamflow for 19.3% of stream segments Countywide will not change by mid century (hence decrease from 100 to 19.3%), while 80.4% of stream segments Countywide will be 10 to 30% greater than the 1980-2009 average annual maximum streamflow by mid century.	Transportation services – such as public transit access and ferries – in the Skagit River Basin is highly vulnerable to extreme flooding. Some public transportation services in Skagit County, such as bus routes, are particularly at risk during high flood stages of the Samish and Skagit Rivers. Due to their low-lying locations and close proximity to these rivers, these routes are susceptible to rapid inundation and severe disruptions. Extreme weather events can exacerbate these issues through levee breaches, debris accumulation, and intense rainfall, leading to significant interruptions in transportation services.	Lack of personnel; Site constraints; Lack of funding	Flooding can reduce access to evacuation centers and other critical facilities, and lead to deterioration of road surfaces, delays, increased maintenance costs, and potential safety hazards for transportation services. Non-climate stressors with climate stressors may also increase emergency calls as individuals become stranded or isolated with limited evacuation routing.
92	Roadways-Reduced snowpack	Decrease in snowpack	Reductions in snowpack have the potential to reduce snow-related road maintenance, road closures, and transportation delays. However, as more cold-season precipitation falls as rain rather than snow, transportation routes in mountainous areas may experience more damage from heavier winter rainfall and associated flooding, erosion, and washouts. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	State Route 20 at Sharps Corner faces risks from climate change due to its critical role in supporting the movement of people and goods across Skagit County. This corridor links communities on Whidbey, Fidalgo, and San Juan Islands, as well as the Swinomish Reservation and Burlington, making it vital for regional connectivity. As part of the Strategic Highway Network, it provides essential access to the Whidbey Naval Air Station, which employs 10,000 people. The route also connects the mainland to island ferries, including the Port Townsend/Coupeville ferry and the Anacortes/San Juan/Sydney B.C. ferry. Samish Island Road, a critical two-lane access route for residents of Samish Island, faces significant climate risks due to surrounding privately owned dikes, which are in various stages of disrepair.	Lack of personnel; Site constraints; Lack of funding	Roads in mountainous areas may experience increased closures due to landslides, washouts, etc. as winter conditions become more wet. Roads in low-lying coastal and basin areas may also experienced increased closures from flooding. These impacts may make it difficult for timely emergency responses and for safe routes evacuation.
93	Roadways-Sea level rise	Increase in likely sea level rise	With moderate sea level rise, Washington's seaports and the connected distribution networks are expected to flood more often. Coastal transportation infrastructure may be subject to more frequent closures due to coastal flooding and erosion, and require more frequent maintenance and repairs. Historical baseline not recorded. Mid century and end of century projected to be 0.7 feet and 2.1 feet, respectively.	State Route 20 at Sharps Corner faces risks from climate change due to its critical role in supporting the movement of people and goods across Skagit County. This corridor links communities on Whidbey, Fidalgo, and San Juan Islands, as well as the Swinomish Reservation and Burlington, making it vital for regional connectivity. As part of the Strategic Highway Network, it provides essential access to the Whidbey Naval Air Station, which employs 10,000 people. The route also connects the mainland to island ferries, including the Port Townsend/Coupeville ferry and the Anacortes/San Juan/Sydney B.C. ferry. Samish Island Road, a critical two-lane access route for residents of Samish Island, faces significant climate risks due to surrounding privately owned dikes, which are in various stages of disrepair.	Lack of funds; Lack of personnel; Site constraints	Coastal and low-lying infrastructure, such as ferry terminals, coastal roads, and rail systems, are particularly vulnerable to flooding and erosion caused by rising sea levels. Samish Island Road and other low-lying areas are prone to inundation from storms, levee breaches, and high river flows. Additionally, vulnerable roads like March's Point Road frequently fail due to tidal influence and poor road base. Roads such as the State Route 20 in areas closer to the sea may face future inundation as well. Increased saltwater intrusion can damage infrastructure, disrupt service schedules, and raise maintenance needs, posing some challenges to operational continuity.
94	Roadways-Wildfire	Increase in wildfire likelihood	More frequent wildfires, and related smoke, can disrupt travel, increase road closures and delay construction projects. Wildfire smoke has the potential to affect labor in the transportation sector because of health effects on outdoor laborers. More roadside brush fires can create safety hazards and disrupt transportation. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	State Route 20 at Sharps Corner faces risks from climate change due to its critical role in supporting the movement of people and goods across Skagit County. This corridor links communities on Whidbey, Fidalgo, and San Juan Islands, as well as the Swinomish Reservation and Burlington, making it vital for regional connectivity. As part of the Strategic Highway Network, it provides essential access to the Whidbey Naval Air Station, which employs 10,000 people. The route also connects the mainland to island ferries, including the Port Townsend/Coupeville ferry and the Anacortes/San Juan/Sydney B.C. ferry. Samish Island Road, a critical two-lane access route for residents of Samish Island, faces significant climate risks due to surrounding privately owned dikes, which are in various stages of disrepair. Major bus routes in the Wildland-Urban Interface (WUI) areas, such as those near Little Mountain Park, are at high risk from wildfires and wildfire smoke.	Lack of personnel; Site constraints; Lack of funding	Wildfires can directly damage road infrastructure, leading to closures, while smoke can severely impact air quality and visibility, creating dangerous driving conditions and potentially compromising safety and maintenance operations on these critical routes (CWPP, 2019; EPA, 2023; DNR, 2024).
95	Bridges-Drought (Transportation)	Decrease in snowpack	Reductions in snowpack have the potential to reduce snow-related road maintenance, road closures, and transportation delays. However, as more cold-season precipitation falls as rain rather than snow, transportation routes in mountainous areas may experience more damage from heavier winter rainfall and associated flooding, erosion, and washouts. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	Snowpack exposure to warming varies by elevation. Exposure in the County has transportation routes and infrastructure that will depend on elevation with assets in mountainous areas more exposed. The low-elevation Cascade and Olympic foothills will be exposed first because these areas currently receive substantial snowfall at temperatures near freezing. By the end of the century, snowpack is expected to remain relatively unaffected only in the high-elevations of the Northern Cascade Mountains.	Lack of funds; Lack of personnel	Decreases in snowpack results in more dry soil conditions, potentially undermining bridges if soils crack, contract, and move under drought conditions.
96	Bridges-Extreme Heat	Increase in hot days	More very hot days have the potential to damage the surfaces of roads and bridges, leading to greater maintenance and repair costs and more frequent traffic and service disruptions. Steady increase in hot days above 100 deg F. Historical baseline is 4 days. Mid century and end of century is projected to be an increase of 22.7 days and 34.2 days, respectively.	In your county or community, the exposure of road surfaces to extreme heat will vary locally based on features that exacerbate or ameliorate extreme heat such as the extent of urban heat islands and tree canopy cover for shade.	Lack of personnel; Site constraints; Lack of funding; Design/technology constraints	Rising temperatures can cause stress on transportation infrastructure, such as the warping of pavement and foundations, and deterioration of road surfaces, leading to delays, increased maintenance costs, and potential safety hazards for transportation services.
97	Bridges-Extreme precipitation	Increase in heavy precipitation magnitude	Change in the intensity of heavy precipitation events are more likely to cause damages to infrastructure and agricultural operations than changes in seasonal and annual precipitation. Increase in heavy precipitation magnitude from 8% for mid century to 21% for end of century. Historical baseline was not recorded.	In your county or community, transportation routes and infrastructure located in low-lying areas, within or near current floodplains or regulatory flood zones, or adjacent to unstable slopes are expected to be more exposed to an increase in heavy precipitation. Bridges and culverts in low-lying areas experience repeated flooding during extreme rain events, leading to accelerated wear and tear	Lack of personnel; Site constraints; Lack of funding; Design/technology constraints	Heavier precipitation events are expected to intensify flooding, landslides, and erosion, which can interrupt transportation routes, damage infrastructure, and increase maintenance and repair costs.

98	Bridges-Flooding	Decrease in peak streamflow	Change in the intensity of heavy precipitation events are more likely to cause damages to infrastructure and agricultural operations than changes in seasonal and annual precipitation. Historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively. Meaning annual maximum streamflow for 19.3% of stream segments Countywide will not change by mid century (hence decrease from 100 to 19.3%), while 80.4% of stream segments Countywide will be 10 to 30% greater than the 1980-2009 average annual maximum streamflow by mid century.	In your county or community, transportation routes and infrastructure located in low-lying areas, within or near current floodplains or regulatory flood zones, or adjacent to unstable slopes are expected to be more exposed to an increase in heavy precipitation. Bridges and culverts in low-lying areas experience repeated flooding during extreme rain events, leading to accelerated wear and tear	Lack of personnel; Site constraints; Lack of funding; Design/technology constraints	Heavier precipitation events are expected to intensify flooding, landslides, and erosion, which can interrupt transportation routes, damage infrastructure, and increase maintenance and repair costs.
99	Bridges-Reduced snowpack	Decrease in snowpack	Reductions in snowpack have the potential to reduce snow-related road maintenance, road closures, and transportation delays. However, as more cold-season precipitation falls as rain rather than snow, transportation routes in mountainous areas may experience more damage from heavier winter rainfall and associated flooding, erosion, and washouts. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	Snowpack exposure to warming varies by elevation. In your county or community, the exposure of transportation routes and infrastructure will depend on elevation with assets in mountainous areas more exposed. The low-elevation Cascade and Olympic foothills will be exposed first because these areas currently receive substantial snowfall at temperatures near freezing. By the end of the century, snowpack is expected to remain relatively unaffected only in the high-elevations of the Northern Cascade Mountains.	Lack of personnel; Site constraints; Lack of funding; Design/technology constraints	Bridges in mountainous areas may experience increased closures due to landslides, washouts, etc. as winter conditions become more wet. Roads in low-lying coastal and basin areas may also experienced increased closures from flooding. These impacts may make it difficult for timely emergency responses and for safe routes evacuation as bridges provide critical access at junctions.
100	Bridges-Sea level rise	Increase in likely sea level rise	Relative sea level rise indicates how much the average water level is expected to rise due to the combined effects of climate change and movement of the land. With moderate sea level rise, Washington's seaports and the connected distribution networks are expected to flood more often. Historical baseline not recorded. Mid century and end of century projected to be 0.7 feet and 2.1 feet, respectively.	SR 20, HWY 5, and collector roads have bridges that cross tributaries and large rivers, and also provide critical support in moving people/goods and responding to emergencies. Bridges in basin and unstable bluff areas are exposed to erosion/landslides, and inundation from SLR.	Lack of personnel; Site constraints; Lack of funding; Design/technology constraints	With moderate sea level rise, Washington's seaports and the connected distribution networks are expected to flood more often. Coastal transportation infrastructure may be subject to more frequent closures due to coastal flooding and erosion, and require more frequent maintenance and repairs.
101	Bridges-Wildfire	Increase in wildfire likelihood	More frequent wildfires, and related smoke, can disrupt travel, increase road closures and delay construction projects. Wildfire smoke has the potential to affect labor in the transportation sector because of health effects on outdoor laborers. More roadside brush fires can create safety hazards and disrupt transportation. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	In your county or community, transportation routes and infrastructure wildland-urban interface and areas with high wildfire risk historically will be most exposed to increases in the likelihood of wildfire.	Lack of personnel; Site constraints; Lack of funding; Design/technology constraints	Wildfires can directly damage bridge infrastructure, leading to closures, while smoke can severely impact air quality and visibility, creating dangerous driving conditions and potentially compromising safety and maintenance operations on these critical routes (CWPP, 2019; EPA, 2023; DNR, 2024).
102	Railroad-Drought (Transportation)	Decrease in snowpack	Reductions in snowpack have the potential to reduce snow-related road maintenance, road closures, and transportation delays. However, as more cold-season precipitation falls as rain rather than snow, transportation routes in mountainous areas may experience more damage from heavier winter rainfall and associated flooding, erosion, and washouts. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	Snowpack exposure to warming varies by elevation. BNSF RR is mainly located in west County from Anacortes/Swinomish to upper Samish river valley. Exposure of transportation routes and infrastructure will increase in mountainous areas. The BNSF RR in upper Samish river valley will be exposed first because this area can receive substantial snowfall at temperatures near freezing. By the end of the century, snowpack is expected to remain relatively unaffected only in the high-elevations of the Northern Cascade Mountains.	Infrastructure strain; Lack of personnel	Decreases in snowpack results in more dry soil conditions, potentially undermining railroad tracks if soils crack, contract, and move under drought conditions.
103	Railroad-Extreme Heat	Increase in hot days	More very hot days have the potential to damage the surfaces of roads and bridges, leading to greater maintenance and repair costs and more frequent traffic and service disruptions. Steady increase in hot days above 100 deg F. Historical baseline is 4 days. Mid century and end of century is projected to be an increase of 22.7 days and 34.2 days, respectively.	In your county or community, the exposure of road surfaces to extreme heat will vary locally based on features that exacerbate or ameliorate extreme heat such as the extent of urban heat islands and tree canopy cover for shade.	Lack of personnel; Site constraints; Lack of funding	Rising temperatures can cause stress on transportation infrastructure, such as the warping of railroad tracks and foundations, and deterioration of surfaces, leading to delays, increased maintenance costs, business disruptions, and potential safety hazards for transportation services.
104	Railroad-Extreme precipitation	Increase in heavy precipitation magnitude	Heavier precipitation events are expected to intensify flooding, landslides, and erosion, which can interrupt transportation routes, damage infrastructure, and increase maintenance and repair costs. Increase in heavy precipitation magnitude from 8% for mid century to 21% for end of century. Historical baseline was not recorded.	In your county or community, transportation routes and infrastructure located in low-lying areas, within or near current floodplains or regulatory flood zones, or adjacent to unstable slopes are expected to be more exposed to an increase in heavy precipitation.	Lack of personnel; Site constraints; Design/technology constraints	Increased heavy precipitation magnitude can cause stress on transportation infrastructure, such as the warping of railroad tracks and foundations, and deterioration of surfaces, leading to delays, increased maintenance costs, business disruptions, and potential safety hazards for transportation services.
105	Railroad-Flooding	Decrease in peak streamflow	Heavier precipitation events are expected to intensify flooding, landslides, and erosion, which can interrupt transportation routes, damage infrastructure, and increase maintenance and repair costs. Historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively. Meaning annual maximum streamflow for 19.3% of stream segments Countywide will not change by mid century (hence decrease from 100 to 19.3%), while 80.4% of stream segments Countywide will be 10 to 30% greater than the 1980-2009 average annual maximum streamflow by mid century.	In your county or community, transportation routes and infrastructure located in low-lying areas, within or near current floodplains or regulatory flood zones, or adjacent to unstable slopes are expected to be more exposed to an increase in heavy precipitation.	Lack of personnel; Site constraints; Design/technology constraints	Increased peak streamflow results in more intense seasonal flooding that can cause stress on transportation infrastructure, such as the warping of railroad tracks and foundations, and deterioration of surfaces, leading to delays, increased maintenance costs, business disruptions, and potential safety hazards for transportation services.
106	Railroad-Reduced snowpack	Decrease in snowpack	Reductions in snowpack have the potential to reduce snow-related road maintenance, road closures, and transportation delays. However, as more cold-season precipitation falls as rain rather than snow, transportation routes in mountainous areas may experience more damage from heavier winter rainfall and associated flooding, erosion, and washouts. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	Snowpack exposure to warming varies by elevation. In your county or community, the exposure of transportation routes and infrastructure will depend on elevation with assets in mountainous areas more exposed. The low-elevation Cascade and Olympic foothills will be exposed first because these areas currently receive substantial snowfall at temperatures near freezing. By the end of the century, snowpack is expected to remain relatively unaffected only in the high-elevations of the Northern Cascade Mountains.	Lack of personnel; Site constraints; Design/technology constraints	Decrease in snowpack results in more intense seasonal precipitation and localized flooding that can cause stress on transportation infrastructure, such as the warping of railroad tracks and foundations, and deterioration of surfaces, leading to delays, increased maintenance costs, business disruptions, and potential safety hazards for transportation services.

107	Railroad-Sea level rise	Increase in likely sea level rise	With moderate sea level rise, Washington's seaports and the connected distribution networks are expected to flood more often. Coastal transportation infrastructure may be subject to more frequent closures due to coastal flooding and erosion, and require more frequent maintenance and repairs. Historical baseline not recorded. Mid century and end of century projected to be 0.7 feet and 2.1 feet, respectively.	In your county or community, exposure to sea level rise will vary locally with differences in the rate of geologic uplift or subsidence. The extent of inundation, coastal flooding, and erosion will vary based on shoreline topography and characteristics. Transportation routes and infrastructure located in low-lying coastal zones or near coastal bluffs will be more exposed.	Lack of personnel; Site constraints; Design/technology constraints	SLR inundation in low-lying coastal areas results in widespread flooding that can cause stress on transportation infrastructure, such as the warping of railroad tracks and foundations, and deterioration of surfaces, leading to delays, increased maintenance costs, business disruptions, and potential safety hazards for transportation services.
108	Railroad-Wildfire	Increase in wildfire likelihood	More frequent wildfires, and related smoke, can disrupt travel, increase road closures and delay construction projects. Wildfire smoke has the potential to affect labor in the transportation sector because of health effects on outdoor laborers. More roadside brush fires can create safety hazards and disrupt transportation. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	In your county or community, transportation routes and infrastructure wildland-urban interface and areas with high wildfire risk historically will be most exposed to increases in the likelihood of wildfire.	Lack of personnel; Site constraints; Design/technology constraints	Wildfires can directly damage railroad infrastructure, leading to closures, while smoke can severely impact air quality and visibility, creating dangerous driving conditions and potentially compromising safety and maintenance operations on these critical routes (CWPP, 2019; EPA, 2023; DNR, 2024).
109	Public transit-Drought (Transportation)	Decrease in snowpack	Reductions in snowpack have the potential to reduce snow-related road maintenance, road closures, and transportation delays. However, as more cold-season precipitation falls as rain rather than snow, transportation routes in mountainous areas may experience more damage from heavier winter rainfall and associated flooding, erosion, and washouts. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	Snowpack exposure to warming varies by elevation. Exposure of transit routes and infrastructure will depend on elevation with assets in mountainous areas more exposed. Transit routes that serve unincorporated County extends from Swinomish to Concrete area. The low-elevation Cascade and Olympic foothills will be exposed first because these areas currently receive substantial snowfall at temperatures near freezing.	Infrastructure strain; Lack of personnel; lack of funds	Decreases in snowpack results in more dry soil conditions, potentially undermining roads if soils crack, contract, and move under drought conditions.
110	Public transit-Extreme Heat	Increase in hot days	More very hot days have the potential to damage the surfaces of roads and bridges, leading to greater maintenance and repair costs and more frequent traffic and service disruptions. Steady increase in hot days above 100 deg F. Historical baseline is 4 days. Mid century and end of century is projected to be an increase of 22.7 days and 34.2 days, respectively.	In your county or community, the exposure of road surfaces to extreme heat will vary locally based on features that exacerbate or ameliorate extreme heat such as the extent of urban heat islands and tree canopy cover for shade.	Lack of personnel; Site constraints; Lack of funding	Rising temperatures can cause stress on transportation infrastructure, such as the warping of pavement and foundations, and deterioration of road surfaces, leading to delays, increased maintenance costs, and potential safety hazards for transportation services.
111	Public transit-Extreme precipitation	Increase in heavy precipitation magnitude	Heavier precipitation events are expected to intensify flooding, landslides, and erosion, which can interrupt transportation routes, damage infrastructure, and increase maintenance and repair costs. Increase in heavy precipitation magnitude from 8% for mid century to 21% for end of century. Historical baseline was not recorded.	Transportation services – such as public transit access and ferries – in the Skagit River Basin is highly vulnerable to extreme flooding.	Lack of personnel; Site constraints; Lack of funding	Due to their low-lying locations and close proximity to these rivers, these routes are susceptible to rapid inundation and severe disruptions. Extreme weather events can exacerbate these issues through levee breaches, debris accumulation, and intense rainfall, leading to significant interruptions in transportation services.
112	Public transit-Flooding	Decrease in peak streamflow	Heavier precipitation events are expected to intensify flooding, landslides, and erosion, which can interrupt transportation routes, damage infrastructure, and increase maintenance and repair costs. Historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 is 100. Mid century and end of century projections are 19.3 and 4.4, respectively. Meaning annual maximum streamflow for 19.3% of stream segments Countywide will not change by mid century (hence decrease from 100 to 19.3%), while 80.4% of stream segments Countywide will be 10 to 30% greater than the 1980-2009 average annual maximum streamflow by mid century.	Transportation services – such as public transit access and ferries – in the Skagit River Basin is highly vulnerable to extreme flooding.	Lack of personnel; Site constraints; Lack of funding	Due to their low-lying locations and close proximity to these rivers, these routes are susceptible to rapid inundation and severe disruptions. Extreme weather events can exacerbate these issues through levee breaches, debris accumulation, and intense rainfall, leading to significant interruptions in transportation services.
113	Public transit-Reduced snowpack	Decrease in snowpack	Reductions in snowpack have the potential to reduce snow-related road maintenance, road closures, and transportation delays. However, as more cold-season precipitation falls as rain rather than snow, transportation routes in mountainous areas may experience more damage from heavier winter rainfall and associated flooding, erosion, and washouts. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	Snowpack exposure to warming varies by elevation. In your county or community, the exposure of transportation routes and infrastructure will depend on elevation with assets in mountainous areas more exposed. The low-elevation Cascade and Olympic foothills will be exposed first because these areas currently receive substantial snowfall at temperatures near freezing. By the end of the century, snowpack is expected to remain relatively unaffected only in the high-elevations of the Northern Cascade Mountains.	Lack of personnel; Site constraints; Lack of funding	Due to their low-lying locations and close proximity to these rivers, these routes are susceptible to rapid inundation and severe disruptions. Extreme weather events can exacerbate these issues through levee breaches, debris accumulation, and intense rainfall, leading to significant interruptions in transportation services.
114	Public transit-Sea level rise	Increase in likely sea level rise	With moderate sea level rise, Washington's seaports and the connected distribution networks are expected to flood more often. Coastal transportation infrastructure may be subject to more frequent closures due to coastal flooding and erosion, and require more frequent maintenance and repairs. Historical baseline not recorded. Mid century and end of century projected to be 0.7 feet and 2.1 feet, respectively.	In your county or community, exposure to sea level rise will vary locally with differences in the rate of geologic uplift or subsidence. The extent of inundation, coastal flooding, and erosion will vary based on shoreline topography and characteristics. Transportation routes and infrastructure located in low-lying coastal zones or near coastal bluffs will be more exposed.	Lack of funds; Lack of personnel; Site constraints	Due to their low-lying locations and close proximity to these rivers, these routes are susceptible to rapid inundation and severe disruptions. Extreme weather events can exacerbate these issues through levee breaches, debris accumulation, and intense rainfall, leading to significant interruptions in transportation services.
115	Public transit-Wildfire	Increase in wildfire likelihood	More frequent wildfires, and related smoke, can disrupt travel, increase road closures and delay construction projects. Wildfire smoke has the potential to affect labor in the transportation sector because of health effects on outdoor laborers. More roadside brush fires can create safety hazards and disrupt transportation. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	In your county or community, transportation routes and infrastructure wildland-urban interface and areas with high wildfire risk historically will be most exposed to increases in the likelihood of wildfire. Routes 40X (County connector island/Skagit), 70X (upriver connector), and 80X (County connector whatcom/Skagit) that are located near historic wildfire areas such as Jordan Creek near Marblemount, Burpee Hills near Concrete, and Sares Head at Fidalgo island are exposed to increases in wildfire likelihood.	Lack of funds; Lack of personnel; Site constraints	Wildfires can directly damage road infrastructure that public transit services relies on, leading to closures, while smoke can severely impact air quality and visibility, creating dangerous driving conditions and potentially compromising safety and maintenance operations on these critical routes (CWPP, 2019; EPA, 2023; DNR, 2024).
116	Solid waste facility-Extreme precipitation (Waste Management)	Increase in extreme precipitation magnitude	Changes in the intensity of extreme precipitation events are more likely to cause damages to infrastructure and agricultural operations than changes in seasonal and annual precipitation. Historical baseline not recorded. Mid century and end of century projected to be 8% and 30%, respectively.	In your county or community, waste management services that serve people located in low-lying areas, within current floodplains or regulatory flood zones, or adjacent to unstable slopes are expected to be more exposed to the impacts of heavier precipitation events. Asset is also located in low-lying basin area just south of Skagit Regional Airport and is exposed to increased extreme precip.	Lack of funds; Lack of personnel; Site constraints; Design and technology constraints	Heavier precipitation has the potential to increase storm damage to infrastructure and generate more waste and debris. More waste will strain municipal cleanup and refuse capacity.

117	Solid waste facility-Flooding	Increase in return interval frequency of 25-yr peak streamflow	More frequent high streamflow events are expected to increase flooding, which can generate more debris and waste. More waste will strain municipal cleanup and refuse capacity. Flooding of waste management facilities can release contaminants and hazardous materials. Historical baseline for all streams in Skagit County is a 20 to 30 year return interval (occurrence of 25-yr flood capacity). Mid century and end of century projections are expected to increase: Mid century and end of century projected to have 28.5% streams and 14.5% streams with 10 to 20 year return interval, respectively. 71.5% streams and 85.5% streams with 0 to 10 year return interval.	In your county or community, waste management services that serve people located in low-lying areas, within current floodplains or regulatory flood zones, or adjacent to unstable slopes are expected to be more exposed to the impacts of heavier precipitation events. Asset is also located in low-lying basin area just south of Skagit Regional Airport and is exposed to increased extreme precip.	Lack of funds; Lack of personnel; Site constraints; Design and technology constraints	Due to their low-lying locations and close proximity to river delta, these routes are susceptible to rapid inundation and severe disruptions. Flooding events can exacerbate these issues through levee breaches, debris accumulation, and intense rainfall, leading to significant interruptions in solid waste services.
118	Solid waste facility-Wildfire	Increase in wildfire likelihood	More frequent wildfires have the potential to generate greater amounts of debris and waste. More waste will strain municipal cleanup and refuse capacity. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	In your county or community, waste management facilities that serve areas in the wildland-urban interface will be more exposed to increases in waste with more wildfire. Asset is located in WUI-interface zone and may be exposed to increased wildfire likelihood - however, "perfect storm" conditions i.e., dry soil, dry vegetation, humidity, ignition source, etc. must be present for wildfire events to occur.	Lack of funds; Lack of personnel; Site constraints; Design and technology constraints	Wildfires can directly damage solid waste infrastructure that public relies on, leading to closures, while smoke can severely impact air quality and visibility and potentially compromising safety and maintenance operations on these critical routes (CWPP, 2019; EPA, 2023; DNR, 2024).
119	Private septic tanks-Extreme precipitation (Waste Management)	Increase in extreme precipitation magnitude	Heavier precipitation has the potential to increase storm damage to infrastructure and generate more waste and debris. More waste will strain municipal cleanup and refuse capacity. Historical baseline not recorded. Mid century and end of century projected to be 8% and 30%, respectively.	In your county or community, waste management services that serve people located in low-lying areas, within current floodplains or regulatory flood zones, or adjacent to unstable slopes are expected to be more exposed to the impacts of heavier precipitation events.	Site constraints; Design and technology constraints; Competing land uses	Heavier precipitation has the potential to flood and damage private septic's and generate more waste and debris. More waste will strain municipal cleanup and refuse capacity along with groundwater contamination.
120	Private septic tanks-Flooding	Increase in return interval frequency of 25-yr peak streamflow	More frequent high streamflow's are expected to increase flooding, which can generate more debris and waste. More waste will strain municipal cleanup and refuse capacity. Flooding of waste management facilities can release contaminants and hazardous materials. Historical baseline for all streams in Skagit County is a 20 to 30 year return interval (occurrence of 25-yr flood capacity). Mid century and end of century projections are expected to increase: Mid century and end of century projected to have 28.5% streams and 14.5% streams with 10 to 20 year return interval, respectively. 71.5% streams and 85.5% streams with 0 to 10 year return interval.	In your county or community, waste management services that serve development located in low-lying areas and in current and historical flood zones will be most exposed to projected increases in the frequency of high streamflows that can cause flooding and generate more waste. Private septic's in frequently flooded delta area, river flood zones, and high groundwater tables are more exposed to damage from flooding.	Site constraints; Design and technology constraints; Competing land uses	Rapid inundation and severe disruptions of human waste collection can occur. Flooding events can exacerbate these issues through levee breaches, debris accumulation, and intense rainfall, leading to significant interruptions in proper waste disposal.
121	Private septic tanks-Wildfire	Increase in wildfire likelihood	More frequent wildfires have the potential to generate greater amounts of debris and waste. More waste will strain municipal cleanup and refuse capacity. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	In your county or community, waste management facilities that serve areas in the wildland-urban interface will be more exposed to increases in waste with more wildfire. Assets may be located in WUI-interface zone and may be exposed to increased wildfire likelihood - however, "perfect storm" conditions i.e., dry soil, dry vegetation, humidity, ignition source, etc. must be present for wildfire events to occur.	Site constraints; Design and technology constraints; Competing land uses	Wildfires can directly damage infrastructure that individuals, especially in remote areas, relies on. This can lead to closures or reduced usage and proper handling of asset.
122	Water treatment facility-Drought (Water Resources)	Increase in total annual precipitation	Increases in annual precipitation have the potential to increase groundwater recharge. Changes in the timing and intensity of precipitation and increases in water demand and evaporation are expected to offset increases in groundwater recharge due to more annual precipitation. Steady increase in percent change in total annual precipitation. Historical baseline recorded to be 80 inches. Mid century and end of century projected to be 5.3% and 10%, respectively.	Skagit PUD facilities include over 600 miles of pipe, and 31-million gallons of storage volume. The exposure of water resources to changes in annual precipitation in the County depends on the presence of critical groundwater aquifer recharge areas and the location of wells. Aquifer recharge areas (ARA) include Diobsud Creek, Grandy Creek, Jones Creek, Opal Creek, Friday Creek, Samish River, Nookachamps Creek, Hill Ditch, and Lake Erie. Wells are located throughout County along water bodies. Asset receives water source from Judy Reservoir/Cultus Mountain watershed and is not in ARA. Asset has two groundwater wells.	Increased development; Lack of technology; Lack of capital expenditure funds; Site constraints; Design & technology constraints	Assets may exceed carrying capacity due to increases in annual precipitation, limiting water availability and increased ability to serve a growing population.
123	Water treatment facility-Reduced snowpack	Decrease in snowpack	Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	Skagit PUD facilities include over 600 miles of pipe, and 31-million gallons of storage volume. Snowpack exposure to warming varies by elevation. In your county or community, the exposure of water resources will depend on the location of water sources. The low-elevation Cascade and Olympic foothills will be exposed first because these areas currently receive substantial snowfall at temperatures near freezing. By the end of the century, snowpack is expected to remain relatively unaffected only in the high-elevations of the Northern Cascade Mountains. Asset receives water source from Judy Reservoir/Cultus Mountain watershed and is not in ARA.	Increased development; Lack of technology; Lack of capital expenditure funds; Site constraints; Design & technology constraints	Assets may exceed carrying capacity due to increases in annual precipitation, limiting water availability and increased ability to serve a growing population.
124	Water treatment facility-Sea level rise	Increase in likely sea level rise	Sea level rise is expected to increase salt water intrusion into groundwater and coastal aquifers, which could reduce water quality. Historical baseline not recorded. Mid century and end of century projected to be 0.7 feet and 2.1 feet, respectively.	Skagit PUD facilities include over 600 miles of pipe, and 31-million gallons of storage volume. Exposure will vary locally with differences in the rate of geologic uplift or subsidence. The extent of inundation, coastal flooding, and erosion will vary based on shoreline topography and characteristics. Shallow aquifers and wells located in low-lying coastal zones will be more exposed to saltwater intrusion. Asset receives water source from Judy Reservoir/Cultus Mountain watershed and is not in ARA. SLR inundation from increased SLR likelihood depends on "perfect storm" conditions i.e., high groundwater levels, storms, high/King tides, geologic subsidence, etc.	Increased development; Lack of technology; Lack of capital expenditure funds; Site constraints; Design & technology constraints	Increased SLR likelihood and combination of other perfect storm conditions can exacerbate localized flooding and contaminate water sources that decreases water security.
125	Water treatment facility-Wildfire	Increase in wildfire likelihood	More frequent wildfires have the potential to damage water distribution infrastructure and reduce water quality in reservoirs due to more runoff, erosion, and turbidity. Changes in water quality could increase the need for water treatment and filtration. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	Skagit PUD facilities include over 600 miles of pipe, and 31-million gallons of storage volume. Water facilities that serve areas in the wildland-urban interface will be more exposed to increases in waste with more wildfire. Asset receives water source from Judy Reservoir/Cultus Mountain watershed and is not in ARA. Asset is located in WUI-interface zone and may be exposed to increased wildfire likelihood - however, "perfect storm" conditions i.e., dry soil, dry vegetation, humidity, ignition source, etc. must be present for wildfire events to occur.	Increased development; Lack of technology; Lack of capital expenditure funds; Site constraints; Design & technology constraints	Increased wildfire likelihood and combination of other perfect storm conditions can contaminate water sources that decreases water security.
126	Reservoirs-Drought (Water Resources)	Increase in total annual precipitation	Increases in annual precipitation have the potential to increase groundwater recharge. Changes in the timing and intensity of precipitation and increases in water demand and evaporation are expected to offset increases in groundwater recharge due to more annual precipitation. Steady increase in percent change in total annual precipitation. Historical baseline recorded to be 80 inches. Mid century and end of century projected to be 5.3% and 10%, respectively.	The exposure of water resources to changes in annual precipitation in your county or community depends on the presence of critical groundwater aquifer recharge areas and the location of wells. Aquifer recharge areas include Diobsud Creek, Grandy Creek, Jones Creek, Opal Creek, Friday Creek, Samish River, Nookachamps Creek, Hill Ditch, and Lake Erie. Wells are located throughout County along water bodies. Increases in annual precip provide additional water security and quality from 1/2 mile buffer - seasonal precip offsets seasonal drought conditions.	Increased development; Lack of technology; Lack of capital expenditure funds; Site constraints; Design & technology constraints	Assets may exceed carrying capacity due to increases in annual precipitation, limiting water availability. Reservoir spill elevation has been increased in the past and may increase again to adapt to increased precipitation.
127	Reservoirs-Reduced snowpack	Decrease in snowpack	Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	Snowpack exposure to warming varies by elevation. In your county or community, the exposure of water resources will depend on the location of water sources. The low-elevation Cascade and Olympic foothills will be exposed first because these areas currently receive substantial snowfall at temperatures near freezing. By the end of the century, snowpack is expected to remain relatively unaffected only in the high-elevations of the Northern Cascade Mountains.	Increased development; Lack of technology; Lack of capital expenditure funds; Site constraints; Design & technology constraints	Assets may exceed carrying capacity that limits water availability. Reservoir spill elevation has been increased in the past and may increase again to adapt to snowpack decreases.

128	Reservoirs-Sea level rise	Increase in likely sea level rise	Sea level rise is expected to increase salt water intrusion into groundwater and coastal aquifers, which could reduce water quality. Historical baseline not recorded. Mid century and end of century projected to be 0.7 feet and 2.1 feet, respectively.	In your county or community, exposure will vary locally with differences in the rate of geologic uplift or subsidence. The extent of inundation, coastal flooding, and erosion will vary based on shoreline topography and characteristics. Shallow aquifers and wells located in low-lying coastal zones will be more exposed to saltwater intrusion.	Increased development; Lack of technology; Lack of capital expenditure funds; Site constraints; Design & technology constraints	Assets may exceed carrying capacity that limits water availability. Reservoir spill elevation has been increased in the past and may increase again to adapt to SLR likelihood increases.
129	Reservoirs-Wildfire	Increase in wildfire likelihood	More frequent wildfires have the potential to damage water distribution infrastructure and reduce water quality in reservoirs due to more runoff, erosion, and turbidity. Changes in water quality could increase the need for water treatment and filtration. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	In your county or community, water collection facilities that serve areas in the wildland-urban interface will be more exposed to increases in waste with more wildfire. Assets located in WUI-interface zone are exposed to increased wildfire likelihood - however, "perfect storm" conditions i.e., dry soil, dry vegetation, humidity, ignition source, etc. must be present for wildfire events to occur.	Increased development; Lack of technology; Lack of capital expenditure funds; Site constraints; Design & technology constraints	Assets may exceed carrying capacity that limits water availability from sedimentation. Reservoir spill elevation has been increased in the past and may increase again to adapt to increased wildfire likelihood.
130	Schools-Drought (Zoning & Dev)	Decrease in snowpack	Reductions in snowpack are expected to decrease opportunities for winter outdoor recreation and shorten the winter recreation season with adverse effects on the economy and character of some communities. Warm season outdoor recreation opportunities are expected to increase, shifting tourism revenue from one recreation sector to another. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	Snowpack exposure to warming varies by elevation. The low-elevation Cascade and Olympic foothills will be exposed first because these areas currently receive substantial snowfall at temperatures near freezing. No assets are located in mountain foothills and exposed to decrease in snowpack.	Lack of personnel; Site constraints; Enrollment increases; Generational knowledge gaps	Decrease in snowpack indicates a decreased amount of natural water storage in snowpack that will be available in the melt season. Reduced water security is especially felt where municipal infrastructure is not present in school grounds i.e., Marblemount, rural communities, etc.
131	Schools-Extreme Heat	Increase in August stream temperature	Stream temperature during August, which is typically the hottest month for most streams, is an indicator of water quality for salmon and other species that depend on cold water. Warmer stream temperatures have the potential to reduce the ability to meet water quality standards and the effluent limits (amount discharge to the water body) set on existing wastewater treatment facilities. The percentage of stream lengths in categories of average August stream temperature for future 30-year periods.	Schools located near rivers, streams, or other water bodies are more exposed to vector diseases from increased summertime temperatures.	Lack of personnel; Site constraints; Enrollment increases; Generational knowledge gaps	Increased exposure to vector diseases can result in more frequent closures, disruption to individual learning, and strain on school services.
132	Schools-Extreme precipitation	Increase in heavy precipitation magnitude	Heavier precipitation events are expected to intensify urban flooding and demands on storm water systems, which can affect zoning restrictions on new buildings, and require revised building codes for development in more frequently flooded areas. Increase in heavy precipitation magnitude from 8% for mid century to 21% for end of century. Historical baseline was not recorded.	In your county or community, certain land uses and development located in low-lying areas, within current floodplains or regulatory flood zones, or adjacent to unstable slopes are expected to be more exposed to an increase in heavy precipitation.	Lack of personnel; Site constraints; Enrollment increases; Generational knowledge gaps	Increased heavy precipitation magnitude can result in more frequent closures, disruption to individual learning, and strain on school services.
133	Schools-Flooding	Increase in peak streamflow frequency	Higher streamflow's are expected to increase damage to all types of infrastructure in flood zones and could expand the flood zone in some areas leading to damage of development not currently in flood zones. Historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 percent is 100. Meaning 100% of stream segments experience 25-year peak volumes once every 20 to 30 years. Mid century and end of century projections are 19.3 and 4.4, respectively, of river segments with little to no change in peak streamflow, whereas 80.4 and 29.5 river segments are projected to experience 25-year peak volumes once every 10 to 20 years. Meaning peak streamflow will occur more frequently.	In your county or community, development located in river valleys and in or near current and historical flood zones will be most exposed to projected increases in high streamflows that cause flooding.	Lack of personnel; Site constraints; Enrollment increases; Generational knowledge gaps	Increased peak streamflow can result in flood damages, more frequent closures, disruption to individual learning, and strain on school services.
134	Schools-Reduced snowpack	Decrease in snowpack	Higher streamflow's are expected to increase damage to all types of infrastructure in flood zones and could expand the flood zone in some areas leading to damage of development not currently in flood zones. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	In your county or community, development located in river valleys and in or near current and historical flood zones will be most exposed to projected increases in high streamflows that cause flooding.	Lack of personnel; Site constraints; Enrollment increases; Generational knowledge gaps	Decrease in snowpack indicates a decreased amount of natural water storage in snowpack that will be available in the melt season. Reduced water security is especially felt where municipal infrastructure is not present in school grounds i.e., Marblemount, rural communities, etc.
135	Schools-Sea level rise	Increase in likely sea level rise	Moderate sea level rise is expected to inundate some coastal land and intensify coastal flooding of infrastructure. Sea level rise is expected to increase beach and bluff erosion in some areas. Increasing coastal hazards are expected to decrease the area of coastal land that is suitable for some types of development and increase the need for relocation. Historical baseline not recorded. Mid century and end of century projected to be 0.7 feet and 2.1 feet, respectively.	In your county or community, exposure to sea level rise will vary locally with differences in the rate of geologic uplift or subsidence. The extent of inundation, coastal flooding, and erosion will vary based on shoreline topography and characteristics. Development located in low-lying coastal zones or near coastal bluffs will be more exposed.	Lack of personnel; Site constraints; Enrollment increases; Generational knowledge gaps	Increased SLR likelihood can result in flood damages, more frequent closures, disruption to individual learning, and strain on school services.
136	Schools-Wildfire	Increase in wildfire likelihood	More frequent wildfires are expected to increase damage to homes and infrastructure and displace residents. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	In your county or community, the extent of development and the types of land use in the wildland-urban interface will affect local exposure to increases in the likelihood of wildfire.	Lack of personnel; Site constraints; Enrollment increases; Generational knowledge gaps	An increasing likelihood of wildfire indicates a greater potential for wildfire to damage infrastructure, interrupt businesses, or affect public health and well-being.

137	Radio towers-Drought (Zoning & Dev)	Decrease in snowpack	Higher streamflow's are expected to increase damage to all types of infrastructure in flood zones and could expand the flood zone in some areas leading to damage of development not currently in flood zones. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	Snowpack exposure to warming varies by elevation. Exposure of asset will depend on elevation. Asset is managed by private corporation - some located in low-elevation Cascade and Olympic foothills that will be exposed first because these areas currently receive substantial snowfall at temperatures near freezing. Radio towers have little to no anticipated exposure to decreased snowpack.	Increased development; Lack of funds; Site constraints; Design & technology constraints; Policy changes	N/a
138	Radio towers-Extreme Heat	Increase in August stream temperature	Higher streamflow's are expected to increase damage to all types of infrastructure in flood zones and could expand the flood zone in some areas leading to damage of development not currently in flood zones. Mid Century: 13.2% increase in range 16-18 deg C. 20.9% increase in range 14-16 deg C. 21.2% increase in range 12-14 deg C. 15% increase in range 10-12 deg C. 15.2% increase in range below 8 deg C. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	Radio communications include radio towers that are located in remote forested areas with higher elevations. However, communication towers are owned and operated by private entities and exact location of assets are unknown. Radio communication towers have little to no anticipated exposure to increases in summertime stream temperatures.	Increased development; Lack of funds; Site constraints; Design & technology constraints; Policy changes	Drier vegetation and soils from extreme heat events increase likelihood of wildfires and landslides that may increase destruction of towers, making it difficult for individuals and community members to communicate and respond to emergencies.
139	Radio towers-Extreme precipitation	Increase in heavy precipitation magnitude	Heavier precipitation events are expected to intensify urban flooding and demands on storm water systems, which can affect zoning restrictions on new buildings, and require revised building codes for development in more frequently flooded areas. Increase in heavy precipitation magnitude from 8% for mid century to 21% for end of century. Historical baseline was not recorded.	Radio communications include radio towers that are located in remote forested areas with higher elevations. However, communication towers are owned and operated by private entities and exact location of assets are unknown. Assets located in unstable landslide/hillside areas are exposed to increases in heavy precip magnitude.	Increased development; Lack of funds; Site constraints; Design & technology constraints; Policy changes	Increased precipitation magnitude increases flooding or landslides that may increase destruction of towers, making it difficult for individuals and community members to communicate and respond to emergencies.
140	Radio towers-Flooding	Increase in peak streamflow frequency	Higher streamflow's are expected to increase damage to all types of infrastructure in flood zones and could expand the flood zone in some areas leading to damage of development not currently in flood zones. Historical baseline for percentage of stream lengths in Skagit county in annual maximum streamflow for -10 to 10 percent is 100. Meaning 100% of stream segments experience 25-year peak volumes once every 20 to 30 years. Mid century and end of century projections are 19.3 and 4.4, respectively, of river segments with little to no change in peak streamflow, whereas 80.4 and 29.5 river segments are projected to experience 25-year peak volumes once every 10 to 20 years. Meaning peak streamflow will occur more frequently.	Radio communications include radio towers that are located in remote forested areas with higher elevations. However, communication towers are owned and operated by private entities and exact location of assets are unknown. Assets located in or near unstable high-elevation stream banks are exposed to damage from flooding.	Increased development; Lack of funds; Site constraints; Design & technology constraints; Policy changes	Flood events increase likelihood of landslides and erosion that may increase destruction of towers, making it difficult for individuals and community members to communicate and emergency response services.
141	Radio towers-Reduced snowpack	Decrease in snowpack	Higher streamflow's are expected to increase damage to all types of infrastructure in flood zones and could expand the flood zone in some areas leading to damage of development not currently in flood zones. Steady decrease in percent change in April 1 snowpack. Historical baseline is 22 inches. Mid century and end of century is projected to be a decrease in 53% and 79%, respectively.	Radio communications include radio towers that are located in remote forested areas with higher elevations. However, communication towers are owned and operated by private entities and exact location of assets are unknown. Assets located in river valleys and in or near current and historical flood zones will be most exposed to projected increases in high streamflows that cause flooding.	Increased development; Lack of funds; Site constraints; Design & technology constraints; Policy changes	Seasonal and more intense flooding from decreased snowpack can down radio towers and lines, interrupting communications between individuals and community members, emergency response services and Countywide security.
142	Radio towers-Sea level rise	Increase in likely sea level rise	Moderate sea level rise is expected to inundate some coastal land and intensify coastal flooding of infrastructure. Sea level rise is expected to increase beach and bluff erosion in some areas. Increasing coastal hazards are expected to decrease the area of coastal land that is suitable for some types of development and increase the need for relocation. Historical baseline not recorded. Mid century and end of century projected to be 0.7 feet and 2.1 feet, respectively.	Radio communications include radio towers that are located in remote forested areas with higher elevations. However, communication towers are owned and operated by private entities and exact location of assets are unknown. Assets located in low-lying coastal zones or near coastal bluffs will be more exposed due to coastal flooding, unstable hillsides, increased groundwater levels, etc.	Increased development; Lack of funds; Site constraints; Design & technology constraints; Policy changes	Seasonal and more intense flooding from increased SLR likelihood can down radio towers and lines, interrupting communications between individuals and community members, emergency response services and Countywide security.
143	Radio towers-Wildfire	Increase in wildfire likelihood	More frequent wildfires are expected to increase damage to homes and infrastructure and displace residents. Steady increase in likelihood of climate and fuel conditions for wildfire. Historical baseline recorded to be 0. Mid century and end of century projected to be 0.04 and 0.17, respectively.	Radio communications include radio towers that are located in remote forested areas with higher elevations. However, communication towers are owned and operated by private entities and exact location of assets are unknown. Assets located in the wildland-urban interface zones will affect local exposure to increases in the likelihood of wildfire.	Increased development; Lack of funds; Site constraints; Design & technology constraints; Policy changes	An increasing likelihood of wildfire indicates a greater potential for wildfire to damage infrastructure, interrupt businesses, or affect public health and well-being.

Task 1.4: Identify priority climate hazards

Hazard	**Relevant to your jurisdiction?** *(Mark Yes or No.)*	**Notes** *(Explain why you determined this hazard is or is not relevant to your jurisdiction.)*
Drought	*Yes*	*Despite being the Evergreen State, Skagit County has experienced a number of drought episodes, including several that have lasted for more than a single season. Agricultural and forestry industries usually experience the greatest impact from a drought event in Skagit County.*
Extreme heat	*No*	*Jurisdiction's exposure to increased extreme events is low.*
Extreme precipitation	*Yes*	*Areas located in central and east Skagit County demonstrate more intense precipitation ranging from 5 inches to more than 10 inches. West Skagit County generally demonstrates 3-4 inches and/or less than 3 inches of precipitation.*
Flooding	*Yes*	*Major flooding has occurred on a regular basis in the Skagit River Basin. The Skagit River Basin is subject to winter rains and an increase in discharge during spring due to snowmelt runoff. Rain-type floods usually occur in November or December; however, may occur as early as October or as late as February.*
Reduced snowpack	*Yes*	*Jurisdiction is surrounded by various mountainous regions. Reduced snowpack impacts streamflow timing which affects hydroelectrical facilities, fisheries, and recreation activities that rely on predictable snowmelt.*
Sea level rise	*Yes*	*Most of Skagit County marine and shoreline areas are protected from sea level rise; however, shoreline areas of Fidalgo Island, Guemes Island, Sinclair Island, Cypress Island, Samish Island, March's Point, the communities of La Conner, Burlington, and Bayview, as well as lakeshore areas may be vulnerable to sea level rise.*
Wildfire	*Yes*	*Major wildfire events occur once every 20 to 50 years, and have remained small, less than 0.2 acres. Since 2008, small wildfire events have occurred in high frequency. Wildfire likelihood is anticipated to increase, resulting in larger more frequent wildfire events.*
Other - please list		
Earthquake	*No*	*Jurisdiction experiences earthquakes due to its location near the Juan de Fuca and Pacific plates; however, the impacts of climate change on earthquake probability are unknown.*
Volcano	*No*	*Lahars are the primary threat and present the greatest hazard to Skagit County resulting from volcanic activity at either Mount Baker or Glacier Peak. Though the possibility of a large volcanic eruption exists, these types of events are typically separated by several hundred to a few thousand years and is unlikely to occur in this lifetime. In addition, the impacts of climate change on volcano probability are unknown.*
Avalanche	*No*	*There are limited records available of avalanches impacting homes, businesses, or communities within Skagit County.*

Task 2.1: Review existing plans for climate gaps and opportunities

	Measure	Document	Sector	Climate Indicator	Hazards	Climate Impacts	Assets	Gaps and	Next Step
	List existing measure (goal or policy) that implicitly or explicitly supports climate resilience.	*List the document where the measure is found (comprehensive plan, hazard mitigation plan, shoreline master program, stormwater management plan, etc.).*	*List the most appropriate sector(s) for the measure [select all that apply].) OPTIONS: Buildings & Energy, Cultural Resources & Practices; Economic Development; Emergency Management; Health & Well-being; Ecosystems; Transportation; Agriculture & Food Systems; Waste Management; Water Resources; Zoning & Development*	***Information from Step 1:*** *List the climate indicator(s) that are relevant to the measure (changes in snowpack, streamflow, sea level, etc.).*	***Information from Step 1:*** *List the climate-related hazard(s) that the measure addresses.*	***Information from Step 1:*** *List climate impacts that the measure addresses now or could be addressed via changes. Also, consider whether the measure is maladaptive and could increase climate vulnerability and risk.*	***Information from Step 1:*** *List assets (forests, orchards, bridges, etc.) that are affected by the climate impacts you listed.*	*If applicable, note how the existing measure could be amended or supplemented by a new goal or policy to better address your local climate hazards and impact(s).*	*Note desired next step (e.g., amend an existing measure; consolidate with a similar measure; add a new measure; keep existing measure as-is in comprehensive plan).*
1	**Urban, Open Space, and Land Use** Policy 2A-1.3 - In designating Urban Growth Areas, consider GMA requirements to provide for recreational lands, critical areas, open space corridors, greenbelts, and view sheds, and to avoid natural hazard areas prone to flooding or other risks to public safety.	Skagit County Comprehensive Plan 2016-2036	Zoning & Development	Peak Streamflow and return interval of 25 yr peak streamflow	Flooding	Higher streamflows are expected to increase damage to all types of infrastructure in flood zones and could expand the flood zone in some areas leading to damage of development not currently in flood zones.	N/A	Add specificity - climate impacts	Amend existing policy to consider climate impacts. Add measures to climate resiliency element.
2	**Urban, Open Space, and Land Use** Policy 2A-3.1 - Urban public facilities include: improved streets, roads, highways, sidewalks, road lighting systems and traffic signals; urban domestic water systems, sanitary sewer systems, storm sewer systems, park and recreational facilities and schools as defined in the Capital Facilities Element with adopted level of service standards.	Skagit County Comprehensive Plan 2016-2036	Buildings and Energy, Waste Management, Water Resources, Transportation	Heating degree days, wildfire likelihood, extreme precipitation magnitude, decrease in peak streamflow	Extreme heat, wildfire, extreme precipitation, flooding	A decrease in heating degree days is expected to reduce energy demand for heating. This has the potential to reduce energy costs for businesses and residents, but decrease utility revenue to support infrastructure and operations. More frequent wildfires have the potential to affect energy transmission by damaging infrastructure and interrupting transmission and distribution. More frequent wildfires are expected to cause property damage and loss. Poor air quality due to wildfire smoke could increase demand for air filtration systems in buildings. Heavier precipitation events are expected to intensify flooding, landslides, and erosion, which can interrupt transportation routes, damage infrastructure, and increase maintenance and repair costs.	Roadways, highways, sidewalks, water systems, waste systems, recreational facilities	Add specificity - climate impacts	Integrate the resiliency element with the land use element, transportation, recreational and capital facilities elements.
3	**Urban, Open Space, and Land Use** Policy 2A-3.2 - Urban public services include fire protection and suppression; emergency medical services; public safety; public health; education; recreation; environmental protection; and other services as identified in the Capital Facilities Element with adopted level of service standards.	Skagit County Comprehensive Plan 2016-2036	Buildings and Energy, Waste Management, Water Resources, Emergency Management, Health and Safety, Transportation	Total annual precipitation, snowpack, likely sea level rise, wildfire likelihood, precipitation drought, 90 deg F max humidex days, extreme precipitation magnitude, peak streamflow, wildfire danger	Extreme precipitation, reduced snowpack, sea level rise, wildfire, flooding	A decrease in heating degree days is expected to reduce energy demand for heating. This has the potential to reduce energy costs for businesses and residents, but decrease utility revenue to support infrastructure and operations. More frequent wildfires have the potential to affect energy transmission by damaging infrastructure and interrupting transmission and distribution. More frequent wildfires are expected to cause property damage and loss. Poor air quality due to wildfire smoke could increase demand for air filtration systems in buildings. Heavier precipitation events are expected to intensify flooding, landslides, and erosion, which can interrupt transportation routes, damage infrastructure, and increase maintenance and repair costs. Heavier precipitation has the potential to increase the demand for emergency response services by intensifying flood events and increasing other emergencies associated with heavy precipitation. More frequent and severe droughts due to low summer precipitation are expected to increase the need for emergency services to plan, prepare, and respond to water shortages. More frequent extreme daytime heat events are expected to increase the demand for emergency services to plan, prepare, and respond to human health impacts. Extreme heat may also impact emergency services due to transportation and travel disruptions such as warped and buckling pavement on roads. Higher streamflows are expected to increase riverine flooding within existing floodplains and could expand flooding to new areas not currently in existing floodplains. More flooding has the potential to increase the demand for emergency services to plan, prepare, and respond to flood events. Moderate sea level rise is expected to inundate some coastal land and intensify coastal flooding during storms, which could increase the need for emergency services to plan, respond to and recover from coastal flooding. More days with high fire danger will increase the need for fire bans and associated enforcement and capacity to respond to wildfires.	All assets	No changes needed	Adopt into comprehensive plan
4	**Urban, Open Space, and Land Use** Policy 2A-3.3 - Urban governmental services should not be extended to, or expanded in, rural areas except in those limited circumstances necessary to protect basic public health and safety and the environment, and when such services are financially supportable at rural densities and do not support urban development.	Skagit County Comprehensive Plan 2016-2036	Buildings and Energy, Cultural resources & Practices & Health & Well-being	heating degree days, wildfire likelihood, low streamflow, august stream temperature, peak streamflow, likely sea level rise, wildfire likelihood, summer maximum temperature	Extreme heat, wildfire, drought, extreme heat, flooding, sea level rise, wildfire	A decrease in heating degree days is expected to reduce energy demand for heating. This has the potential to reduce energy costs for businesses and residents, but decrease utility revenue to support infrastructure and operations. More frequent wildfires have the potential to affect energy transmission by damaging infrastructure and interrupting transmission and distribution. More frequent wildfires are expected to cause property damage and loss. Poor air quality due to wildfire smoke could increase demand for air filtration systems in buildings.	All assets	Add specificity - climate impacts	Amend existing policy to consider climate impacts. Add measures to climate resiliency element.
5	**Urban, Open Space, and Land Use** Policy 2H-1.3 - Essential Public Facilities must comply with adopted federal, state, and county land use regulations and be in conformance with this Comprehensive Plan.	Skagit County Comprehensive Plan 2016-2036	Buildings and Energy	Total annual precipitation, snowpack, likely sea level rise, wildfire likelihood, precipitation drought, 90 deg F max humidex days, extreme precipitation magnitude, peak streamflow, wildfire danger	Extreme precipitation, reduced snowpack, sea level rise, wildfire, flooding	A decrease in heating degree days is expected to reduce energy demand for heating. This has the potential to reduce energy costs for businesses and residents, but decrease utility revenue to support infrastructure and operations. More frequent wildfires have the potential to affect energy transmission by damaging infrastructure and interrupting transmission and distribution. More frequent wildfires are expected to cause property damage and loss. Poor air quality due to wildfire smoke could increase demand for air filtration systems in buildings. Heavier precipitation events are expected to intensify flooding, landslides, and erosion, which can interrupt transportation routes, damage infrastructure, and increase maintenance and repair costs. Heavier precipitation has the potential to increase the demand for emergency response services by intensifying flood events and increasing other emergencies associated with heavy precipitation. More frequent and severe droughts due to low summer precipitation are expected to increase the need for emergency services to plan, prepare, and respond to water shortages. More frequent extreme daytime heat events are expected to increase the demand for emergency services to plan, prepare, and respond to human health impacts. Extreme heat may also impact emergency services due to transportation and travel disruptions such as warped and buckling pavement on roads. Higher streamflows are expected to increase riverine flooding within existing floodplains and could expand flooding to new areas not currently in existing floodplains. More flooding has the potential to increase the demand for emergency services to plan, prepare, and respond to flood events. Moderate sea level rise is expected to inundate some coastal land and intensify coastal flooding during storms, which could increase the need for emergency services to plan, respond to and recover from coastal flooding. More days with high fire danger will increase the need for fire bans and associated enforcement and capacity to respond to wildfires.	All assets	Add specificity - climate impacts	Integrate the resiliency element with capital facilities elements.

6	**Urban, Open Space, and Land Use** Policy 2H-1.6 - The County code must establish approval criteria for facility requirements and impacts. Proposals should be conditioned to be consistent with the County Comprehensive Plan, functional plans, and development regulations. The County may execute interlocal agreements regarding the siting, operation and/or expansion of such facilities within Skagit County. Agreements are encouraged to the extent they would result in locally beneficial siting decisions, facilitate the sponsor's voluntary provision of enhanced mitigation measures exceeding those required by applicable regulatory standards, and/or provide for mitigation of any disproportionate financial burden on the County created by the proposed facility.	Skagit County Comprehensive Plan 2016-2036	Zoning & Development	Total annual precipitation, snowpack, likely sea level rise, wildfire likelihood, precipitation drought, 90 deg F max humidex days, extreme precipitation magnitude, peak streamflow, wildfire danger	Extreme precipitation, reduced snowpack, sea level rise, wildfire, flooding	Reductions in snowpack are expected to decrease opportunities for winter outdoor recreation and shorten the winter recreation season with adverse effects on the economy and character of some communities. Warm season outdoor recreation opportunities are expected to increase, shifting tourism revenue from one recreation sector to another. Warmer stream temperatures have the potential to reduce the ability to meet water quality standards and the effluent limits (amount discharge to the water body) set on existing wastewater treatment facilities. Higher streamflows are expected to increase damage to all types of infrastructure in flood zones and could expand the flood zone in some areas leading to damage of development not currently in flood zones. Heavier precipitation events are expected to intensify urban flooding and demands on storm water systems, which can affect zoning restrictions on new buildings, and require revised building codes for development in more frequently flooded areas. Moderate sea level rise is expected to inundate some coastal land and intensify coastal flooding of infrastructure. Sea level rise is expected to increase beach and bluff erosion in some areas. Increasing coastal hazards are expected to decrease the area of coastal land that is suitable for some types of development and increase the need for relocation. More frequent wildfires are expected to increase damage to homes and infrastructure and displace residents.	All assets	Add specificity - climate impacts	Integrate the resiliency element with capital facilities elements.
7	**Urban, Open Space, and Land Use** Policy 2H-1.8 - Skagit County shall encourage the siting of essential public facilities equitably so that no single community and no racial, cultural or socio-economic group should absorb an inequitable share of these facilities and their impacts. In addition, siting should consider environmental, economic, technical, and service area factors.	Skagit County Comprehensive Plan 2016-2036	Zoning & Development	Total annual precipitation, snowpack, likely sea level rise, wildfire likelihood, precipitation drought, 90 deg F max humidex days, extreme precipitation magnitude, peak streamflow, wildfire danger	Extreme precipitation, reduced snowpack, sea level rise, wildfire, flooding	Reductions in snowpack are expected to decrease opportunities for winter outdoor recreation and shorten the winter recreation season with adverse effects on the economy and character of some communities. Warm season outdoor recreation opportunities are expected to increase, shifting tourism revenue from one recreation sector to another. Warmer stream temperatures have the potential to reduce the ability to meet water quality standards and the effluent limits (amount discharge to the water body) set on existing wastewater treatment facilities. Higher streamflows are expected to increase damage to all types of infrastructure in flood zones and could expand the flood zone in some areas leading to damage of development not currently in flood zones. Heavier precipitation events are expected to intensify urban flooding and demands on storm water systems, which can affect zoning restrictions on new buildings, and require revised building codes for development in more frequently flooded areas. Moderate sea level rise is expected to inundate some coastal land and intensify coastal flooding of infrastructure. Sea level rise is expected to increase beach and bluff erosion in some areas. Increasing coastal hazards are expected to decrease the area of coastal land that is suitable for some types of development and increase the need for relocation. More frequent wildfires are expected to increase damage to homes and infrastructure and displace residents.	All assets	Add specificity - climate impacts	Integrate the resiliency element with capital facilities elements.
8	**Rural** Policy 3A-3.2 - Continue to work with water providers such as Skagit PUD to extend public water service in rural areas where ground water supplies are limited, with the greatest emphasis being on areas already identified as pre-existing higher density rural areas with corresponding Comprehensive Plan designations and zoning, specifically limited areas of more intensive rural development (LAMIRDs) including Rural Villages and Rural Intermediate.	Skagit County Comprehensive Plan 2016-2036	Water Resources	likely sea level rise	Extreme precipitation, flooding, sea level rise	Sea level rise is expected to increase salt water intrusion into groundwater and coastal aquifers, which could reduce water quality.	Water infrastructure, ground water wells, aquifers, etc.	Add specificity - climate impacts	Amend existing policy to consider climate impacts. Add measures to climate resiliency element.
9	**Rural** Policy 3A-3.3 - Standards and plans for structures, roads and utility systems, and other public services and facilities shall be consistent with rural densities and uses. Such facilities and services shall be such designed, constructed, and provided to minimize the alteration of the landscape and the impacts to rural residents and community character, to preserve natural systems, to protect critical areas, to protect important land features such as ridgelines, to retain historic and cultural structures/landscapes, and scenic amenities.	Skagit County Comprehensive Plan 2016-2036	Buildings & Energy	Heating degree days and wildfire likelihood	Extreme heat and wildfire	A decrease in heating degree days is expected to reduce energy demand for heating. This has the potential to reduce energy costs for businesses and residents, but decrease utility revenue to support infrastructure and operations. More frequent wildfires have the potential to affect energy transmission by damaging infrastructure and interrupting transmission and distribution. More frequent wildfires are expected to cause property damage and loss. Poor air quality due to wildfire smoke could increase demand for air filtration systems in buildings.	Roadways, utility stems, and other public service utilities.	No changes needed	Adopt into comprehensive plan
10	**Rural** Policy 3A-3.4 - The County's public health responsibility for ensuring adequate wastewater treatment includes the determination of failing on-site septic systems, technical assistance to property owners, and actions to require necessary improvements. These services may include community plans and other strategies for creating area-wide solutions when surface waters or groundwater is threatened.	Skagit County Comprehensive Plan 2016-2036	Waste Management	Extreme precipitation magnitude, return interval of 25-year peak streamflow	Extreme precipitation, flooding	Heavier precipitation has the potential to increase storm damage to infrastructure and generate more waste and debris. More waste will strain municipal cleanup and refuse capacity. More frequent high streamflows are expected to increase flooding, which can generate more debris and waste. More waste will strain municipal cleanup and refuse capacity. Flooding of waste management facilities can release contaminants and hazardous materials.	Wastewater infrastructure/systems and septic tank systems	No changes needed	Adopt into comprehensive plan
11	**Rural** Policy 3C-2.19 - Any new Rural Center designations shall meet the following criteria: (a) All property to be included is located within the Rural Intermediate or Rural Reserve designations only. (b) The commercial area existed predominantly as an area or use of more intensive commercial development on July 1, 1990. (c) Location at the crossroads of county roads, state routes, or major arterials. (d) The designation does not jeopardize the protection of designated critical areas, frequently flooded areas, and surface water and ground water resources, including sole source aquifers, or the conservation and productive use of designated natural resource lands. (e) The travel distance between a new Rural Center and existing rural commercial designations is a minimum of 5 miles. This is generally the minimum distance that existing Rural Centers are located from other rural commercial designations.	Skagit County Comprehensive Plan 2016-2036	Zoning & Development	Heavy precipitation magnitude, peak streamflow, likely sea level rise	Extreme precipitation, flooding, sea level rise	Heavier precipitation events are expected to intensify urban flooding and demands on storm water systems, which can affect zoning restrictions on new buildings, and require revised building codes for development in more frequently flooded areas. Higher streamflows are expected to increase damage to all types of infrastructure in flood zones and could expand the flood zone in some areas leading to damage of development not currently in flood zones. Moderate sea level rise is expected to inundate some coastal land and intensify coastal flooding of infrastructure. Sea level rise is expected to increase beach and bluff erosion in some areas. Increasing coastal hazards are expected to decrease the area of coastal land that is suitable for some types of development and increase the need for relocation.	County roads, state routes, or major arterials,	Add specificity - climate impacts	Amend existing policy to consider climate impacts. Add measures to climate resiliency element.
12	**Natural Resource Lands** Policy 4A-2.4 - Agricultural Resource Lands Database: Skagit County shall maintain a database of current information on land uses, farming activities, conversions of agricultural lands for development or habitat, soils, drainage systems, and other quantifiable factors for the purpose of monitoring and conserving agricultural lands	Skagit County Comprehensive Plan 2016-2036	Agriculture & Food Systems	Precipitation drought, summer maximum temperature, heavy precipitation magnitude, streamflow timing, wildfire likelihood	Drought, extreme heat, extreme precipitation, reduced snowpack, wildfire	More frequent and severe droughts due to low summer precipitation will reduce the amount of water available for livestock and irrigation during the same time that warmer temperatures and longer growing seasons are expected to increase the demand for irrigation water. Warmer summers are expected to increase the potential for heat stress on some crops and livestock and decrease crop yields. Some agricultural pests are expected to have greater survival rates and population size with warming. Warmer summer temperatures are expected to increase demand for irrigation water. Heavier precipitation is expected to intensify flooding and inundation of agricultural lands, which can delay spring planting, affect crop quality and quantity, increase erosion and runoff, and increase susceptibility to root diseases. A shift in streamflow timing, with more streamflow in winter and early spring, will change the timing of water available for irrigated agriculture. This may or may not align with changes in the timing of the growing season for different crops. More frequent wildfires have the potential to increase damage to crops, livestock, agriculture infrastructure and operations. Wildfire smoke may reduce the quality of some crops and adversely affect farm workers and other outdoor laborers in the industry.	Agricultural land	Add specificity - climate impacts	Integrate the resiliency element with agricultural and recreational elements.
13	**Natural Resource Lands** Policy 4A-2.7 - Agricultural and Critical Areas: Consistent with the Growth Management Act, the County will a convene a watershed group to prepare a Voluntary Stewardship Work Plan for the Samish and Skagit watersheds in order to protect critical areas and promote the viability of agriculture.	Skagit County Comprehensive Plan 2016-2036	Agriculture & Food Systems	Precipitation drought, summer maximum temperature, heavy precipitation magnitude, streamflow timing, wildfire likelihood	Drought, extreme heat, extreme precipitation, reduced snowpack, wildfire	More frequent and severe droughts due to low summer precipitation will reduce the amount of water available for livestock and irrigation during the same time that warmer temperatures and longer growing seasons are expected to increase the demand for irrigation water. Warmer summers are expected to increase the potential for heat stress on some crops and livestock and decrease crop yields. Some agricultural pests are expected to have greater survival rates and population size with warming. Warmer summer temperatures are expected to increase demand for irrigation water. Heavier precipitation is expected to intensify flooding and inundation of agricultural lands, which can delay spring planting, affect crop quality and quantity, increase erosion and runoff, and increase susceptibility to root diseases. A shift in streamflow timing, with more streamflow in winter and early spring, will change the timing of water available for irrigated agriculture. This may or may not align with changes in the timing of the growing season for different crops. More frequent wildfires have the potential to increase damage to crops, livestock, agriculture infrastructure and operations. Wildfire smoke may reduce the quality of some crops and adversely affect farm workers and other outdoor laborers in the industry.	Agricultural land	Add specificity - climate impacts	Integrate the resiliency element with agricultural and recreational elements.

14	**Natural Resource Lands** Policy 4A-5.6 - Drainage Plans: Minimize and mitigate flooding and drainage impacts on agricultural lands. Skagit County Public Works shall develop criteria to review development proposals for drainage impacts on agricultural lands. Drainage plans for minimizing impacts of development shall be circulated to the affected. Drainage District for comment prior to issuance of permits by Public Works.	Skagit County Comprehensive Plan 2016-2036	Water Resources and Emergency Management	Snowpack, likely sea level rise, peak streamflow, extreme precipitation magnitude,	Reduced snowpack, sea level rise, flooding, extreme precipitation	Heavier precipitation has the potential to increase the demand for emergency response services by intensifying flood events and increasing other emergencies associated with heavy precipitation. Higher streamflows are expected to increase riverine flooding within existing floodplains and could expand flooding to new areas not currently in existing floodplains. More flooding has the potential to increase the demand for emergency services to plan, prepare, and respond to flood events. Moderate sea level rise is expected to inundate some coastal land and intensify coastal flooding during storms, which could increase the need for emergency services to plan, respond to and recover from coastal flooding. Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase. Sea level rise is expected to increase salt water intrusion into groundwater and coastal aquifers, which could reduce water quality.	Agricultural land	No changes needed	Adopt into comprehensive plan
15	**Natural Resource Lands** Policy 4B-2.2 - Forestry and Critical Area/Habitat Goals: The Forest Advisory Board (FAB) will develop a County-coordinated working group of non-profit organizations, industry groups and County agencies to reconcile, where possible, conflicts between the goals of protecting critical areas and habitat with those of preserving forest land for commercial forestry purposes.	Skagit County Comprehensive Plan 2016-2036	Ecosystems	Late summer precipitation, summer maximum temperature, peak streamflow, streamflow timing, likely sea level rise	Drought, extreme heat, flooding, reduced snowpack, sea level rise	Less summer precipitation is expected to affect ecosystem types differently. In freshwater ecosystems, less summer precipitation will contribute to lower streamflows, reduce water quality, and increase water temperatures. In terrestrial ecosystems, less summer precipitation will contribute to drought stress and reduce the growth and productivity of some plants. Warmer summers are expected to reduce summer soil moisture and increase physiological stress for some plants and animals. Warmer summer temperatures are expected to reduce tree growth and forest productivity in some areas and increase growth and productivity in mild climates. Outbreaks of some forest pests, such as mountain pine beetles, are expected to increase. Higher streamflows can scour the streambed and remove or crush salmon eggs, increasing mortality and reducing return rates. Higher streamflows reduce the availability of slow-water habitat and can increase sedimentation that affects habitat quality.	Agricultural and forest land	Add specificity - climate impacts	Integrate the resiliency element with agricultural and recreational elements.
16	**Natural Resource Lands** Policy 4B-2.7 - Fire Prevention and Protection: Residential development allowed on Industrial Forest Resource Lands shall be limited to those areas located within an existing fire protection district and within 200 feet of a county road or state highway. Skagit County shall require owners of all structures built in the designated forest lands to address forest fire prevention, reduction, and control. The Forest Advisory Board shall review the implementation of this policy annually to ensure its performance.	Skagit County Comprehensive Plan 2016-2036	Emergency Management and Ecosystems	Wildfire danger and wildfire likelihood	Wildfire	More frequent wildfires have the potential to reduce timber, non-timber forest products, carbon storage, and forest habitat for some wildlife. Wildfires also increase establishment of invasive species. More frequent wildfires have the potential to increase runoff and sediment to streams, which can reduce aquatic habitat quality. More days with high fire danger will increase the need for fire bans and associated enforcement and capacity to respond to wildfires.	Residential development and existing residential buildings	No changes needed	Adopt into comprehensive plan
17	**Natural Resource Lands** Policy 4B-2.11 - Wildfire Planning Program: Continue the National Fire Protection Association's "Firewise Communities Program" consistent with the Natural Hazards Mitigation Plan and with agency partners such as the Skagit Conservation District, fire districts and state agencies. Skagit County supports further development of a county-wide wildfire planning program to increase public safety and awareness regarding forest fire dangers, and establish the means of managing, reducing and suppressing catastrophic wildfires.	Skagit County Comprehensive Plan 2016-2036	Emergency Management and Ecosystems	Wildfire danger and wildfire likelihood	Wildfire	More frequent wildfires have the potential to reduce timber, non-timber forest products, carbon storage, and forest habitat for some wildlife. Wildfires also increase establishment of invasive species. More frequent wildfires have the potential to increase runoff and sediment to streams, which can reduce aquatic habitat quality. More days with high fire danger will increase the need for fire bans and associated enforcement and capacity to respond to wildfires.	All assets	No changes needed	Adopt into comprehensive plan
18	**Natural Resource Lands** Policy 4D-6.1 - Reclamation Plan: Support the Washington Department of Natural Resources (DNR) requirement that reclamation plans specify how overburden and spoil material is to be handled and placed in a manner which will control erosion, dust, sedimentation or leaching of material and hazardous substances into surface or ground waters.	Skagit County Comprehensive Plan 2016-2036	Ecosystems and Water Resources	Peak streamflow, streamflow timing, likely sea level rise, summer maximum temperature	flooding, reduced snowpack, sea level rise, extreme heat	Higher streamflows can scour the streambed and remove or crush salmon eggs, increasing mortality and reducing return rates. Higher streamflows reduce the availability of slow-water habitat and can increase sedimentation that affects habitat quality. Warmer summers are expected to reduce summer soil moisture and increase physiological stress for some plants and animals. Warmer summer temperatures are expected to reduce tree growth and forest productivity in some areas and increase growth and productivity in mild climates. Outbreaks of some forest pests, such as mountain pine beetles, are expected to increase. Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase.	Natural resource lands, groundwater wells, aquifers	Add specificity - climate impacts	Integrate the resiliency element with agricultural, land use, and recreational elements.
19	**Natural Resource Lands** Policy 4D-6.3 - Erosion Prevention: The flow of natural or process runoff from mineral extraction sites shall be dispersed or regulated such that soil erosion on receiving lands is prevented. Natural runoff includes: Any water that runs on disturbed ground, including stormwater and 'process water' that flows through operation.	Skagit County Comprehensive Plan 2016-2036	Ecosystems and Water Resources	Peak streamflow, streamflow timing, likely sea level rise, summer maximum temperature	flooding, reduced snowpack, sea level rise, extreme heat	Higher streamflows can scour the streambed and remove or crush salmon eggs, increasing mortality and reducing return rates. Higher streamflows reduce the availability of slow-water habitat and can increase sedimentation that affects habitat quality. Warmer summers are expected to reduce summer soil moisture and increase physiological stress for some plants and animals. Warmer summer temperatures are expected to reduce tree growth and forest productivity in some areas and increase growth and productivity in mild climates. Outbreaks of some forest pests, such as mountain pine beetles, are expected to increase. Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase.	Mineral extraction sites, groundwater wells, aquifers	Add specificity - climate impacts	Integrate the resiliency element with agricultural, land use, and recreational elements.
20	**Natural Resource Lands** Policy 4D-6.6 - Aquifer Protection: Activities related to mineral extraction and processing operations in the vicinity of open aquifers must provide safeguards including containment, to prevent contamination to the open aquifer.	Skagit County Comprehensive Plan 2016-2036	Water Resources	Total annual precipitation, snowpack, likely sea level rise	Drought, reduced snowpack, sea level rise	Increases in annual precipitation have the potential to increase groundwater recharge. Changes in the timing and intensity of precipitation and increases in water demand and evaporation are expected to offset increases in groundwater recharge due to more annual precipitation. Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase. Sea level rise is expected to increase salt water intrusion into groundwater and coastal aquifers, which could reduce water quality.	Aquifers	Add specificity - climate impacts	Amend existing policy to consider climate impacts. Add measures to climate resiliency element.
21	**Natural Resource Lands** Policy 4F-1.3 - Natural Resource Lands Database: Maintain a database management system to provide current information on natural resource land uses and activities, soils, conversions, and other quantifiable factors for the purpose of monitoring and conserving natural resource lands.	Skagit County Comprehensive Plan 2016-2036	Ecosystems	Peak streamflow, streamflow timing, likely sea level rise, summer maximum temperature	flooding, reduced snowpack, sea level rise, extreme heat	Warmer summers are expected to reduce summer soil moisture and increase physiological stress for some plants and animals. Warmer summer temperatures are expected to reduce tree growth and forest productivity in some areas and increase growth and productivity in mild climates. Outbreaks of some forest pests, such as mountain pine beetles, are expected to increase. Higher streamflows can scour the streambed and remove or crush salmon eggs, increasing mortality and reducing return rates. Higher streamflows reduce the availability of slow-water habitat and can increase sedimentation that affects habitat quality.	Natural resource lands	No changes needed	Adopt into comprehensive plan
22	**Environment** Policy 5A-1.1 - Critical areas shall be identified based on the best available science. (a) The National Wetland Inventory Maps, U.S.D.A. Soil Conservation Service Soil Survey, Washington Department of Fish and Wildlife Priority Habitats and Species Database and aerial photo overlays are examples of the information that shall be utilized in determining the approximate distribution and extent of wetlands in Skagit County. (b) Soil logs and surveys, geological information, well logs, and geological reports shall be utilized in identifying aquifers and aquifer recharge areas. (c) Hydrologic information such as Washington Department of Natural Resources water type maps, United States Geological Services streamflow data, and Federal Emergency Management Agency maps should be utilized in identifying frequently flooded areas.	Skagit County Comprehensive Plan 2016-2036	Ecosystems and Water Resources	Peak streamflow, streamflow timing, likely sea level rise, summer maximum temperature	flooding, reduced snowpack, sea level rise, extreme heat	Warmer summers are expected to reduce summer soil moisture and increase physiological stress for some plants and animals. Warmer summer temperatures are expected to reduce tree growth and forest productivity in some areas and increase growth and productivity in mild climates. Outbreaks of some forest pests, such as mountain pine beetles, are expected to increase. Higher streamflows can scour the streambed and remove or crush salmon eggs, increasing mortality and reducing return rates. Higher streamflows reduce the availability of slow-water habitat and can increase sedimentation that affects habitat quality.	Wetlands, aquifers	No changes needed	Adopt into comprehensive plan
23	**Environment** Policy 5A-1.2 - Critical areas shall be designated by definition and site assessment for conservation and protection. (a) Critical Areas shall be designated and mapped from general sources of critical area information based on best available science. (b) Critical areas shall be designated by performance standards or definitions. (c) Critical areas shall be designated upon completion of a site assessment done by a qualified professional during the process of a permit or development application.	Skagit County Comprehensive Plan 2016-2036	Ecosystems	Late summer precipitation, summer maximum temperature, peak streamflow, streamflow timing, likely sea level rise	flooding, reduced snowpack, sea level rise, extreme heat	Warmer summers are expected to reduce summer soil moisture and increase physiological stress for some plants and animals. Warmer summer temperatures are expected to reduce tree growth and forest productivity in some areas and increase growth and productivity in mild climates. Outbreaks of some forest pests, such as mountain pine beetles, are expected to increase. Higher streamflows can scour the streambed and remove or crush salmon eggs, increasing mortality and reducing return rates. Higher streamflows reduce the availability of slow-water habitat and can increase sedimentation that affects habitat quality.	N/A	No changes needed	Adopt into comprehensive plan

24	**Environment** Policy 5A-1.3 - Critical areas shall be classified for conservation, protection, and risk. (a) The Washington State Rating System for Western Washington (2014 Update) shall be utilized to classify wetlands according to the function, value and uniqueness of wetlands in Skagit County. (b) Aquifer recharge areas shall be classified based on their vulnerability, susceptibility to contamination, and potable water quality and quantity. (c) Frequently flooded areas should be classified utilizing the 100-year floodplain designations as adopted by the Federal Emergency Management Agency and the National Flood Insurance Program. (d) Geologically hazardous areas (areas subject to erosion, sliding, earthquakes, or other geologic events) shall be classified based on the degree of risk to health, life, property and resources. (e) "Fish and Wildlife Habitat Conservation Areas" (HCA's) shall be classified according to the type of conservation area which include: (i) Areas with which endangered, threatened, and sensitive species have a primary association; (ii) Habitats and species of local importance that have been designated by the County at the time of application; (iii) All public and private tidelands suitable for shellfish harvest; (iv) Kelp and eelgrass beds, and herring, smelt, and other forage fish spawning areas; (v) Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat; (vi) Waters of the state as defined by WAC 222-16; (vii) Lakes, ponds, streams, and rivers planted with game fish by a government or Tribal entity; (viii) Areas with which anadromous fish species have a primary association and; (ix) State Natural Area Preserves, Natural Resource Conservation Areas, and State Wildlife Areas.	Skagit County Comprehensive Plan 2016-2036	Ecosystems	Late summer precipitation, summer maximum temperature, peak streamflow, streamflow timing, likely sea level rise	flooding, reduced snowpack, sea level rise, extreme heat	Warmer summers are expected to reduce summer soil moisture and increase physiological stress for some plants and animals. Warmer summer temperatures are expected to reduce tree growth and forest productivity in some areas and increase growth and productivity in mild climates. Outbreaks of some forest pests, such as mountain pine beetles, are expected to increase. Higher streamflows can scour the streambed and remove or crush salmon eggs, increasing mortality and reducing return rates. Higher streamflows reduce the availability of slow-water habitat and can increase sedimentation that affects habitat quality.	Wetlands, aquifers	No changes needed	Adopt into comprehensive plan
25	**Environment** Policy 5A-3.1 - Areas of native vegetation and riparian corridors that connect wetland systems should be conserved and protected whenever feasible through incentive programs.	Skagit County Comprehensive Plan 2016-2036	Ecosystems	Late summer precipitation, summer maximum temperature, peak streamflow, streamflow timing, likely sea level rise	flooding, reduced snowpack, sea level rise, extreme heat	Warmer summers are expected to reduce summer soil moisture and increase physiological stress for some plants and animals. Warmer summer temperatures are expected to reduce tree growth and forest productivity in some areas and increase growth and productivity in mild climates. Outbreaks of some forest pests, such as mountain pine beetles, are expected to increase. Higher streamflows can scour the streambed and remove or crush salmon eggs, increasing mortality and reducing return rates. Higher streamflows reduce the availability of slow-water habitat and can increase sedimentation that affects habitat quality.	Vegetation and riparian corridors, wetland systems	Add specificity - climate impacts	Amend existing policy to consider climate impacts. Add measures to climate resiliency element.
26	**Environment** Policy 5A-3.4 - Economic incentive programs shall be implemented to encourage private participation in protecting and enhancing aquifer recharge and surface and ground water quality. (a) Reuse of water shall be encouraged and incentives provided for use of best management practices. (b) Incentives shall be developed that encourage industries, businesses and homes to use water conservation technologies and practices. (c) Incentive programs shall be established to maintain	Skagit County Comprehensive Plan 2016-2036	Water resources	Total annual precipitation, snowpack, likely sea level rise	Drought, reduced snowpack, sea level rise	Increases in annual precipitation have the potential to increase groundwater recharge. Changes in the timing and intensity of precipitation and increases in water demand and evaporation are expected to offset increases in groundwater recharge due to more annual precipitation Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase. Sea level rise is expected to increase salt water intrusion into groundwater and coastal aquifers, which could reduce water quality.	Aquifers	No changes needed	Adopt into comprehensive plan
27	**Environment** Policy 5A-3.5 - Incentives shall be developed to protect critical areas in agriculture and forestry land.	Skagit County Comprehensive Plan 2016-2036	Ecosystems	Late summer precipitation, summer maximum temperature, peak streamflow, streamflow timing, likely sea level rise	flooding, reduced snowpack, sea level rise, extreme heat	Warmer summers are expected to reduce summer soil moisture and increase physiological stress for some plants and animals. Warmer summer temperatures are expected to reduce tree growth and forest productivity in some areas and increase growth and productivity in mild climates. Outbreaks of some forest pests, such as mountain pine beetles, are expected to increase. Higher streamflows can scour the streambed and remove or crush salmon eggs, increasing mortality and reducing return rates. Higher streamflows reduce the availability of slow-water habitat and can increase sedimentation that affects habitat quality.	Agricultural and forest land	Add specificity - climate impacts	Amend existing policy to consider climate impacts. Add measures to climate resiliency element.
28	**Environment** Policy 5A-4.1 - The use of inter-agency agreements among county, city, state, federal and tribal agencies shall be encouraged for conservation and protection of critical areas when developing regulations, incentives, and monitoring/enforcement strategies. (a) Local, state, federal and tribal governments shall be consulted in the development of land use plans and development review to identify and protect habitat networks on an inter-jurisdictional basis. (b) Local, state, federal agencies, tribes and private interests shall be encouraged to plan and implement methods to protect and enhance water quality at commercial, recreational, and subsistence shellfish beds, including controlling potential new pollution sources, reducing pollution from existing sources, and establishing shellfish protection districts. (c) Coordinate with state and tribal programs to protect plant species and communities listed in the Natural Heritage Program, the Priority Habitats and Species (PHS) Program and plant species of cultural (tribal) significance should be maintained.	Skagit County Comprehensive Plan 2016-2036	Ecosystems and Water Resources	Late summer precipitation, summer maximum temperature, peak streamflow, streamflow timing, likely sea level rise	flooding, reduced snowpack, sea level rise, extreme heat	Warmer summers are expected to reduce summer soil moisture and increase physiological stress for some plants and animals. Warmer summer temperatures are expected to reduce tree growth and forest productivity in some areas and increase growth and productivity in mild climates. Outbreaks of some forest pests, such as mountain pine beetles, are expected to increase. Higher streamflows can scour the streambed and remove or crush salmon eggs, increasing mortality and reducing return rates. Higher streamflows reduce the availability of slow-water habitat and can increase sedimentation that affects habitat quality.	N/A	No changes needed	Adopt into comprehensive plan
29	**Environment** Policy 5A-4.3 - Critical area conservation and protection strategies shall be coordinated with watershed planning efforts and watershed implementation plans.	Skagit County Comprehensive Plan 2016-2036	Ecosystems and Water Resources	Late summer precipitation, summer maximum temperature, peak streamflow, streamflow timing, likely sea level rise	flooding, reduced snowpack, sea level rise, extreme heat	Warmer summers are expected to reduce summer soil moisture and increase physiological stress for some plants and animals. Warmer summer temperatures are expected to reduce tree growth and forest productivity in some areas and increase growth and productivity in mild climates. Outbreaks of some forest pests, such as mountain pine beetles, are expected to increase. Higher streamflows can scour the streambed and remove or crush salmon eggs, increasing mortality and reducing return rates. Higher streamflows reduce the availability of slow-water habitat and can increase sedimentation that affects habitat quality.	N/A	Add specificity - climate impacts	Amend existing policy to consider climate impacts. Add measures to climate resiliency element.
30	**Environment** Policy 5A-4.6 - Skagit County shall continue to work cooperatively with the cities, towns, state and federal agencies and tribes as needed in flood hazard mitigation planning and projects to minimize potential for flood damage throughout Skagit County.	Skagit County Comprehensive Plan 2016-2036	All	Total annual precipitation, snowpack, likely sea level rise, wildfire likelihood, precipitation drought, 90 deg F max humidex days, extreme precipitation magnitude, peak streamflow, wildfire danger	Extreme precipitation, reduced snowpack, sea level rise, wildfire, flooding	Reductions in snowpack are expected to decrease opportunities for winter outdoor recreation and shorten the winter recreation season with adverse effects on the economy and character of some communities. Warm season outdoor recreation opportunities are expected to increase, shifting tourism revenue from one recreation sector to another. Warmer stream temperatures have the potential to reduce the ability to meet water quality standards and the effluent limits (amount discharge to the water body) set on existing wastewater treatment facilities. Higher streamflows are expected to increase damage to all types of infrastructure in flood zones and could expand the flood zone in some areas leading to damage of development not currently in flood zones. Heavier precipitation events are expected to intensify urban flooding and demands on storm water systems, which can affect zoning restrictions on new buildings, and require revised building codes for development in more frequently flooded areas. Moderate sea level rise is expected to inundate some coastal land and intensify coastal flooding of infrastructure. Sea level rise is expected to increase beach and bluff erosion in some areas. Increasing coastal hazards are expected to decrease the area of coastal land that is suitable for some types of development and increase the need for relocation. More frequent wildfires are expected to increase damage to homes and infrastructure and displace residents.	All assets	No changes needed	Adopt into comprehensive plan
31	**Environment** Policy 5A-4.7 - The County shall encourage the restoration of appropriate degraded critical areas through coordinated cooperative public and private efforts.	Skagit County Comprehensive Plan 2016-2036	Ecosystems	Late summer precipitation, summer maximum temperature, peak streamflow, streamflow timing, likely sea level rise	flooding, reduced snowpack, sea level rise, extreme heat	Warmer summers are expected to reduce summer soil moisture and increase physiological stress for some plants and animals. Warmer summer temperatures are expected to reduce tree growth and forest productivity in some areas and increase growth and productivity in mild climates. Outbreaks of some forest pests, such as mountain pine beetles, are expected to increase. Higher streamflows can scour the streambed and remove or crush salmon eggs, increasing mortality and reducing return rates. Higher streamflows reduce the availability of slow-water habitat and can increase sedimentation that affects habitat quality. Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase.	N/A	Add specificity - climate impacts	Amend existing policy to consider climate impacts. Add measures to climate resiliency element.

32	**Environment** Policy 5A-5.1 - Critical Areas shall be designated and protected to prevent their continued loss and degradation. Furthermore, priority shall be given to the avoidance of impacts to Critical Areas, followed by the minimization of impacts and full mitigation respectively. (a) Wetlands (i) The greatest level of protection should be provided to wetlands of exceptional resource value, based on the Washington State Wetland Rating System for Western Washington (2014 Update). (ii) Measures shall be taken to protect the natural ability of wetlands to improve the quality of surface water runoff, hold and gradually release storm water, function as primary producers of plant matter, provide habitat for fish and wildlife, provide recreational opportunities, and provide historical and cultural values. (iii) Mitigation projects shall, whenever feasible, contribute to an existing wetland system or restore an area that was historically a wetland. (iv) A wetland buffer zone of adequate width should be maintained between a wetland and any adjacent development to protect the functions and integrity of the wetland. Where buffers are required, adequate buffer widths and protective mechanisms, using best management practices to sustain the buffer functions, shall be established. (v) Wetland buffer zones should be retained in their natural condition to the greatest extent possible. Re-vegetation may be required to restore the functional value of the buffer zone. (vi) Regulated wetlands and their associated buffer zones shall be protected from adverse wetland impacts to their overall functions. No wetland or buffer zone alteration should be authorized unless it can be shown that the impact is unavoidable and that the adverse impacts are offset by deliberate restoration, creation or enhancement of wetlands and buffer zones. (b) Aquifer Recharge Areas (i) Water resources shall be protected using natural systems and non-structural methods wherever possible. (ii) Ground Water Management Areas (according to WAC 173-100), Wellhead Protection Areas and Significant Use Zones shall be established to further protect the quality and quantity of ground and surface water. (iii) Skagit County will review and update its Saltwater Intrusion Policy for the islands and those coastal areas of the mainland where seawater intrusion has been documented. (iv) Skagit County will update the county code to address instream flow, mandated sewage code changes and water code changes. Aquifer recharge areas will be evaluated and protected under the revisions to the Critical Areas Ordinance. (v) Consistent with State law (RCW 19.27.097), Skagit County will not issue a permit for a building requiring potable water unless the applicant can demonstrate they have a legal and adequate source of water and the source meets drinking water standards.	Skagit County Comprehensive Plan 2016-2036	Ecosystems and Water Resources	Late summer precipitation, summer maximum temperature, peak streamflow, streamflow timing, likely sea level rise	flooding, reduced snowpack, sea level rise, extreme heat	Warmer summers are expected to reduce summer soil moisture and increase physiological stress for some plants and animals. Warmer summer temperatures are expected to reduce tree growth and forest productivity in some areas and increase growth and productivity in mild climates. Outbreaks of some forest pests, such as mountain pine beetles, are expected to increase. Higher streamflows can scour the streambed and remove or crush salmon eggs, increasing mortality and reducing return rates. Higher streamflows reduce the availability of slow-water habitat and can increase sedimentation that affects habitat quality. Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase.	Wetlands, aquifers, fish and wildlife habitat areas	No changes needed	Adopt into comprehensive plan
	(c) Frequently Flooded Areas (i) Undisturbed natural rivers, streams, lakes, wetlands, and floodplains shall be protected to avoid increases in flood elevations, to reduce flood damage, and to allow proper conveyance of flood flows. (ii) When reviewing proposed developments or designing infrastructure, consider the potential effects of tsunami, high tides with strong winds, sea level rise, and extreme weather events, including those potentially resulting from global climate change, and apply conditions of approval to ensure adaptation to future conditions and mitigation of potential impacts. (d) Fish and Wildlife Habitat Conservation Areas (i) Stream and wetland buffers shall be set so as to protect habitats associated with riparian dependent species. (ii) Habitat fragmentation shall be minimized to enhance wildlife diversity by protecting important wildlife areas, open space, and interconnecting corridors that form a continuous habitat network. (iii) Protective measures will be required in all areas that have the potential to introduce sediments into fish bearing streams, unless the applicant can adequately demonstrate that other mitigating measures will avoid impacts to instream resources. (iv) Habitats or species that have been identified as priority species or priority habitats by the state, federal or tribal governments should not be reduced and should be preserved through regulation, acquisition, incentives and other techniques. The County should determine which habitats are of local importance. (v) The level of protection for HCAs shall be commensurate with the resource population status and management objectives as determined by appropriate resource managers.	Skagit County Comprehensive Plan 2016-2036	Ecosystems and Water Resources	Late summer precipitation, summer maximum temperature, peak streamflow, streamflow timing, likely sea level rise	flooding, reduced snowpack, sea level rise, extreme heat	Warmer summers are expected to reduce summer soil moisture and increase physiological stress for some plants and animals. Warmer summer temperatures are expected to reduce tree growth and forest productivity in some areas and increase growth and productivity in mild climates. Outbreaks of some forest pests, such as mountain pine beetles, are expected to increase. Higher streamflows can scour the streambed and remove or crush salmon eggs, increasing mortality and reducing return rates. Higher streamflows reduce the availability of slow-water habitat and can increase sedimentation that affects habitat quality. Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase.	N/A	No changes needed	Adopt into comprehensive plan
33	**Environment** Policy 5A-5.2 - Land uses that are incompatible with critical areas shall be discouraged. (a) Frequently Flooded Areas (i) Low intensity land use activities such as agricultural, forestry, and recreational land uses should be encouraged in floodplain areas and other land uses in these areas should be discouraged. (ii) Land uses, densities, and development activities in the floodplain and coastal high hazard areas should be limited to protect public health, safety, and welfare, to minimize expenditure of public money and costly flood control projects, and to maintain hydrologic systems, and to protect habitat for threatened and endangered species consistent with the National Marine Fisheries Service Biological Opinion (September 2008). (b) Geologically Hazardous Areas (i) Low land use densities and intensities or open space shall be preferred in geologically hazardous areas where this practice can provide site specific mitigation. (ii) Land use regulations and practices for geologically hazardous areas shall be established so that development does not cause or exacerbate natural processes that endanger lives, property, infrastructure, and resources on or off site. (c) Fish and Wildlife Habitat Conservation Areas (i) Fish and Wildlife Habitat Conservation Areas shall be protected against habitat degradation to the fullest extent possible while allowing reasonable use of property. (ii) Urban density development in the County and adjacent to Habitat Conservation Areas shall be sited such that HCA functions and values are protected.	Skagit County Comprehensive Plan 2016-2036	Ecosystems and Water Resources	Late summer precipitation, summer maximum temperature, peak streamflow, streamflow timing, likely sea level rise	flooding, reduced snowpack, sea level rise, extreme heat	Warmer summers are expected to reduce summer soil moisture and increase physiological stress for some plants and animals. Warmer summer temperatures are expected to reduce tree growth and forest productivity in some areas and increase growth and productivity in mild climates. Outbreaks of some forest pests, such as mountain pine beetles, are expected to increase. Higher streamflows can scour the streambed and remove or crush salmon eggs, increasing mortality and reducing return rates. Higher streamflows reduce the availability of slow-water habitat and can increase sedimentation that affects habitat quality. Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase.	Agricultural, forestry, recreational land uses, shorelines	No changes needed	Adopt into comprehensive plan
34	**Environment** Policy 5A-5.3 - Development allowed in critical areas shall be conducted without risk to lives, and with minimum risk to property, infrastructure, and resources. (a) Wetlands (i) Development adjacent to wetlands should be sited such that wetland and buffer functions are protected and an adequate buffer around the wetland is left undisturbed. (ii) Alterations to wetlands that are allowed in order to maintain or enhance specific wetland functions and values, shall consider all quantitative and qualitative functions of the wetlands and required buffers. (b) Aquifer Recharge Areas (i) Consistent with state and federal laws and regulations, the County shall develop in unincorporated areas and facilitate on a county-wide basis performance standards and regulate uses for activities which can adversely impact water quality or quantity in aquifers, watersheds, and surface waters. (ii) Performance standards shall be established to maintain aquifer recharge and protection and require that new developments meet these performance standards and that existing facilities be retrofitted, where feasible, to meet the standards. (c) Frequently Flooded Areas (i) Development regulations shall be adopted that prohibit intensive uses such as urban subdivisions, multi-family dwellings, commercial buildings, and industrial parks in the floodplain. (ii) The construction of critical facilities (i.e. schools, hospitals, police, fire, emergency response installations, nursing homes, and installations which produce, use or store hazardous materials or hazardous waste) should be prohibited within the 100 year floodplain. (iii) Development shall protect water quality and minimize run-off by limiting impervious surfaces, grading and filling, as well as maximizing vegetative cover and other best management practices. (iv) Flood-proofing of substantial improvements and new structures in frequently flooded areas shall be required. (v) Where the effects of hazards can be mitigated, appropriate design standards shall be required for site development and livestock sanctuary areas within the 100-year floodplain. (vi) Best management practices shall be required for maintaining the river channel configurations during dredging and gravel removal. (vii) Compensatory storage and a "no net loss" land use approach to maintaining flood water storage capacity and conveyance shall be required in frequently flooded areas.	Skagit County Comprehensive Plan 2016-2036	Ecosystems and Water Resources	Late summer precipitation, summer maximum temperature, peak streamflow, streamflow timing, likely sea level rise	flooding, reduced snowpack, sea level rise, extreme heat	Warmer summers are expected to reduce summer soil moisture and increase physiological stress for some plants and animals. Warmer summer temperatures are expected to reduce tree growth and forest productivity in some areas and increase growth and productivity in mild climates. Outbreaks of some forest pests, such as mountain pine beetles, are expected to increase. Higher streamflows can scour the streambed and remove or crush salmon eggs, increasing mortality and reducing return rates. Higher streamflows reduce the availability of slow-water habitat and can increase sedimentation that affects habitat quality. Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase.	Wetlands, aquifer recharge areas, critical assets (educational facilities, hospitals, police and fire departments, nursing homes), fish and wildlife areas	No changes needed	Adopt into comprehensive plan

	(d) Geologically Hazardous Areas (i) Critical facilities (i.e., schools, hospitals, police, fire, emergency response installations, nursing homes, and installations which produce, use or store hazardous materials or hazardous waste) (ii) Development proposals in designated geologically hazardous areas, where applicable, shall include a geotechnical report and a mitigation plan for development activities, with the amount of information required based on the severity of the geologic hazard and the susceptibility of the development on or off site. (iii) Independent third party review of geotechnical reports for development in designated geologically hazardous areas may be required by the planning director when the report is found to be deficient with the review to be paid for by the applicant as a way of expediting development permits. (iv) Any development should be carried out in a way that will not cause or exacerbate hazardous geological conditions. (v) Public or private utility service or extensions (sewer, water, natural gas, and electric) should be discouraged in geologically hazardous areas and carefully sited to avoid potential damage to the utility or properties. (vi) When residential development is proposed in areas subject to geologic hazards it should be clustered and the development designed to minimize risk to human life, property, and the natural environment. Should be prohibited in geologically hazardous areas. (e) Fish and Wildlife Habitat Conservation Areas (i) New development within or adjacent to HCAs should incorporate design elements that protect wildlife habitat values. (ii) All development that may significantly adversely impact HCAs shall require a mitigation plan, prior to any permit approval. A threshold shall be established on a case by case basis by a qualified professional. (iii) Storm water runoff, flow rates, flow volumes and pollution caused by site development shall be managed so that detrimental impacts to water resources and property are maintained at pre-development levels. (iv) Clearing and grading ordinances shall be developed to avoid impacts of erosion on critical areas. (v) Impacts to fish and wildlife resources associated with instream flows shall be considered in the Comprehensive Plan and development regulations. (vi) Areas important for local and ecoregional biodiversity, as determined through regional ecological assessments, should be considered priorities for conservation and protection. (vi) Native vegetation shall be preferred and retained over exotic species in Fish and Wildlife Conservation Areas. (vii) Native plant communities should be integrated with land uses wherever possible. (viii) Give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries.	Skagit County Comprehensive Plan 2016-2036	Ecosystems and Water Resources	Late summer precipitation, summer maximum temperature, peak streamflow, streamflow timing, likely sea level rise	flooding, reduced snowpack, sea level rise, extreme heat	Warmer summers are expected to reduce summer soil moisture and increase physiological stress for some plants and animals. Warmer summer temperatures are expected to reduce tree growth and forest productivity in some areas and increase growth and productivity in mild climates. Outbreaks of some forest pests, such as mountain pine beetles, are expected to increase. Higher streamflows can scour the streambed and remove or crush salmon eggs, increasing mortality and reducing return rates. Higher streamflows reduce the availability of slow-water habitat and can increase sedimentation that affects habitat quality. Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase.	Wetlands, aquifer recharge areas, critical assets (educational facilities, hospitals, police and fire departments, nursing homes), fish and wildlife areas	No changes needed	Adopt into comprehensive plan
35	**Environment** Policy 5A-5.4 - Impacts to critical areas should be monitored to ensure the long-term success of mitigation measures. (a) Performance standards shall be adopted through appropriate codes and administrative procedures for development in critical areas; including, but not limited to: (i) Critical area report information and analysis; (ii) Site inspections and development review of construction within critical areas; (iii) The use of critical area designations to prohibit, restrict, or otherwise control land uses within short subdivisions, subdivisions, and residential cluster developments; (iv) The use of protective covenants or conservation easements to protect critical areas in non-land division developments. (b) Land used for critical area mitigation should be preserved in perpetuity. Monitoring and maintenance of critical area mitigation sites shall be provided until the success of the site is established. (c) Monitoring of the mitigation site should take appropriate measures utilizing one or more of the following: (i) Applicants should develop comprehensive mitigation plans in order to ensure long term success of the mitigation project. Such plans should provide for sufficient monitoring, maintenance, and contingencies to ensure mitigation persistence. (ii) Applicants should demonstrate sufficient scientific expertise, supervisory capability and financial resources to complete and monitor mitigation projects and address cumulative impacts to the surrounding area. (iii) Applicants should restore critical areas that are temporarily impacted by development upon project completion. (iv) During development review, applicants should identify potential erosion and sedimentation impacts and submit appropriate mitigation plans that shall be monitored during construction and assessed periodically thereafter. (d) Critical area mitigation proposals should improve overall critical area functions, recognizing that it may be inappropriate to impact certain critical areas. All critical area functions shall be considered.	Skagit County Comprehensive Plan 2016-2036	Ecosystems	Late summer precipitation, summer maximum temperature, peak streamflow, streamflow timing, likely sea level rise	flooding, reduced snowpack, sea level rise, extreme heat	Warmer summers are expected to reduce summer soil moisture and increase physiological stress for some plants and animals. Warmer summer temperatures are expected to reduce tree growth and forest productivity in some areas and increase growth and productivity in mild climates. Outbreaks of some forest pests, such as mountain pine beetles, are expected to increase. Higher streamflows can scour the streambed and remove or crush salmon eggs, increasing mortality and reducing return rates. Higher streamflows reduce the availability of slow-water habitat and can increase sedimentation that affects habitat quality. Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase.	N/A	No changes needed	Adopt into comprehensive plan
36	**Environment** Policy 5A-5.5 - Critical areas should be avoided, maintained, restored, acquired, replaced or enhanced. (a) Mitigation for proposed alterations to critical areas or associated buffers should be sufficient to maintain the function and values of the critical area or to prevent risk from a critical area hazard. Proposed mitigation should follow the mitigation sequence of:(i) Avoid the impact altogether. (ii) Minimize the impact utilizing appropriate technology and design. (iii) Rectify the impact by restoring, repairing or rehabilitating the affected environment to the conditions existing at the time of initiation of the project or activity. (iv) Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the project. (v) Compensate for the impact by replacing, enhancing or providing substitute resources or environments. (b) On-site replacement of critical area impact is preferred. Where on-site replacement is not feasible or practical due to characteristics of the existing critical area location, replacement should occur within the same watershed and proximity. (c) Critical area restoration, creation, and enhancement projects should be completed prior to alteration, where possible. In all other cases, replacement should be completed prior to use or occupancy of the development. (d) The County shall place a high priority on the proper placement or other correction of all identified county road culverts causing blockage of fish passage. (e) Acquiring additional natural water storage areas, drainage systems and conveyance capacity should be accomplished through public means. (f) Protection of aquifer recharge areas and potable water resources is preferred, and restoration should be supported where warranted by cost-benefit analysis or limited water supply.	Skagit County Comprehensive Plan 2016-2036	Ecosystems and Water Resources	Late summer precipitation, summer maximum temperature, peak streamflow, streamflow timing, likely sea level rise	flooding, reduced snowpack, sea level rise, extreme heat	Warmer summers are expected to reduce summer soil moisture and increase physiological stress for some plants and animals. Warmer summer temperatures are expected to reduce tree growth and forest productivity in some areas and increase growth and productivity in mild climates. Outbreaks of some forest pests, such as mountain pine beetles, are expected to increase. Higher streamflows can scour the streambed and remove or crush salmon eggs, increasing mortality and reducing return rates. Higher streamflows reduce the availability of slow-water habitat and can increase sedimentation that affects habitat quality. Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase.	Fish passage areas, natural water storage areas, drainage streams, and conveyance capacity areas	No changes needed	Adopt into comprehensive plan
37	**Utilities** Policy 9A-4.1 - Planning - Utility providers shall be encouraged to plan for underground installation of utility lines, and private developers shall be required to underground utilities as directed during permit review.	Skagit County Comprehensive Plan 2016-2036	Buildings and energy	Heating degree days and wildfire likelihood	Extreme heat and wildfire	A decrease in heating degree days is expected to reduce energy demand for heating. This has the potential to reduce energy costs for businesses and residents, but decrease utility revenue to support infrastructure and operations. More frequent wildfires have the potential to affect energy transmission by damaging infrastructure and interrupting transmission and distribution. More frequent wildfires are expected to cause property damage and loss. Poor air quality due to wildfire smoke could increase demand for air filtration systems in buildings.	Underground utility lines	Add specificity - climate impacts	Amend existing policy to consider climate impacts. Add measures to climate resiliency element.
38	**Utilities** Policy 9A-8.1 - Cooperation with water districts and other water providers shall be extended to support them in their responsibility to provide a reliable service to assure an adequate quality and quantity of potable water and high quality water supply within their service areas.	Skagit County Comprehensive Plan 2016-2036	Water resources	Total annual precipitation, snowpack, likely sea level rise	Drought, reduced snowpack, sea level rise	Increases in annual precipitation have the potential to increase groundwater recharge. Changes in the timing and intensity of precipitation and increases in water demand and evaporation are expected to offset increases in groundwater recharge due to more annual precipitation. Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase. Sea level rise is expected to increase salt water intrusion into groundwater and coastal aquifers, which could reduce water quality.	Water supply (lakes, reservoirs, etc.).	Add specificity - climate impacts	Amend existing policy to consider climate impacts. Add measures to climate resiliency element.
39	**Utilities** Policy 9A-8.10 - Water conservation measures shall be incorporated into water supply development and service plans as a method of addressing future water needs.	Skagit County Comprehensive Plan 2016-2036	Water resources	Total annual precipitation, snowpack, likely sea level rise	Drought, reduced snowpack, sea level rise	Increases in annual precipitation have the potential to increase groundwater recharge. Changes in the timing and intensity of precipitation and increases in water demand and evaporation are expected to offset increases in groundwater recharge due to more annual precipitation. Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase. Sea level rise is expected to increase salt water intrusion into groundwater and coastal aquifers, which could reduce water quality.	Water supply (lakes, reservoirs, etc.).	Add specificity - climate impacts	Amend existing policy to consider climate impacts. Add measures to climate resiliency element.
40	**Utilities** Policy 9B-1.6 - Structural Flood Protection: Dikes, levees, and other structural flood protection facilities should be designed to allow fish passage, protect flows in riparian zones, and complement or enhance the surrounding landscape.	Skagit County Comprehensive Plan 2016-2036	Water resources	Total annual precipitation, snowpack, likely sea level rise	Drought, reduced snowpack, sea level rise	Increases in annual precipitation have the potential to increase groundwater recharge. Changes in the timing and intensity of precipitation and increases in water demand and evaporation are expected to offset increases in groundwater recharge due to more annual precipitation. Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase. Sea level rise is expected to increase salt water intrusion into groundwater and coastal aquifers, which could reduce water quality.	Dikes, levees, and other structural protection facilities	No changes needed	Adopt into comprehensive plan

41	**Marinas and Launch Ramps** 1.B Location (1) Marinas and launch ramps should be located to minimize the need for continual dredging, spoil disposal, filling, beach feeding, and other river, lake, harbor, and channel maintenance activities. (2) Hazardous Areas - Marinas and launch ramps and their equipment, structures, and craft, should be located, designed, and maintained to avoid, or if necessary, withstand 100 year frequency flooding, storm tides or surges, and winds without becoming hazards and without the placement of massive structural defense works. (3) Resources and other uses - Marinas and launch ramps should not be located where they would adversely affect or diminish: a. Prime agricultural land. b. Natural resources such as sand and gravel deposits, timber, or recreational beaches. c. Shellfish and aquacultural resource areas. d. Fish and wildlife habitats and migratory routes. e. Commercial fishing and navigational areas. (4) Mixing and Flushing Waters - Marinas and launch ramps should be located in areas where there is adequate mixing and flushing of waters and should be designed so as not to retard or negatively influence flushing characteristics.	Shoreline Master Program	Water resources	Total annual precipitation, snowpack, likely sea level rise	Drought, reduced snowpack, sea level rise	Increases in annual precipitation have the potential to increase groundwater recharge. Changes in the timing and intensity of precipitation and increases in water demand and evaporation are expected to offset increases in groundwater recharge due to more annual precipitation. Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase. Sea level rise is expected to increase salt water intrusion into groundwater and coastal aquifers, which could reduce water quality.	Marinas and launch ramps, agricultural land, recreational beaches, fish and wildfire habitats, commercial fishing and navigational areas	No changes needed	Adopt into comprehensive plan
42	**Mining** 1.F Hazardous and Sensitive Areas (1) The sensitivity of flood prone and floodplain areas should be carefully considered during review of proposed mining operations. (2) All equipment, works and structures of mining operations should be able to withstand flooding without becoming hazards in themselves and without the placement of structural defense works. (3) Mining operations, if allowed on shorelines, should occur in areas other than those of high environmental, cultural, recreational, or historical value	Shoreline Master Program	Water resources	Total annual precipitation, snowpack, likely sea level rise	Drought, reduced snowpack, sea level rise	Increases in annual precipitation have the potential to increase groundwater recharge. Changes in the timing and intensity of precipitation and increases in water demand and evaporation are expected to offset increases in groundwater recharge due to more annual precipitation. Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase. Sea level rise is expected to increase salt water intrusion into groundwater and coastal aquifers, which could reduce water quality.	Mining extraction sites	No changes needed	Adopt into comprehensive plan
43	**Piers and Docks** 1.B Geohydraulics and Design/Location (1) Marine and lake shores: a. Where geohydraulic processes are active (shore erosion and accretion, littoral drift), piers and docks should allow for a maximum of littoral drift and should minimize interference with basic geohydraulic processes. b. If a bulkhead-like base is proposed for a fixed pier or dock where there is net positive littoral drift, the base should be built landward of the ordinary high water mark (foreshore) or protective berms. c. Piers and docks should not be located in estuaries and biologically productive marshlands. d. The use of mooring buoys should be preferred if proposed docking facilities for small boat and pleasure craft will adversely interfere with basic geohydraulic processes or utilize valuable and unique shoreline resources. (2) River shores: a. Piers and docks should not locate along braided or meandering river channels or where the river channel is subject to change in direction or alignment. b. Bulkhead-like bases for piers and docks along river shorelines should be built landward of the ordinary high water mark. c. If docks are allowed along river shorelines, they should be of the floating type, securely anchored to piling to allow for changes in the river level. Construction of such docks and their accessory uses should be able to withstand 100-year frequency flooding. (3) Floating and/or open-pile construction should be utilized: a. Where geohydraulic processes are active b. Where shore trolling and commercial fishing is a significant activity c. If there will be interference with currents, circulation, and aquatic life. (4) Open-pile piers and docks should not form groins or baffles that trap littoral drift, adversely affect river channel form and alignment, promote erosion or interfere with fisheries resources and other aquatic life (5) Impacts - Piers and docks should be sited and designed to minimize all possible adverse impacts. (6) Boathouses should be located inland from the ordinary high water mark, be in conformance with Skagit County zoning ordinances regarding accessory buildings, and should be designed to minimize visual impacts to the shoreline environment. (7) Mooring Buoys and Swim Floats should be of the anchored, floating type, be located out of main navigational channels and areas of intensive water surface use, and be painted or designated to avoid	Shoreline Master Program	Water resources	Total annual precipitation, snowpack, likely sea level rise	Drought, reduced snowpack, sea level rise	Increases in annual precipitation have the potential to increase groundwater recharge. Changes in the timing and intensity of precipitation and increases in water demand and evaporation are expected to offset increases in groundwater recharge due to more annual precipitation. Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase. Sea level rise is expected to increase salt water intrusion into groundwater and coastal aquifers, which could reduce water quality.	Marine and lake shores, river shores, piers and docks	No changes needed	Adopt into comprehensive plan
44	**Ports and Industry** 1.B Location and Design (1) Ports and water related industry should be located and designed to minimize the need for initial and continual dredging, filling, spoil disposal, and other harbor and channel maintenance activities. (2) Ports and water related industry should be located at existing developed port and harbor areas and/or on Department of Natural Resources designated first class shorelands and harbor areas if consistent with this program. (3) Water using industries and activities should not locate in shoreline areas. Waste treatment ponds and works associated with port and water related industry should not locate in shoreline areas. (4) Ports and water related industry should occur in areas other than those of high environmental, agricultural, cultural, recreational, or historical value. (5) All port and water related industrial facilities, equipment and works should be located, designed, and maintained to avoid, or if necessary, withstand 100-year flood frequency flooding and/or storm tides or surges without becoming hazards and without the placement of massive structural defense works.	Shoreline Master Program	Water resources	Total annual precipitation, snowpack, likely sea level rise	Drought, reduced snowpack, sea level rise	Increases in annual precipitation have the potential to increase groundwater recharge. Changes in the timing and intensity of precipitation and increases in water demand and evaporation are expected to offset increases in groundwater recharge due to more annual precipitation. Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase. Sea level rise is expected to increase salt water intrusion into groundwater and coastal aquifers, which could reduce water quality.	Marine and lake shores, river shores, piers and docks	No changes needed	Adopt into comprehensive plan
45	**Recreation** 1.C Unique and Fragile Shoreline Areas (1) Unique and fragile shoreline areas such as accretion beaches marshes, estuaries, and wetlands that are susceptible to damage from structural recreational development and to periodic and seasonal changes in water levels should be identified, protected, and preserved for less intensive forms of recreation. (2) Unique and fragile shoreline areas such as point bar beaches, sand bars, and other accretion beach forms whose formation and maintenance are dependent upon water borne transport and deposit of sand and gravel materials should be identified, protected, and preserved for more passive forms of recreation. (3) Plans for recreational activities, developments, designations, and accesses should identify and make provisions for the preservation, protection, and proper use (see No. 1 and 2) of unique and fragile shoreline areas and their associated biological life and communities.	Shoreline Master Program	Water resources	Likely sea level rise	Sea level rise	Sea level rise is expected to increase salt water intrusion into groundwater and coastal aquifers, which could reduce water quality.	Shorelines (accretion beaches, estuaries, and wetlands)	No changes needed	Adopt into comprehensive plan
46	**Residential Development** 1.A.8 Hazardous Areas - Residential development and accessory uses should be located, designed, constructed, and maintained to avoid, or if necessary, withstand 100-year frequency flooding and storm tides or surges without becoming hazards and without the placement of extensive structural defense works.	Shoreline Master Program	Buildings and energy	N/A	N/A	N/A	Residential development and existing residential buildings	Add specificity - climate impacts	Integrate the resiliency element with land use element.
47	**Shoreline Defense Works** 1.A.10 Restoration - Local programs or coordinated efforts among individuals, private and/or public agencies should be initiated to remove or repair failing, hazardous, or nonfunctioning shore defense works and to restore and/or maintain shore and beach resources with more rational, less hazardous long term measures.	Shoreline Master Program	Water resources	Likely sea level rise	Sea level rise	Sea level rise is expected to increase salt water intrusion into groundwater and coastal aquifers, which could reduce water quality.	Shorelines	No changes needed	Adopt into comprehensive plan

48	**Shoreline Stabilization and Flood Protection** 1.B Design and Location (1) All bank stabilization and flood protection measures should be constructed to comply with the design and location standards and guidelines of applicable agencies. (2) Riprapping and other bank stabilization measures should be located, designed, and constructed primarily to prevent damage to agricultural land, public roads and bridges, existing homes and residential areas, or other structures or natural features whose preservation is in the public interest. Such measures should not restrict the flow of the river or stream. (3) Fish and Wildlife Resources - Recognizing the value and interdependency of water bodies and associated wetlands as biologically productive habitats and recognizing the intent of the Shoreline Management Act (RCW 90.58.030(2) and WAC 173-22-030), shoreline stabilization and flood protection projects should be located landward of natural wetlands, marshes, and swamps of associated fresh and marine water bodies. (4) Braided and meandering channels and associated shoreline areas should not be the locations for intensive land use developments such as those of an industrial, commercial, or residential nature. (5) Substantial stream channel direction modification, realignment, and straightening should be discouraged as a means of shoreline and flood protection and for protection of road rights-of-way, navigational routes, and other construction or developmental projects.	Shoreline Master Program	Water resources	Likely sea level rise	Sea level rise	Sea level rise is expected to increase salt water intrusion into groundwater and coastal aquifers, which could reduce water quality.	Shorelines	No changes needed	Adopt into comprehensive plan
49	**Transportation Facilities** 1.A.7 Hazardous Areas - Transportation facilities and corridors should be located, designed, and maintained to avoid, or if necessary, withstand 100-year frequency flooding and storm tides or surges without becoming hazards and without the placement of massive structural defense works.	Shoreline Master Program	Transportation	Heavy precipitation magnitude, peak streamflow, likely sea level rise	Extreme precipitation, flooding, sea level rise	Heavier precipitation events are expected to intensify flooding, landslides, and erosion, which can interrupt transportation routes, damage infrastructure, and increase maintenance and repair costs. With moderate sea level rise, Washington's seaports and the connected distribution networks are expected to flood more often. Coastal transportation infrastructure may be subject to more frequent closures due to coastal flooding and erosion, and require more frequent maintenance and repairs.	Transportation facilities and corridors	No changes needed	Adopt into comprehensive plan
50	**Utilities** 1.A.5 Hazardous Areas - Utilities and their associated structures should be located, designed, and maintained to avoid, or if necessary, withstand 100-year frequency flooding or storm tides and surges without becoming hazards and without the placement of massive structural defense works.	Shoreline Master Program	Water resources	Reduced snowpack and likely sea level rise	Snowpack and sea level rise	Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase. Sea level rise is expected to increase salt water intrusion into groundwater and coastal aquifers, which could reduce water quality.	Utilities	No changes needed	Adopt into comprehensive plan
51	**Skagit County Initiatives** Initiative #9 - Provide erosion control information and steep slope stability recommendations to citizens and homeowners. Inform owners concerning structures above steep bluffs or below steep bluffs. Increase monitoring of countywide erosion issues and bluffs.	Natural Hazard Mitigation Plan	Buildings and energy	Decrease in heating degree days, increase in wildfire likelihood,	Extreme heat and wildfire	A decrease in heating degree days is expected to reduce energy demand for heating. This has the potential to reduce energy costs for businesses and residents, but decrease utility revenue to support infrastructure and operations. More frequent wildfires have the potential to affect energy transmission by damaging infrastructure and interrupting transmission and distribution. More frequent wildfires are expected to cause property damage and loss. Poor air quality due to wildfire smoke could increase demand for air filtration systems in buildings.	Dike and drainage equipment	No changes needed	Adopt into comprehensive plan
52	**Skagit County Initiatives** Initiative #10 - In conjunction with the Diking and Irrigation Districts, assist in conducting a needs assessment to determine logistical requirements for equipment and parts for dike and drainage equipment, wells, and water distribution sources to ensure a surplus allowing for management of floodwaters, and continued supply of potable water in case commodity flow is impacted by a major event.	Natural Hazard Mitigation Plan	Water resources	Total annual precipitation, decrease in snowpack, likely sea level rise	Drought, reduced snowpack, sea level rise	Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase. Increases in annual precipitation have the potential to increase groundwater recharge. Changes in the timing and intensity of precipitation and increases in water demand and evaporation are expected to offset increases in groundwater recharge due to more annual precipitation. Sea level rise is expected to increase salt water intrusion into groundwater and coastal aquifers, which could reduce water quality.	Roadways and bridges	No changes needed	Adopt into comprehensive plan
53	**Skagit County Initiatives** Initiative #13 - Partner with the Washington State Department of Transportation, surrounding counties, and local municipalities to expand earthquake assessment of roadways and bridges to reduce hazard impact and transportation-related and potential isolation.	Natural Hazard Mitigation Plan	Transportation	Decrease in snowpack, increase in hot days, increase in heavy precipitation magnitude, decrease in peak streamflow, decrease in snowpack, increase in likely sea level rise, increase in wildfire likelihood	Drought, extreme heat, extreme precipitation, flooding, reduced snowpack, sea	Heavier precipitation events are expected to intensify flooding, landslides, and erosion, which can interrupt transportation routes, damage infrastructure, and increase maintenance and repair costs. With moderate sea level rise, Washington's seaports and the connected distribution networks are expected to flood more often. Coastal transportation infrastructure may be subject to more frequent closures due to coastal flooding and erosion, and require more frequent maintenance and repairs.	Transportation facilities and corridors	Add specificity - climate impacts	Amend existing policy to consider climate impacts. Add measures to climate resiliency element.
54	**Skagit County Initiatives** Initiative #17 - Continue to integrate mitigation planning data into ongoing land-use planning to assist in providing information necessary to enforce existing building codes, floodplain and critical areas ordinances, and shoreline protection.	Natural Hazard Mitigation Plan	Water Resources	Total annual precipitation, decrease in snowpack, likely sea level rise	Drought, reduced snowpack, sea level rise	Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase. Increases in annual precipitation have the potential to increase groundwater recharge. Changes in the timing and intensity of precipitation and increases in water demand and evaporation are expected to offset increases in groundwater recharge due to more annual precipitation. Sea level rise is expected to increase salt water intrusion into groundwater and coastal aquifers, which could reduce water quality.	Existing buildings	No changes needed	Adopt into comprehensive plan
55	**Skagit County Initiatives** Initiative #20 - Work with local school districts to study and retrofit school facilities to better withstand damage from earthquakes, tsunamis, floods, severe weather, erosion, and landslide events.	Natural Hazard Mitigation Plan	Buildings and Energy	Decrease in heating degree days, increase in wildfire likelihood,	Extreme heat and wildfire	A decrease in heating degree days is expected to reduce energy demand for heating. This has the potential to reduce energy costs for businesses and residents, but decrease utility revenue to support infrastructure and operations. More frequent wildfires have the potential to affect energy transmission by damaging infrastructure and interrupting transmission and distribution. More frequent wildfires are expected to cause property damage and loss. Poor air quality due to wildfire smoke could increase demand for air filtration systems in buildings.	Educational facilities	No changes needed	Adopt into comprehensive plan
56	**Skagit County Initiatives** Initiative #21 - Study, retrofit or move county-owned facilities to better withstand damage from earthquakes, floods, severe weather, and tsunami.	Natural Hazard Mitigation Plan	Buildings and Energy	Decrease in heating degree days, increase in wildfire likelihood,	Extreme heat and wildfire	A decrease in heating degree days is expected to reduce energy demand for heating. This has the potential to reduce energy costs for businesses and residents, but decrease utility revenue to support infrastructure and operations. More frequent wildfires have the potential to affect energy transmission by damaging infrastructure and interrupting transmission and distribution. More frequent wildfires are expected to cause property damage and loss. Poor air quality due to wildfire smoke could increase demand for air filtration systems in buildings.	County owned facilities	No changes needed	Adopt into comprehensive plan
57	**Skagit County Initiatives** Initiative #22 - Evaluate and enhance the current capital improvements program for county roads. Working with corresponding special purpose districts to include/review as necessary, drainage projects such as culverts; elevate roadways as necessary where areas are frequently flooding, blocking ingress and egree; replace small-diameter flood control devices in known flood problem areas; enhance drainage system maintenance plans and sediment and debris clearance to ensure unobstructed flow of floodwaters.	Natural Hazard Mitigation Plan	Water Resources	Total annual precipitation, decrease in snowpack, likely sea level rise	Drought, reduced snowpack, sea level rise	Reduced snowpack and more winter rain is expected to increase water availability in winter for multiple uses including drinking water and hydropower generation, and decrease water availability in late spring and summer when demand is also expected to increase. Increases in annual precipitation have the potential to increase groundwater recharge. Changes in the timing and intensity of precipitation and increases in water demand and evaporation are expected to offset increases in groundwater recharge due to more annual precipitation. Sea level rise is expected to increase salt water intrusion into groundwater and coastal aquifers, which could reduce water quality.	County roads	No changes needed	Adopt into comprehensive plan
60	**Skagit County Initiatives** Initiative #28 - Implement cost-effective measures to address the vulnerabilities of facilities at risk to sea level rise, extreme high tides, and storm surges as they relate to the potential inflow of saltwater. This includes working with local private water purveyors.	Natural Hazard Mitigation Plan	Buildings and Energy, Water Resources	Decrease in heating degree days, increase in wildfire likelihood, Total annual precipitation, decrease in snowpack, likely sea level rise	Extreme heat and wildfire	A decrease in heating degree days is expected to reduce energy demand for heating. This has the potential to reduce energy costs for businesses and residents, but decrease utility revenue to support infrastructure and operations. More frequent wildfires have the potential to affect energy transmission by damaging infrastructure and interrupting transmission and distribution. More frequent wildfires are expected to cause property damage and loss. Poor air quality due to wildfire smoke could increase demand for air filtration systems in buildings.	Existing and future buildings	No changes needed	Adopt into comprehensive plan

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Appendix F Climate Policy Assessment & Initial Recommendations

MEMORANDUM

To	**Robby Eckroth & Tara Satushek** Skagit County
From	**Andrea Martin, Nicole Gutierrez, & Lucy Harrington** Cascadia Consulting Group, Inc.
Date	September 11, 2024
Subj	**Skagit County Climate Policy Assessment & Initial Recommendations**

PURPOSE

Skagit County (County) is including a Climate Element (CE) in the County's 2025 Comprehensive Plan update that will integrate climate resilience and greenhouse gas (GHG) reduction goals and policies into the County's long-term planning framework. The CE will build on commitments made in the County's current Comprehensive Plan, Natural Hazard Mitigation Plan, Climate Action Plan, and Shoreline Master Program, to provide consistent, clear, and actionable guidance on GHG emission reduction and climate resilience.

This memorandum identifies County climate policy trends, gaps, and opportunities to guide development of Climate Element goals, objectives, and policies. Results from this assessment will be utilized to ensure the Climate Element is consistent with existing County initiatives and Washington state guidance and requirements.

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INTRODUCTION

The memorandum is organized into the following sections:

- **Introduction:** Introduces the context, objectives, and methodology for the climate policy assessment.
- **Error! Reference source not found.:** Summarizes key findings from the policy assessment of the County's existing climate policies and goals. Includes:
  - **Error! Reference source not found.:** Overviews County climate vulnerabilities and climate resiliency policy trends and opportunities.
  - **GHG Emissions Reduction Policy A:** Overviews County GHG emissions sources and GHG emission reduction policy trends and opportunities.
- **Barriers to** Identifies potential barriers to implementing climate policy in Skagit County.
- **Error! Reference source not found.:** Outlines the next steps for Climate Element development.

Legislative Context & Background

Washington State's Growth Management Act (GMA) requires quickly growing Washington cities and counties to develop comprehensive plan elements that respond to challenges associated with population growth. Amended in 2023 by House Bill 1181, the GMA now requires integrating climate change policies into comprehensive plan updates. To meet the new requirements, the Washington State Department of Commerce (Commerce) recommends jurisdictions develop a climate element that includes both resilience and GHG emissions mitigation goals and policies.

Commerce led a multiyear effort to develop model climate element guidance[1], which provides steps and pathways to integrate climate resilience and GHG emissions reduction sub-elements into comprehensive plans, either as integrated policies or standalone element. Jurisdictions are encouraged to assess their climate impacts and risks, seek input from key stakeholders and communities, and pursue pathways that modify existing or create new policies to address GHG emissions and increase community resilience. Skagit County's 2025 Comprehensive Plan update will incorporate a Climate Element aligned with Commerce guidance, existing County climate policies, and policies to foster sustainable and equitable planning in the face of climate change.

Washington State Policy

The Skagit County Climate Element will pinpoint specific actions the County can take to improve climate resilience and reduce GHG emissions. However, understanding key climate policy direction in Washington state will be essential to inform these local policies.

[1] Washington Department of Commerce. (2023). Climate Element Planning Guidance. Retrieved from https://deptofcommerce.app.box.com/s/bhqov8pvbiygss9jxbmtezzgzrtr7nal

The Climate Commitment Act (CCA) is central to Washington's climate action efforts, targeting the state's largest polluters and aiming for a **95% reduction in climate pollution by 2050**. The CCA creates a market-based system to hold emitters accountable, and reinvests the proceeds into communities, clean energy, and transportation projects. Within Skagit County, the following pollution sources will likely be regulated under the CCA based on their emissions exceeding the threshold for regulation: Northwest Pipeline, HF Sinclair Puget Sound Refinery, Air Liquide Hydrogen Plant - Anacortes, Marathon Anacortes Refinery, Matheson Tri-Gas Anacortes hydrogen plant, and the Fredonia Generating Station (Puget Sound Energy)[2].

Other critical state climate policies address clean transportation through the Clean Fuel Standard and zero-emission vehicle mandates, as well as clean buildings through updated energy codes and performance standards. The Clean Energy Transformation Act further drives the transition to 100% zero-emission electricity by 2045, reinforcing the state's long-term climate goals and strategy.

Methodology

As part of the climate policy assessment, the consultant team developed a policy database that includes goals and policies from the County's key planning documents. This database was used to filter climate focus areas, Commerce-identified priority sectors, and climate impacts to identify trends, gaps, and opportunities for policy inclusion in Skagit County's Climate Element.

Cascadia Consulting (Cascadia), Kimley-Horn, and County staff worked together to identify the following key documents for review as part of this policy assessment:

- Skagit County Multi-Jurisdictional Natural Hazard Mitigation Plan (2023)
- Skagit County Comprehensive Plan (2016)
- Skagit County Shoreline Master Program (Public Hearing Draft 2022)
- Skagit County Climate Action Plan (2010)

Addressing Policy Gaps

The consultant team identified policy gaps and opportunities by utilizing climate element planning guidance to ensure that each focus area and priority sector was comprehensive and included key strategies for enhancing climate resilience, reducing GHG emissions, and promoting climate equity.

[2] The emissions of these industries exceed the 25,000 $MTCO_2e$ threshold based on the results of the 2022 Greenhouse Gas Emissions Inventory and thus will be regulated by the CCA. Source: Washington State Legislature. (2021). Greenhouse Gas Emissions – Cap and Invest Program. Retrieved from https://app.leg.wa.gov/RCW/default.aspx?cite=70A.65

The guidance documents used to identify these gaps and inform policy development for the draft Climate Element (CE) included the Washington State Department of Commerce's Menu of Measures[3] and Climate Element Planning Guidance[4].

Policy Coding

Identified County climate policies, plans, and reports were coded for the following attributes to help assess climate policy trends and gaps:

- Focus area
- Priority sector
- Climate impacts

The *Policy Trends, Gaps & Opportunities* section below provides definitions of each coding category, reason for inclusion in database, and findings.

[3] Washington Department of Commerce. (2023). Climate Menu of Measures. Retrieved from https://deptofcommerce.app.box.com/s/n34kivgzn9rfe74jfz2vvzxqlrv7j9m9.

[4] Washington Department of Commerce. (2023). Climate Element Planning Guidance. Retrieved from https://deptofcommerce.app.box.com/s/bhqov8pvbiygss9jxbmtezzgzrtr7nal.

POLICY TRENDS, GAPS & OPPORTUNITIES

The tables below summarize findings from consultant team review of County climate planning documents. They organize identified policies by focus area and priority sector, offering a high-level perspective on how the County's existing plans address the focus areas of climate resilience, GHG emission reduction, and climate equity.

Current Plans

The County's 2016 Comprehensive Plan contains few policies specifically targeting climate change and/or equitable climate resilience. However, it does include some GHG emission reduction and resilience measures, such as investments in multimodal transportation, flood protection, and active forest management. Additionally, the County has developed other plans and documents that address gaps in the Comprehensive Plan and reinforce its existing policies. These include the Skagit County Natural Hazard Mitigation Plan, the Skagit County Climate Action Plan, and the Skagit County Shoreline Master Program (currently being updated). However, the County's current Comprehensive Plan and the Climate Action Plan are both more than five years old, indicating that updates are needed.

Focus Areas

All policies were coded based on their relevance to GHG emission reduction, climate resilience, and climate equity (Table 1). Most of the reviewed policies were focused on GHG emission reduction. Climate resilience, which addresses the impacts and risks of climate change, had the second-highest number of policies, reflecting the importance of preparing for and adapting to climate-related challenges. Climate equity, with the fewest policies, indicates a growing but still emerging focus on addressing the disproportionate impacts of climate change on vulnerable communities.

Table 1. Identified County Policies, by Focus Area

Focus Areas	Description	# Policies/Actions
GHG Emission Reduction	Policies aimed to reduce GHG emissions that cause climate change.	111
Climate Resilience	Policies aimed to address the impacts and risks of climate change by increasing county resilience and/or decreasing county vulnerability.	68
Climate Equity	Policies aimed to address the disproportionate impacts of climate change on certain communities due to existing and historic racial, social, environmental, and economic inequities.	28

Priority Sectors

Policies were coded by alignment with key priority sectors (Table 2). These priority sectors are drawn from State guidance, which identifies these sectors as most vulnerable to climate impacts in the state. Reviewed planning documents reveal a prevalence of County policies across sectors, with particular emphasis on ecosystems, buildings & energy, emergency management, and waste management. Other sectors such as economic development, cultural resources & practices, and agriculture & food systems had fewer policies, suggesting that these are limited or emerging areas of focus for the County.

Table 2. Identified County Policies, by Priority Sector

Priority Sector	Includes…	# Policies/Actions
Ecosystems	Terrestrial and aquatic species, habitats, and services	44
Buildings & Energy	Generation, transmission, and consumption	30
Emergency Management	Preparedness, response, and recovery	23
Waste Management	Materials recycling and disposal	19
Transportation	Multimodal travel and infrastructure	12
Health & Well-being	Community well-being, equity, and engagement	10
Zoning & Development	Site use, design, and other development facets	10
Water Resources	Water quality and quantity	7
Economic Development	Business continuity and opportunities	6
Cultural Resources & Practices	Historic sites and cultural resources and practices	5
Agriculture & Food Systems	Production and distribution	4

Climate Impacts

Policies were also coded by their relevant or target climate impacts (Table 3). Reviewed policies primarily addressed multiple (cross-cutting) impacts, with 41 policies focusing on issues that span multiple climate-related challenges. Flooding was a significant concern, with 28 policies dedicated to mitigating its impacts. Extreme heat also received considerable attention, with 22 policies aimed at addressing this growing threat.

Table 3. Identified County Policies, by Climate Impact

Impacts	# Policies/Actions
Cross-cutting	41
Flooding	28
Extreme heat	22
Extreme precipitation	16
Wildfire	16
Sea level rise	9
Drought	5
Reduced snowpack	1

OVERARCHING POLICY ASSESSMENT

The policy assessment identified several policies that address climate change across key sectors, sources, and impacts. Such cross-cutting policies include:

- Policies that promote **community involvement and educational campaigns** on climate actions. These policies involve public engagement through campaigns and events that raise awareness and encourage actions to reduce carbon footprints and support sustainability initiatives.
- Policies that implement strategies for **emergency preparedness and response**, including improving risk assessment, enhancing infrastructure readiness, and promoting public awareness and preparedness for climate-related hazards.
- Policies to **encourage diverse, healthy communities** with affordable housing, mixed-use developments, and compact growth within Urban Growth Areas (UGAs), while preserving rural character and natural resources.

To ensure that these and other climate change policies are fully implemented, we suggest the following additional policies for consideration:

- Bolster County capacity to monitor and report on climate policy implementation through development and upkeep of progress reports and/or dashboards.
- Set GHG emission reduction targets in key sectors such as buildings/energy, land use, and transportation (the Climate Action Plan identified targets but was last updated in 2010).
- Evaluate and dedicate needed resources, such as partnerships, County staff, and funding, to implement the Climate Element.
- Develop and maintain County staff technical expertise and skills related to climate change and environmental justice to support communitywide policy implementation, equity, and resilience.

RESILIENCE POLICY ASSESSMENT

It is important to understand how climate impacts will affect the County to ensure the resilience policies within the Climate Element address the unique climate vulnerabilities of the Skagit County's communities, natural resources, and infrastructure. The County is currently conducting a Climate Vulnerability Assessment to inform resilience measures included in the Climate Element. The County is also updating their Multi-Jurisdictional Natural Hazard Mitigation Plan that will identify actions to build resilience and plan for emergency response to climate hazards.

The following sections describe climate impacts that were identified to be most relevant to Skagit County and are likely to be exacerbated by climate change. The Climate Impacts Summary, conducted in summer 2024 and integrated into the Climate Vulnerability Assessment, details the projected climate impacts for Skagit County.

The policies included in the resilience sub-element must, at a minimum, identify the action the County will take to fulfill the following:

Focus	Requirement
Resilience	Requirement 1: Address natural hazards created or aggravated by climate change, including sea level rise, landslides, flooding, drought, heat, smoke, wildfire, and other effects of changes to temperature and precipitation patterns;
	Requirement 2: Identify, protect, and enhance natural areas to foster climate resilience, as well as areas of vital habitat for safe species migration; and
	Requirement 3: Identify, protect, and enhance community resilience to climate impacts, including social, economic, and built-environment factors, which support adaptation to climate impacts consistent with environmental justice.

Climate Equity

Climate impacts, such as extreme heat or shifting precipitation patterns, are likely to affect existing housing, transportation, and energy infrastructure, especially in areas already vulnerable to flooding or landslides. Climate change also worsens existing risks, such as chronic health conditions, social and economic inequalities, and pollution exposure, disproportionately affecting frontline communities. These compounding risks highlight the need for policies that address cumulative environmental and health burdens across the county.

Understanding which assets and populations are most at risk from climate and environmental burdens can inform policy focus areas and community priorities. The **Climate Vulnerability Assessment** will guide policy by identifying areas, populations, and infrastructure most at risk from climate impacts. This information will help prioritize resources and actions to reduce vulnerabilities, shape policies to protect critical infrastructure, and address social and environmental inequities. Resilience Policy Trends, Gaps, & Opportunities

The 2016 County Comprehensive Plan identifies climate change as an area of concern in the Environment Element and notes that "As these [climate change impacts] and other issues and

considerations are studied and resolved, the policies in the Environment Element and other Comprehensive Plan elements will have to be revisited as an ongoing part of future update". For the purposes of this memo, and to ensure compliance with HB1181, the following section will focus on impacts exacerbated by climate change and resilience policies. Policies reducing GHG emissions reduction will be addressed in the following GHG Emissions Policy Assessment section.

The tables below overview trends, opportunities, and gaps in current climate resilience policy in Skagit County. The table headings indicate the "Sector Nexus," representing the priority sectors where the theme or impact intersects. These priority sectors were identified in the Department of Commerce's guidance. The complete list is available in Table 2.

Note that the forthcoming **Climate Vulnerability Assessment** will provide detailed projections on climate risks, adaptive capacity, and vulnerability within the County, informing additional policy opportunities and priorities for Climate Element development.

Socioeconomic Impacts

Sector Nexus: Health & Wellbeing; Emergency Management; Economic Development

Existing Policy Trends	Existing Policy Gaps	Policy Opportunities
Current policies… • Aim to enhance public health by concentrating development in urban areas, promoting compact growth, and improving pedestrian and non-motorized links. • Focus on housing availability for special needs populations and farmworkers, with an emphasis on balancing housing development with the preservation of agricultural lands and accommodating seasonal needs. • Include focus on public health and protecting commercially significant natural resource industries. • Include community-focused goals across comprehensive plan sections including land use, natural resource lands, housing, utilities, and economic development. • Focus on developing a system of parks, trials, and recreational facilities (in the Parks and Recreation section of the Comprehensive Plan).	Current policies… • Do not adequately consider climate hazard risks for frontline and vulnerable communities. • Lack culturally relevant outreach and education on climate threats and resilience actions.	Improve or add policies to… • Protect vulnerable communities from disproportionate health and well-being caused by climate-exacerbated hazards. • Link climate adaptation strategies with social equity and public health strategies. • Implement culturally relevant outreach and education to inform the community about climate change threats and ensure all residents are provided with an equitable opportunity to influence policy decisions. • Support businesses in climate preparedness; promote economic recovery plans incorporate sustainable practices and continuity of operations, while creating green job opportunities for frontline communities. • Conserve culturally important consumptive and non-consumptive resources including foods, medicinal plants, and materials that could be adversely impacted by climate change.

Key Considerations

- Coordination with key stakeholder groups, tribal governments, and appropriate federal, state, and local agencies, will be key to addressing climate risks.

Extreme Heat

Sector Nexus: Health & Wellbeing; Ecosystems; Buildings & Energy; Emergency Management		
Existing Policy Trends	**Existing Policy Gaps**	**Policy Opportunities**
Current polices… • Focus primarily on hazards such as earthquakes, floods, and severe weather, with limited attention to extreme heat risks. • Predominantly address physical infrastructure resilience, including county-owned facilities, to hazards like earthquakes and floods, without specific measures for adapting to extreme heat. • Ensure emergency shelters are prepared and available for community use, indicating that policy is being developed to ensure community-members have a safe and secure location in the event of a hazard.	Current policies… • Have less emphasis on protecting the health and wellbeing of vulnerable populations, such as outdoor workers, inadequately housed individuals, or communities reliant on public transportation during extreme heat events. • Lack explicit guidance on mitigating extreme heat risks in building, land use, and development policies. • Do not sufficiently address public health risks related to extreme heat, such as heat exhaustion, and power outages affecting critical services (e.g., hospitals), or dis disruptions to public transportation services caused by heatwaves, potentially leaving communities more isolated during climate events.	Improve or add policies to… • Protect outdoor workers exposed to extreme heat, such as mandatory heat protection measures (cooling breaks, shade, hydration) and stricter enforcement of work-rest cycles during heatwaves. • Establish development regulations that integrate best practices for extreme heat, such as building codes that enhance natural ventilation, encourage green roofs, and create heat-resilient infrastructure (cooling centers, tree canopy). • Work with Skagit Transit to develop public transportation systems that are resilient to heatwaves, with strategies to prevent delays and minimize community isolation. • Protect overburdened and frontline communities by establishing resilience hubs or community facilities offering shelter, resources, and communication coordination.

Sea Level Rise (SLR)

Sector Nexus: Water Resources; Health & Well-being; Zoning & Development; Building & Energy

Existing Policy Trends	Existing Policy Gaps	Policy Opportunities
Current policies… • Seek to integrate SLR projections into long-term planning for infrastructure, development, and land use to ensure future resilience. • Emphasize the need to implement cost-effective measures to protect at-risk facilities and communities from SLR impacts. • Cites a *Saltwater Intrusion Policy,* noting an update is needed.	Current policies… • Lack specific resilience measures to address SLR impacts to the community or infrastructure, even though SLR is identified as a climate change impact. • Do not sufficiently protect natural areas from the impacts of SLR, storm surges, and erosion.	Improve or add policies to… • Consider policies that increase resilience to SLR, including, planning, building, and regulating infrastructure and natural assets to withstand the impacts of SLR and associated climate change impacts, such as shifting floodplains and increased erosion. • Assess the vulnerability of wetlands, beaches, and other ecosystems to SLR. • Reflect the research/action related to saltwater intrusion in the vulnerable coastal and island areas in development regulation updates overtime.

Key Considerations

- The *Saltwater Intrusion Policy* may have been updated and should be reviewed for resilience policy development.
- **The Consortium and Dike District** Partnership, the WSU Skagit County extension, Skagit Conservation District, and Department of Emergency Management will be potential partners to further vet and refine policy related to SLR.

Extreme Precipitation

Sector Nexus: Agricultural Lands; Water Resources; Health & Well-being; Emergency Management

Existing Policy Trends	Existing Policy Gaps	Policy Opportunities
Current policies… • Prioritize informing and educating the public about natural hazards and appropriate preparedness measures. Initiatives like coordinated public information programs and annual events (e.g., Flood Awareness Week) are key components in building community resilience. • Include some measures that address the need for developments to withstand natural hazards such as floods and storm surges.	Current policies… • Lack specificity regarding integration of extreme precipitation projections into planning. • Do not explicitly detail strategies for addressing extreme precipitation beyond general flood management. Specific adaptation measures for managing increased rainfall intensity and frequency are not well-defined. • Have limited focus on retrofitting or designing infrastructure and facilities, particularly in high-risk areas, to flooding and storm surges. • Lack equitable engagement and outreach strategies related to climate hazards and community preparedness.	Improve or add policies to… • Manage the current and future potential impacts of extreme precipitation, including integrating latest climate projections into flood management and mitigation practices. • Work with drainage, diking, and irrigation districts to implement enhanced drainage management practices to ensure the long-term productivity and viability of agricultural resource lands. • Conduct education and outreach to those who live or work in future flood zones. • Consult Ecology for guidance on developing flood hazard management plans that consider both current and future conditions. Coordinate with jurisdictions for collaborative management of river basins.

Key Considerations

- Skagit County is enhancing its agricultural resilience through **collaboration with Washington State University (WSU) Agriculture Programs at WSU Skagit Extension,** aiming to boost irrigation efficiency by offering free on-farm audits, personalized recommendations for equipment upgrades and practices, and improved access to technical assistance programs.
- The **Department of Emergency Management** is responsible for flood hazard management and will be a useful resource to consult to develop flood preparedness and safety policy.
- The **Clean Water Program**, **Skagit County Monitoring Program**, **Pollution Identification and Correction Program**, **Stormwater Management Program**, and **Source Control Program** all focus on Skagit County's water quality. The **Drainage Utility** evaluates and addresses drainage concerns.

Drought

Sector Nexus: Water Resources; Agriculture & Food Systems; Economic Development		
Existing Policy Trends Current policies… • Have a relatively narrow focus on drought management, indicating that drought might not be as prominently addressed compared to other climate hazards. • Focus on specific actions like extending water services in areas where groundwater supply is low and developing a drought contingency plan to address public education and conservation practices.	**Existing Policy Gaps** Current policies… • Lack a comprehensive drought management strategy that integrates various aspects of drought preparedness, resilience, and response, especially with the expected increases in frequency and severity of dry spells. • Lack specific actions for long-term water conservation and sustainable land use.	**Policy Opportunities** Improve or add policy to… • Mandate the development of a comprehensive drought resilience strategy. • Promote low-impact development practices such as rainwater catchment, onsite retention, and water reuse. • Support work by the Skagit County drainage consortium to enhance water table management within the Skagit and Samish deltas. Through the WSU Skagit County Extension, support drought resilience within the agricultural sector, ensuring that farming practices, water management, and economic stability are effectively supported during drought conditions.
Key Considerations • Skagit County's **Climate Vulnerability Assessment** offers comprehensive projections on climate risks, adaptive capacity, and vulnerabilities, guiding future drought resilience efforts. Although the county has historically been less affected by prolonged droughts compared to other areas, climate change is expected to increase the frequency and severity of droughts, affecting water supply, wildfire risks, and ecosystems. These conditions pose significant challenges to agriculture, potentially reducing crop quality and threatening farmers' livelihoods.		

Wildfire & Wildfire Smoke

Sector Nexus: Buildings & Energy; Agriculture & Food Systems; Emergency Management; Health & Well-being		
Existing Policy Trends Current policies… • Address wildfire preparedness, public education, and response strategies, through a wildfire safety program, the "Firewise Communities Program", which includes ongoing partnerships with local organizations, such as the Skagit Conservation District and fire districts. • Emphasize public information campaigns, utilizing fairs, meet-and-greets, and online sessions to educate residents about various hazards, including wildfires, earthquakes, and tsunamis.	• Existing Policy Gaps • Current policies… • Lack a unified, countywide wildfire resilience strategy that encompasses emergency response, fire-adapted initiatives, and long-term recovery. • Insufficiently address the increasing wildfire risk in Wildland-Urban Interface (WUI) areas, where development is encroaching on fire-prone lands. • Do not have adequate measures to reduce sedimentation in streams following wildfires, which could lead to increased landslide and flooding risks. • Do not fully address energy infrastructure vulnerability to climate change impacts such as wildfires and extreme weather events. • Lack comprehensive plans for community preparedness and resilience against wildfire smoke and its associated health impacts.	**Policy Opportunities** Improve or add policies to… • Develop a communitywide wildfire smoke resilience strategy in collaboration with residents, emergency management , and air quality agencies. • Expand efforts to manage tree canopy and forests to mitigate wildfire risks, enhance ecosystem health, and improve community safety. • Strengthen partnerships with energy utilities to improve the safety and resilience of energy infrastructure, particularly in wildfire-prone areas. • Require new residential subdivisions and commercial and industrial development to bury electricity transmission lines to reduce storm damage and wildfire ignition risks. • Establish incentives and regulations to maintain open space buffers, reducing wildfire risk while promoting ecological benefits and habitat protection. • Establish policies and development regulations that enhance protection from wildfire in the Wildlife Urban Interface (WUI).

Key Considerations

- Skagit County's **Climate Vulnerability Assessment** provides detailed projections on risks, adaptive capacity, and vulnerability related to wildfires and wildfire smoke. As wildfires become more frequent, the risk of fire damage to buildings, especially homes, is expected to rise, particularly in the wildland-urban interface (WUI) areas where development meets undeveloped land. With much of Skagit County located within these WUI zones, the region faces a growing risk to both communities and infrastructure.

GHG EMISSIONS REDUCTION POLICY ASSESSMENT

The policies included in the GHG emissions reduction sub-element must, at a minimum, identify the action the County will take to fulfill the following requirements:

Focus	Requirement
GHG emissions reduction	Requirement 1: Result in reductions in overall GHG emissions generated by transportation and land use within the jurisdiction but without increasing emissions elsewhere in Washington;
	Requirement 2: Result in reductions in per capita vehicle miles traveled (VMT) within the jurisdiction but without increasing greenhouse gas emissions elsewhere in Washington; and
	Requirement 3: Prioritize reductions that benefit overburdened communities in order to maximize the co-benefits of reduced air pollution and environmental justice.

To better understand current and future GHG emissions in Washington and support local comprehensive planning, the WA Department of Commerce funded an 11-county GHG emissions inventory and scenario planning effort. As part of this effort, Skagit County completed communitywide and County operations GHG inventories, detailed in the *Skagit County 2022 Greenhouse Gas Emissions Analysis* report. The communitywide inventory will help inform the identification of GHG emission reduction targets to assess the county's progress over time.

Communitywide GHG Emissions

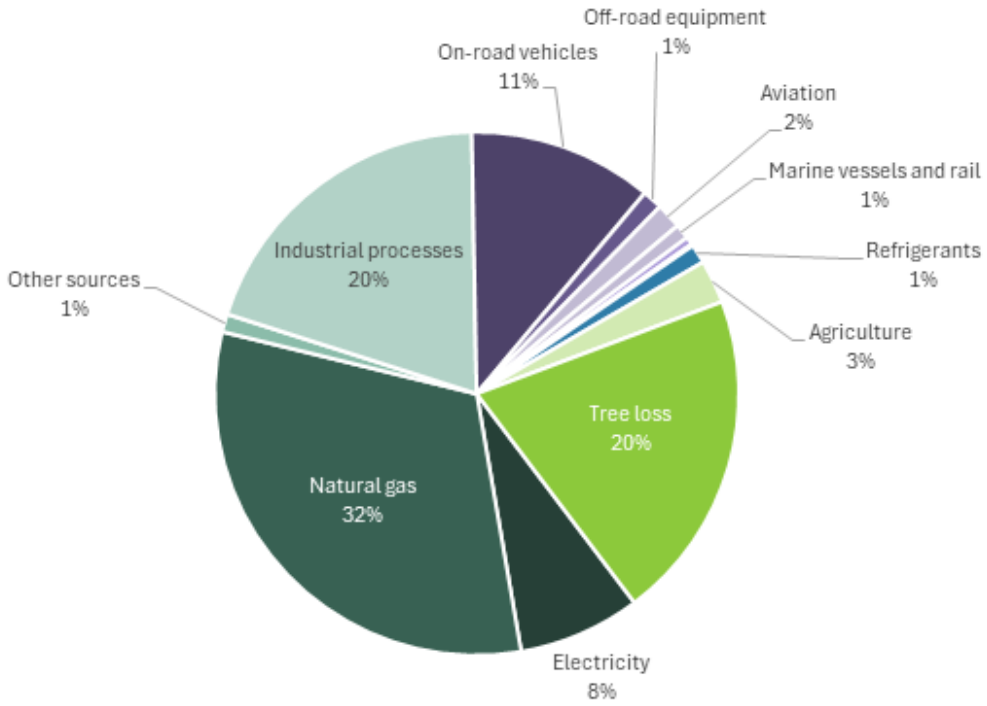
The communitywide emissions inventory quantifies emissions produced by activity from county residents, businesses, and visitors, including from buildings, transportation, land use, and solid waste management. The 2022 GHG emissions inventory estimates that the Skagit County community emitted an estimated 6.1 million metric tons of carbon dioxide equivalent ($MTCO_2e$) in 2022, equivalent to 46.3 $MTCO_2e$ per capita—compared to a statewide average of 13.5 $MTCO_2e$ per capita.[5]

[5] The statewide value is based on 2019 emissions, which is the most recent year currently available. Source: Washington Department of Ecology (December 2022). Washington State Greenhouse Gas Emissions Inventory: 1990-2019. https://apps.ecology.wa.gov/publications/documents/2202054.pdf

Key sources of GHG emissions, as shown in Figure 1, include:

- Natural gas (32%) used for heating, cooking, and other uses.
- Tree loss (20%) from land use conversation and forest management.
- Industrial processes (20%) such as oil refineries.
- On-road vehicles (11%), including passenger vehicles, freight, and other commercial vehicles.
- Electricity (8%) used to heat, cool, and power residential, commercial, and industrial buildings and facilities.
- Agriculture (3%) emissions from livestock and soil management.
- Aviation (3%) from passenger air travel.

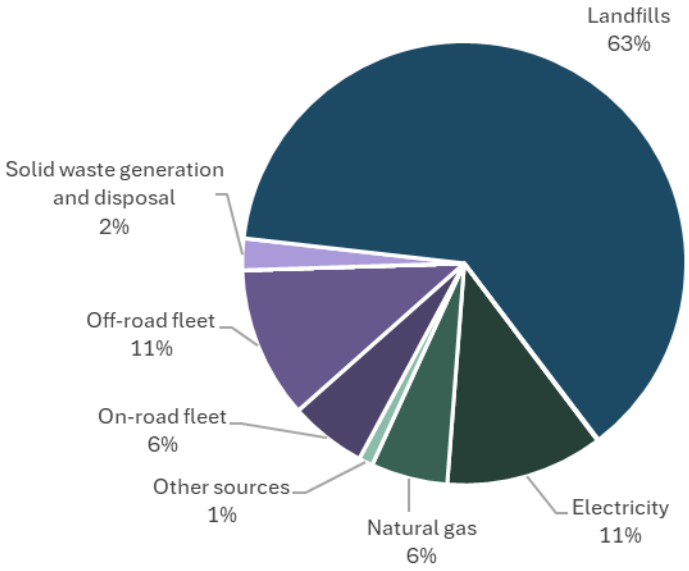
Figure 1. Skagit County 2022 communitywide GHG emissions, by source (%)



County Operations GHG Emissions

While communitywide GHG emissions account for the vast majority of county emissions, it is also important to consider the County government's own GHG emissions. In 2022, Skagit County government emitted an estimated 6,549 $MTCO_2e$. As shown in Figure 2, the largest sources of County government operations GHG emissions were from County owned landfills (63%), County fleet vehicles (11%), and from County facility electricity consumption (11%) and natural gas consumption (6%).

Figure 2. Skagit County 2022 government operations GHG emissions, by source (%)



GHG Emissions Reduction Trends, Gaps, & Opportunities

The following section reviews policy trends, opportunities, and gaps related to GHG emissions reduction from key focus areas identified in the GHG inventories**.** For each focus area, the Sector Nexus represents the priority sectors that intersect with the main focus area. These priority sectors were identified by the Department of Commerce's guidance.

Land Use

Sector Nexus: Zoning & Development; Transportation; Ecosystems; Agriculture & Food Systems; Water Resources; Economic Development

Existing Policy Trends	Existing Policy Gaps	Policy Opportunities
Current policies… • Emphasize designating and maintaining UGAs that support population and employment growth while minimizing environmental impacts. • Aim to protect the rural landscape, character, and lifestyle by maintaining rural densities, conserving natural resource lands, and allowing compatible land uses that support rural values. • Maintain natural habitats by ensuring developments do not lead to a net loss of ecological function. • Promote sustainable agricultural practices, such as energy conservation, methane capture, and local markets.	Current policies… • Do not emphasize GHG emission reduction through low-carbon land practices. • Have limited focus on improved forest management or strategies to maximize carbon storage and conservation in natural lands. • May not sufficiently engage small-scale, minority-owned, and historically marginalized farmers.	Improve or add policies to… • Limit tree loss and support low-carbon land practices such as sustainable forestry, agriculture, and livestock management. • Protect and manage natural lands (forests, grasslands, wetlands) to maintain or increase their carbon concentrations and avoid conversion of carbon-rich ecosystems. • Align with Conservation Futures and Open Space Program strategies. • Strengthen outreach and support for agricultural communities to ensure that sustainable farming practices and climate resilience measures are more widely adopted across different segments of the agricultural sector.

Key Considerations

- The County community GHG emissions inventory indicates that reducing tree loss emissions and emissions from agricultural practices in Skagit County would reduce land use emissions, which made up **23% of 2022 communitywide emissions**.
- Policies, especially those related to natural resource use and ecosystem management, should be revised to **ensure they respect and protect the cultural practices of indigenous and local communities**.
-

Transportation

Sector Nexus: Transportation; Health & Well-being; Zoning & Development

Existing Policy Trends	Existing Policy Gaps	Policy Opportunities
Current policies… • Encourage multi-modal transportation systems by promoting public transit and non-motorized transport (e.g., biking and walking) as alternatives. • Support developing a network of trails and bikeways that connect key destinations. • Integrate transportation and land use planning to ensure transit options align with growth management and environmental goals, promoting sustainable infrastructure and reducing GHG emissions. Aim to reduce County vehicle fleet emissions through third-party assessments, improving fuel efficiency, vehicle utilization, and replacement strategies to lower GHG emissions and operational costs.	Current policies… • Do not emphasize public and/or private electric vehicle (EV) adoption through EV infrastructure, incentives, and planning. • Are limited in consideration for sustainable transportation options and affordability for households with low incomes. • Do not address emissions from aviation and marine sectors. • Could be expanded to further reduce reliance on passenger cars and long-distance travel, especially in rural communities.	Improve or add policies to… • Reduce passenger vehicle travel, through changes to land use, transportation infrastructure (transit, walking, bicycling), and commute options/modes. • Facilitate the transition to EVs through expansion of reliable EV charging infrastructure and public education on options and available incentives/rebates. • Enhance public transit options by coordinating with local agencies and social services to meet the needs of underserved populations, particularly seniors, people with disabilities, and households with low-income. • Establish clear targets for reducing vehicle miles travelled (VMT) as part of the county's transportation policies. • Work with Skagit Transit to prioritize, develop, and maintain mobility hubs in transportation-efficient locations, especially in overburdened communities experiencing a scarcity of transportation alternatives.

Key Considerations

- Skagit County's GHG inventory identified that local action to support transitioning passenger and freight vehicles to electric would reduce Skagit County's passenger and freight vehicle on-road emissions, which made up **11% of 2022 communitywide emissions**.
- **Skagit Transit** will be a key implementer of transit-related policies. Aligning efforts with Skagit Transit's 2018 Strategic Plan and Six-Year Development Plan will be key for successful implementation.

Built Environment

Sector Nexus: Buildings & Energy, Economic Development, Zoning & Development

Existing Policy Trends	Existing Policy Gaps	Policy Opportunities
Current policies… • Encourage the use of renewable energy sources like solar, wind, and biomass in new construction and existing buildings, with long-term goals to reduce reliance on fossil fuels by 2030 (2010 CAP). • Aim to reduce energy use in homes and businesses by providing support for energy audits, financing, and energy efficiency practices through programs like the Skagit Cool Community Campaign and the proposed Community Energy Efficiency Program (CEEP). • Support energy conservation through methods such as public education, improved building codes, and encouraging alternative energy in new developments.	Current policies… • Do not sufficiently address the county's largest sources of emissions, particularly emissions from buildings and industrial processes. More targeted policies are needed to tackle these high-emission sectors comprehensively. • Lack clear strategies to achieve long-term renewable energy goals. • Do not ensure recognition programs and incentives benefit a wide range of businesses and builders, including small and marginalized entities.	Improve or add policies to… • Support and adopted policies to decarbonize and reduce energy consumption in new and existing residential and commercial buildings through 1) transition from fossil fuels such as natural gas to low-carbon building energy sources and 2) energy efficient building design and retrofits. • Seek and support funding for programs that focus on energy efficiency with an emphasis on vulnerable communities. (e.g., rentals and lower income households who are currently energy burdened or communities more vulnerable to climate impacts like heat/smoke that can be helped with weatherization). • Support local industries in the transition to low-carbon industrial processes. • Support and promote the use of lower-carbon building materials in new construction and building retrofits to reduce embodied carbon.

Key Considerations

- According to the County GHG inventory, local action to transition to renewable building energy sources would reduce Skagit County's built environment emissions, which made up **60% of 2022 communitywide emissions**. Additionally, industrial process emissions made up **20% of Skagit County's 2022 communitywide emissions**.
- Many of the buildings and energy policies exist in the **Skagit County Climate Action Plan**, which is outdated (passed in 2010).

Skagit currently participates in the **Community Energy Challenge**, an energy efficiency program to encourage residential and commercial energy efficiency retrofits, and to boost local economic development in the construction sector.

Solid Waste

Sector Nexus: Waste Management; Buildings & Energy

Existing Policy Trends	Existing Policy Gaps	Policy Opportunities
Current policies… • Encourage waste reduction and recycling through resident/business education to conserve natural resources and protect and enhance environmental quality. • Are focused within the Skagit County Comprehensive Solid Waste Management Plan, 2017 update. This plan encompasses many high priority recommendations focused on waste reduction, recycling, organics, transfer and disposal, and public education.	Current policies… • Do not include composting policies, which is one of the County's largest components of the waste stream. • Lack waste reduction, recycling, and composting incentives, and requirements are unclear in the Comprehensive Plan. • Lack specific education and outreach policies related to waste management and do not explicitly consider equity needs for implementation.	Improve or add policies to… • Support the initiatives in the Skagit County Comprehensive Solid Waste Management Plan. • Build on the waste management initiatives from the 2010 CAP, incorporating input from staff to understand which policies have been implemented from the CAP and/or why they were not implemented successfully. • Strengthen engagement and education policy by developing targeted campaigns for recycling material with highest GHG reduction impact (e.g., paper, metal, food waste) in culturally contextualized outreach and education initiatives and materials.

Key Considerations

- Skagit County waste management is managed by the **Solid Waste Division**.
- There is a **Solid Waste Advisory Committee** that advise Skagit County on all aspects of solid waste management planning, assist Skagit County in the development of solid waste management programs and policies, and review and comment on proposed solid waste management rules, policies or ordinances prior to their adoption.
- The County manages **Skagit County Zero-Waste Events** as a comprehensive program facilitating recycling, composting and waste reduction at public and private events.

BARRIERS TO IMPLEMENTATION

Funding

Capacity

Knowledge

Skagit County includes a wide range of demographics, and a large geographic area. Historically, stakeholder groups have had varying degrees of involvement in Skagit County's land use history. As agriculture is a vital industry to the community these stakeholders are often more involved and more informed in the County's land use policies. Given these conditions, Skagit County residents and property owners have different levels of knowledge on these topics. This can make it difficult to foster collaborative conversations with stakeholders and collect feedback that can inform the policy revision process.

Community Support

Through the public participation process

NEXT STEPS

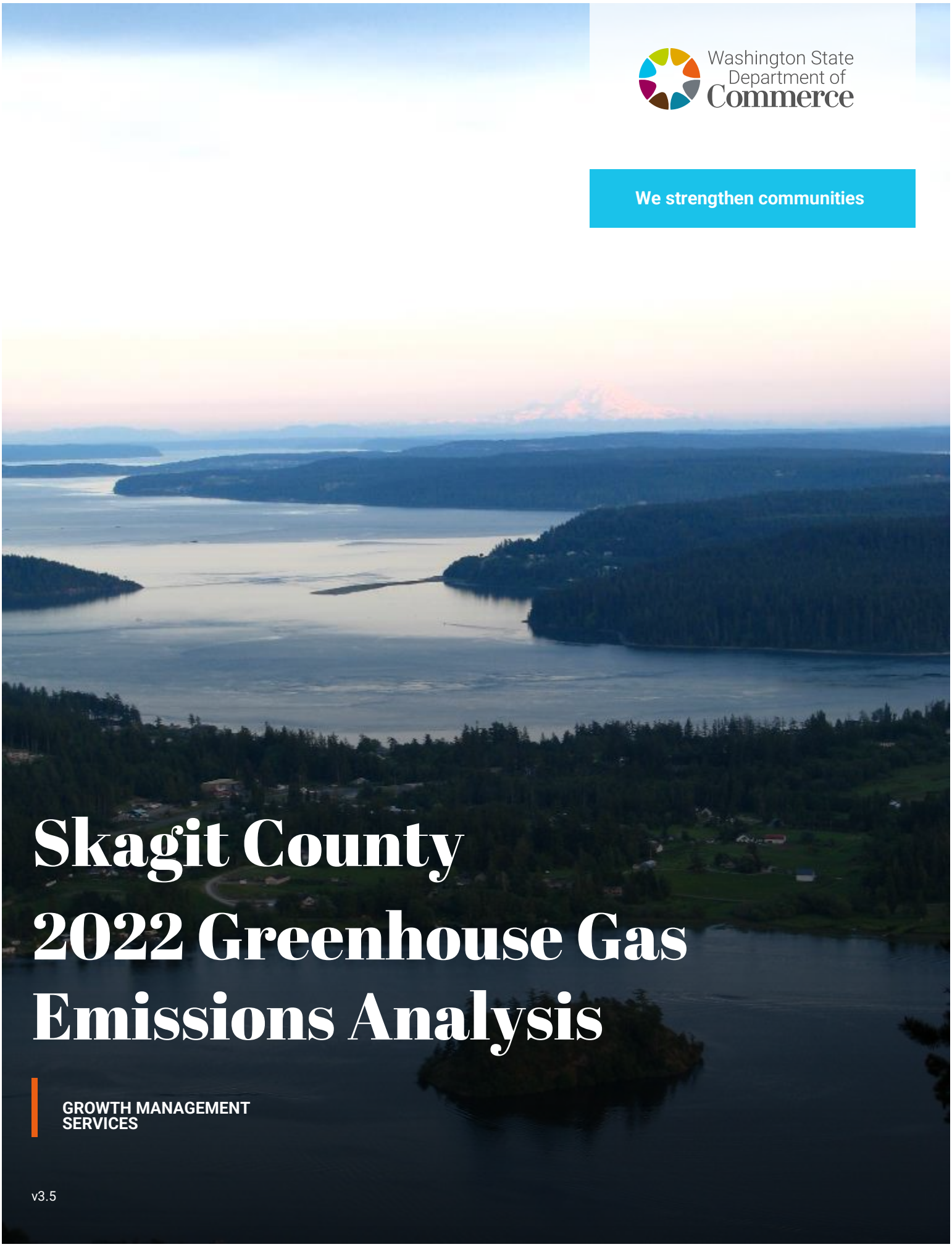
By identifying trends, gaps, and opportunities in existing plans, this policy assessment will be used to inform the County's draft Climate Element. The consultant team will be working with the County to develop policy that incorporates opportunities identified in this memorandum, community input, and findings from baseline assessment such as the GHG emissions inventory and climate vulnerability assessment.

This climate policy assessment process also revealed the following observations for consideration in developing the Skagit County Climate Element:

- **The Climate Element can serve as a central resource to reaffirm the existing resilience and mitigation policies established in the Comprehensive Plan**, while also referencing the County's ongoing updates to several key climate-related documents and plans.
- **Findings from the Climate Impacts Summary and Climate Vulnerability Assessment will be essential to incorporate into Climate Element resilience policies**, ensuring greater specificity and relevance in addressing climate risks, vulnerabilities, and adaptive capacity. Current County policies do not fully reflect the projected impacts of extreme heat, sea level rise, variable precipitation, and wildfire in Skagit County.
- **There is a need to introduce and/or revise GHG emissions reduction policies** to better align with the WA Department of Commerce's guidance and address the highest-emitting sectors identified in the County's greenhouse gas inventory.
- **Many opportunities exist to address the needs of vulnerable and frontline communities in addressing climate change.** For example, the Comprehensive Plan should tackle health, transportation, and utility concerns related to expected extreme heat, smoke, and flooding events, especially for those who are disproportionately affected by climate-related risks.

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13 Implementation
Appendices

Appendix G Greenhouse Gas Emissions Inventory



Washington State Department of Commerce

We strengthen communities

Skagit County 2022 Greenhouse Gas Emissions Analysis

GROWTH MANAGEMENT SERVICES

v3.5

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Executive Summary

To better understand current and future greenhouse gas (GHG) emissions in Washington and support local comprehensive planning, WA Department of Commerce (Commerce) funded an 11-county GHG emissions inventory and scenario planning effort. HB 1181, signed into law in 2023, requires Washington cities and counties to incorporate a Climate Element into Comprehensive Plans to build resilience and reduce GHG emissions. For 11 counties and the cities within, development of a greenhouse gas emissions sub-element is mandatory for inclusion in the jurisdiction's next Comprehensive Plan update. This GHG analysis effort aims to support local comprehensive planning, as identifying current and future emissions is a critical step in understanding where the state's largest sources of emissions are occurring and where there are opportunities for emissions reduction. This report provides a summary of 2022 communitywide and County government operations emissions for Skagit County, as well as projected future emissions and GHG emission reduction strategies. Skagit County's communitywide and operational emissions were quantified for the 2022 calendar year, representing the most recent year with complete data at the time of this study.

2022 Greenhouse Gas Emissions Profile

Communitywide

The communitywide emissions inventory quantifies emissions produced by activity from county residents, businesses, schools, and visitors, including from buildings, transportation, land use, and solid waste generation and disposal. In 2022, the Skagit County community produced an estimated 6,078,127 metric tons of carbon dioxide equivalent ($MTCO_2e$), which equates to approximately 46.3 $MTCO_2e$ per capita. Figure 1 and Figure 2 show the breakdown of 2022 communitywide emissions, including emissions from the built environment, transportation, solid waste and wastewater treatment, refrigerant usage, and land use.

FIGURE 1. 2022 COMMUNITYWIDE GHG EMISSIONS PROFILE BY SOURCE.

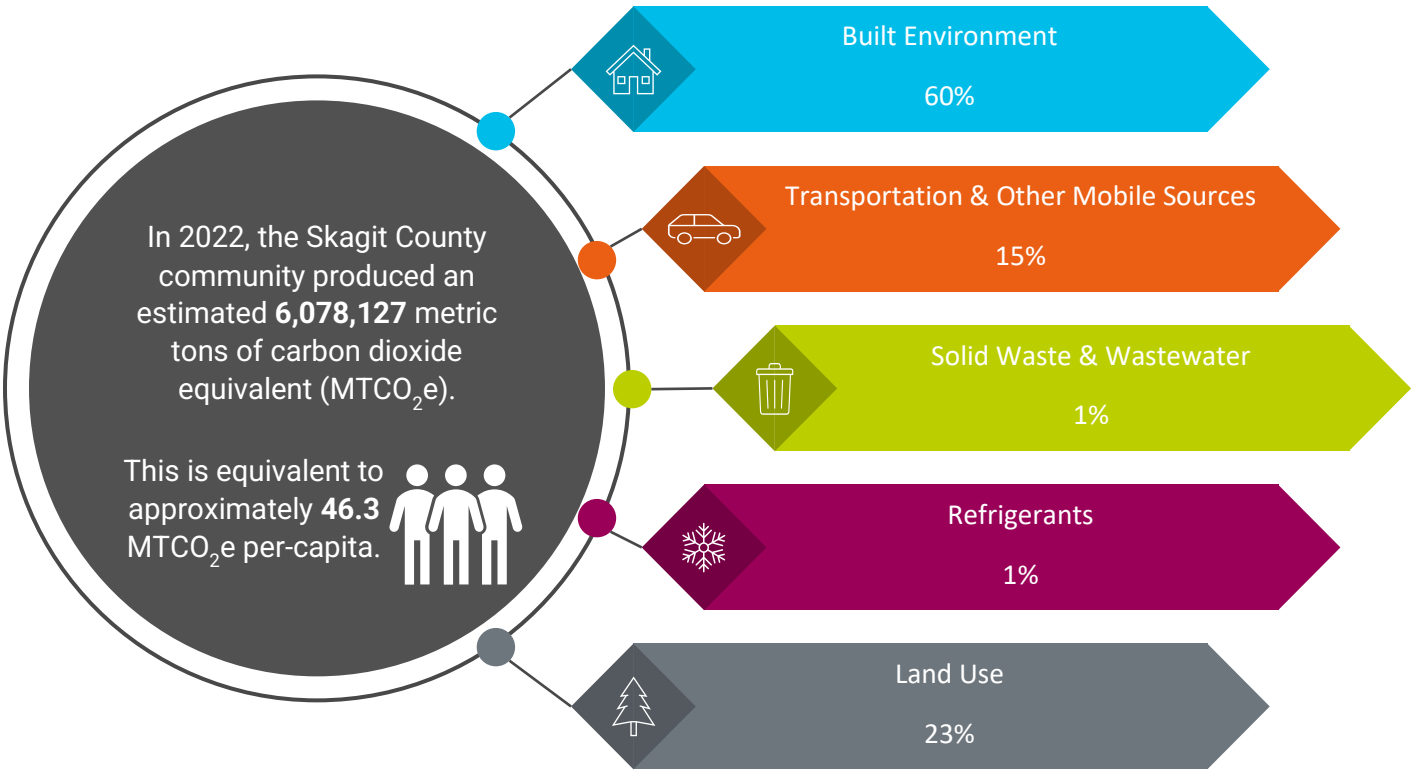
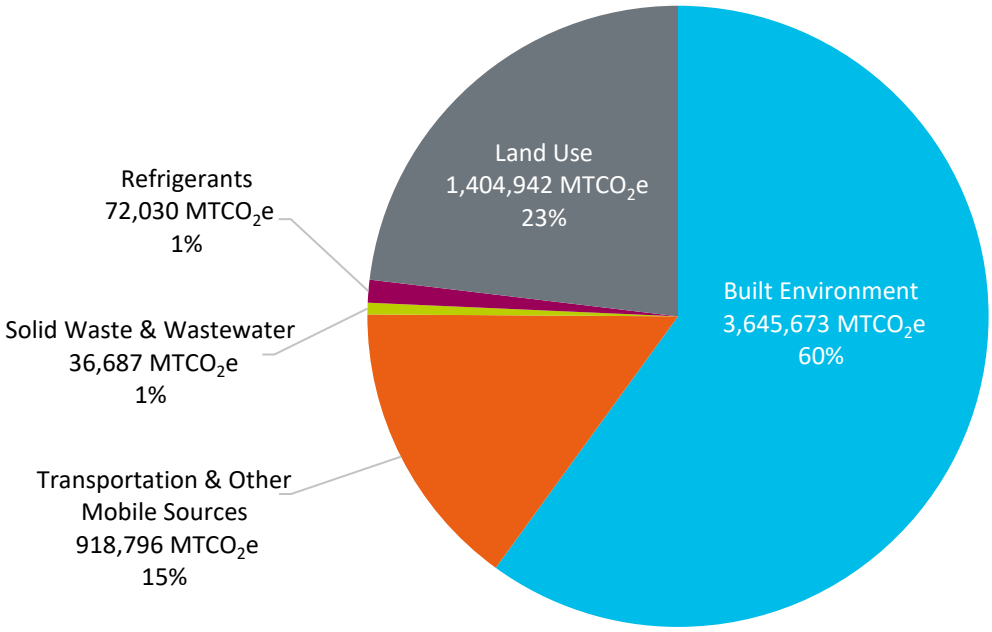


FIGURE 2. 2022 COMMUNITYWIDE GHG EMISSIONS PROFILE ($MTCO_2E$).



County Operations

The County operations emissions inventory reports emissions that are produced by County government activities and facilities, including from County facilities, fleet vehicles, employee commuting, and waste generation and disposal. In 2022, Skagit County's operations produced an estimated 18,251 $MTCO_2e$. Figure 3 and Figure 4 show the breakdown of 2022 County operations emissions, including emissions from County facilities, transportation (fleet vehicles, employee commuting, and business travel), solid waste and wastewater treatment, and refrigerant usage.

FIGURE 3. 2022 COUNTY OPERATIONS GHG EMISSIONS PROFILE BY SOURCE.

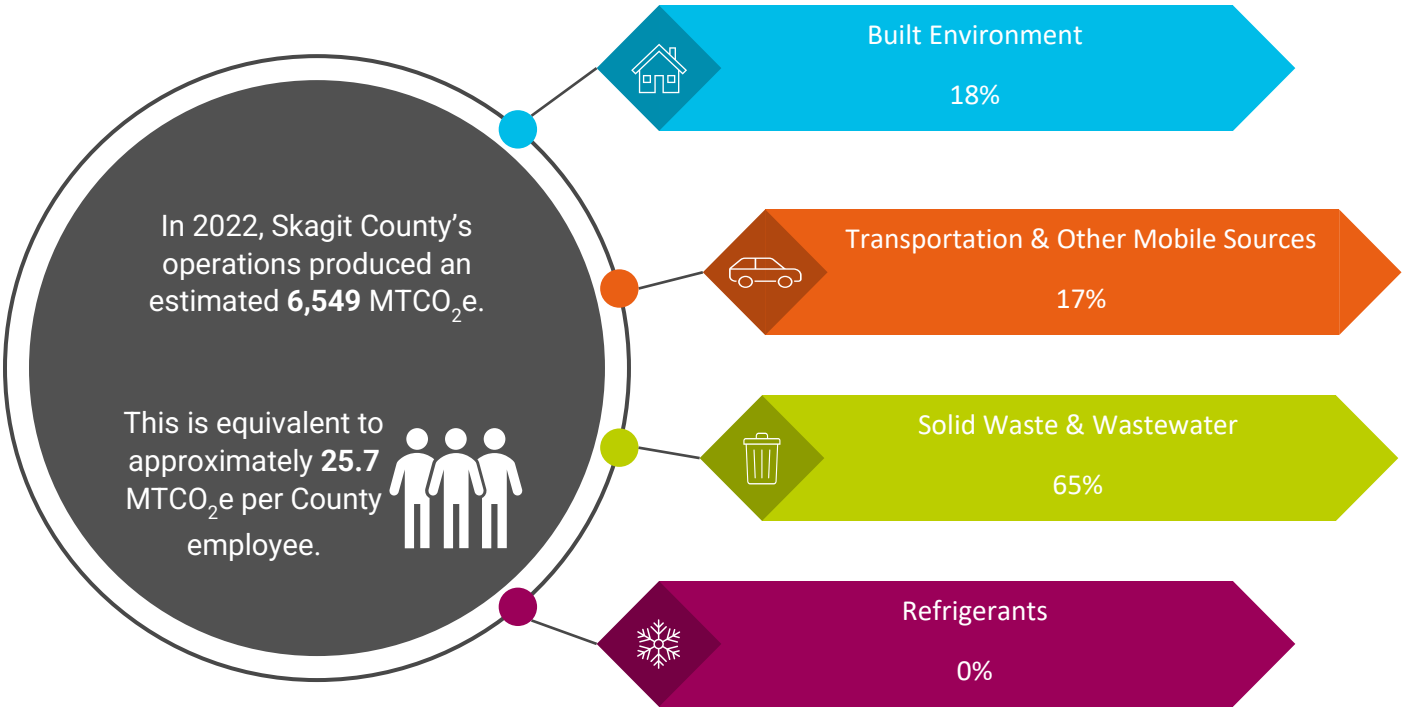
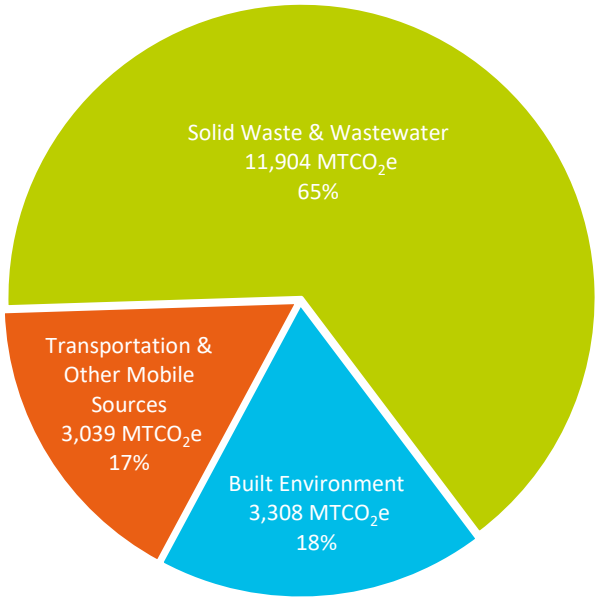


FIGURE 4. 2022 COUNTY OPERATIONS GHG EMISSIONS PROFILE ($MTCO_2E$).

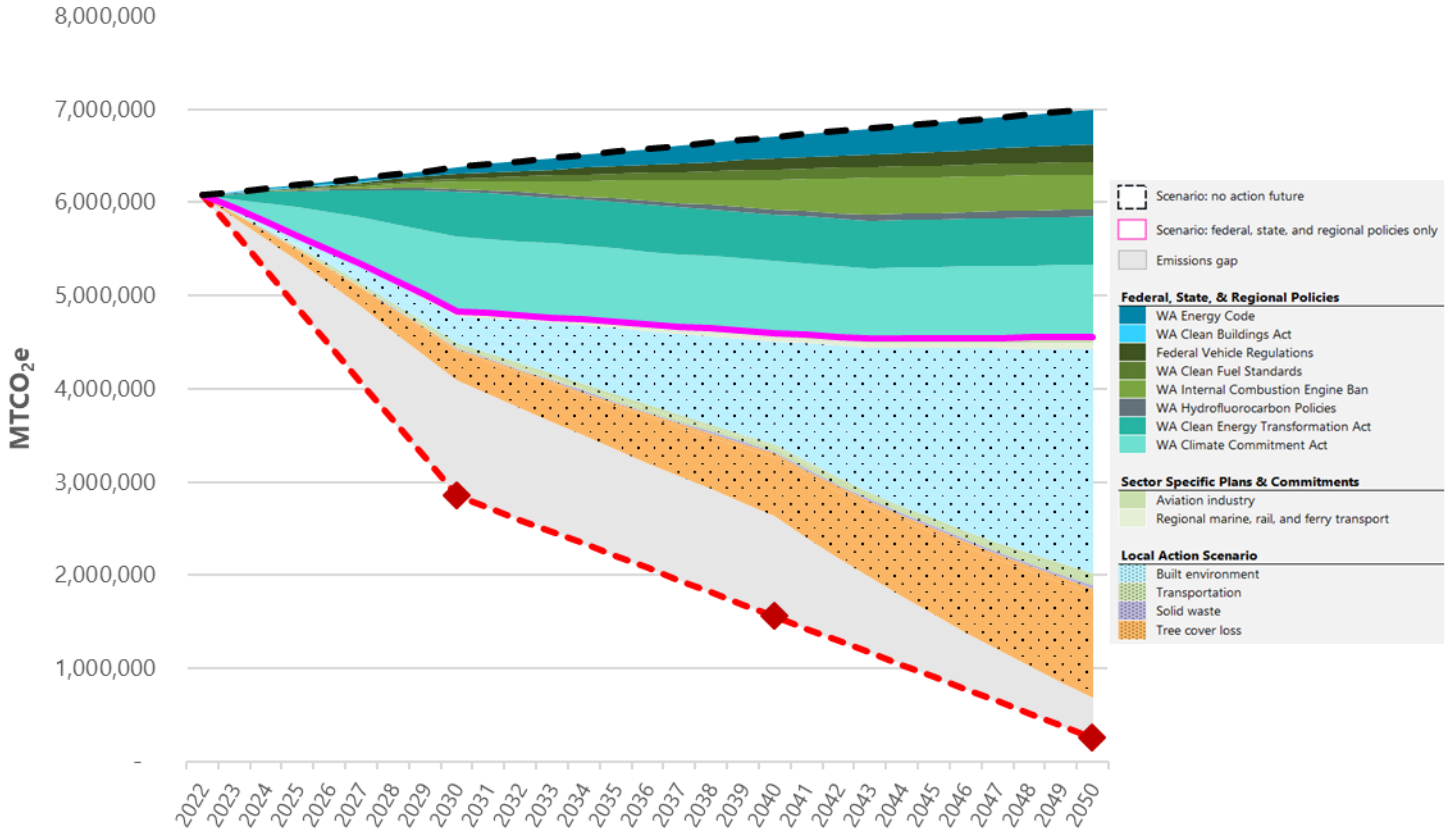


Future Emissions Projections & Local Strategies

A forecasting analysis of Skagit County's communitywide emissions from 2022 to 2050 revealed the following projections under three scenarios compared to Washington state greenhouse gas emission reduction targets (45% by 2030, 70% by 2040, and 95% by 2050, compared to a 1990 baseline):

- Business-as-usual (BAU), which assumes no action is taken to reduce GHG emissions. Under this scenario, Skagit County's emissions will grow 35% by 2050 (compared to a 1990 baseline), as depicted by the dotted black line in Figure 5.
- Adjusted business-as-usual (ABAU), which models estimated emissions reductions from existing federal, state, and regional policies. This scenario estimates a 12% reduction in communitywide emissions by 2050 (compared to a 1990 baseline), as depicted by the pink line in Figure 5.
- Local action scenario, which models estimated emission reductions from local climate actions such as reducing building energy consumption or transitioning to electric vehicles: Combined with the ABAU, this scenario estimates a 79% total reduction in communitywide emissions by 2050 (compared to a 1990 baseline), as shown by the local action scenario reductions in Figure 5.

FIGURE 5. FORECASTED GHG EMISSIONS AND REDUCTIONS ($MTCO_2E$).



These analyses of current and projected future GHG emissions provide insight into local policy options for reducing GHG emissions in Skagit County. As presented in the local action scenario, key GHG emission reduction strategies for focus in Skagit County's comprehensive plan update include:

- Decarbonize and reduce energy consumption in new and existing residential and commercial buildings through 1) transition from fossil fuels such as natural gas to low-carbon building energy sources such as renewable electricity and 2) energy efficient building design and retrofits. Local action to transition to renewable building energy sources would reduce Skagit County's built environment emissions, which made up 60% of 2022 communitywide emissions.
- Reduce passenger vehicle travel within the county, including through changes to land use, transportation infrastructure (transit, walking, bicycling), and commuting options/modes. A reduction in passenger VMT would reduce Skagit County's communitywide on-road emissions from passenger vehicles, which made up 8% of 2022 emissions.
- Facilitate the transition to electric vehicles through expansion of reliable EV charging infrastructure and public education on options and available incentives/rebates. Local action to support transitioning passenger and freight vehicles to electric would reduce Skagit County's passenger and freight vehicle on-road emissions, which made up 11% of 2022 communitywide emissions.
- Limit tree loss and support low-carbon land practices such as sustainable forestry, agriculture, and livestock management. Reducing tree loss emissions and emissions from agricultural practices in Skagit County would reduce land use emissions, which made up 23% of 2022 communitywide emissions.
- Work with local industries to support transition to low-carbon industrial processes, including for high-carbon industries such as petroleum refining and industrial gas manufacturing. These industrial process emissions made up 20% of Skagit County's 2022 communitywide emissions.

Introduction

To better understand current and future greenhouse gas (GHG) emissions in Washington and support local comprehensive planning, WA Department of Commerce (Commerce) funded an 11-county GHG emissions inventory and scenario planning effort. HB 1181, signed into law in 2023, requires Washington cities and counties to incorporate a Climate Element into Comprehensive Plans to build resilience and reduce GHG emissions. For 11 counties and the cities within, development of a greenhouse gas emissions sub-element is mandatory for inclusion in the jurisdiction's next Comprehensive Plan update. This GHG analysis effort aims to support local comprehensive planning for these counties, as identifying current and future emissions is a critical step in understanding where the state's largest sources of emissions are occurring and where there are opportunities for emissions reduction. This report provides a summary of 2022 communitywide and County government operations emissions for Skagit County, as well as projected future emissions and GHG emission reduction strategies.

Methodology

In determining the methodology used to complete Skagit County's GHG analyses, the project team used the following guiding principles:

- Replicability and transparency, to ensure that analyses can be conducted in future years.
- Consistency, both across counties and with past county GHG analyses, where applicable.
- Accuracy, including through inclusion of all relevant sectors, use of locally specific data, and alignment with industry best practices.

GHG Emissions Inventories

The following protocols were referenced to complete the GHG emission inventories:

- Skagit County's communitywide inventory was performed using guidance from both ICLEI's U.S. Community Protocol for Accounting and Reporting of GHG Emissions (USCP)[1] and The Greenhouse Gas Protocol's Global Protocol for Community-Scale Greenhouse Gas Inventories (GPC)[2]. These protocols are the industry standards for quantifying GHG emissions from community activities.[3]
- Skagit County's operational inventory was performed using guidance from ICLEI's Local Government Operations Protocol for the Quantification and Reporting of GHG Emissions Inventories (LGOP).[4] This protocol outlines a standardized method for local governments to estimate operational emissions.

Skagit County's communitywide and operational emissions were quantified for the 2022 calendar year, chosen as the most recent year with complete data at the time of this study. All analyses were performed in Microsoft Excel.

[1] U.S. Community Protocol | ICLEI USA
[2] Global Protocol for Community-Scale GHG Inventories (GPC) | GHG Protocol.
[3] These two protocols have different geographic specificities (e.g., the GPC is more global, while the U.S. Community Protocol has more of a U.S. focus). Both share the same basic GHG accounting principles.
[4] Local Government Operations (LGO) Protocol | ICLEI USA

Emissions Sources

The GHG emissions inventories, forecast, and scenario analysis included emissions sources listed in Table 1, as applicable. These sources are recommended by protocols and aligned with industry best practices.

TABLE 1. EMISSIONS SOURCES FOR THE 2022 COMMUNITYWIDE AND COUNTY OPERATIONS GHG ANALYSES.

Sector	Communitywide	County Operations
Buildings	Electricity Natural gas Propane Fuel oil Industrial processes	Electricity Natural gas Propane Fuel oil
Transportation	On-road vehicles Off-road equipment Aviation Public transit	County fleet vehicles & equipment County employee commute County business travel
Solid Waste	Landfilled waste generation & disposal Compost generation & disposal	Landfilled waste generation & disposal Compost generation & disposal County landfills
Wastewater	Treatment processes Septic systems	Treatment processes
Land Use	Agriculture Forests & land use change	N/A
Refrigerants	Refrigerants	Refrigerants

Detailed methodologies and data considerations for each emissions source are provided in Appendix A.

Forecast & Scenario Planning

The interactive communitywide GHG emissions forecasting and scenario planning analysis estimated emissions from 2022 to 2050 under the following three scenarios:

- Business-as-usual (BAU), which assumes no action is taken to reduce GHG emissions.
- Adjusted business-as-usual (ABAU), which models estimated emissions reductions from existing federal, state, and regional policies.
- Additional local action needed to achieve state GHG emission reduction targets.

This analysis was conducted in a user-friendly tool based in Microsoft Excel, which allows for custom user-defined inputs and real-time scenario planning to inform GHG emission reduction policy development.

Local Policy Options

Outputs from Skagit County's GHG emissions inventories, forecast, and scenario analysis supported development of county-specific local policy options. These options were developed through consultation with County staff and included detailed review of County emissions sources.

GHG Emissions Inventory Findings

Communitywide Inventory

In 2022, the Skagit County community produced an estimated 6,078,127 $MTCO_2e$. This total equates to approximately 46.3 $MTCO_2e$ per-capita. The community's largest sources of emissions were built environment, contributing 60% of total emissions, and land use contributing 23%. Figure 6 and Table 2 summarize 2022 communitywide emissions by sector and source. Table 2 also identifies "core emissions," which are emissions produced by sectors most commonly included in community greenhouse gas inventories and over which county governments often have the most influence (e.g., through local policy mechanisms such as local codes/regulations). Core emissions included in this inventory include emissions from electricity, natural gas, on-road vehicles, solid waste generation and disposal, and wastewater treatment processes.

FIGURE 6. 2022 COMMUNITYWIDE EMISSIONS PROFILE ($MTCO_2E$).

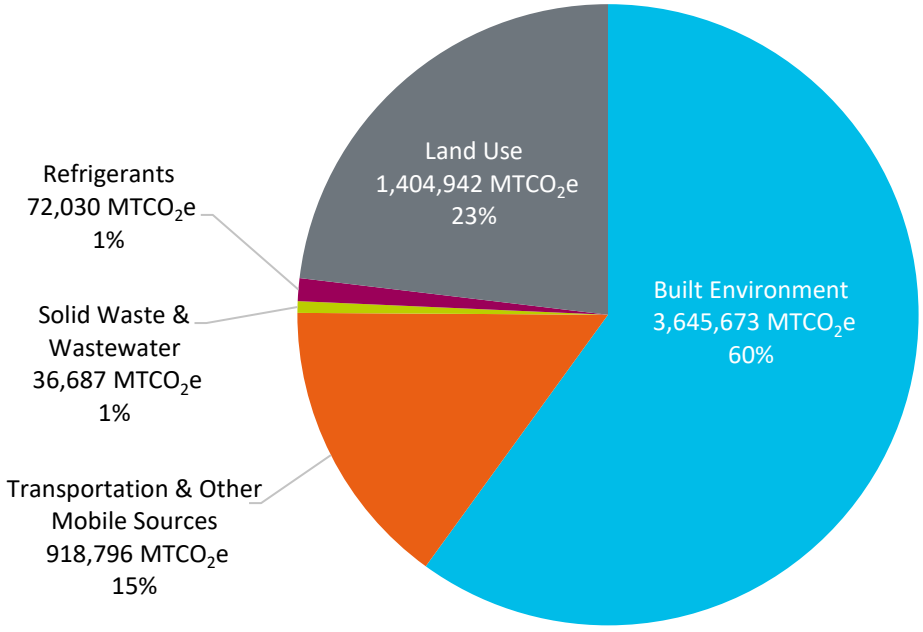
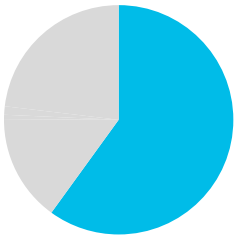


TABLE 2. TOTAL AND PER-CAPITA COMMUNITYWIDE GHG EMISSIONS, BY SECTOR ($MTCO_2E$ AND %).

GHG Emissions Sector	Total Emissions ($MTCO_2e$)	Per-capita Emissions ($MTCO_2e$)	Percent of Emissions (%)
Built Environment			
Electricity	**459,959**	**3.5**	**8%**
Residential	225,041	1.7	4%
Commercial	191,498	1.5	3%
Industrial	43,419	0.3	<1%
Natural Gas	**1,916,026**	**14.6**	**32%**
Residential	109,295	0.8	2%
Commercial	62,194	0.5	1%
Industrial	1,744,538	13.3	29%
Propane	**32,957**	**0.3**	**<1%**
Residential	28,327	0.2	<1%
Commercial	4,630	<0.1	<1%
Fuel Oil	**34,474**	**0.3**	**<1%**
Residential	2,206	<0.1	<1%
Commercial	32,268	0.2	<1%
Industrial Processes	**1,202,257**	**9.2**	**20%**
Transportation & Other Mobile Sources			
On-Road Vehicles	**691,726**	**5.3**	**11%**
Passenger vehicles	490,348	3.7	8%
Freight & service vehicles	198,053	1.5	3%
Public Transit	**3,325**	**<0.1**	**<1%**
Off-Road Equipment	**75,398**	**0.6**	**1%**
Aviation	**95,616**	**0.7**	**2%**
Marine & Rail	**56,056**	**0.4**	**<1%**
Solid Waste & Wastewater			
Solid Waste Generation & Disposal	**29,915**	**0.2**	**<1%**
Landfill	26,587	0.2	<1%
Compost	3,328	<0.1	<1%
Wastewater Processes	**6,771**	**<0.1**	**<1%**
Refrigerants			
Refrigerants	**72,030**	**0.5**	**1%**
Land Use			
Agriculture	**162,920**	**1.2**	**3%**
Tree Cover Loss	**1,242,022**	**9.5**	**20%**
Total Emissions	**6,078,127**	**46.3**	**100%**
Core Emissions	***3,104,398***	***23.7***	***51%***

Built Environment

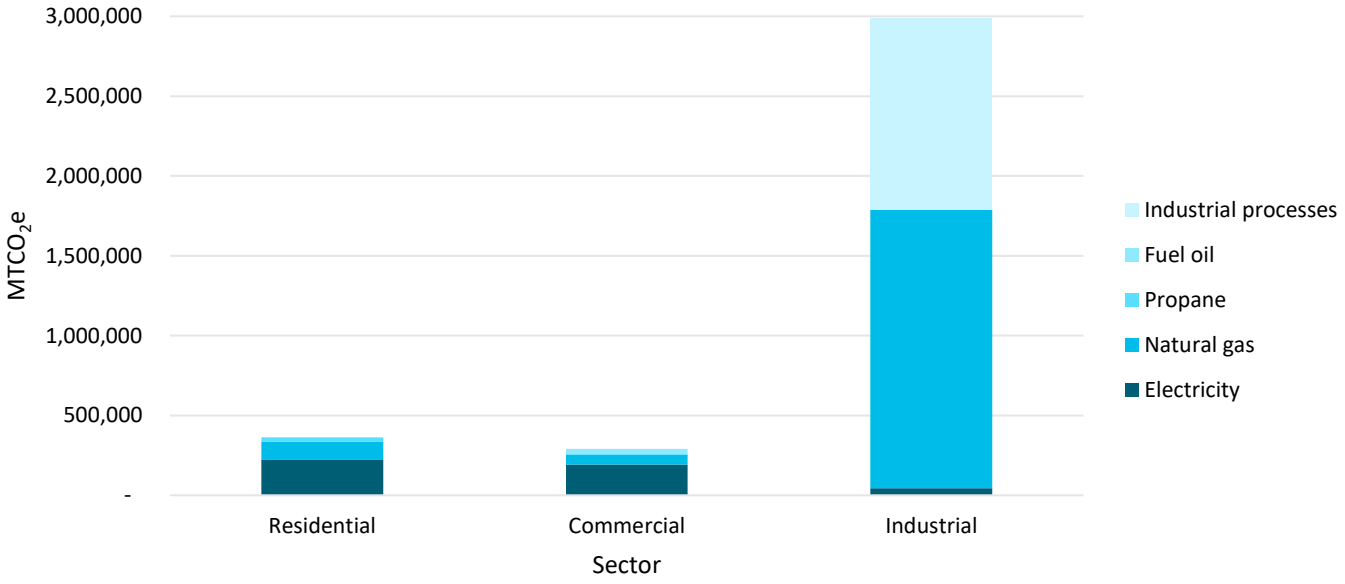


The built environment sector made up 60% of Skagit County's 2022 communitywide emissions, contributing 3,645,673 $MTCO_2e$. This sector includes emissions from the use of electricity, natural gas, propane, and fuel oil to heat, cool, and power buildings, as well as direct emissions from industrial processes within the county.

Figure 7 below summarizes Skagit County's 2022 emissions from the built environment, by sector and source. An estimated 8% and 32% of Skagit County's total communitywide emissions stemmed from electricity and natural gas consumption, respectively. Propane and fuel oil consumption contributed <1% and <1%, respectively, and 20% of communitywide emissions were produced by industrial processes within Skagit County.

Emissions calculated from electricity were calculated using utility-specific emission factors sourced from the WA Department of Ecology. For informational purposes, emissions from electricity were also calculated using the regional electric grid emissions factor, sourced from the EPA Emissions & Generation Resource Integrated Database (eGRID). When calculated using this location-based method, Skagit County's electricity emissions were approximately 355,918 $MTCO_2e$, compared to 459,959 $MTCO_2e$ when estimated using a utility-specific approach.

FIGURE 7. BUILT ENVIRONMENT GHG EMISSIONS, BY SECTOR AND SOURCE.

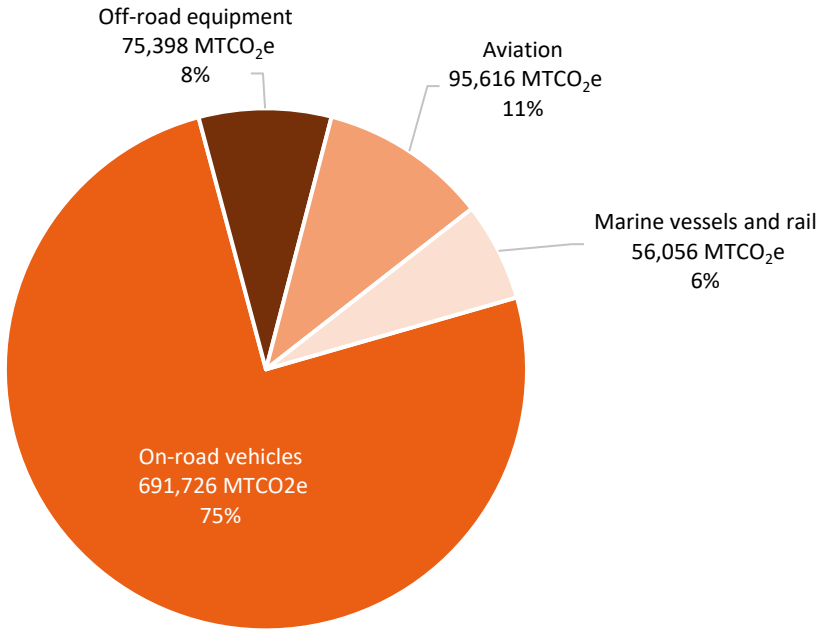


Transportation

The transportation sector made up 15% of Skagit County's 2022 communitywide emissions, emitting an estimated 918,796 $MTCO_2e$. This sector includes emissions from the use of on-road vehicles and off-road equipment, as well as emissions from marine, rail, and air travel, shown in Figure 8 below.

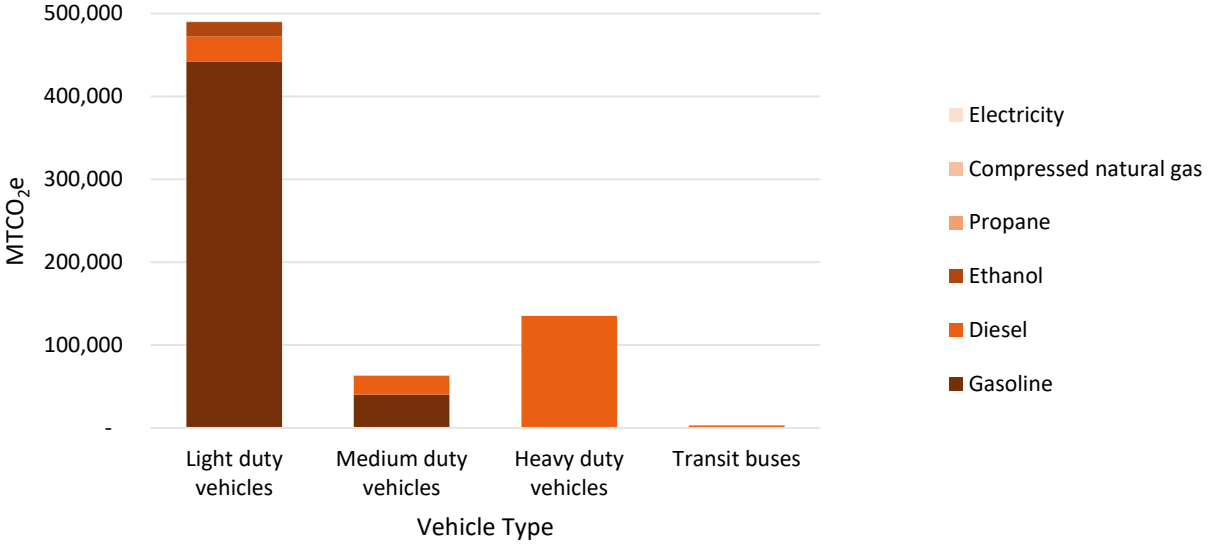


FIGURE 8. TRANSPORTATION EMISSIONS, BY SOURCE.



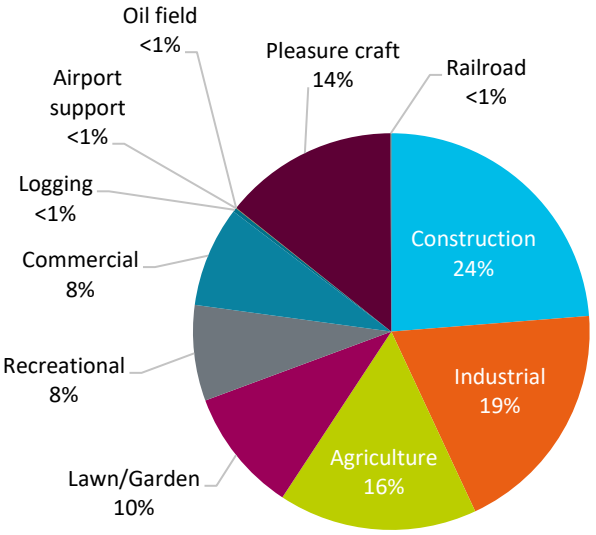
On-road vehicle emissions include those from passenger vehicles, freight and service trucks, and transit vehicles within the county boundary, and made up 75% of Skagit County's 2022 transportation emissions. On-road emissions by vehicle and fuel type are shown in Figure 9.

FIGURE 9. ON-ROAD TRANSPORTATION EMISSIONS, BY VEHICLE AND FUEL TYPE.



In addition to on-road vehicles, emissions from the following off-road equipment categories were included in this inventory: recreational, construction, industrial, lawn/garden, agriculture, commercial, logging, airport support, oil field, pleasure craft, and railroad. Off-road vehicles and equipment produced 75,398 $MTCO_2e$, making up 1% of communitywide emissions. The largest source of off-road emissions was construction, producing 24% of all off-road vehicle and equipment emissions.

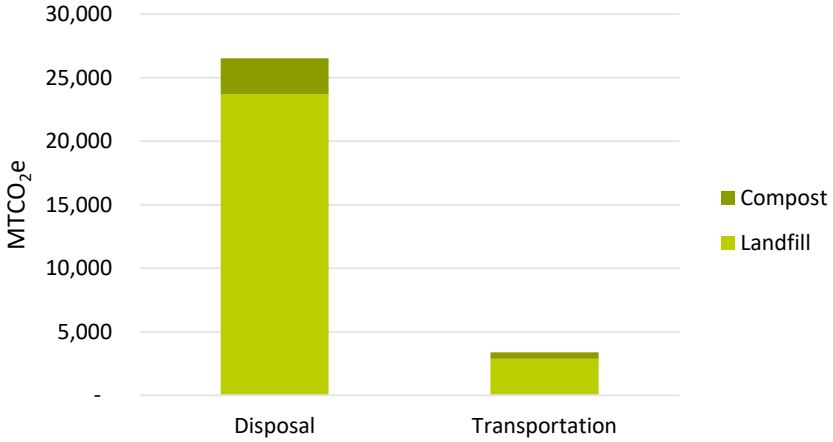
FIGURE 10. OFF-ROAD EMISSIONS, BY SECTOR.



Solid Waste & Wastewater

The solid waste and wastewater sector made up 1% of Skagit County's 2022 communitywide emissions, contributing an estimated 36,687 $MTCO_2e$. This sector includes emissions from the generation and disposal of solid waste and commercially processed compost (if available), as well as the treatment of wastewater produced within Skagit County.

FIGURE 11. EMISSIONS FROM SOLID WASTE GENERATION, BY ACTIVITY AND WASTE TYPE.



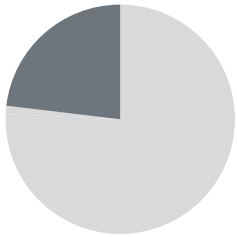
Emissions from wastewater are generated by the biological processing of organic wastewater at treatment facilities, as well as from septic systems within the community. In 2022, emissions from wastewater made up <1% of communitywide emissions. Wastewater treatment plants within Skagit County also produce emissions

through energy used to power wastewater treatment processes; these emissions are accounted for in the commercial energy sector to avoid double-counting between sectors.

Refrigerants

Refrigerant emissions accounted for 1% of Skagit County's 2022 communitywide emissions, contributing an estimated 72,030 $MTCO_2e$. The refrigerant sector includes emissions from the use and leakage of hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and CO_2 from ozone depleting substances (ODSs). Due to local data limitations, refrigerants emissions in this inventory are downscaled from national-level data to the county level based on population.

Land Use



Land use emissions made up 23% of Skagit County's 2022 communitywide emissions, contributing approximately 1,404,942 $MTCO_2e$. The land use sector includes emissions from agricultural activities such as soil management, digestive processes in livestock (enteric fermentation), and manure management, in addition to emissions from land use changes and tree loss. Skagit County had approximately 68,346 acres of agricultural cropland in 2022.

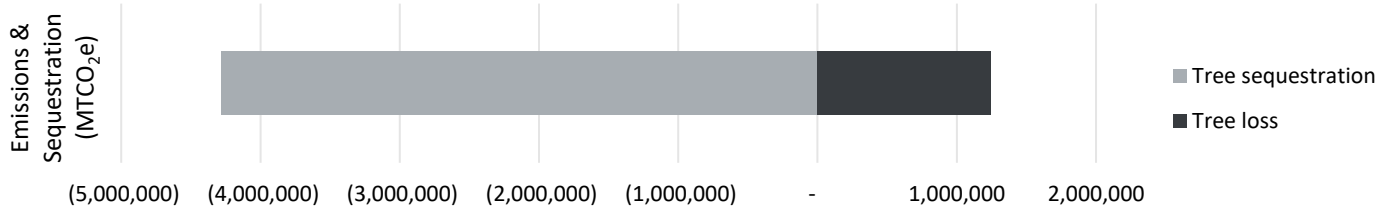
In 2022, the largest emitter of agricultural emissions in Skagit County was dairy cows, producing 51% of agriculture emissions.

Emissions from land use also include emissions from tree cover loss within Skagit County, stemming from forest management and activities that result in conversion of tree-covered land into settlements, grasslands, or other non-forested land types. In 2022, changes to tree cover resulted in the generation of approximately 1,242,022 $MTCO_2e$.

Tree Carbon Sequestration

Trees and forests in Skagit County sequestered approximately 4,283,975 $MTCO_2e$ from the atmosphere in 2022. Carbon sequestration refers to the removal of carbon dioxide from the atmosphere. This sequestration estimate is derived from remote sensing data and accounts for tree characteristics, including tree types, age, and health. Figure 12 below compares estimated GHG emissions from tree cover loss to GHG removals from tree carbon sequestration in 2022. Causes of tree loss include conversion from forest to other land uses; deforestation/harvesting; reduction in urban tree canopy; and degradation from insects, fire, and diseases. Emissions from tree cover loss should not be netted with sequestration; Figure 12 below provides a sense of scale for comparison purposes only. Note that these tree loss emissions estimates do not consider loss of future carbon sequestration potential. For additional information regarding emissions from tree cover loss and carbon sequestration in Skagit County, see Appendix D.

FIGURE 12. TREE COVER GHG EMISSIONS AND SEQUESTRATION.



County Operations Inventory

The County operations emissions inventory summarizes GHG emissions produced by County government activities, including from County owned and operated facilities. In 2022, Skagit County's operations produced an estimated 18,251 $MTCO_2e$. The County's largest sources of emissions occurred from solid waste & wastewater, contributing 65% of total County operations emissions, and built environment, contributing 18%. County operations emissions in 2022 made up .3% of Skagit County's 2022 communitywide emissions. Figure 13 depicts Skagit County's 2022 operational emissions by sector and source.

FIGURE 13. COUNTY OPERATIONS EMISSIONS PROFILE ($MTCO_2E$).

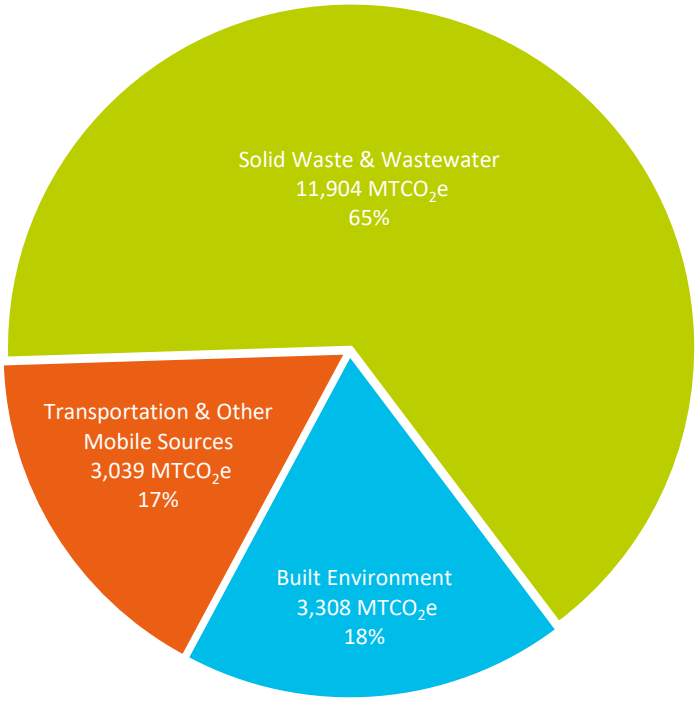
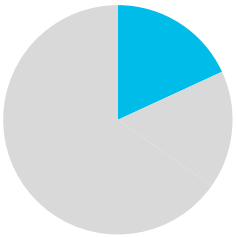


TABLE 3. 2022 TOTAL AND PER-CAPITA COUNTY OPERATIONS GHG EMISSIONS, BY SECTOR ($MTCO_2E$ AND %).

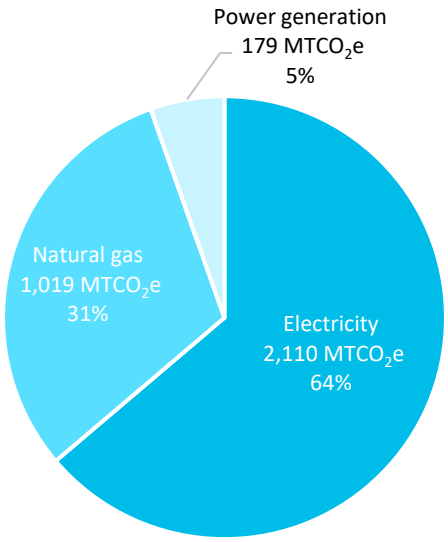
GHG Emissions Sector	Total Emissions ($MTCO_2e$)	Per-employee Emissions ($MTCO_2e$)	Percent of Emissions (%)
Built Environment			
Electricity	**2,100**	**3.0**	**12%**
Natural Gas	**1,019**	**1.4**	**6%**
Propane	**11**	**<0.1**	**<.1%**
Fuel Oil	**N/A**	**N/A**	**0%**
Power Generation	**179**	**0.3**	**1%**
Transportation & Other Mobile Sources			
Fleet Vehicles & Equipment	**3,039**	**4.3**	**17%**
On-road fleet vehicles	1,022	1.4	6%
Off-road fleet equipment	2,017	2.8	11%
Employee Commute	**N/A**	**N/A**	**0%**
Business Travel	**N/A**	**N/A**	**0%**
Solid Waste & Wastewater			
Solid Waste Generation & Disposal	**11,894**	**16.7**	**65%**
Landfilled waste	420	0.6	2%
Composted waste	N/A	N/A	0%
County-owned landfills	11,474	16.1	63%
Wastewater Processes	**10**	**<0.1**	**<.1%**
Refrigerants			
Refrigerants	**N/A**	**N/A**	**0%**
Stationary refrigerants	N/A	N/A	0%
Mobile refrigerants	N/A	N/A	0%
Total Emissions	**18,251**	**25.7**	**100%**

Built Environment



The built environment sector, which includes emissions from all County-owned and operated facilities, made up 18% of Skagit County's 2022 operational emissions, contributing approximately 3,308 $MTCO_2e$. This sector includes emissions from the use of electricity, natural gas, propane, and fuel oil to heat, cool, and power County facilities, as well as diesel generators used for backup power. The breakdown of government operations emissions by fuel type is shown in Figure 14.

FIGURE 14. GOVERNMENT OPERATIONS BUILT ENVIRONMENT EMISSIONS, BY FUEL TYPE.

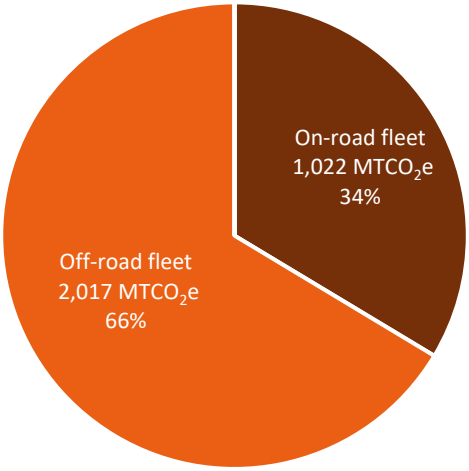


Transportation



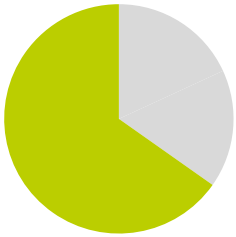
County operations transportation emissions stem from the operation of County fleet vehicles and equipment, County employee commuting, and County staff business travel (as data are available). Emissions from this sector made up 17% of Skagit County's 2022 operational emissions (approximately 3,039 $MTCO_2e$). A breakdown of Skagit County operations transportation emissions are shown below in Figure 15.

FIGURE 15. GOVERNMENT OPERATIONS TRANSPORTATION EMISSIONS, BY SOURCE.



Solid Waste & Wastewater

The solid waste and wastewater sector made up 65% of Skagit County's 2022 operational emissions, contributing approximately 11,904 $MTCO_2e$. This sector includes emissions from the County government's generation and disposal of solid waste, emissions from County-owned landfills (as applicable), energy used to convey water to County facilities, and process emissions from any County-owned wastewater facilities. Note that some of these sources may have been excluded due to data availability limitations.



Refrigerants

The refrigerant sector made up an estimated 0% of Skagit County's 2022 operational emissions (0 $MTCO_2e$). This sector includes emissions from the use, leakage, and disposal of stationary refrigerants in County facilities, as well as mobile refrigerant use in County fleet vehicles and equipment.

Future Emissions Forecast & Scenario Analysis

Results from the 2022 communitywide GHG inventory were used to forecast future emissions and emission reduction scenarios for Skagit County. Specifically, the analysis forecasted Skagit County's communitywide GHG emissions to 2050 under three scenarios, detailed in the sections below:

- Business-as-usual (BAU), which assumes no action is taken and assumes projected population[5] and economic growth[6].[7]
- Adjusted business-as-usual (ABAU), which models estimated emissions reduction from existing federal, state, and regional policies.
- Additional local action, which models estimated emissions reduction from local strategies such as VMT reduction and building energy efficiency.

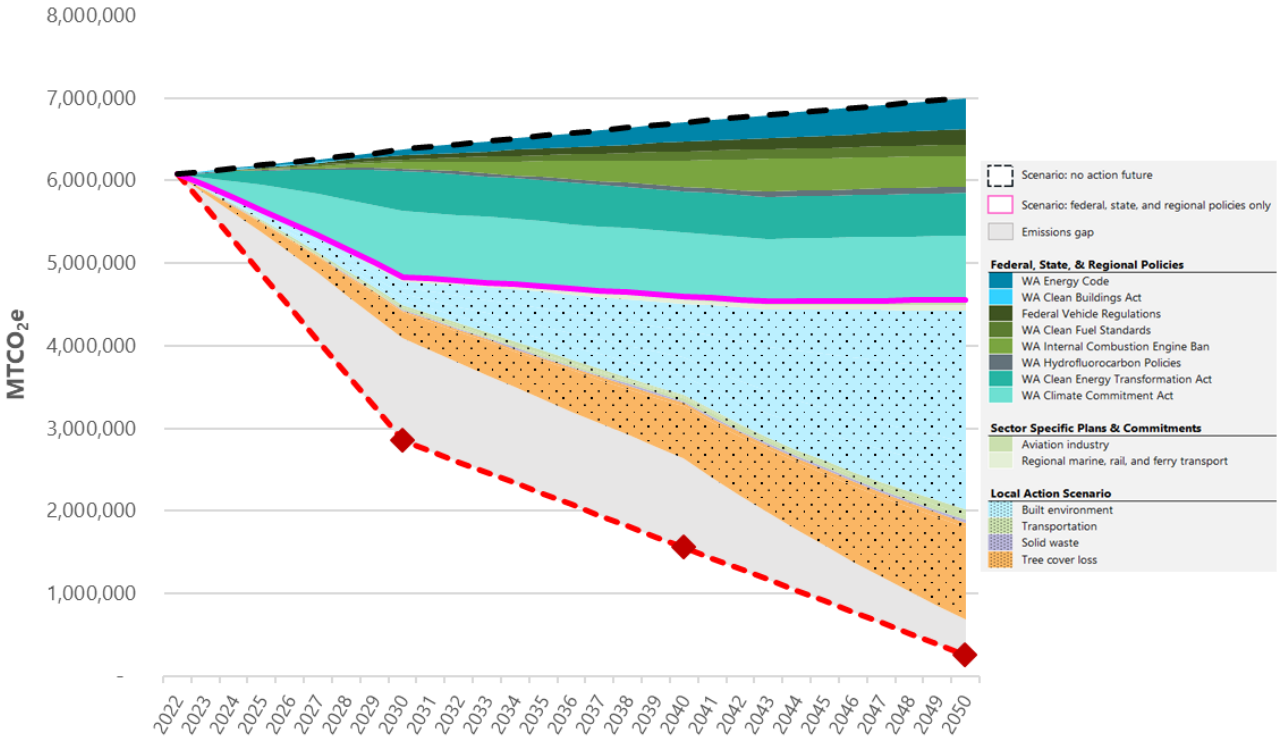
Findings Summary

The 2022-2050 forecast and scenario analysis revealed the following key findings, as summarized in Figure 16:

- BAU: 35% increase by 2050 compared to 1990.
- ABAU: 12% decrease by 2050 compared to 1990.
- Local Action: 79% decrease by 2050 compared to 1990.

Emission levels for 1990 were estimated based on state-level emissions trends between 1990 and 2022.

FIGURE 16. FORECASTED GHG EMISSIONS AND REDUCTIONS UNDER THREE SCENARIOS ($MTCO_2E$).



[5] Washington Office of Financial Management (OFM) Growth Management Act population projections, "Middle" scenario.
[6] Future employment estimated using expected OFM population growth percentages.
[7] Please note that the growth forecasts used in this analysis were selected in order to achieve consistency between Washington counties, and may not reflect the growth forecast used in Skagit County's Comprehensive Plan update.

The following sections provide a detailed summary of each scenario, including underlying assumptions and policy-specific findings.

Business-as-Usual Scenario

The BAU projects emissions based on a "no-action future" that assumes no federal, state, regional, or local policies or actions influence future emissions. Future emissions under the BAU are modeled based on estimated population and economic growth. Population and economic growth estimates can be found in Table 4. Overall, the BAU projects a 35% growth in emissions by 2050.

TABLE 4. DEMOGRAPHIC PROJECTIONS FOR SKAGIT COUNTY.

Demographic	2022	2030	2040	2050
Population	131,250	142,805	155,142	166,281
Employment	51,542	56,080	60,924	65,299

Adjusted-Business-as-Usual Scenario

The ABAU estimates emissions reductions resulting from established federal, state, and regional policies. Together, implementation of identified policies results in an estimated 12% reduction in communitywide GHG emissions by 2050 compared to 1990 levels.

The ABAU scenario included consideration of the following federal, state, and regional policies. Additional information regarding policy interpretation and assumptions are provided in Appendix B.

- Washington State Energy Code (SB 5854)
- Washington Clean Buildings Act (HB 1257)
- Federal Vehicle Regulations (CAFE)
- WA Clean Fuel Standard (HB 1091)
- WA Internal Combustion Engine Ban (SB 5974)
- WA Hydrofluorocarbon Policies (HB 1112 & HB 1050)
- WA Clean Energy Transformation Act (CETA)
- WA Climate Commitment Act (E2SSB 5126)

Note that to avoid double-counting, the analysis sequentially models each policy, so the order of modeling influences a policy's indicated GHG emission reductions.

Local Action Scenario

The local action scenario models additional emissions reductions from county-level local strategies, such as land use policies to encourage transportation mode shift and building energy efficiency. The intention of this scenario is to support identification and prioritization of local policies for inclusion in a GHG emission reduction sub-element. The local action scenario, which represents just one of many potential paths to achieving GHG emission reductions, provides a pathway toward achieving the state's GHG emission reduction target (95% reduction in GHG emissions by 2050 compared to a 1990 baseline). Note that several of these strategies may address emission sources that are expected to be reduced through existing federal, state, and regional legislation, which may make local strategies appear less impactful. Table 5 below summarizes the local action scenario and associated reductions.

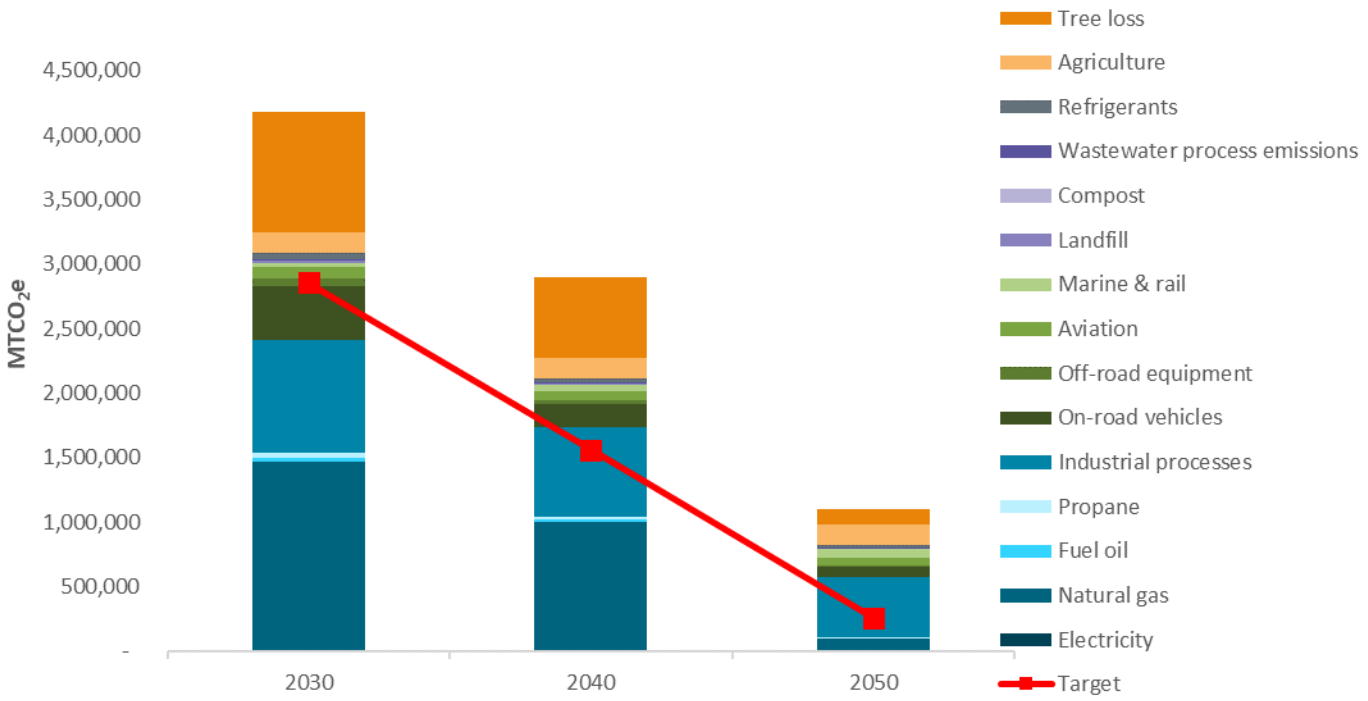
TABLE 5. LOCAL ACTION SCENARIO AND GHG EMISSION REDUCTIONS ($MTCO_2E$).

Local Strategy	2050 Value	Cumulative emissions reduction to 2050 ($MTCO_2e$)	Proportion of local strategy reductions (%)
Electrify new buildings (% fossil fuel use converted to elect.)	100%	4,068,794	11%
Reduce energy use in existing buildings (% reduction in energy use)	45%	3,690,337	18%
Electrify existing buildings (% fossil fuel use converted to elect.)	95%	3,572,138	20%
Reduce industrial emissions (% reduction in emissions)	50%	3,964,980	11%
Reduce passenger vehicle travel (% reduction in VMT)	20%	4,425,737	1%
Electrify passenger vehicles (% new vehicles sold that are EV)	100%	4,425,737	<1%
Electrify freight/service vehicles (% new vehicles sold that are EV)	80%	4,360,645	1%
Decarbonize offroad equipment (% reduction in emissions)	95%	4,362,214	1%
Divert C&D materials (% of C&D waste diverted)	85%	4,396,058	1%
Divert other recyclable and compostable materials (% reduction in waste to landfill)	95%		
Improve soil management (% reduction in emissions)	75%	4,364,135	2%
Reduce tree loss (% reduction in tree loss)	90%	3,307,917	33%
Total Emission Reductions		**44,938,692**	**100%**

Remaining Emissions

In 2050, the largest sources of remaining emissions under the local action scenario are industrial processes (42%), agriculture (15%), and tree loss (11%). The makeup of remaining emissions is depicted in Figure 17 below.

FIGURE 17. FORECASTED GHG EMISSIONS AND REDUCTIONS UNDER THREE SCENARIOS ($MTCO_2E$).



Local Policy Options

These analyses of current and projected future GHG emissions provide insight into local policy options for reducing GHG emissions in Skagit County. As presented in the local action scenario, key GHG emission reduction strategies for focus in Skagit County's comprehensive plan update include:

- Decarbonize and reduce energy consumption in new and existing residential and commercial buildings through 1) transition from fossil fuels such as natural gas to low-carbon building energy sources such as renewable electricity and 2) energy efficient building design and retrofits. Local action to transition to renewable building energy sources would reduce Skagit County's built environment emissions, which made up 60% of 2022 communitywide emissions.
- Reduce passenger vehicle travel within the county, including through changes to land use, transportation infrastructure (transit, walking, bicycling), and commuting options/modes. A reduction in passenger VMT would reduce Skagit County's communitywide on-road emissions from passenger vehicles, which made up 8% of 2022 emissions.
- Facilitate the transition to electric vehicles through expansion of reliable EV charging infrastructure and public education on options and available incentives/rebates. Local action to support transitioning passenger and freight vehicles to electric would reduce Skagit County's passenger and freight vehicle on-road emissions, which made up 11% of 2022 communitywide emissions.
- Limit tree loss and support low-carbon land practices such as sustainable forestry, agriculture, and livestock management. Reducing tree loss emissions and emissions from agricultural practices in Skagit County would reduce land use emissions, which made up 23% of 2022 communitywide emissions.
- Work with local industries to support transition to low-carbon industrial processes, including for high-carbon industries such as petroleum refining and industrial gas manufacturing. These industrial process emissions made up 20% of Skagit County's 2022 communitywide emissions.

Appendix A: GHG Inventory Methodology

Methodology and Data Sources

Calculating Skagit County's GHG emissions inventories involved identifying and applying emissions factors to activity data, summarized in Table 6 and detailed in the following sections:

- Activity data quantify levels of activity that generate GHG emissions, such as vehicle miles traveled and kWh of electricity consumed.
- Emission factors (EFs) translate activity levels into emissions (e.g., $MTCO_2e$ per kWh).

TABLE 6. KEY APPROACHES AND DATA SOURCES FOR COUNTY GHG EMISSIONS INVENTORIES.

Sector	Activity Data	Emissions Factors (EFs)
Transportation		
On-road vehicles	Two approaches: 1) Vehicle miles traveled data from Washington State Department of Transportation (WSDOT) Highway Performance Monitoring System (HPMS) 2) Origin-destination vehicle miles traveled estimates from StreetLight	U.S. Environmental Protection Agency (EPA) Emission Factors Hub[8] vehicle EFs (by vehicle & fuel type)
Off-road equipment	EPA Motor Vehicle Emission Simulator (MOVES) model outputs, by county	N/A (data reported in emissions)
Public transit	Reported transit vehicle miles traveled by fuel type for each transit agency from the National Transit Database (NTD)	U.S. EPA Emission Factors Hub vehicle EFs (by vehicle & fuel type)
Aviation	Two approaches, depending on data availability: 1) Volume of fuel (jet-A and aviation gasoline) loaded onto all planes departing from airports within county; volume of all fuel used in helicopters, light aircraft operating within county boundaries (e.g., police, sightseeing, training) 2) Number of landing and takeoff cycles that could be used to estimate fuel based on similar airports Emissions from Seattle-Tacoma International Airport (SEA) and Portland International Airport (PDX) were attributed to individual counties using Approach 1 (described above), in combination with passenger survey data, population, and household income data from the U.S. Census.	U.S. EPA EF Hub average emission factors, by fuel type
Marine	US EPA National Emissions Inventory (NEI) estimates by county (for commercial marine vessels)	N/A (data reported in emissions)
Rail	U.S. EPA National Emissions Inventory (NEI) by county (for freight and passenger rail use)	N/A (data reported in emissions)
Built Environment		
Electricity	County-wide consumption provided by utilities	1) Utility-specific emission factors (from Department of Ecology Clean Fuel Standard program utility-specific electricity calculations) 2) Emissions & Generation Resource Integrated Database (eGRID) EFs (for informational purposes only)
Natural gas	County-wide consumption provided by utilities	1) Utility-specific emission factors, where available 2) U.S. EPA EF Hub average EFs (where utility-specific EFs were not available)

[8] EPA Emission Factors Hub

Sector	Activity Data	Emissions Factors (EFs)
Fuel oil	WA fuel oil consumption by sector from U.S. Energy Information Administration (EIA)	U.S. EPA EF Hub average EFs
Propane	WA propane consumption by sector from U.S. EIA	U.S. EPA EF Hub average EFs
Industrial processes	EPA Facility Level Information on Greenhouse Gases Tool	N/A - data reported in terms of emissions
Solid Waste & Wastewater		
Solid waste generation & disposal	County-wide tonnage and local waste characterization data, as available. Where local waste characterization data were unavailable, Department of Ecology regional characterizations were used.	EPA Waste Reduction Model (WARM) EFs, customized for landfill attributes
Compost generation & disposal	County-wide tonnage and WA state organics characterization study	EPA WARM EFs
Wastewater treatment processes	Wastewater treatment data by wastewater treatment facilities (including gallons processed)	U.S. Community Protocol default EFs, customized for wastewater treatment facility process specifications (unless a treatment facility provided customized emission calculations)
Septic systems	Number of reported septic systems	U.S. Community Protocol default EFs
Refrigerants		
Refrigerants	EPA Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2022	N/A - reported in terms of emissions
Land Use		
Agriculture	County-specific acres of cropland and number of livestock (from U.S. Department of Agriculture Census of Agriculture)	U.S. Community Protocol defaults by animal / management scenario
Tree cover	ICLEI Land Emissions and Removals Calculator - reported in terms of emissions	

Transportation

On-Road

On-road emissions were developed using 2022 vehicle-miles-traveled (VMT) activity data from WSDOT's Highway Performance Monitoring System (HPMS), which provides estimated annual VMT for all public roadways in each county. VMT for each county was split into light, medium, and heavy duty VMT based on WSDOT HPMS statewide freight percentages. For medium- and heavy-duty freight emissions, VMT was multiplied by fuel- and vehicle-specific emissions factors from the 2022 EPA Emission Factors Hub. For light-duty vehicles, 2022 vehicle registration data from each county was used to estimate VMT by fuel type, which was then multiplied by fuel-specific emissions factors from the EPA Emission Factors Hub. The vehicle registration data was also used to create a weighted emissions factor for light-duty gasoline vehicles, based on the split between passenger vehicles and light trucks in each county.

Off-Road

Off-road emissions were acquired from EPA's Motor Vehicle Emissions Simulator (MOVES) model version 4.0. Using county-level defaults, the MOVES nonroad module was used to output 2022 daily emissions for all available off-road sectors, including agriculture, airport support, commercial, construction, industrial, lawn and garden, logging, oil field, pleasure craft, railroad, recreational, and underground mining. The equipment included in these sectors included self-propelled vehicles, such as construction equipment, as well as handheld equipment like chainsaws. MOVES output was provided for by weekday and weekend day for each month. The results were multiplied by the appropriate number of weekdays and weekend days in 2022 to determine annual emissions. The model produces CH_4 and CO_2 emissions per sector for gasoline, LPG, CNG, and diesel.

Public Transit

Transit emissions were based on annual fuel use and vehicle-miles-traveled data for each transit agency, obtained from the National Transit Database report for 2022. Annual fuel use was multiplied by standard fuel- and vehicle-specific emissions factors from the EPA Emission Factors Hub.

Aviation

Aviation emissions were based on the fuel used by aircraft at each airport. Gallons of jet fuel and aviation gasoline were multiplied by standard fuel-specific emission factors from the EPA Emission Factors Hub. Emissions from regional and municipal airports were assigned to the county in which the airport is located.

King, Kitsap, Pierce, Thurston, Skagit, Snohomish, and Whatcom County:

Emissions from Seattle-Tacoma International Airport (SEA) were allocated to the surrounding counties to acknowledge that many travelers are residents of locations other than King County, where the airport is located. To attribute fuel consumption to the Puget Sound counties, total jet fuel used in 2022 was multiplied by the percentage of passengers whose journey began or ended at SEA—rather than connecting through SEA—based on passenger survey data provided by the airport. Using passenger survey data that identified the percentage of passengers who were from King County, a portion of this fuel was attributed to King County. To ensure consistency with the Puget Sound Regional Emissions Analysis (PSREA) 2019 inventory approach, the remaining fuel allocated to the Puget Sound region was then attributed to Kitsap, Pierce, Thurston, and Snohomish counties based on an income-weighted per-capita fuel consumption average. This income-weighted per-capita consumption metric was then used to estimate commercial aviation-related GHG emissions for Skagit and Whatcom counties. All fuel consumption estimates were then multiplied by fuel-specific emission factors to estimate GHG emissions.

Clark County:

Portland International Airport (PDX) is not located in Clark County; however, many residents of Clark County utilize PDX for air travel. PDX provided passenger survey data that identified the percentage of departing passengers whose home is Clark County. These data were used to attribute a portion of the airport's 2022 fuel consumption data to Clark County.

Marine

Emissions from marine sources were estimated for commercial marine vessels. Pleasure craft were reported as off-road vehicles/equipment. Emissions from commercial marine vessels were obtained from EPA's National Emissions Inventory (NEI) 2020 NEI Data Retrieval Tool, by county. In the absence of 2022 data or scaling factors related to commercial activity, it was assumed that 2022 emissions were equivalent to 2020 emissions.

NEI commercial marine data includes emissions from the Washington State Ferry (WSF) system. WSF has begun implementation of its System Electrification Plan, which is projected to decrease fleetwide GHG emissions by 75% by 2040. To understand the contribution of ferry vessel emissions to the total commercial marine vessel sector, emissions from WSF vessels were determined by scaling the emissions reported in the 2016 Puget Sound Maritime Emissions Inventory by fuel use in 2016 and 2022 (these calculations were performed for informational purposes only).

Rail

Emissions from freight and passenger rail were obtained from EPA's National Emissions Inventory 2020 NEI Data Retrieval Tool, by county. In the absence of 2022 data or scaling factors related to commercial activity, it was assumed that 2022 emissions were equivalent to 2020 emissions.

Building Energy

Electricity

Emissions from electricity consumption were determined using the amount of electricity consumed in 2022 within each county, multiplied by utility- and year-specific emission factors. Residential, commercial, and industrial electricity consumption data were procured directly from the utilities that provide service to each county. Emissions from electricity transmission and distribution (T&D) were included in the utility-specific emission factors used for these inventories, provided by the WA Department of Ecology.

Natural Gas

Emissions from natural gas consumption were determined by multiplying the natural gas consumed in 2022 within each county by utility- and year-specific emission factors (as available). Residential, commercial, and industrial natural gas consumption data were procured directly from the utilities that provide service to each county. Emissions from natural gas leakage were calculated using utility-specific leakage rates if available, or using a default leakage rate from the Environmental Defense Fund's "User Guide for Natural Gas Leakage Rate Modeling Tool"[9]. Other defaults necessary to calculate fugitive emissions from natural gas were provided by ClearPath, ICLEI's greenhouse gas inventory software platform.

Propane & Fuel Oil

Residential propane and fuel oil emissions were calculated using 2021 U.S. EIA residential and commercial propane and fuel oil consumption data for the state of Washington. Data for 2022 were not available at the time of this analysis, so 2021 data were scaled to 2022 using trends in fuel consumption over the past several years. Statewide total residential fuel sales were allocated to counties using U.S. Census American Community Survey (ACS) home heating fuel data. Commercial propane and fuel oil emissions were calculated using WA commercial fuel consumption estimates downscaled by the number of commercial employees within each county as compared to total state employment. Employment data were collected from the WA Employment Security Department, which provides data on the number of employees across industries. Propane and fuel oil emissions were both calculated using U.S. EPA emissions factors.

Industrial Processes

Emissions from industrial processes in 2022 were obtained from EPA's Facility Level Information on Greenhouse Gases Tool (FLIGHT). Data was available for download by county for large facilities (>25,000 $MTCO_2e$) required to report annual data about GHG emissions to EPA as part of the Greenhouse Gas Reporting Program. To avoid double counting with other inventory sectors such as solid waste and buildings, EPA FLIGHT data from landfill facilities and metered facility energy consumption (e.g., electricity, natural gas) were excluded.

[9] U.S. Natural Gas Leakage Model User Guide | EDF

Solid Waste and Wastewater

Solid Waste Generation and Disposal

Emissions from the generation and disposal of landfilled solid waste were estimated by multiplying the tons of waste generated in 2022 by material-specific emissions factors derived from the U.S. EPA WARM v16 model. If locally specific solid waste tonnage data were not attainable, WA Department of Ecology "Solid Waste Disposal Annual Summary, Recoverable and Non-Recoverable Wastes generated in Washington State, 1994-2021" tonnage data were scaled by population to estimate county-level waste generation. Waste and compost generation data were obtained from local waste haulers that serve each county, as available. Waste composition data, when available, were obtained directly from County staff. If recent waste characterization studies were unavailable, regional data from the WA Statewide 2020 Waste Characterization Study were used. These characterization data were translated into U.S. EPA WARM categories to estimate emissions by material type, and EFs were applied to estimate methane emissions based on the landfill's unique characteristics and methane capture scenario. Emissions from transportation of waste to landfills were estimated using estimated travel distance (from Google Maps) and default EFs from the U.S. Community Protocol.

Wastewater Treatment Processes

Emissions from the treatment of wastewater produced by each county were estimated based on reported 2022 data from wastewater treatment plants. Emissions were estimated based on the type of treatment processes at a given plant—such as the use of anaerobic digestion or the use of nitrification/denitrification—as well as the population served. Based on the data reported by each facility, emissions were calculated using U.S. Community Protocol default equations. Where facilities were unable to directly provide the necessary data to estimate process emissions, the treatment plant service area was used to estimate population served and emissions were estimated using data from U.S. EPA compliance reports for that wastewater treatment facility.

Septic Systems

To determine emissions from septic systems, the estimated population served by septic systems was estimated using the 1) number of septic systems within each county and 2) average population per household in that county as of 2022 (as reported by the U.S. Census). Emissions were then estimated using default equations from the U.S. Community Protocol.

Refrigerants

Emissions from refrigerant use were obtained from U.S. EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2022. Total refrigerant emissions were downscaled to each county based on the U.S.-to-county population ratio.

Land Use

Agriculture

Agricultural emissions were calculated following the U.S. Community Protocol methodology. Agricultural emissions stem from livestock enteric fermentation, manure management, and soil. For these calculations, the U.S. EPA Inventory Annexes provided values for the following: livestock enteric fermentation emissions factors, distribution of waste management systems, typical animal mass, daily and annual volatile solid production rates, maximum CH_4 producing capacity per pound of manure, methane conversion factors based on manure management system, daily excreted nitrogen rates, nitrous oxide emissions factors, nitrogen lost through volatilization, and nitrogen lost through runoff and leaching. The U.S. Community Protocol Appendix G provided values for volatilization and runoff/leaching emissions factors. Data on the number of animals in

each county was sourced from the USDA 2022 Census of Agriculture. The U.S. EPA Inventory and Inventory Annexes provided nationwide values for direct and indirect N_2O emissions from soils, and the total U.S. cropland acreage was provided by the 2022 USDA Census of Agriculture. This national data was used to create an emissions factor for soil, which was applied to the acres of cropland in each county.

Tree Carbon Sequestration

ICLEI's Land Emissions and Removals Navigator (LEARN) tool was used to estimate GHG emissions from tree cover loss and carbon sequestration from tree cover gain and maintenance within county boundaries. The LEARN tool uses the National Land Cover Database (NLCD), produced by the United States Geological Survey (USGS) as the land cover database for this analysis. The LEARN tool requires a minimum of a 3-year analysis timeframe, which was divided by three to determine an average annual value. At the time of this analysis, the tool was available through 2019; therefore, a 2016-2019 timeframe was analyzed. Default factors used to calculate emissions for the "Trees Outside Forests" category are based on data for Seattle, Washington (the tool allows for customization to major metropolitan areas; the only available Washington option is for Seattle). More information regarding this methodology can be found in Appendix D: Tree Canopy GHG Emissions & Sequestration Summary Report.

Approach and Data Limitations

While the GHG inventories sought to include the most accurate, locally-specific data available, in some cases data availability was limited and scaling or approximations were necessary. Notable limitations in the data and resulting approaches are summarized below.

Transportation

On-Road

- No notable limitations of approach or data sources.

Off-Road

- No notable limitations of approach or data sources.

Public Transit

- No notable limitations of approach or data sources.

Aviation

- No data received for Concrete Municipal Airport.
- Allocated emissions from Seattle-Tacoma International Airport by population using passenger survey data.

Marine

- National Emissions Inventory data were used for this analysis, which was last updated in 2020.

Rail

- National Emissions Inventory data were used for this analysis, which was last updated in 2020.

Building Energy

Electricity

- No notable limitations of approach or data sources.

Natural Gas

- No notable limitations of approach or data sources.

Propane & Fuel Oil

- At the time of the analysis, 2022 EIA data were unavailable; 2021 data were used as a proxy, forecasting to 2022 based on past trends.

Industrial Processes

- Emissions from U.S. EPA FLIGHT reporting were used to avoid potential double counting, due to lack of data granularity within WA Department of Ecology reporting.

Solid Waste and Wastewater

Solid Waste Generation and Disposal

- Landfill: Data from the City of Anacortes were not split between residential and commercial, so the WA state average breakdown by sector was applied as a proxy.
- Compost: No notable limitations of approach or data sources.

Wastewater Treatment Processes

- No notable limitations of approach or data sources.

Septic Systems

- No notable limitations of approach or data sources.

Refrigerants

- No notable limitations of approach or data sources.

Land Use

Agriculture

- No notable limitations of approach or data sources.

Tree Carbon Sequestration

- The most recent year of data available within the LEARN tool at the time of this analysis was 2019, so the tree cover analysis was performed using 2016-2019 to satisfy the tool's three-year analysis time period requirement. The National Land Cover Database (NLCD) used for the LEARN tool's analysis is updated approximately every 2-3 years. Additional information regarding emissions from tree cover loss and carbon sequestration in Skagit County is provided in Appendix D.

Sensitivity to Local Conditions

Not all inventory values are based on locally derived data. Table 7 below summarizes some of the limitations and sensitivities of data used in the inventory.

TABLE 7. SUMMARY OF DATA SENSITIVITY TO LOCAL CONDITIONS.

Sector	Values are sensitive to local conditions	Values are sensitive to local conditions, with some exceptions	Values are based on scaled regional/state data	Values are based on scaled national data
Transportation				
On-road		✓		
Off-road		✓		
Public transit		✓		
Aviation		✓		
Marine & rail		✓		
Built Environment				
Electricity	✓			
Natural gas	✓			
Fuel oil			✓	
Propane			✓	
Industrial processes	✓			
Solid Waste and Wastewater				
Solid waste generation & disposal		✓		
Wastewater treatment processes	✓			
Refrigerants				
Refrigerants				✓
Land Use				
Agriculture		✓		
Tree loss	✓			

Appendix B. Emissions Forecast & Scenario Analysis Methodology

Adjusted Business-As-Usual Assumptions

The adjusted business-as-usual (ABAU) scenario included consideration of the following federal, state, and regional policies:

- Washington State Energy Code (SB 5854)
- Washington Clean Buildings Act (HB 1257)
- Federal Vehicle Regulations (CAFE)
- WA Clean Fuel Standard (HB 1091)
- WA Internal Combustion Engine Ban (SB 5974)
- WA Hydrofluorocarbon Policies (HB 1112 & HB 1050)
- WA Clean Energy Transformation Act (CETA)
- WA Climate Commitment Act (E2SSB 5126)

Additional information regarding policy interpretation and assumptions are provided below.

WA Energy Code (SB 5854)

Interpretation: SB 5854 requires residential and nonresidential construction permitted under the 2031 state energy code to achieve a 70% reduction in annual net energy consumption (compared to a 2006 baseline). State energy codes will be adopted from 2013-2031 to incrementally move towards achieving the 70% reduction by 2031.

Modeling Assumptions: New construction in 2031 and beyond will consume 70% less energy than the 2006 baseline. Scaled 2022 data to 2006 to use a 2006 baseline for this policy analysis. Assumed this baseline applies to all jurisdictions. Using 2022 energy consumption rates, modeled a straight-line reduction in energy consumption rate from 2022 to 2031 to achieve the 70% reduction from baseline (in new buildings only). Assume that any additional energy consumption under BAU compared to 2022 is from new buildings. All new commercial buildings must use electric heat pumps for space heating and electric water heating for 50% of water (reflects updates to the 2021 WA State Energy Code).

- Assume commercial water heating accounts for 9% of building energy use; assume space heating accounts for 23% of building energy use (total = 32%; Source: EIA 2015).
- Assume 75% of current commercial buildings use fossil fuel space/water heating.

WA Clean Buildings Act (HB 1257)

Interpretation: Requires all new and existing commercial buildings over 50,000 square feet to reduce their energy use intensity by 15%, compared to the 2009–2018 average.

- Buildings greater than 220,000 square feet must comply by June 1, 2026
- Buildings greater than 90,000 square feet must comply by June 1, 2027
- Buildings greater than 50,000 square feet must comply by June 1, 2028

Modeling Assumptions: Using 2022 county level commercial energy consumption data, calculated energy consumed per sq ft of commercial building space to arrive at average energy use intensity (EUI: energy

consumed per sq ft). Scaled 2022 data to 2019 as a proxy for 2009-2018 baseline. Modeled a straight-line reduction in energy use intensity (up to 15%) for Bins 1–3 below for 2023 through respective compliance dates.

- Bin 1: >220K sq ft
- Bin 2: > 90K sq ft
- Bin 3: > 50K sq ft
- Bin 4: 50K sq ft and under (rule does not apply)

Federal Vehicle Regulations (CAFE)

Interpretation: Corporate Average Fuel Economy (CAFE) standards are regulated by the DOT and supported by the EPA, calculates average fuel economy levels for manufacturers and sets related GHG standards. Passenger cars and light trucks require an industry-wide fleet average of approximately 49 mpg for passenger cars and light trucks in model year 2026, increasing fuel efficiency 8% annually for model years 2024–2025 and 10% annually for model year 2026. This will also increase the estimated fleetwide average by nearly 10 miles per gallon for model year 2026, relative to model year 2021.

Modeling Assumptions: Based on PSRC Vision 2050 modeling, scaling 2022 data to 2018 for these assumptions, assumed the following changes in vehicle emissions intensity (g CO_2e/mile):

- Light duty vehicles: 33% reduction from 2018 to 2050.
- Heavy duty vehicles: 26% reduction from 2018 to 2050.

WA Clean Fuel Standard (HB 1091)

Interpretation: The Clean Fuel Standard requires a 20% reduction in the carbon intensity of transportation fuels by 2038, compared to a 2017 baseline level. Reductions in carbon intensity may be achieved through cleaner fuels or by purchasing clean fuel credits from cleaner producers such as those providing electricity as fuel. Boats, trains, aircraft, and military vehicles & equipment are excluded.

Modeling Assumptions: Model assumes the 2022 transportation fuel emissions factors are applicable for 2017–2023 (2017 is policy baseline year). Overall, policy calls for 20% reduction in carbon intensity of transportation fuels by 2038.

EV/fuel contributions: Since there are concerns with WA's short-term ability to scale up low carbon fuels, for 2030 the split of clean fuel/EV is closer to 35%/65%, compared to 50%/50% by 2038.

Therefore, compared to baseline, we modeled the following for fuel carbon intensities:

- 3.5% reduction in per-gallon gasoline & diesel vehicle (passenger, heavy duty, transit) emissions from cleaner fuels (NOT EVs) by 2030.
- 10% reduction in per-gallon gasoline & diesel vehicle (passenger, heavy duty, transit) emissions from cleaner fuels (NOT EVs) by 2040.
- Maintain 10% reduction levels to 2050.

Given ICE ban, compared to baseline, we will model the following for EV use:

- 6.5% transition of gasoline/diesel passenger vehicles to EV by 2030.
- 10% transition of gasoline/diesel passenger vehicles to EV by 2040.
- Maintain 10% reduction levels to 2050.

WA Internal Combustion Engine Ban (SB 5974)

Interpretation: Establishes a target that, "all publicly owned and privately owned passenger and light duty vehicles of model year 2030 or later that are sold, purchased, or registered in Washington state be electric vehicles."

Modeling Assumptions: As part of Move Ahead Washington program, WA would ban sale of gasoline/diesel ICE passenger vehicles starting in 2030. For ICE ban, assuming a 15-year vehicle turnover rate, with the following proportion of new sales EV (a conservative estimate given that the ICE ban is currently a goal and lacks a clear accountability mechanism):

- 25% by 2026
- 65% by 2030
- 100% by 2035
- Maintained by 100% thereafter

WA Hydrofluorocarbon Policies (HB 1112 & HB 1050)

Interpretation: HB 1112 requires that new equipment be manufactured without HFCs or using refrigerants with a lower global warming potential (GWP) in a phased approach through 2024. Equipment covered by the law are being phased in each year, starting with 2020, and penalties apply for non-compliance. In 2021, HB 1050 applied Clean Air Act provisions for ozone depleting substances to HFCs and extended restrictions on higher GWP HFCs to new equipment such as ice rinks and stationary air conditioning.

Modeling Assumptions: Aligned model assumptions with state modeling, scaling 2022 data to 2019 to align with modeling.

WA Clean Energy Transformation Act (CETA)

Interpretation: CETA applies to all electric utilities serving retail customers in Washington and sets specific milestones: By 2025, utilities must eliminate coal-fired electricity from their state portfolios; by 2030, utilities must be greenhouse gas neutral, with flexibility to use limited amounts of electricity from natural gas if it is offset by other actions; by 2045, utilities must supply Washington customers with electricity that is 100% renewable or non-emitting, with no provision for offsets.

Modeling Assumptions: Electricity will be GHG neutral (electricity emissions factor equals zero) in 2030 and beyond with a straight-line emissions factor reduction from 2022 to 2030. For utilities that rely on coal for electricity generation, additionally model straight-line reduction to 0% coal by December 31, 2025. Assume coal is replaced by renewables. This action impacts electricity emissions factors (reduces emissions per unit of energy consumed).

WA Climate Commitment Act (E2SSB 5126)

Interpretation: The Climate Commitment Act (known as Cap and Invest) places an economy-wide cap on carbon to meet state GHG reduction targets and remain consistent with best available science, while minimizing the use of offsets to meet those targets. Every polluting facility covered under the program needs to hold one allowance for every ton of greenhouse gas that it emits. Based on an environmental justice review, 35–40% of investments must be made in overburdened communities to reduce health disparities and create environmental benefits, with an additional 10% allocated for tribal programs and projects.

Modeling Assumptions: State estimates that CCA will account for 26.2 million $MTCO_2e$ in statewide reductions by 2030. 2018 total emissions = 99.57 million $MTCO_2e$. Scaled 2022 data to 2018 to obtain a proxy baseline.

Key regulated CCA sectors relevant to the geographic inventory include:

- Natural gas (however, this sector will receive directly allocated no-cost allowances).
- Industrial processes (however, Emissions-Intensive Trade-Exposed facilities will receive directly allocated no-cost allowances).
- Transportation fuels (however, already covered to some extent by Clean Fuels Standard).

Therefore, assume the following for CCA:

- Assume CETA addresses emissions reductions in electricity sector.
- Apply -10% emissions factor adjustment to natural gas (assuming increase in hydrogen or RNG in fuel mix) to 2030.
- Apply -15% emissions reduction estimate (consider applying a reduction factor) to industrial process emissions to 2030.
- Apply -23.5% fuel emissions factor reduction estimate (consider applying a reduction factor) to transportation emissions to 2030 and -30% to 2040 (includes reductions from CFS).

Appendix C: GHG Emission Reduction Policies

This appendix contains examples of greenhouse gas emission reduction policies that could be included within Skagit County's Climate Element. These draft policies are drawn from the Department of Commerce's Climate Menu of Measures.[10]

How to read these policies:

The list of model goals and policies (measures) below aligns with recommended GHG-reduction strategies from the Emissions Forecast and Scenario Analysis Tool. Local governments may choose to use these optional measures as written, adapt them to fit local context, or supplement them. Please access details related to listed measures using the factsheet links. These factsheets provide information on the HB1181 requirements satisfied by the measures, as well as information about the measures' co-benefits, equity and justice potential, and related policies that can be used to inform policy development and evaluation for adoption.

Built Environment

Strategy: Electrify new buildings.

33% of Skagit County's 2022 communitywide emissions

Goal: Ensure that buildings use renewable energy, conservation, and efficiency technologies and practices to reduce greenhouse gas emissions. Click to open factsheet

- Require additional net-zero greenhouse gas emission features of all new residential and commercial structures. Click to open factsheet
- Maximize renewable energy sources for the supply of electricity and heat to new and existing buildings. Click to open factsheet
- Require all publicly owned buildings to be powered completely by renewable energy by **[insert target date]**. Click to open factsheet
- Incentivize green building certification to improve energy and environmental performance. Click to open factsheet.

Goal: Maximize solar access of site design, where practicable, for new solar-ready residential and commercial buildings. Click to open factsheet.

- Direct solar development onto lands identified as having “least conflict” through the Least-Conflict Solar Siting process on the Columbia Plateau. Click to open factsheet.
- Require solar panels on buildings with large rooftops, as well as within or over parking areas. Click to open factsheet.

[10] Climate Menu of Measures

Goal: Ensure that the local economy is resilient to climate disruptions and fosters business opportunities associated with climate mitigation and adaptation. Click to open factsheet.

- Facilitate the development of community-owned, small-scale renewable energy generation projects. Click to open factsheet.

Strategy: Reduce energy use in existing buildings.

40% of Skagit County's 2022 communitywide emissions

Goal: Foster higher-intensity land uses in mixed-use urban villages and transit corridors. Click to open factsheet.

- Adjust single-family home impact fees and system development charges so those homes with larger impacts on utilities pay more. Click to open factsheet.

Goal: Ensure that buildings use renewable energy, conservation, and efficiency technologies and practices to reduce greenhouse gas emissions. Click to open factsheet.

- Retrofit buildings for energy efficiency. Click to open factsheet.
- Incentivize green building certification to improve energy and environmental performance. Click to open factsheet.

Goal: Prioritize the adaptive reuse of buildings, recognizing the emission-reduction benefits of retaining existing buildings. Click to open factsheet.

- Prioritize the preservation and weatherization of housing in overburdened communities, particularly at higher densities, to reduce emissions and increase resilience. Click to open factsheet.

Strategy: Electrify existing buildings.

33% of Skagit County's 2022 communitywide emissions

Goal: Ensure that buildings use renewable energy, conservation, and efficiency technologies and practices to reduce greenhouse gas emissions. Click to open factsheet.

- Maximize renewable energy sources for the supply of electricity and heat to new and existing buildings. Click to open factsheet.
- Develop local microgrid solar and battery storage facilities in low-impact sites. Click to open factsheet.
- Phase out natural gas use in existing publicly owned facilities by **[insert target date]** and retrofit with electric heat pumps. Click to open factsheet.
- Require all publicly owned buildings to be powered completely by renewable energy by **[insert target date]**. Click to open factsheet.
- Incentivize green building certification to improve energy and environmental performance. Click to open factsheet.

Goal: Ensure that energy infrastructure — including generation and transmission — is able to accommodate renewable energy opportunities and to withstand and recover quickly from the impacts of extreme weather and other natural hazards worsened by climate change Click to open factsheet.

- Install distributed renewable energy generation and battery infrastructure at public facilities to store renewable electricity generated on site and provide emergency power that ensures continuity of operations. Click to open factsheet.

Goal: Ensure that the local economy is resilient to climate disruptions and fosters business opportunities associated with climate mitigation and adaptation. Click to open factsheet.

- Facilitate the development of community-owned, small-scale renewable energy generation projects. Click to open factsheet.

Strategy: Increase local solar.

40% of Skagit County's 2022 communitywide emissions

Goal: Ensure that buildings use renewable energy, conservation, and efficiency technologies and practices to reduce greenhouse gas emissions. Click to open factsheet.

- Maximize renewable energy sources for the supply of electricity and heat to new and existing buildings. Click to open factsheet.
- Develop local microgrid solar and battery storage facilities in low-impact sites. Click to open factsheet
- Require all publicly owned buildings to be powered completely by renewable energy by **[insert target date]**. Click to open factsheet.

Goal: Maximize solar access of site design, where practicable, for new solar-ready residential and commercial buildings. Click to open factsheet.

- Direct solar development onto lands identified as having “least conflict” through the Least-Conflict Solar Siting process on the Columbia Plateau. Click to open factsheet.
- Require solar panels on buildings with large rooftops, as well as within or over parking areas. Click to open factsheet.

Goal: Ensure that energy infrastructure — including generation and transmission — is able to accommodate renewable energy opportunities and to withstand and recover quickly from the impacts of extreme weather and other natural hazards worsened by climate change. Click to open factsheet.

- Install distributed renewable energy generation and battery infrastructure at public facilities to store renewable electricity generated on site and provide emergency power that ensures continuity of operations. Click to open factsheet.

Goal: Ensure that the local economy is resilient to climate disruptions and fosters business opportunities associated with climate mitigation and adaptation. Click to open factsheet.

- Facilitate the development of community-owned, small-scale renewable energy generation projects. Click to open factsheet.

Strategy: Reduce industrial emissions.

20% of Skagit County's 2022 communitywide emissions

Goal: Establish land use patterns that increase the resilience of the built environment, ecosystems, and communities to climate change. Click to open factsheet.

- Prohibit the expansion of polluting industries in overburdened communities via local zoning and development regulations. Click to open factsheet.

Transportation & Other Mobile Sources

Strategy: Reduce passenger vehicle travel.

8% of Skagit County's 2022 communitywide emissions

Goal: Convert public fleets to zero-emission vehicles by [insert target date] and develop supporting infrastructure and programs (e.g., charging stations and dedicated lanes for electric cars and buses). Click to open factsheet.

- Prioritize and promote public transit expansion and use through coordination of land use and transportation planning. Click to open factsheet.
- Implement multimodal transportation planning to reduce single-occupancy vehicle dependence and greenhouse gas emissions. Click to open factsheet.

Goal: Reduce vehicle miles traveled to achieve greenhouse gas reduction goals. Click to open factsheet.

- Implement travel demand management (TDM) programs and strategies. Click to open factsheet.
- Increase multimodal capacity in coordination with the location of higher-density housing and commercial centers. Click to open factsheet.
- Create a safe, well-connected, and attractive bicycle and pedestrian transportation network to encourage active transportation. Click to open factsheet.
- Prioritize, develop, and maintain mobility hubs in transportation-efficient locations — especially in overburdened communities experiencing a scarcity of transportation alternatives. Click to open factsheet.
- Provide vehicle licensing fee subsidies to low-income drivers who present proof of transit pass use over the previous year to encourage mode shift. Click to open factsheet.
- Integrate "Complete Streets" principles into the roadway designs of residential developments. Click to open factsheet.
- Facilitate the siting of complimentary destinations such as commercial-employment centers, schools or education centers, and residential developments. Click to open factsheet.

- Establish micromobility centers wherever plausible (e.g., hubs for shared bikes and scooters). Click to open factsheet.
- Address active transportation and other multimodal types of transportation options in concurrency programs – both in assessment and mitigation. Click to open factsheet.
- Prioritize permitting for transit-oriented development (TOD) proposals. Click to open factsheet.
- Improve transit speed, frequency, coverage, and reliability. Click to open factsheet.
- Establish a green belt of parks to support connectivity and non-motorized travel between houses, schools, and businesses across a community. Click to open factsheet.

Goal: Use demand-based methods to reflect the actual cost of existing parking. Click to open factsheet.

- Eliminate parking minimum requirements, and establish parking maximums. Click to open factsheet.
- Reduce parking requirements where there are multimodal options available. Click to open factsheet.

Goal: Foster higher-intensity land uses in mixed-use urban villages and transit corridors. Click to open factsheet.

- Ensure public transit stops and stations are located at or near (e.g., within 600 ft.) dense commercial and employment areas. Click to open factsheet.
- Limit parking spaces near transit-oriented development to encourage use of transit and decrease single-occupancy vehicle travel. Click to open factsheet.
- Prioritize infill development through zoning and permitting process. Click to open factsheet.
- Establish form-based codes where appropriate to better integrate higher-density development. Click to open factsheet.
- Increase residential densities near (within 600 feet) high-use transit stations and centers. Click to open factsheet.

Goal: Increase housing diversity and supply within urban growth areas to reduce greenhouse gas emissions and support environmental justice. Click to open factsheet.

- Increase or remove density limits in areas well-served by transit and other services within the urban growth area. Click to open factsheet.
- Allow middle housing types, such as duplexes, triplexes, and ADUs, on all residential lots. Click to open factsheet.
- Amend SEPA exemptions to allow residential infill development projects outright. Click to open factsheet.
- Establish minimum residential densities within urban growth areas. Click to open factsheet.
- Plan for and invest in capital facilities to accommodate infill development. Click to open factsheet.
- Allow or encourage micro-housing units. Click to open factsheet.
- Develop and implement inclusionary zoning to support greater income diversity in housing types. Click to open factsheet.

Goal: Establish land use patterns that increase the resilience of the built environment, ecosystems, and communities to climate change. Click to open factsheet.

- Implement complimentary, mixed land uses versus traditional zoning, such as locating business districts, parks and schools in neighborhoods to promote cycling and walking and reduce driving. Click to open factsheet.

Strategy: Electrify passenger vehicles.

8% of Skagit County's 2022 communitywide emissions

Goal: Convert public fleets to zero-emission vehicles by [insert target date] and develop supporting infrastructure and programs (e.g., charging stations and dedicated lanes for electric cars and buses). Click to open factsheet.

- Provide low-income residents subsidies to purchase or lease electric vehicles and bicycles. Click to open factsheet.

Goal: Expand electric vehicle infrastructure. Click to open factsheet.

- Require electric vehicle charging infrastructure in all new and retrofitted buildings. Click to open factsheet.

Goal: Improve the efficiency of transportation system to reduce greenhouse gas emissions. Click to open factsheet.

- Develop dedicated electric-vehicle (EV) lanes on local roads and highways. Click to open factsheet.

Strategy: Electrify freight/service vehicles.

3% of Skagit County's 2022 communitywide emissions

Goal: Expand electric vehicle infrastructure. Click to open factsheet.

- Require electric vehicle charging infrastructure in all new and retrofitted buildings. Click to open factsheet.

Goal: Improve the efficiency of transportation system to reduce greenhouse gas emissions. Click to open factsheet.

- Develop dedicated electric-vehicle (EV) lanes on local roads and highways. Click to open factsheet.

Strategy: Decarbonize off-road equipment.

1% of Skagit County's 2022 communitywide emissions

Goal: Reduce GHG emissions in rural areas of the county. Click to open factsheet.

- Phase out the use of use of gas-powered landscaping equipment. Click to open factsheet.

Strategy: Divert construction and demolition (C&D) materials.

<1% of Skagit County's 2022 communitywide emissions

Goal: Ensure that the community is able to reduce, reuse, and recycle waste materials sustainably. Click to open factsheet.

- Develop a program that will enable recycling of all construction and demolition debris by **[insert target date]**. Click to open factsheet.
- Recycle all paper, food, textile, and metal waste by **[insert target date]**. Click to open factsheet.
- Minimize carbon emission impacts of building demolition with best available recycling strategies. Click to open factsheet.
- Develop a local pollution surcharge for large producers of air pollutants, wastewater, and solid waste. Click to open factsheet.
- Require methane capture processes from wastewater treatment facilities. Click to open factsheet.

Goal: Develop targeted campaigns for recycling material with highest GHG reduction impact (e.g., paper, metal, food waste). Click to open factsheet.

- Incentivize recycling of construction and demolition debris. Click to open factsheet.
- Create and sustain a business technical assistance program to increase recycling and reduce waste. Click to open factsheet.
- Use recycled materials in the construction of transportation and other infrastructure facilities. Click to open factsheet.

Goal: Ensure that the local economy is resilient to climate disruptions and fosters business opportunities associated with climate mitigation and adaptation. Click to open factsheet.

- Promote local industrial development to support a circular economy that increases demand for reused and recycled materials and reduces demand for new raw materials and their embodied carbon emissions. Click to open factsheet.

Strategy: Divert other recyclable and compostable materials.

2% of Skagit County's 2022 communitywide emissions

Goal: Develop targeted campaigns for recycling material with highest GHG reduction impact (e.g., paper, metal, food waste). Click to open factsheet.

- Create and sustain a business technical assistance program to increase recycling and reduce waste. Click to open factsheet.

Goal: Ensure that the local economy is resilient to climate disruptions and fosters business opportunities associated with climate mitigation and adaptation. Click to open factsheet.

- Promote local industrial development to support a circular economy that increases demand for reused and recycled materials and reduces demand for new raw materials and their embodied carbon emissions. Click to open factsheet.

Goal: Ensure that the community is able to reduce, reuse, and recycle waste materials sustainably. Click to open factsheet.

- Develop a program that will enable recycling of all construction and demolition debris by **[insert target date]**. Click to open factsheet.
- Increase staff and facility capacity for composting programs to divert **[insert percentage]** of community organic waste from entering landfills. Click to open factsheet.
- Reduce municipal solid waste disposed of in landfills by **[insert percentage]** by **[insert target date]**. Click to open factsheet.
- Recycle all paper, food, textile, and metal waste by **[insert target date]**. Click to open factsheet.
- Develop a local pollution surcharge for large producers of air pollutants, wastewater, and solid waste. Click to open factsheet.

Land Use

Strategy: Improve soil management.

1% of Skagit County's 2022 communitywide emissions

Goal: Support long-term local and regional agriculture that sequesters carbon. Click to open factsheet.

- Facilitate and enable regenerative agriculture and regenerative ocean farming where practicable. Click to open factsheet.
- Designate a percentage of agricultural land that shall be maintained and managed for sequestering carbon and curtailing vehicle miles traveled. Click to open factsheet.

Goal: Reduce GHG emissions in rural areas of the county. Click to open factsheet.

- Require methane collection on dairy farms and other agricultural operations that utilize waste ponds. Click to open factsheet.
- Promote the sale and use of agricultural supplies, pesticides, fertilizers, and fuels that are not derived from fossil fuels. Click to open factsheet.

Strategy: Reduce tree loss.

20% of Skagit County's 2022 communitywide emissions

Goal: Increase tree canopy cover to boost carbon sequestration, reduce heat islands, and improve air quality, prioritizing overburdened communities. Click to open factsheet.

- Improve and expand urban forest management to maximize or conserve carbon storage. Click to open factsheet.
- Maximize tree canopy coverage in surface parking lots. Click to open factsheet.
- Maintain small forestland ownership and publicly owned forest properties with carbon sequestration as the goal. Click to open factsheet.

Strategy: Protect land carbon sinks (including agricultural lands, wetlands, and grasslands).

2022 annual sequestration amount was equivalent to 70% of Skagit County's 2022 communitywide emissions.

Goal: Support long-term local and regional agriculture that sequesters carbon. Click to open factsheet.

- Maximize conservation and carbon sequestration through alignment of Conservation Futures, Transfer of Development Rights (TDR), and Open Space Program strategies with the Climate Commitment Act. Click to open factsheet.

Goal: Increase tree canopy cover to boost carbon sequestration, reduce heat islands, and improve air quality, prioritizing overburdened communities. Click to open factsheet.

- Improve and expand urban forest management to maximize or conserve carbon storage. Click to open factsheet.
- Maximize tree canopy coverage in surface parking lots. Click to open factsheet.
- Maintain and manage natural lands (forests, grasslands, wetlands) to maintain or increase their carbon concentrations and avoid conversion of carbon-rich ecosystems. Click to open factsheet.
- Maintain small forestland ownership and publicly owned forest properties with carbon sequestration as the goal. Click to open factsheet.

Goal: Protect and restore coastal ecosystems to increase the resilience of species, habitats, and communities to climate change. Click to open factsheet.

- Identify, protect, and restore submerged aquatic vegetation (eelgrass, kelp, etc.) that provides aquatic habitat, "blue" carbon storage, and other ecosystem services. Click to open factsheet.

Goal: Preserve land for long-term agricultural use, recreation, open spaces, and other uses consistent with rural character. Click to open factsheet.

- Preserve land outside of the unincorporated UGA for long-term agricultural use, recreation, open spaces, forestry, mineral resources, and other uses consistent with rural character. Click to open factsheet.

- Require open space set-asides (such as parks) for new development. Click to open factsheet.

Appendix D: Tree Canopy GHG Emissions & Sequestration Summary Report

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Summary Report

GHG Inventory for Forests and Trees Outside Forests, 2016 to 2019

Skagit County, Washington

Summary

Forests and trees play a key role in mitigating climate change, yet they are often not included in local greenhouse gas (GHG) inventories or climate action plans. Skagit County, Washington has taken the first step towards understanding how local changes in land use and tree canopy have contributed to the county's net greenhouse gas profile. Unlike other sectors, land use (in this case, forests and trees) not only emit GHGs, they also remove CO2 from the atmosphere through photosynthesis, and play a critical role in regulating the planet's climate. The information contained in this summary report can be useful when designing climate actions that reduce GHG emissions and/or increase removals of GHGs from the atmosphere.

Key findings:

- Over the period 2016 to 2019, emissions from forests and trees were 1,242,022 t CO2e per year.

- Over the period 2016 to 2019, the Net GHG balance of forests and trees was -3,041,953 t CO2e per year.

- Roughly 69% of Skagit County's total land base of 455,973 hectares (1,126,733 acres) is forest. Many areas outside of forests are also covered by trees, including an average of nearly 13 percent tree canopy on lands outside of forest areas

- Over the same period, annual CO2 removals from forests and trees were -4,283,975 t CO2e per year. (Carbon removals are represented by negative values.)

- Total GHG emissions for Skagit County across all sectors could be reduced if additional forests/trees were added to its land base, and/or if losses of trees were reduced further.

Table 1. Skagit county's GHG fluxes from forests and trees for inventory period 2016 – 2019, all values reported in t CO2e per year

	Removals(t CO2e/yr)	Emissions(t CO2e/yr)
Undisturbed Forest	-3,910,114	
Forest Disturbances		343,134
Non-Forest to Forest	-187,525	
Forest to Settlement		2,794
Forest to Grassland		593,346
Forest to other non-forest lands		29,899
Trees outside of forests	-186,336	272,851
Harvested Wood Products	0	
TOTAL	-4,283,975	1,242,022
Net GHG balance	**-3,041,953**	

Data Inputs

Data used as inputs into the GHG emission and removal calculations are described below.

Land and Forest Cover

GHG inventories for lands are reported in six “land use” categories which were defined by data on land cover—forest land, grassland, cropland, wetland, settlement and other land (barren, snow, ice). Skagit County’s total land base is approximately 455,973 hectares (1,126,733 acres), with nearly 6% Settlement (i.e. developed areas of varying intensity), around 68.7% forest, 12.2% Grassland (which includes hay/pasture, shrub/scrub and other herbaceous cover), 4.8% cropland, 2.7% wetland and 5.5% other land.

Figure 1. Land cover in Skagit from the National Land Cover Database, 2019

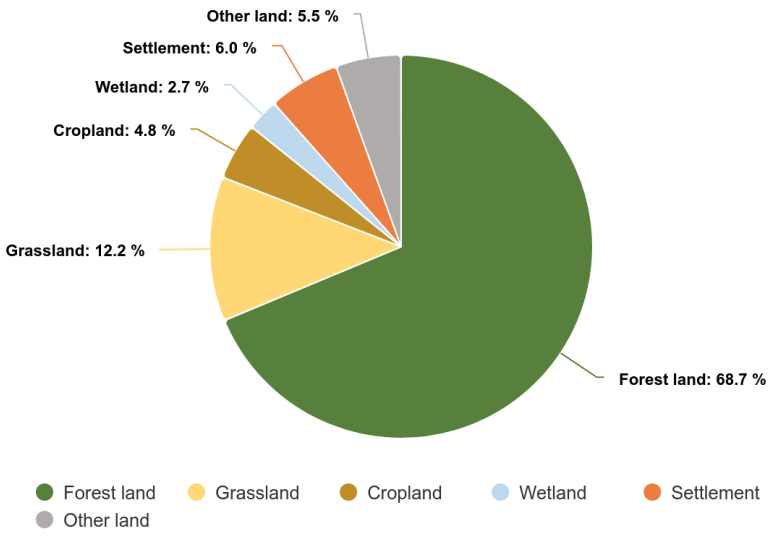
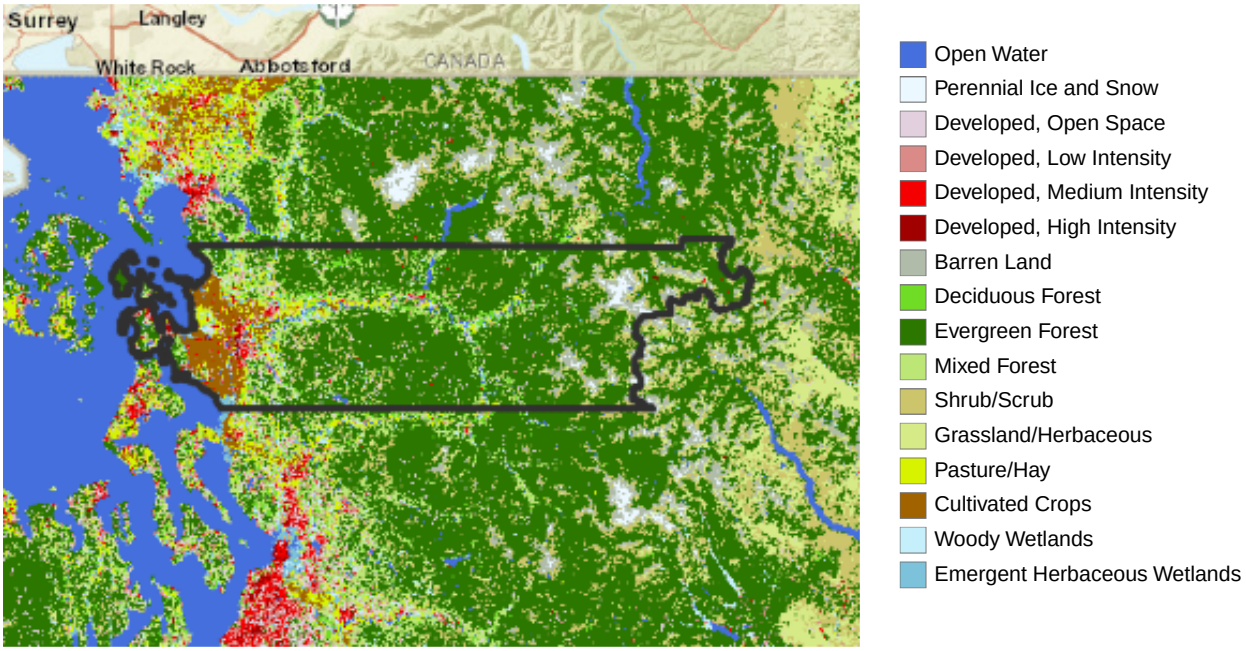


Figure 2. Land cover in Skagit from the National Land Cover Database, 2019



Forest Cover Change

Generating GHG estimates requires data not just on areas of land use, but also data on how land use has changed over time. Between 2016 and 2019, the county lost around 4,088 hectares (10,102 acres) of forest land, largely conversion to Grassland. Over the same period, the county gained around 13,838 hectares (34,193 acres) of forest land, largely from Grassland.

Figure 3. Loss of forest to other land use types between 2016 and 2019 (ha)

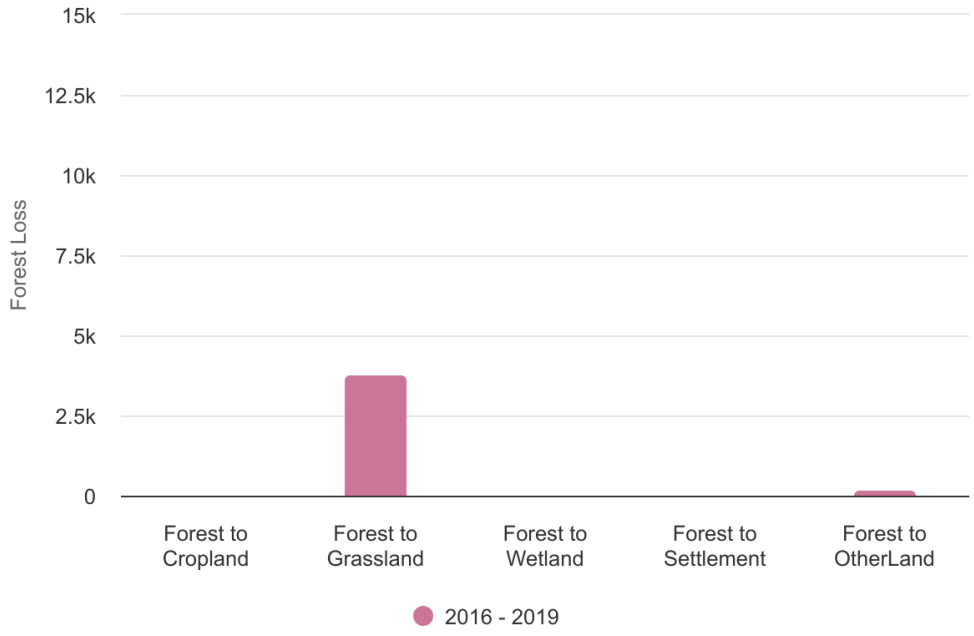
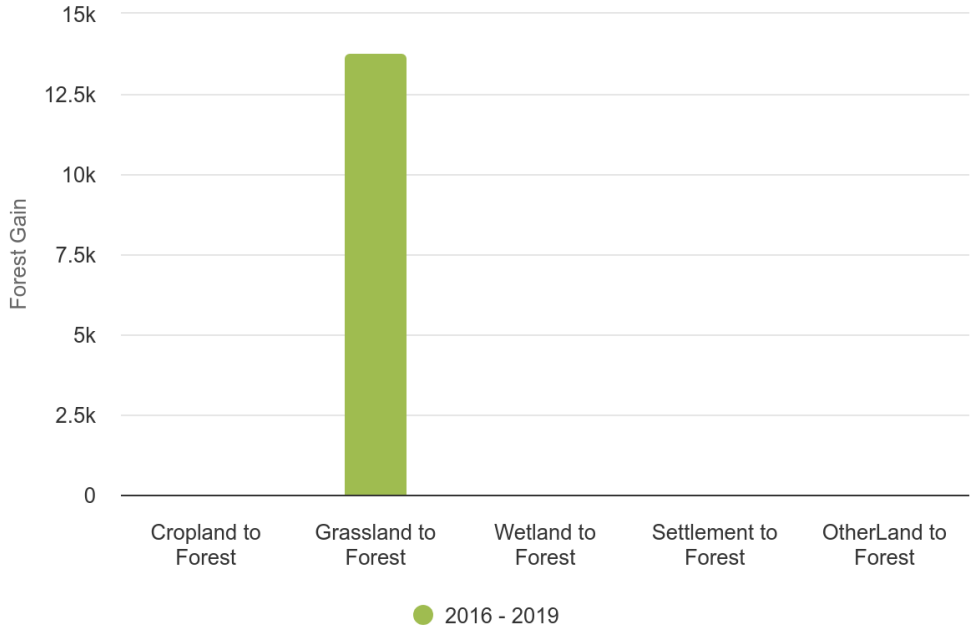


Figure 4. Gain of forest from other land use types between 2016 and 2019 (ha)



Forest Disturbances

Over the inventory period 2016 to 2019, forest disturbance from insects was the most significant in Skagit County, affecting 15031.1 hectares (37142.6 acres), followed by harvests, which affected 2558.5 hectares (6322.2 acres) and fires, which affected 0 hectares (0.0 acres).

Trees Outside Forests

Figure 5 shows tree canopy captured by the NLCD tree canopy data. (Note that some areas with high tree canopy in Figure 5 overlap with the NLCD forest class shown in Figure 2.)

This data is only available for the years 2011 and 2016. Over this time period, Skagit County had an average of 18,005 hectares (44,490 acres) of tree canopy outside forests. Between 2011 and 2016, 775 hectares per year of tree canopy were lost, for a total of 3,876 hectares (9,579 acres) of tree canopy loss over the 5 year period. Most of this loss occurred within the Grassland class.

Figure 5. Tree canopy 2016 (Source: National Land Cover Database)

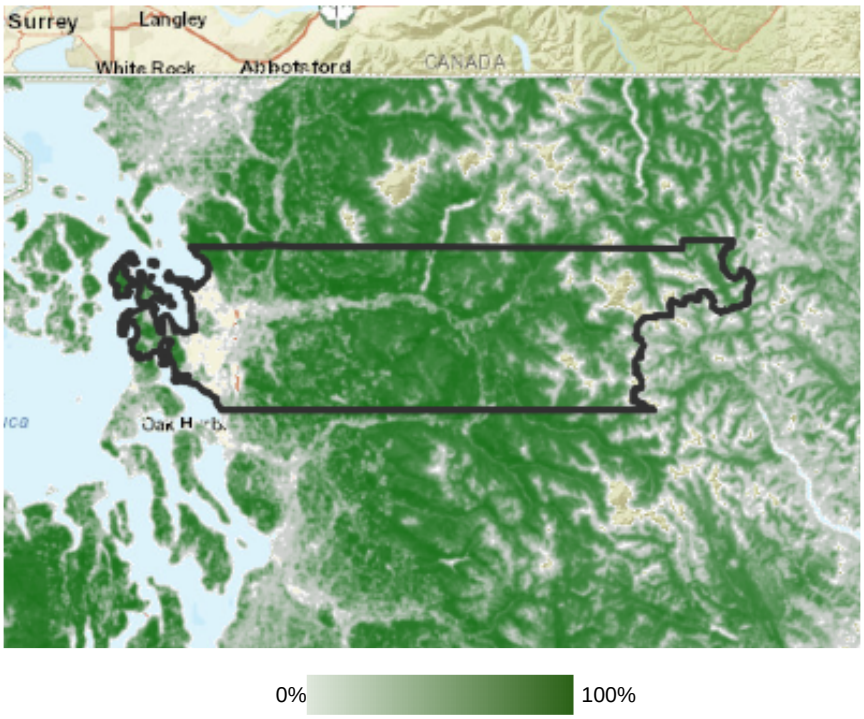


Figure 6: Average tree canopy (in hectares) and % tree canopy in different non-forest land use categories in Skagit County for the period 2011-2016. Note: bars relate to tree canopy area (left vertical-axis, hectares) and dots are the % tree cover per land use category (right vertical-axis). "Other" category not shown due to very low area.

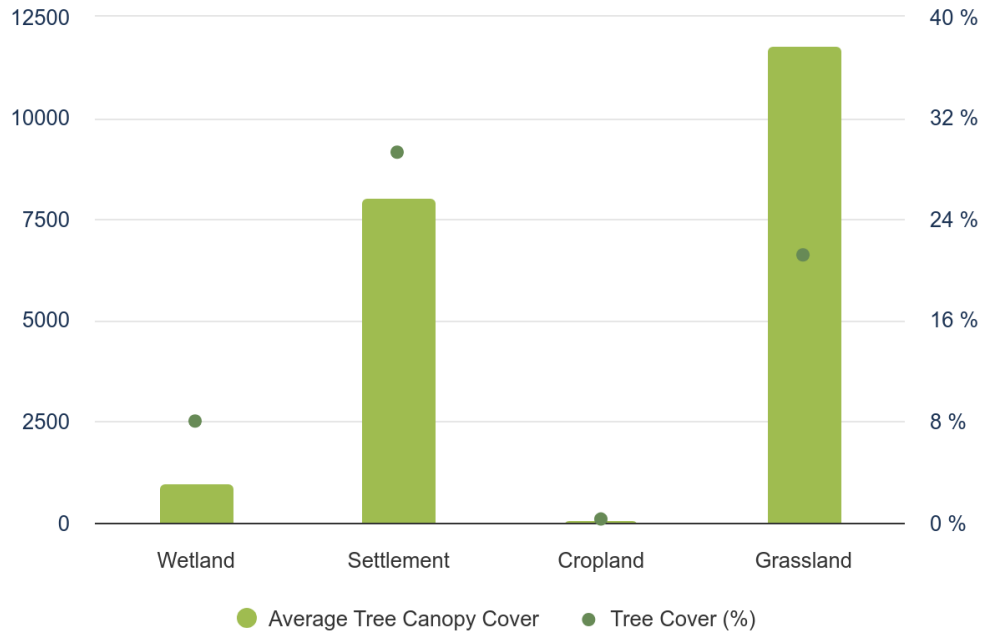
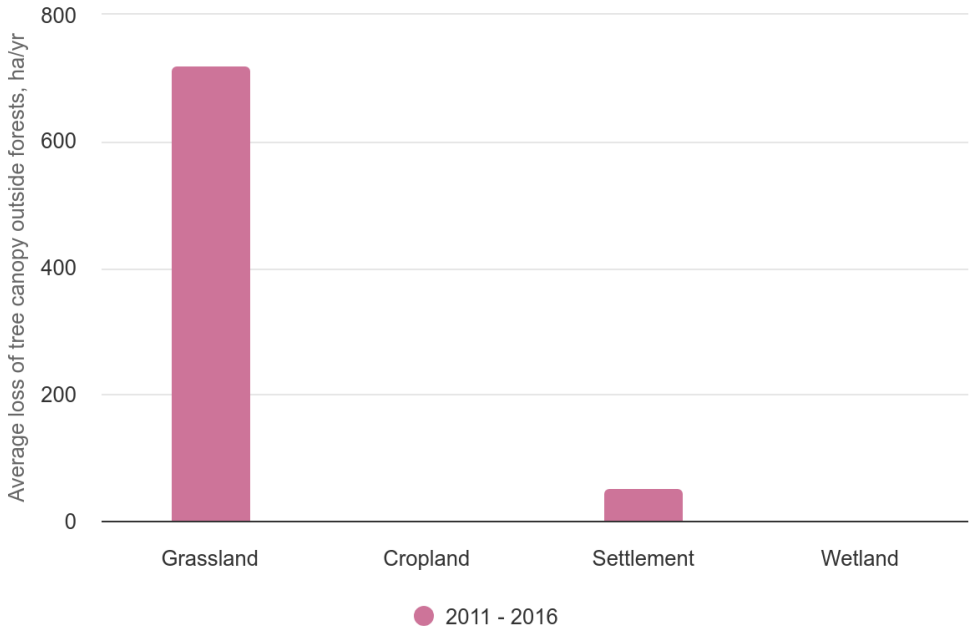


Figure 7: Average area of tree canopy loss in different non-forest land use categories in Skagit County over the period 2011 to 2016 (hectares per year). Note: other category not shown due to very low area.



Land Cover Change Matrix

Table 2. Full NLCD land cover change matrix for 2016 to 2019. All areas are in hectares.

2019: Top 2016: Left	Deciduous Forest	Evergreen Forest	Mixed Forest	Woody Wetlands	Cultivated Crops	Pasture/Hay	Grassland/Herbaceous	Shrub/Scrub	Open Water	Emergent Herbaceous Wetlands	Developed, Open Space	Developed, Low Intensity	Developed, Medium Intensity	Developed, High Intensity	Barren Land	Perennial Ice/Snow	Total
Deciduous Forest	13,754	0	0.1	0	0	4	114	6	9	0	2	3	3	0.2	3	0	13,898
Evergreen Forest	0	250,378	0.2	0	0.1	13	3,033	274	37	0	4	0.1	0.3	0	219	0	253,959
Mixed Forest	0	0.2	28,967	0.1	0	18	273	44	3	0.1	3	1	0.9	0	4	0	29,316
Woody Wetlands	0	0	0	6,352	2	0	0.2	0	7	6	0	0	0	0	0	0	6,367
Cultivated Crops	0	0	0	0.3	21,922	21	0	0	0.4	13	1	0.6	0.2	0.5	2	0	21,961
Pasture/Hay	0.7	2	3	2	57	14,655	0.6	0.5	6	0	2	2	2	0.7	3	0	14,737
Grassland/Herbaceous	0.1	16	3	0	0	43	7,940	5,304	9	0	0.4	0.5	0.3	0.9	407	0	13,724
Shrub/Scrub	365	12,677	739	0	0	2	64	23,722	7	0	0.4	0	0	0	387	0	37,964
Open Water	0	0.2	0	0	0	0	6	0.4	6,284	97	0.3	0	0	0	7	0	6,394
Emergent Herbaceous Wetlands	0	0	0	15	11	4	0.2	0	66	5,771	0	0	0	0	0	0	5,867
Developed, Open Space	0	0	0	0	0	0	0	0	0	0	12,468	23	62	8	0	0	12,560
Developed, Low Intensity	0	0	0	0	0	0	0	0	0	0	0	8,287	21	25	0	0	8,333
Developed, Medium Intensity	0	0	0	0	0	0	0	0	0	0	0	0	4,814	8	0	0	4,821
Developed, High Intensity	0	0	0	0	0	0	0	0	0	0	0	0	0	1,760	0	0	1,760
Barren Land	0.5	13	0.7	0	0	0	67	40	64	0.5	0	0	0	0	18,583	0	18,769
Perennial Ice/Snow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,510	5,510
Total	**14,120**	**263,086**	**29,714**	**6,369**	**21,992**	**14,759**	**11,497**	**29,393**	**6,491**	**5,887**	**12,482**	**8,317**	**4,904**	**1,803**	**19,617**	**5,510**	**0**

Table 3. Simplified land cover change matrix for 2016 to 2019.All areas are in hectares.

2019: Top 2016: Left	Forest Land	Cropland	Grassland	Wetland	Settlement	Other Land	Total
Forest Land	299,451	2	3,779	62	19	227	**303,540**
Cropland	0.3	21,922	21	13	2	2	**21,961**
Grassland	13,808	57	51,732	22	10	797	**66,426**
Wetland	15	11	10	12,217	0.3	7	**12,261**
Settlement	0	0	0	0	27,474	0	**27,474**
Other Land	14	0	107	64	0	24,093	**24,278**
Total	**313,289**	**21,992**	**55,649**	**12,378**	**27,505**	**25,127**	**0**

Emission and Removal Factors

A summary of the emission and removal factors used in the calculations is provided in Table 4.

	Emission Factor (t C/ha)	Removal Factor (t C/ha/yr)
Forest Change		
Deforestation		
To Cropland	42.33	
To Grassland	128.34	
To Settlement	123.17	
To Wetland	104.50	
To Other	78.99	
Reforestation (Non-Forest to Forest)		-3.69
Forest Remaining Forest		
Undisturbed		-3.78
Disturbed		
Fire	0	
Insect/Disease	-6.72	
Harvest/Other	149.10	
Trees Outside Forest		
Tree canopy loss	95.90	
Canopy maintained/gained		-2.82

Harvested Wood Products

Harvested wood products (HWP) temporarily store carbon from the forest ecosystem as the wood goes through a series of production processes and end-uses, with eventual disposal (and emission to the atmosphere). The delay represents a net benefit to the atmosphere. The period of storage varies from long-lived solid wood products that remain in use for long periods of time to products that are quickly disposed of in landfills.

In the web tool, the HWP Calculator tracks carbon in harvested wood through four different “fates,” from harvest to timber products to primary wood products to end-use to disposal, applying best estimates for product ratios and half-lives at each stage. Based on user inputs entered about annual harvest volumes in Skagit County, the change in the harvested wood pool over the inventory period 2016 to 2019 is estimated as 0 t CO2e per year.

Caveats

Information presented here represents a snapshot in time of the net GHG balance and many of the factors contributing to that balance. The estimates can help identify where policies may be designed to reduce net GHG emissions. This inventory currently uses a simplifying assumption that a loss of forest or trees results in immediate emissions to the atmosphere (rather than delayed emissions in the case of various use cases from long-term storage to shorter decay timelines if sent to landfills). In general, it is important to consider that these estimates represent a relatively short period of time compared with the long-term consequences of policy decisions and land management actions. For example, a forest converted to settlement represents a permanent loss of removal capacity. Over the long term, maintaining forests will sustain a higher rate of carbon removal, depending on age-related growth rates and occurrence of disturbances.

There are significant uncertainties in the estimates. Although not quantified here, typical greenhouse gas inventories of forests using similar approaches, including the national GHG inventory, report uncertainties in the net GHG balance that can be as high as ±45% (with 95% confidence). In the results presented here, the most uncertain estimates involve emissions from land-use change which are based on well-documented remote-sensing products, but relatively few field observations from a statistical sampling of county forests. While uncertainties can be high, the estimates can still provide useful information on the relative magnitude and importance of such GHGs; subsequent analyses can also provide information on the directionality of emissions and removals from land management.

Finally, it is recommended that additional analyses be done using models that project impacts of alternatives over coming decades. Such models are available and have been used in other studies at county scale. The GHG inventory presented here is only the first step to providing science-based information to support policy decisions. To more fully explore the potential impacts of alternate policies, projection models can be used to compare long-term results among the alternatives which typically include a “business as usual” (i.e. no change in policy) alternative. This feature may be added into the web tool in the future.

Comprehensive Plan
2025-2045

0: Appendices: Appendices
Greenhouse Gas Emissions Inventory

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Appendix H Public Participation Plan

2025 Comprehensive Plan Update

Public Participation Program



Prepared by Skagit County
Planning & Development Services Staff

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05. Engagement Commitments

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07. Engagement

08. Legislative Process

09. Measuring Success

Executive Summary

SKAGIT COUNTY 2025
Comprehensive Plan Update

The State of Washington requires all counties, cities, and towns planning under the Growth Management Act to conduct a periodic review and update of its comprehensive plan and development regulations. The comprehensive plan is a set of overarching goals and vision statements to guide the physical growth and development in Skagit County while protecting natural resource lands, open space and rural areas.

The periodic update occurs every ten years to respond to changes in state law and to address new information about land use, community needs, and population and employment growth. As Skagit County continues to grow and change, the County's Comprehensive Plan is intended to change to reflect the current needs and vision of the County and into the future. Community Engagement will be broadly applicable to all elements of the Comprehensive Plan.

The next periodic update is required to be completed by June 30th, 2025.

This Public Participation Plan (PPP) outlines how the community will be engaged during the project and given specific opportunities for providing feedback on the plan. Throughout the engagement process, the County and consultant staff will seek to understand the vision, goals and priorities of the community. This feedback from the public will provide staff information necessary to shape policy and standards that reflect the character and values of Skagit County.



Introduction

The Comprehensive Plan guides the direction for the future of Skagit County and all local planning efforts. Residents of Skagit County choose to live here for many reasons: natural beauty, clean air, good jobs, and an ideal place to create a home and family. The Comprehensive Plan seeks to foster this high quality of life by providing for social, environmental, cultural, economic, resource, recreational, civic, transit, health, and safety needs. The purpose of the County's Comprehensive Plan and Capital Facilities Plan is to guide policy, financing, and development regulation decisions over a 20-year period.

Public Participation Program Purpose

The Public Participation Program (PPP) is required by state law (RCW 36.70A.140), which states:

> "*Comprehensive plans – Ensure public participation. Each county and city that is required or chooses to plan under RCW 36.70A.040 shall establish and broadly disseminate to the public a public participation program identifying procedures providing for early and continuous public participation in the development and amendment of comprehensive land use plans and development regulations implementing such plans. The procedures shall provide for broad dissemination of proposals and alternatives, opportunity for written comments, public meetings after effective notice, provision for open discussion, communication programs, information services, and consideration of and response to public comments…*"

The PPP outlines how the community will be engaged during the project and given specific opportunities for providing feedback on the plan. Throughout the engagement process, the County and consultant staff will seek to understand the vision, goals, and priorities of the community. This feedback from the public will provide staff information necessary to shape policy and standards that reflect the character and values of Skagit County. Feedback will be collected, reviewed and incorporated into the engagement summaries which will in turn be used for plan updates prior to its presentation before County decision makers for plan adoption. This plan will be used by County staff and consultants to guide engagement during the comprehensive plan update process. The plan is a living document and will expand as the comprehensive plan update process continues.

2025 Periodic Comprehensive Plan Update

The Growth Management Act (GMA) requires counties planning under the GMA to periodically review and, if needed, revise its 20-year comprehensive plan, capital facility plan, and development regulations. The periodic update occurs every ten years to respond to changes in state law and to address new information about land use, community needs, and population

and employment growth. Specifically, the 2023 state law updates require a "Climate Change and Resiliency Element" be added which will be a new chapter to the Skagit County Comprehensive Plan. This chapter is often interchangeably called the "Climate Element". As Skagit County continues to grow and change, the County's Comprehensive Plan is intended to change to reflect the current needs and vision of the County and into the future. It is important to note that community engagement will be broadly applicable to all elements of the Comprehensive Plan. Specific activities will be added to gather feedback on the climate element, as it represents a new area of focus that has not previously been the subject of public input.

The next periodic update is required to be completed by June 30th, 2025.

What is a Comprehensive Plan?

A Comprehensive Plan Update reviews and improves the County's growth and development alongside current policies and regulations in effect. The update process will include gathering information, listening to the community's input, identifying issues and opportunities, setting goals, and creating strategies to achieve them. The updated plan should reflect the community's vision for the future, addressing key areas such as land use, housing, transportation, natural resource management and the environment.



Public Participation Goals

The goal of community engagement is to encourage input that produces diverse viewpoints for the County to consider. Cities, tribes, interested parties, and the public will have opportunities for involvement and are encouraged to participate. Throughout the engagement process, the

County staff and consultant team will seek to understand the vision, goals and priorities of the community. The community engagement strategy seeks to:

- Commit to early and continuous engagement.
- Broadly disseminate proposals and information in accessible formats.
- Provide equitable opportunities for public participation in all areas of Skagit County.
- Provide timely information at key milestones.
- Use concise, plain, and easy to understand language.
- Consult with local tribes.
- Consult with neighboring jurisdictions, and federal and state agencies.
- Provide multilingual engagement opportunities and materials.
- Update the project website with current information.
- Utilize a variety of outreach mediums including local media, print, web, social media, emails, community meetings, and open houses.

Engagement Commitments

The engagement tactics used for this effort will focus on informing, involving and collaborating with stakeholders. The extent to which each stakeholder participates will depend on the stakeholders themselves. The County will make the following commitments:

- **Commit to inform** – We will keep the community well informed from start to finish.
- Commit to involve – We will consult with specific stakeholders and make sure that their needs and concerns are reflected in the plan.
- **Commit to collaborate** – We will gather advice and innovative ideas from the community and incorporate them into the plan's decisions to the maximum extent possible.
- **Commit to circle back** – We will share how feedback was used to demonstrate the importance of community engagement process.
- **We will summarize our activities** – We will acknowledge people's time and participation after each activity (surveys, interviews, community meetings, etc). The County and consultant team will summarize feedback by creating a community engagement summary that will be available on the project website.
- **We will give adequate public notice** – We will inform the public of opportunities to participate in a timely manner, at least a week in advance of a meeting or activity where feedback is sought.

Skagit County 2025 Periodic Update Timeline



Skagit County 2025 Periodic Update Timeline

The County has established an outline for public involvement to help the public understand where engagement opportunities exist. Skagit County will schedule a series of public outreach opportunities to correspond with new available information throughout the update process. Below are the overall steps of the Public Participation Program.

Engagement

The Comprehensive Plan update is a multi-faceted project spanning multiple years. Detailed communication and engagement plans will be developed at key milestones throughout the process that consider audience, medium, and key messages.

Graphic: Process graphic to demonstrate how engagement tactics will line up with project phases or individual chapter development.

The County has been coordinating with the Planning Commission to begin this Comprehensive Plan Update. Planning Commission Workshops took place on the following dates:

- January 23, 2024
- February 13, 2024
- February 27, 2024

The County plans to conduct a more thorough engagement process from April 2024 – September 2024. These engagement tactics and tools used throughout this effort are outlined in this section.

Communication Tools

The communication tools used by Skagit County during the comprehensive plan update process will include:

- **Project Website** – Skagit County Planning and Development Services (PDS) will regularly update the project website with up-to-date comprehensive plan information. Relevant documents and schedules will be posted on the website along with announcements and notices concerning upcoming meetings, hearings, and public involvement opportunities. The webpage can be found under Comprehensive Plan on the PDS Services website. The Skagit County website uses Google Translate to make content available in multiple languages. All visuals will be checked in advance to ensure they meet ADA accessibility requirements.
- **Email List** – Interested parties can sign up for email notifications to be notified of public meetings, outreach events, and new materials for review.

- **Direct Mail** – Postcards or other informational materials may be directly mailed to residents to notify the public about opportunities to participate, key dates or deadlines, and/or public meetings and hearings.
- **News Releases** – For major topics and decisions, Skagit County will prepare press releases and distribute them to local media.
- **Social Media** – PDS staff will use Skagit County social media platforms to promote public meetings and opportunities to provide formal public comment during the comprehensive plan update process.
- **Posters and flyers** – County staff and consultant team will provide posters and flyers about public events or opportunities to comment in common gathering places such as community centers, libraries, and food banks. These materials will be translated to Spanish.
- **Engagement Summaries** – Engagement summaries detailing the outcomes of public events, surveys or comment periods will be produced after each effort and be uploaded to the project website. Summaries will also include attendee/participation counts, geography and demographic information when available.

Outreach Methods

Outreach methods used by Skagit County during the comprehensive plan update process will include:

- **Focus Groups and Technical Advisory Groups** – In order to solicit guidance on specific or complex technical issues, planning staff may utilize Board of County Commissioners approved focus groups or technical advisory groups. These groups will include members with specific knowledge or interest in certain topics or can effectively represent a subset of the community.
- **Surveys** – Surveys may be utilized to better understand the community's point of view on specific topics. The survey will be hosted online, with paper surveys available at in-person events and by request. Online and paper surveys will be available in Spanish.
- **Community Events / Fairs and Festivals** –County staff and consultant team will utilize already established community events to share information about the comprehensive plan process, such as farmers markets, local parades, and annual community events.
- **Open Houses / Workshops** – Open houses are informal public gatherings to solicit feedback on Skagit County's planning efforts. These involve presentations by planning staff, question and answer sessions, and interactive activities.

- **Community Pop-ups** – Community pop-ups are tabling activities at specific community locations, (e.g., bus stops, grocery stores, family resource centers, shelters, food banks, houses of worship). Each pop-up tabling opportunity will provide project information in an informal setting with the aim of connecting with groups who may not otherwise participate.
- **Public Hearings** – Public Hearings are a formal public process conducted and held before the Board of County Commissioners or the Planning Commission. All public hearings will be noticed at least 15 days in advance of the hearing in the Notice of Availability, posted in the local paper, and on the County website. Testimony will be recorded and made available to the public, the Planning Commission, and the Board.
- **Stakeholder Interviews** – The purpose of stakeholder interviews is to gather input on certain planning issues from a variety of perspectives. Interview results can be published in aggregate with individuals' input anonymized. County staff will help identify individuals or organizations to invite to interviews.
  Skagit Council of Governments (SCOG) – Issues requiring a high level of intergovernmental coordination or decision-making may be forwarded to the Skagit Council of Governments for discussion. SCOG will be leading the coordination of the update to the Countywide Planning Policies. This will be the key forum the County will use to coordinate with cities.
- **Board of County Commissioners Work Sessions** – Planning staff will frequently attend work sessions and monthly briefings to brief Board members on the update process.
- **Planning Commission Work Sessions** – Planning staff will frequently attend work sessions to brief Planning Commission members on the update process.

Key Audiences

Key audiences will be engaged by Skagit County during the comprehensive planning process. All Skagit County residents are invited to participate in the comprehensive plan update process, with an emphasis on vulnerable and historically underserved communities. The list below represents groups that have expressed interest in being involved or are required to be engaged by State law.

- Skagit County Residents
- Landowners
- Local Tribal Governments
- Cities and Towns
- Federal Government
- State Agencies
- Local Organizations
- Agricultural and Forestry Groups
- Environmental Groups
- Economic Groups
- Housing Groups
- Schools and colleges
- Developers
- Advisory Boards
- Transportation Groups
- Utility Providers
- Veteran Groups
- Senior Service Groups
- Social Service Groups
- Youth Service Groups
- School Districts
- Fire Districts
- Drainage and Irrigation Districts
- Communities with limited English Proficiency
- Farm workers

This engagement approach aims to make project details accessible and relevant to the target communities. Through a variety of outreach methods, this public participation program will involve a broad cross-section of the community, to engage key groups and those who may not otherwise participate.

Skagit County Boards and Committees

Skagit County recognized that certain community groups may have a particular interest in participating in the public engagement process. These groups may include advisory boards, professional organizations or other influential advocacy groups. By engaging with these identified groups, Skagit County seek to bring together community representatives to inform decisions, foster a shared sense of responsibility by engaging trusted organizations and broaden the reach by leveraging the existing networks to share information.
Below is a selection of community advisory boards and groups Skagit will seek to engage with:

- Accessible Communities Advisory Committee
- Agricultural Advisory Board
- Catholic Community Services Farmworker Center
- Community Action of Skagit County – Latinx Advisory Committee
- Developmental Disabilities Board
- Economic Development Advisory Committee

- Emergency Management Advisory Board
- Forest Advisory Board
- Housing Authority of Skagit County Board of Commissioners
- Marine Resources Committee
- Mount Vernon Chamber of Commerce – Latin Business Leaders
- Northwest Agriculture Business Center
- Parks and Recreation Advisory Board
- Skagit Council on Aging
- Skagit Soil Conservation District
- Voluntary Stewardship Program Watershed Group
- Senior Services – Housing
- Skagit Valley College
- North Star – Housing Group
- Natural Resources Committee

Skagit County may use the follow tactics to engage with these groups throughout the Comprehensive Plan Update Process:

- Develop key messages to implement and share during meetings and interviews
- Prepare educational materials or for representatives to share with their networks
- One-on-one or group interviews
- Prepare presentations to share at regular meetings and materials to facilitate conversations and solicit feedback

Local Tribal Governments

Tribes within Skagit County that staff will coordinate with throughout the update process include:

- Samish Indian Nation
- Sauk-Suiattle Indian Tribe
- Swinomish Indian Tribal Community
- Upper Skagit Indian Tribe

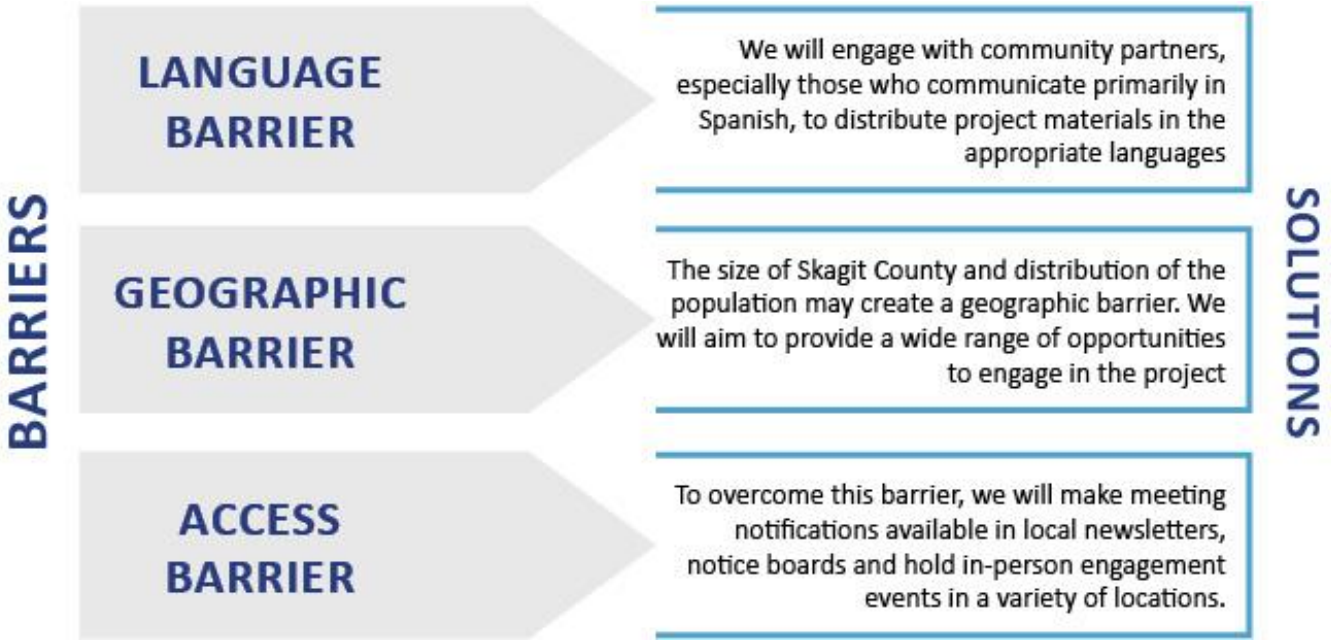
The County recognizes that Tribal Governments may be engaged at their discretion. The County will include interested Tribal Governments in the Comprehensive Plan Update process to the extent they are able and willing to do so. Mindful of HB 1717 (2022) requirements, Skagit County will:

- Invite Tribal Governments to voluntarily participate in the comprehensive planning process.
- Share process updates and continue to invite invite, regardless of their level of participation in the process.

- Share draft materials as they are available.
- Facilitate communication between tribes and the County, including support to resolve issues related to plan changes and regulations.
  Invite tribal governments to participate in the development of countywide policies, including policies that allow for the protection for cultural resources if desired.

Overcoming Obstacles to Engagement

The engagement tactics identified in the PPP are intended to offer community members a variety of opportunities to participate and share their feedback. Skagit County understands that there may be existing barriers to participation that may hinder the participation of community members who may be interested. This PPP identifies potential barriers to partition and strategies to overcome these. Engagement will be mindful of these barriers and strategies to maintain an accessible process.



Climate and Resilience Element

In 2023, the Washington State legislature amended the Growth Management Act (GMA) to add Climate Change and Resiliency as a planning goal (RCW 36.70A.020):

> *(14) Climate change and resiliency. Ensure that comprehensive plans, development regulations, and regional policies, plans, and strategies under RCW 36.70A.210 and*

chapter 47.80 RCW adapt to and mitigate the effects of a changing climate; support reductions in greenhouse gas emissions and per capita vehicle miles traveled; prepare for climate impact scenarios; foster resiliency to climate impacts and natural hazards; protect and enhance environmental, economic, and human health and safety; and advance environmental justice.

This amendment requires Skagit County to add a climate element in the the Comprehensive Plan that includes a greenhouse gas (GHG) emissions reduction and resilience sub-elements.

GHG Emissions Reduction Sub-element

The County will develop guidance to measure, reduce and eliminate GHG emissions. This element will be developed with an overall target of reaching net-zero emissions by 2050. These measures will include policies in transportation, zoning and development, and buildings & energy.

Resilience Sub-element:

This sub-element will help the County use climate data to identify and prepare for natural hazards made worse by climate change, including floods, droughts, wildfires and changing weather patterns. With guidance will help the County create policy to mitigate the effects of natural hazards, protect the environment and plan or health and safety.

The County aims to create a climate and resilience element that reflects the community priorities and values and increases the chance of community buy-in. Community engagement in support of this element will take place concurrently with other engagement efforts and identify specific opportunities to engage with members of the community who may be particularly vulnerable to the effects of climate change.

Engagement goals

- Educate the community about climate resilience and hazard mitigation throughout the engagement process.
- Educate the community about their role in the planning effort and the importance of their input.
- Focus on communities most impacted by climate change for targeted interviews, focus groups, and community advisory committees.

- Integrate community feedback into the development of the climate and resilience element and clearly community how feedback is being used .

Key messages

- The community has an opportunity to shape the vision and direction of the County's resiliency planning efforts.
- The climate and resilience elements will be integrated into the Comprehensive Plan to help the County create climate solutions.
- Feedback will help guide the development of the County's climate resiliency strategies.

Engagement tactics

- Develop key messages to implement and share during community engagement events.
- Develop specific survey questions to aid in the development of climate and resilience section.
- Climate resilience focus groups/interviews.
- Engage with advisory boards or community groups who support populations deemed especially vulnerable to climate change.
- Prepare educational materials or presentations to share at schools and community colleges.

Legislative Process

Skagit County stakeholders are encouraged to attend and listen to discussions and make comments at Planning Commission and Board of County Commissioner hearings when scheduled. These legislative bodies hold meetings of record to gather information from County staff and community input on a variety of topics. Participants may also submit written comment by emailing pdscomments@co.skagit.wa.us.

Specifically, the Skagit County Planning Commission advises on comprehensive plan updates. The Planning Commission consists of nine members appointed by the Board of County Commissioners to make recommendations on planning related matters including growth and development. The Planning Commission will review and advise on comprehensive plan updates throughout the process.

Additionally, the Skagit County Board of Commissioners is the County's legislative authority and holds the decision-making authority on the 2025 Comprehensive Plan Update process. The

Board of County Commissioners includes three commissioners representing geographic districts based on population. The Board of County Commissioners will review the comprehensive plan updates throughout the process and approve the final version at the end of the process.

Measuring Success

The project team will collect and report engagement metrics during each outreach opportunity. We will document engagement events, numbers, and demographics of participants (if possible), and provide quantitative and qualitative summaries of the engagement to assess if engagement objectives are achieved, the team will encourage communities to evaluate and give feedback about events, tools, and experiences.

For additional information, please contact the Skagit County Planning and Development Services Department.

Visit:
www.skagitcounty.net/2025CPA

Phone: (360) 416-1320 **Email**: PDS@co.skagit.wa.us

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Community Engagement Results Report

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Appendix I Community Engagement Results Report

SKAGIT COUNTY 2025
Comprehensive Plan Update

Public Engagement Summary

LAST UPDATED January 27, 2024

Please visit the project website at *https://skagitcounty.net/2025cpa* for more information.

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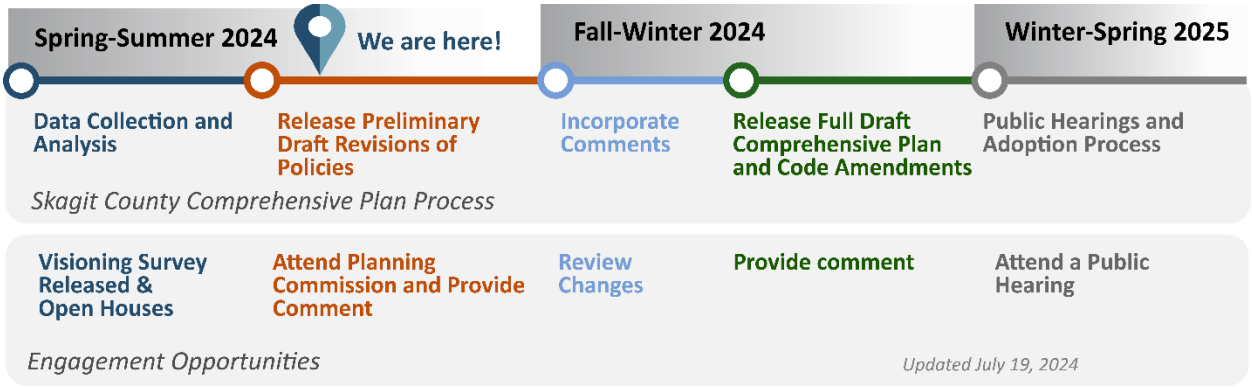
Furthering the Public Participation Program

This engagement document is intended to be a living document and will be updated throughout the 2025 Skagit County Comprehensive Plan update. In April 2024, Skagit County completed the public participation program for the Comprehensive Plan which outlines goals, strategies, and timelines of the project's engagement. To review the public participation plan, visit the project website at skagitcounty.net/2025CPA.

The public participation plan goals are:

- Commit to early and continuous engagement
- Broadly disseminate proposals and information in accessible formats
- Provide equitable opportunities for public participation in all areas of Skagit County
- Provide timely information at key milestones
- Use concise, plain, and easy to understand language
- Consult with local tribes
- Consult with neighboring jurisdictions, and federal and state agencies.
- Provide multilingual engagement opportunities and materials
- Update the project website with current information
- Utilize a variety of outreach mediums including local media, print, web, social media, emails, community meetings, and open houses

Comprehensive Plan Process and Engagement Opportunities



The table above shows where community engagement opportunities run concurrent with project.

Engagement Commitments

Commit to inform –Skagit County will keep the community well informed from start to finish.

Commit to involve – Skagit County will consult with specific stakeholders and make sure that their needs and concerns are reflected in the plan.

Commit to collaborate – Skagit County will gather advice and innovative ideas from the community and incorporate them into the plan's decisions to the maximum extent possible.

Commit to circle back – Skagit County will share how feedback was used to demonstrate the importance of community engagement process.

Commit to summarize our activities – Skagit County will acknowledge people's time and participation after each activity (surveys, interviews, community meetings, etc.). Skagit County

and the consultant team will summarize feedback by creating a community engagement summary that will be available on the project website.

Commit to provide adequate public notice – We will inform the public of opportunities to participate in a timely manner, at least a week in advance of a meeting or activity where feedback is sought.

First Survey

Summary

In April to May 2024, Skagit County conducted an online public survey to gather feedback from the community. The goal was to identify the general community perception of the Skagit County's strengths and weaknesses, and determine key areas needing focus for the 2025 Comprehensive Plan periodic update cycle. This initiative was one of many strategies aimed to involve the community in shaping Skagit County's future direction by prioritizing areas of improvement efforts. The survey findings provide valuable insights for staff and policymakers. These results will be used to guide focus areas for policy or influence future engagement questions.

The survey was widely advertised across Skagit County's diverse networks, both online and in-person, to encourage maximum community participation. This included use of Skagit County's social media and utilizing the department's listserv. Long-range planners from Skagit County actively promoted the survey during public meetings and engaged with residents at various community events, including the Concrete Community Resources Fair on April 8, 2024 and Healthy Kids Day at Skagit YMCA on April 13, 2024. See Tabling section for information about these events. Additionally, the survey was distributed via email to individuals subscribed to Skagit County newsletter, as well as various stakeholder groups and advisory boards. The survey was open for five weeks from April 9, 2024 and closed on May 14, 2024 with 717 participants.

Goals

Skagit County identified the following goals for the survey.

1. Identify broad priorities from Skagit County residents
2. Identify Skagit County's greatest strengths
3. Identify Skagit County's greatest weaknesses
4. Identify key topics for the Comprehensive Plan to focus on
5. Use the survey to advertise the start of the year-long project
6. Collect emails from interested residents to build a network for future input

Based on these goals, the survey was written to be short, quick, and easy to complete to collect the most responses from residents and invite participants to stay involved via email. As required by state law, community engagement for the Comprehensive Plan is meant to be continuous and the engagement opportunities were structured with the intent that all participants will have more opportunities to provide more detailed feedback.

Survey Questions

Based on the approach and goals for the first community survey the following questions were used:

1. What values best describe Skagit County? Please rank your priorities. (1–highest; 8–lowest)
    a. Family oriented
    b. Stewardship of natural resources
    c. Health and safety
    d. Prosperity and opportunity
    e. Diversity and community inclusion
    f. Community cohesiveness
    g. Financial sustainability
    h. Equity
2. What are Skagit County's greatest strengths? Pick two.
    a. Housing supply and affordability
    b. Local industry and employment
    c. Environment (stewardship and water resources)
    d. Environment (natural resource extraction)
    e. Rural character
    f. Public facilities and services (roads, parks, and community buildings)
    g. Transportation options (bike, bus, car, and walking)
    h. Community resilience and natural hazard mitigation
    i. Healthy food access
    j. Other (please specify)
3. What are Skagit County's greatest weaknesses? Pick two.
    a. Housing supply and affordability
    b. Local industry and employment
    c. Environment (stewardship and water resources)
    d. Environment (natural resource extraction)
    e. Rural character
    f. Public facilities and services (roads, parks, and community buildings)
    g. Transportation options (bike, bus, car, and walking)
    h. Community resilience and natural hazard mitigation
    i. Healthy food access
    j. Other (please specify)
4. Skagit County is aiming to establish a vision to guide the Comprehensive Plan and for the County of the next 20 years. We want to know what is most important to you. What priorities do you feel are most important to focus on over the next 20 years? Please rank your priorities (1-highest; 6-lowest).
    a. Preserving agricultural land
    b. Community resilience and hazard mitigation
    c. Transportation improvements
    d. Improving housing supply and affordability
    e. Economic growth and jobs
    f. Environmental preservation

    Questions 5-7 were demographic questions, analyzed on page 9.

Results

The highest-ranking values were family oriented, stewardship of natural resources, and health and safety. The highest-ranking strengths were rural character, environment (stewardship and water resources), and healthy food access. The highest-ranking weaknesses were housing supply and affordability, transportation options, and local industry and employment. The full list of rankings for all options provided can be found in Appendix A.

Highest-ranking Values	**Family Oriented, Stewardship of Natural Resources, Health and Safety**
Highest-ranking Strengths	**Rural Character, Environment (Stewardship and Water Resources), Healthy Food Access**
Highest-ranking Weaknesses	**Housing Supply and Affordability, Transportation Options, Local Industry and Employment**

For the questions identifying strengths and weaknesses, a write-in option was provided. Write-in responses and complete survey questions can be found in the survey results included in Appendix A.

Respondents prioritized preserving agricultural land as the number one priority for Skagit County. This was also true when comparing the responses by the region and by age. The second-highest ranked priority from respondents was improving housing supply and affordability although when comparing the responses by region, region A's second highest-ranked priority was environmental preservation and region C's second highest-ranked priority was community resilience and hazard mitigation. Regardless of age, improving housing supply and affordability was ranked as the second highest priority.

Question 4 Summarized: What priorities should Skagit County focus on over the next 20 years?	
#1	**Preserving agricultural land**
#2	**Improving housing supply and affordability**
#3	**Environmental preservation**
#4	**Economic growth and jobs**
#5	**Community resilience and hazard mitigation**
#6	**Transportation improvements**

Respondents were asked to identify the region that they lived and worked in based on the map provided below.

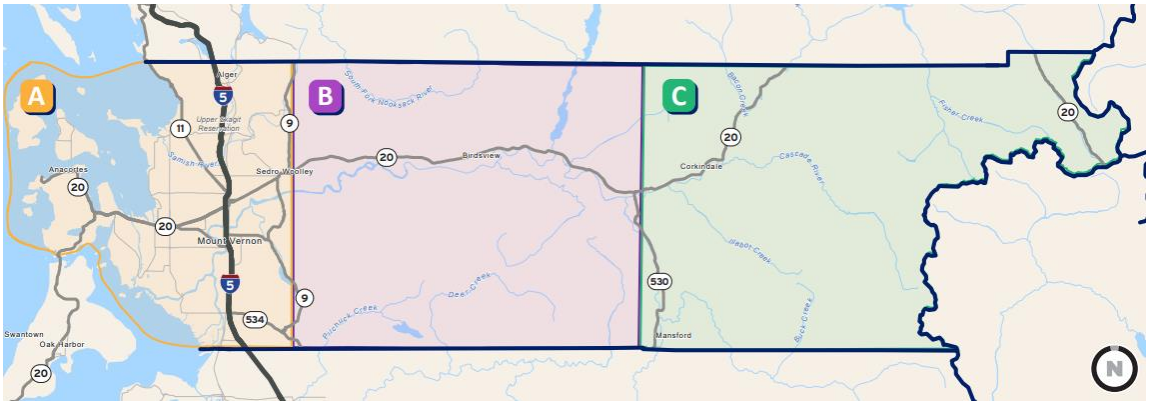


Figure 1 Map of Skagit County used to help determine where survey participants live.

Results were further analyzed by the region respondents lived and worked to identify local differences in survey responses. It was generally found that regardless of where respondents lived, priorities were similar.

- All three regions listed “preserving agricultural land” as the top priority.
- All three regions listed “economic growth and jobs” as the fourth priority.
- Region A listed “environmental preservation” the highest out of the three regions.
- Region B listed “improving housing supply and affordability” the highest out of the three regions.
- Region C listed “community resilience and hazard mitigation” the highest out of the three regions.

Question 4 Summarized by Region

Region A Responses Ranked		Region B Responses Ranked		Region C Responses Ranked	
1	Preserving agricultural land	1	Preserving agricultural land	1	Preserving agricultural land
2	Environmental preservation	2	Improving housing supply and affordability	2	Community resilience and hazard mitigation
3	Improving housing supply and affordability	3	Environmental preservation	3	Improving housing supply and affordability
4	Economic growth and jobs	4	Economic growth and jobs	4	Economic growth and jobs
5	Transportation improvements	5	Transportation improvements	5	Environmental preservation
6	Community resilience and hazard mitigation	6	Community resilience and hazard mitigation	6	Transportation improvements

General Findings by Age

Priorities of respondents ages 18-44:

1. Preserving agricultural land
2. Improving housing and affordability
3. Environmental preservation
4. Economic growth and jobs
5. Community resilience and hazard mitigation
6. Transportation improvements

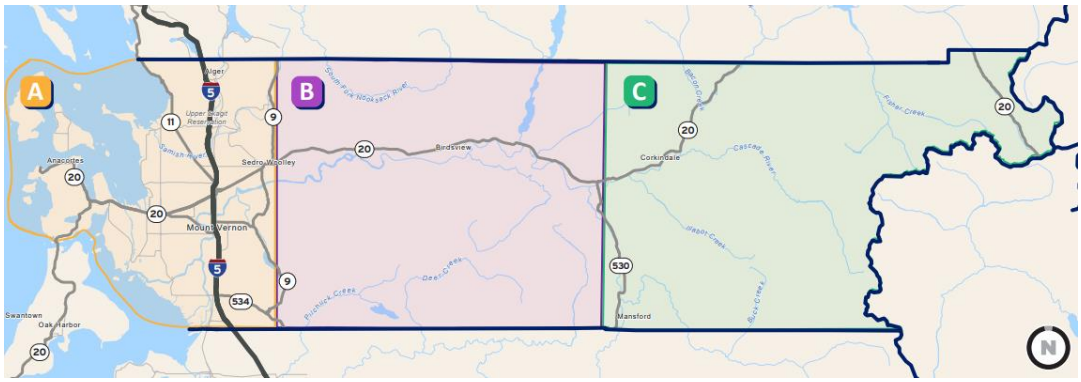
Priorities of respondents ages 45-76 or older:

1. Preserving agricultural land
2. Improving housing and affordability
3. Environmental preservation
4. Community resilience and hazard mitigation
5. Economic growth and jobs
6. Transportation improvements

717
Responded to the community survey.

304
Signed up to receive project updates on the project.

Survey Participants	
93.58%	Live in Skagit County
76.15%	Own property in Skagit County
54.39%	Work in Skagit County
22.42%	Own or operate a business in Skagit County
1.95%	Go to school in Skagit County
1.26%	Visitor of Skagit County



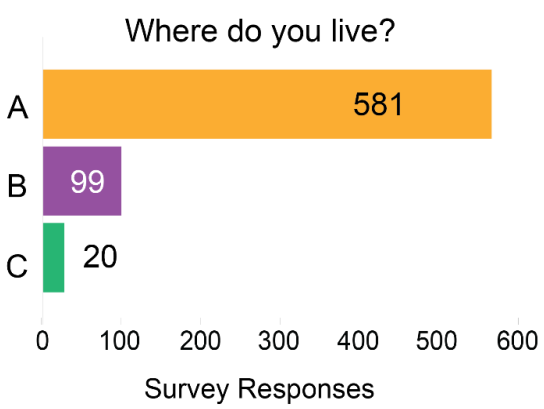


Figure 2 "Where do you live?" Demographic Question from Survey

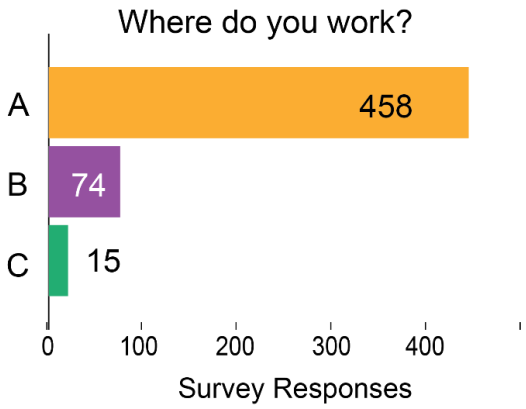
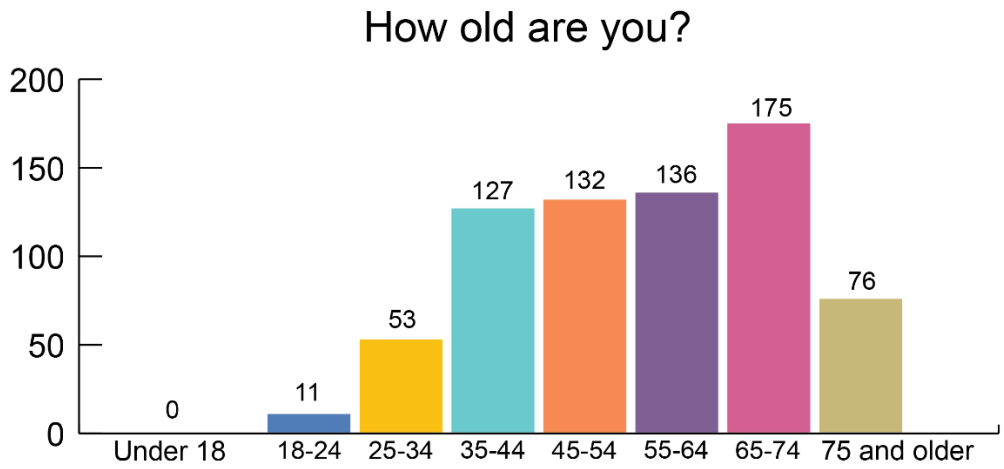


Figure 3 "Where do you work?" Demographic Question from Survey

A total of 581participants live in Region A, around Mount Vernon, Burlington, Sedro-Woolley, and Anacortes. A total of 99 participants live in Region B, around Hamilton and Concrete. A total of 20 participants live east of Rockport. A total of 458 participants work in Region A around Mount Vernon, Burlington, Sedro-Woolley, and Anacortes. A total of 74 participants work in Region B, around Hamilton and Concrete. A total of 15 participants work east of Rockport.



The highest age groups that participated in the survey were between 65 to74. The three highest age groups that participated in the survey were 35 to 44, 45 to 54, 55 to 64, and the lowest participating age groups were 18 to 24, 25 to 34, and 75 and older. No participants in the survey were under 18.

Key Takeaways for the Comprehensive Plan

The results of this survey was one of the early outreach community engagement efforts utilized to identify groups selected for stakeholder interviews, discussed in the next section of this document. Because the top four priorities were preserving agricultural land, improving housing supply and affordability, environmental preservation, and economic growth and jobs stakeholder groups from these four areas were invited to discuss issues around these topics.

Tabling Events

Summary

Between April to June 2024, Planning and Development Services (PDS) staff attended four community events to advertise the start of the project and notify residents of the opportunity to participate in the first community survey and information on how they can follow the project and provide input.

Goals

The goal of the tabling events was to met residents where they are, foster open conversations, and provide the opportunity to educate those that haven't yet participated in the planning process.

Results

At these events, staff had open conversations with community members and collected valuable comments to consider before starting the plan drafting process. The comments are paraphrased from what was heard from the community. Direct quotes are in quotation marks.

1

TABLING EVENTS SNAPSHOT

East Skagit County – Community Resource Fair

Location: Concrete Senior Center,
45821 Railroad Ave., Concrete, WA 98327
Audience: East Skagit County residents
Date: Monday, April 8, 2024
Time 10:00 a.m. – 2:00 p.m.

Healthy Kids Day – Community Resource Fair

Location: Skagit Valley YMCA, 1901 Hoad Rd., Mount Vernon, WA 98273
Audience: Families and young children
Date: Saturday, April 21, 2024
Time: 2:30 p.m. – 5:00 p.m.

Berry Dairy Days
Location: 520 E. Fairhaven Ave., Burlington, WA 98233
Audience: Festival attendees
Date: Saturday, June 15, 2024
Time: 10:30 a.m. – 3:30 p.m.

Community Connect
Location: 17400 Cook Rd., Burlington, WA 98233
Audience: Farm workers
Date: Saturday, June 29, 2024
Time: 1:00 p.m. – 7:00 p.m.

Community Action of Skagit County's Latinx Advisory Committee
Audience: Spanish Community
Date: September 12, 2024



Caption 2. PDS staff attending the East Skagit County Community Resource Fair

Comments from East Skagit County - Community Resource Fair

Comments within quotations are direct quotes, all other comments are paraphrased.

Increased the transparency of available data with technological solutions. For example, King County provides a map of the as-builts for sewer/ water. This can help assist with development and avoid delays in construction by knowing where things are. - Community Member

"Desperate need for transitional housing." - Volunteers of America staff

Improved transportation access. - Community member

"More homes." - Community member

It can be difficult writing codes and regulations if you do not have the capacity or political buy-in to do so. Example provided was code enforcement of abandoned vehicles in rural areas around the Town of Concrete. The goals and objectives provided in plans and regulations need to be obtainable and realistic. Avoid lofty goals that will never be accomplished. - Concrete Planning Commissioner

There needs to be work within Skagit County to keep and elevate higher education within the region and provide more opportunities for locals to pursue their education without having to move or commute to educational institutions. Skagit Valley College is working to partner with organizations to assist students with internships and job opportunities within the County. - Skagit Valley College Outreach Staff



Caption 2. PDS staff and Kimley-Horn staff at the Healthy Kids Community Resources Fair

Comments from Healthy Kids Day – Community Resource Fair

Comments within quotations are direct quotes, all other comments are paraphrased.

Transportation and ADA accessibility are lacking for public and commercial facilities. It is difficult for caregivers to transport their clients that are in wheelchairs and walking aids. - Community member and home health aide.

"We need to support our ag community."

"Affordable housing"

"It's grown up too fast"

There needs to be multifamily housing with on-site childcare. Transportation is a major challenge for families, especially those with children who have health issues and have to shuttle children between medical appointments and childcare facilities. It would be easier for families to consolidate these uses to reduce vehicle trips. - Community member and parent

More educational childcare facilities that provide services over the summer break. It is challenging for families with working parents to find quality childcare. Currently there are not enough opportunities throughout the County creating tight competition for registration. - Community member and parent

Please visit the project website at https://skagitcounty.net/2025cpa for more information.



Caption 3. PDS staff at Berry Dairy Days

Comments from Berry Dairy Days

Comments within quotations are direct quotes, all other comments are paraphrased.

Development needs to stay in the cities and the county needs to remain rural.

"Housing is too expensive and hard to get. It's hard for families with one income."

Better transportation is needed. There is now traffic on I-5 where there never used to be. Solutions are needed to encourage other forms of transportation besides relying on personal vehicles.



Caption 4. PDS staff at Community Connects Farmworker Event

Comments from Community Connect Farmworker Event

Comments are paraphrased.

Childcare services are limited.

Bus routes to farms / agricultural bus routes

Rental contract lengths are too long. Temporary rental contracts should be 3 to 6 months, but most landlords require contracts that are greater than 6 months.

There is a need for assistance with farmworker minimum wage and childcare.

Need more services near homes, including bus routes.

Services are too expensive in the city. Childcare is too expensive, and most people cannot afford it. The minimum wage cannot support the cost of living.

Organizations to reach out to: Helping Hands, Welcome Home Skagit, Alternative Housing Alliance.

Lack of rental housing in the cities.

Families have been looking for suitable rental properties.

Services near transportation, it is difficult to travel by walking.

Streamlining permit timelines and processes.

Rent is too high with upfront costs. Provide more services near homes.

Seasonal worker housing availability. Too many restrictions on rental contracts.

Participants Summary

Demographic data is not collected at tabling events to encourage participation from everyone. However, PDS staff did collect the general location of where residents lived in Skagit County as

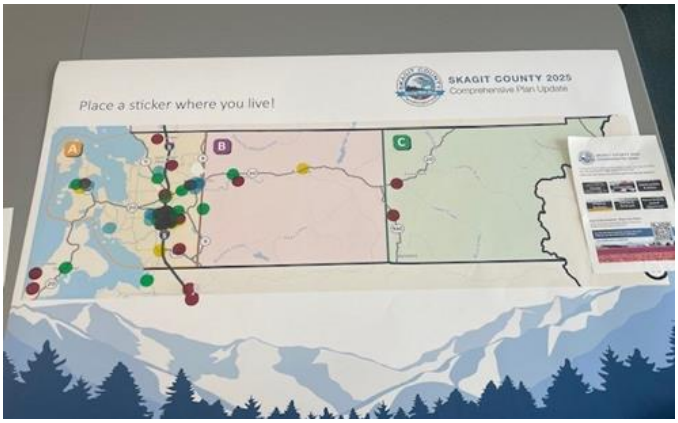
a tabling activity. Participants were asked to place a sticker where they live. The color of the stickers did not correlate to any data collected.

Generally, participants at the Healthy Kids Fair lived in Mount Vernon – Burlington area. A few participants lived in Anacortes, La Conner, Sedro-Woolley, and East Skagit County.

Participants at Berry Dairy Days were from various areas along I-5.

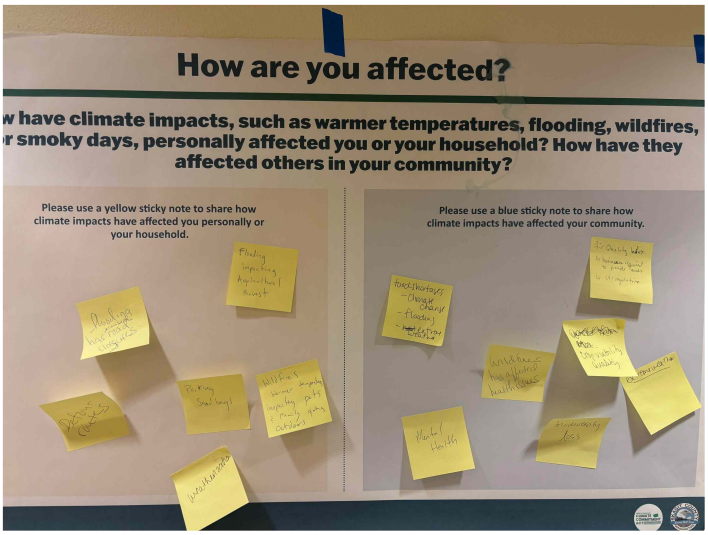
Caption 5. Map activity results at Berry Dairy Days





Skagit Leadership Class

On October 18, 2024, the Skagit Leadership Class of 2025 invited Skagit County to give a brief presentation on the Skagit County Comprehensive Plan, with a focus on the new



Climate Change Element addressing greenhouse gas (GHG) reduction and climate resiliency. Poster boards from October 1st Climate and Environment Open House were displayed around the room, allowing students to break into small groups, review the materials, engage with the interactive boards, and report their findings back to the larger group. County staff also shared information on how participants could get involved in the public comment and engagement process.

Community Action of Skagit County's Latinx Advisory Committee

Community Action of Skagit County's Latinx Advisory Committee invited Skagit County and local municipalities to present a "Comp Planning 101" overview and share examples how their communities can participate in the update process at the Committee's September 12, 2024, monthly meeting. Skagit County and the City of Sedro-Woolley participated in the presentation. Skagit County highlighted upcoming outreach efforts, including a bilingual English/Spanish Community Climate Survey and an open house focused on policies in the Climate and Environment Element.

Following the presentation, participants engaged in a discussion centered on two reflective questions: What resources do you wish you and your family had access to 20 years ago? and What would make this community better for your children and grandchildren?

Themes that came up during the discussion were:

Affordable Housing: There is a strong need for affordable apartments, especially for young workers and families.

Youth and Teen Facilities: The community lacks indoor, non-sports-oriented spaces for teens. Indoor public facilities for youth are a top priority.

Multi-Age Community Centers: Facilities should serve people of all ages (seniors, and small children) and support activities like live music and family gatherings.

Food and Environment: Access to fresh, affordable, and local food near neighborhoods is essential, along with green spaces, parks, and walkable infrastructure.

Language Access: Improve access to public services by offering more information in Spanish and other languages.

Public Participation: People want safe, welcoming spaces that empower families and encourage community participation in local government decisions.

Key Vision for the Future:

Create inclusive, accessible, and safe community hubs.

Build affordable housing and infrastructure that promotes walkability and connectivity.

Ensure all voices, especially those of marginalized groups, are heard and included in civic processes.

Caption 6. Map activity results at Healthy Kids Community Resources Fair

First Stakeholder Interviews

Summary

Based on the first survey results which identified the top four priorities for Skagit County to focus on for the next 20 years, stakeholder groups focusing on agricultural, environmental, housing, and economic conditions in the community were invited to participate in early discussions before policy development.

The stakeholder interviews were completed in a series of online and in-person interviews between June 1st, 2024, and July 10th, 2024. Overall, 8 stakeholder interviews were held and over 36 people attended the meetings.

The project team reached out to a wide range of stakeholders and attended several monthly meetings held by different groups to advertise the Comprehensive Plan and gauge interest in participating in interviews. From these discussions, the interviews were schedule with the following organizations:

Housing Focus

- Skagit/Island Counties Builders Association
- Helping Hands Food Bank
- Skagit Habitat for Humanity

Agricultural Focus

- Agricultural Advisory Board
- Skagit County Farmers
- Skagit County Drainage and Irrigation District Consortium

Environmental Focus

- Marine Resource Committee
- Forestry Advisory Committee

Economic Focus

- Economic Development Alliance of Skagit County

Important note: more stakeholder interviews are proposed to be completed in September 2024 to specifically address new state requirements for climate change, resiliency, and greenhouse gas emissions reductions.

Although the stakeholder interviews had four key focus areas based on the top priorities from the survey, the stakeholder interview questions were created to collect comments on several topics. All interviewees were provided the same questions ahead of the meeting. During the interview, the facilitator introduced the questions but allowed the interviewees to steer the conversation towards their primary concerns, ensuring the collection of the most valuable feedback This also helps the project team understand the areas of greatest importance to each group.

Comments said during the meeting were written down verbatim and assigned to an element in the Comprehensive Plan. See the sticky note boards in Appendix D.

Goals

Skagit County identified the following goals for the first round of stakeholder interviews:

1. Collect detailed information about existing conditions in these topics (agriculture, housing, economic development, environmental).

2. Collect current progress made to improve conditions in these topics
3. Collect feedback on future policies or actions that could improve these topics

Stakeholder Interview Results

Agricultural Focus

Finding balance between preserving agricultural land and promoting economic opportunity.

Farmers that participated in the stakeholder interviews had different views on the future of agricultural land based on the scale of the farming business. Farmers that operated large, historical farms generally prioritized preservation, keeping the existing policies as they are. Farmers that had relocated or established their business within the last 10 years expressed the desire to explore new options for economic diversity to keep up with costs.

- Interviewees expressed the desire to maintain agricultural land, property rights, and a strong agricultural industry for farmers in the area.
- Concerns about agricultural land turning into developable land to accommodate for growth as a result of pressures from outside development companies buying ag land and changing the farmland forever. There is no way a local farmer can keep up with outside investments.
- Another reoccurring concern shared was using agritourism. It creates the opportunity educate people about local farming and can help diversify farming income. The other point shared is that it can negatively impact resource lands by taking land out of production.
- Policies are needed to retain operators in the county and support first generation farmers.

Provide housing, services, and transportation for agricultural workers.

- Concern about housing for agricultural workers, cost of living, and paying fair wages. The ability to pay workers a living wage cannot keep off with the cost of living, particularly rent, in the County.
- Providing incentives for accessory dwelling units (ADUs) that could provide affordable rental spaces.
- Alternative solutions needed, for example, have Community oriented housing, centralized shared green space
- Remote jobs are impacting and increasing growth, placing added development pressure on resource lands in need of larger regional transportation networks in and out of the County.
- Ensuring future growth aligns with transit plans locally and regionally.
- Using roundabouts as a traffic management tool.
- Ensuring sufficient access at choke points on the roads.

Finding balance between preserving agricultural land and creating opportunities for growth/housing.

Multiple interviewees were concerned about increasing impervious surfaces to accommodate growth. This has a large impact on water runoff and stormwater. Interviewees mentioned promoting infill development and prioritizing developing in existing city centers to relieve current pressure to develop rural lands.

- Build affordable housing that already has impervious surfaces and that is ripe for redevelopment. No addition of impervious surface or conversion of farmland.
- Keep multifamily housing near transit lines and social services to limit VMT.

Finding balance between preserving agricultural land and environmental preservation.

Multiple interviewees mentioned that some strategies to combat climate change or promote environmental preservation can be a hindrance to the agriculture industry. One common issue brought several times was critical areas.

- Ensuring maps are accurate and updated frequently.
- Potentially integrating a natural resources plan with climate change plan.

Improving capital facilities and infrastructure to build a resilient agricultural industry that can withstand potential impacts from climate change.

- *"Without drainage, flood control, and irrigation agricultural would not happen and we need to invest in infrastructure for protection against climate change."*
- Making sure prioritizing infrastructure improvements isn't being misaligned with agricultural improvements.
- Identify how to get irrigation water to the natural resource lands. The delta cannot sustain anymore impervious surfaces, this is becoming a problem. Limit surface water or bolster stormwater code.
- Infrastructure is needed for value added agriculture; storing, cooling, barns, packaging etc. High costs can push out smaller farms.
- Concern around contained communities and the inability for those roads to be maintained.
- Planning for future growth within schools.

Climate/Hazard Mitigation for Agricultural Focus

Generally, interviewees expressed concern about the protection of agricultural lands when faced with potential hazards, especially hazards from climate change. Conversations focused on emergency management, like evacuation routes, communication, and protection of lands should hazards occur.

- Needing to think about long term management of the marine dike
- Concern about water availability/security; how valuable is agricultural land without water?
- Concerns about potential policies making farming activities more expensive and less viable.
- The Comprehensive Plan should take a holistic approach to climate change.
- The current levees are only 50-year levees which is not ideal flood protection. But there are no policies that promote the creation of 100-year levees.
- The hazard mitigation plans and the flood plans from the County could bolster the district or levees, or they could harm the districts if the goals are not in alignment.
- Concern around food security.
- Is the County prepared for evacuation and communication in the rural areas? How can this be paired with the Hazard Mitigation Plan?

Environmental Focus

Ensuring industry and environmental and natural resource protection are addressed concurrently.

- Continuing to support the Forestry Advisory Board to demonstrate commitment to natural resource preservation
- Interviewees made mention of the Shoreline Master Program (SMP) and potentially integrating it with stormwater management plans. Interviewees want Skagit County to be a leader in shoreline stabilization, green infrastructure, and water restoration and management.
- Equitable access to waterfronts was mentioned. This comment also relates to climate change and resiliency.

Finding balance between preserving agricultural land and creating opportunities for growth/housing.

- *"Transitioning from agricultural land to developable land is having huge impacts on resources, water, and inundation."*

Providing housing and transportation options for all types of families and demographics in the County.

- Ensuring schools are keeping up with growth
- Impact of remote jobs and the disparity between long term residents and new residents and how that will impact gentrification
- Ensure housing accommodates multi-generational living
- Cost and value of land being too high to develop.
- Part of creating equity in a community is thinking of transportation and growing concurrently and ensuring multiple modes of transportation.
- It is very challenging for natural resource - based business to recruit and retain workforce since their employees have difficulty and are often unable to find housing near employment.
- *"There should be an emphasis on interconnected community through walking and biking."*

Ensure existing infrastructure is maintained.

- Multiple interviewees mentioned that bridges need to be assessed and updated to maintain existing levels of forest management.
- Multiple interviewees mentioned that exiting infrastructure, like roads through federal lands, are not being maintained by property owners or agencies. These roads have historically provided support to the forest industry and management of forestry lands. *"Once it's gone it's a large problem for future timber industries to grow."*
- Discussion around Public Works projects helping protect the shoreline, preserve water, and prevent pollution of natural resources

Climate/Hazard Mitigation

- Multiple interviewees were concerned about sea-level rise.
- Coastal restoration and preservation is a concern especially with stress from development.

- Common concerns are landslides, erosion, overland flow, inundation, and alluvial floodplains.
- Illegal dumping on forest resource lands is a significant challenge to forestry groups for the cost to dispose garbage, abandoned appliances/ vehicles and the possible environmental damage from hazardous materials.
- Understanding limitations in growth and the capacity to preserve.
- Communities around the river could be impacted in the predominant rain.
- *"Effects on cultural resources due to climate change is another element that should be considered in preserving."*

Economic Development

- Supporting businesses in areas people live to ensure living wages
- Keep and retain waterfront and water-based businesses.

Housing and Building Focus

Increase affordable and accessible housing options for all residents in Skagit County.

- Interviewees made mention of needing to close the gap from shelters to long term housing and allow for more options between the two.
- Providing housing options for senior citizens and multigenerational households. Seniors may have challenges aging in their homes with increased maintenance costs while receiving a limited fixed income. There are people who "have a home without lights or water but they have nowhere to go. They cannot live in their homes, but they have nowhere to go."
- Decreasing the difficulties around the permitting process
- Interviewees agreed that ADUs should be explored as additional housing options

Finding balance between preserving agricultural land and creating opportunities for growth/housing.

- Interviewees expressed several concerns about finding available and affordable land for new housing projects and several barriers to construction.
- Building permit processes are not transparent and can often have unpredictable timelines.
- Locating appropriate land for new housing projects has been difficult.
- *"Once land around the UGA* [urban growth area] *gets approved to be farmland it creates a barrier to ever allowing any new housing or UGA expansion."*

Integrate transportation and housing planning between the County, cities, and agencies, like Skagit Transit.

- Barriers to transit in Skagit County are the scattered amounts of densities and communities, which makes it difficult to increase number of bus stops and make an interconnected system.
- Consider transit-oriented development and build near existing transportation hubs for better opportunities for expansion.
- Challenges on east county with transportation. Affordable housing has to go with it and services.

Finding balance between increasing housing stock and environmental and agricultural preservation.

- Balancing development with preservation of natural resources and farmland
- Educating developers on buffers within critical areas so they understand the full capabilities of critical areas.

Capital Facilities/Utilities

- Ensuring water availability

Increase the number of programs and policies to protect housing stock from potential climate impacts and climate related hazards.

- *"In Marblemount there is a huge worry about fire. There is a large area of low-income populations and people are reliant on the food bank in these areas."*
- Hamiliton areas deal with floods regularly. The food bank and other services help move people and haul off debris.
- *"Example 25 people living in trailers that had to move in Hamilton from floods and were not able to move back from landlord."*
- Mobile homes are susceptible to mold and other unhealthy living conditions.
- Concerns about wildfire
- Solar and electric should be promoted and incentivized by the County. Including planning around transitioning houses to alternative energy.
- The County should consider possibilities and impacts if outages occur.

Economic Focus

Ensure economic development is orderly and comprehensive.

- A lot of work was done with public health, especially during the pandemic. It's crucial that Skagit County understands the importance of public health and the impacts it has on the economy.
- Skagit County Leadership works across disciplines. It's important that help is received in order to move issues forward and come to a solution. It can be easy to get stuck before taking any action; "we have the tendency to admire the problem for a long long long time before diving in and working on issue."
- People tend to criticize if it doesn't fit every element of the issue. They are multifaceted and cannot be solved with one solution, but a solution can help. There do not need to be competing concerns.
- *"The growth of Skagit County is not nearly as large as other counties. It is not explosive growth; it is incremental growth. There is a want to prioritize the economy by ensuring that people can both work and live within the County."*

Rural/Agricultural

- Developable land is hard to find for expanding businesses or housing especially in rural areas.
- Currently, farmers are having a hard time making a living with the land that they own. Support value added agricultural and ancillary activities. The County is heavily protecting

farmland, concern that is overprotection prohibits people from making a living on land. Surgical approach to managing uses.

Provide housing for all families and populations.

Interviewees mentioned there is a need for greater diversity in housing options. Provide options for all family sizes, incomes, and abilities. The most common types of housing discussed were transitional housing, shelters, smaller units (one-two bedrooms).

- Need more multi-family and rental properties for younger populations.
- Concerted effort around new housing projects being close to work centers.
- Housing options near population and work centers rather than on farmland or floodplains.
- Needing to accept more density to preserve the beauty of the landscape in Skagit County.
- It is difficult for families to encourage their kids to grow up and live within Skagit County due to housing price points.
- More entry-level housing is necessary
- Need to reduce costs for the builders and find a way for the public sector to share the risk and cost.
- The Skagit Housing Consortium encourages group conversation.
- Matha's Place is a model for addressing homelessness, but it does not address the issue of workforce housing. We need a range of housing projects that specifically targets different housing problems.
- Potential for housing in unincorporated areas of Skagit County

Create connections between housing, services, and transportation.

- Connecting people to where they work and where they recreate should be prioritized.
- Connecting the train to the bus is what people want. Taking people off the roads and using different modes of transportation. This way support is given to the lower-income populations that cannot afford a car, maintenance, gas etc.
- Transportation is an equity issue for the lower income population. In addition to the environmental benefits, we want to make sure that people can get to and from work.
- Childcare can be a major challenge for individuals when trying to enter or rejoin the workforce.

Capital Facilities/Utilities

- Broadband is much better than it used to be but could still be improved for businesses and homes. It is important to extend outside of the urban cores.
- A pressing issue within Skagit County is power. Limited electric power discourages industrial consumers. This will need to be addressed in the near future, such as new substation.

Hazard Mitigation

- Ensuring businesses in rural areas get hazard relief.
- Natural hazards exasperated by climate change impacts. For example; cold snaps- crop failure, pipes bursting. Businesses upriver are disproportionately affected per capita as are home based businesses.

Potential Actions Mentioned

Throughout the interviews, participants mentioned potential County actions. These actions were collected and assembled into a general list to present as part of the community engagement data although their inclusion in this engagement report does not guarantee they will be adopted in the Comprehensive Plan as is.

These have been paraphrased to clarify the context from the conversation.

- The County should consider how to work with diking districts or irrigation districts when developing land use policies to continue farming activities.
- Engage companies that assist farmers in their business operations.
- Ensuring the County can make the permitting process easier for affordable housing construction for Habitat for Humanity projects.
- Ways to incentivize smaller housing types in limited areas of more intensive rural development (LAMIRDs) for first time home buyers or for seniors that don't need large houses or can't live in them.
- Develop incentives for smaller housing types, reduce the permit process timeline for homes built for affordable housing, multifamily tax incentives and density incentives for low-income units, create opportunities for seniors to downsize.
- Incentivizing cottage ordinances and small lot subdivisions for duplexes.
- Demonstration programs can help incubate housing types and show the community new and innovative ways to create nontraditional housing types.
- Address bridges that need to be updated for the capital facilities plan.
- Ensuring coordination with the Department of Emergency Management (DEM) and the hazard mitigation plan and community wildfire protection plan.
- Educating the public on the importance of natural resource programs in the County: tax benefits, open space benefits, revenue, and jobs
- Explain how the forest industry will be promoted but still be able to mitigate climate in certain ways and emphasize fuel reduction more than carbon dioxide (CO2) capture.
- Consider how to balance the tension between limiting infrastructure in rural areas and developing growth.
- Write policies to bolster the ability to apply for funding, especially for green infrastructure and road projects.
- Skagit County should make a vulnerability map of properties with the most concerning hazards.
- The Comprehensive Plan should be done in such a way that it's respectful of tribes and treaty rights and acknowledges this to avoid any future issues.
- Is there potential for a transfer of development rights program?
- The County should encourage and support this resiliency groups that are forming in the County. Consult with Skagit Council of Governments (SCOG) and Public Works on this effort.
- The Shoreline Master Plan (SMP) should be proactive in responding to climate.

June 2024 Open Houses

Summary

Skagit County hosted three open houses early in the project before drafting goals and policy revisions to the Comprehensive Plan. These were hosted at the end of June in Anacortes, Sedro-Woolley, and Concrete. The open houses were scheduled in these locations to provide opportunities to participate in-person in West, Central, and East Skagit County.

A future open house is tentatively scheduled for early October and will be in hosted in Mount Vernon.

The meeting format was self-guided with no formal presentation. Participants could arrive anytime between 5:30 and 7:00 and walk through a collection of poster boards that educated participants on state requirements and engaged participants to provide feedback. The topics covered at the open houses were land use/rural, housing, capital facilities, transportation, climate change and resiliency.

Goals

1. Educate the public about the new state requirements specific to this periodic update.
2. Ensure residents are aware of the new element regarding climate change with two sub elements for resiliency and greenhouse gas emissions reductions.
3. Collect community feedback specific to the Comprehensive Plan elements that will help guide the preliminary policy revisions presented between July and October 2024.

OPEN HOUSE SNAPSHOT

Attendance

More than 100 people attended open houses at three different locations in Skagit County. The open house that received the highest attendance was hosted at the Sedro-Woolley Community Center with over 60 attendees.

Comments Collected

Over 400 comments were collected across all open houses. The comments collected identified issues or opportunities related to rural character, housing, transportation, climate, and resiliency.

Locations

Anacortes Depot Arts & Community Center
Thursday, June 20th
5:30PM-7:00PM
611 R Ave.
Anacortes, WA

Sedro-Woolley Community Center
Wednesday, June 26th
5:30PM-7:00PM
703 Pacific St.
Sedro-Woolley, WA

Concrete High School
Thursday, June 27th
5:30PM-7:00PM
7830 S Superior Ave.
Concrete, WA

Please visit the project website at https://skagitcounty.net/2025cpa for more information.



Caption 37. Open House Attendees at the Anacortes Depot Arts & Community Center

Results

What does rural character mean to you?

The comments focus on preserving rural and natural environments while managing urban growth. Key points include:

- **Habitat Protection:** Emphasis on creating and maintaining habitats for a variety of wildlife such as eagles, ospreys, and seals, and preserving natural areas like forests, wetlands, and rivers for their ecological functions, including carbon sequestration.
- **Rural Character and Preservation:** A strong desire to maintain rural character by protecting open spaces, farmland, and natural landscapes from urban sprawl and non-agricultural development. Rural areas should remain sparsely populated with limited development, focusing on agriculture and conservation.
- **Sustainable Development:** Advocacy for sustainable farming practices, reduced density in rural areas, and the importance of green spaces, parks, and scenic beauty. Some comments suggest implementing clustered housing with significant open space and integrating new climate solutions like biochar.
- **Regulation and Zoning:** Calls for updating zoning laws to balance housing needs with the preservation of natural lands. Some advocate for stricter regulations to prevent farm conversion to residential use and non-commercial exploitation of natural areas.
- **Community and Quality of Life:** A vision of a close-knit community with minimal governmental intrusion, emphasizing a connection to nature, quiet environments, and less traffic. There is also concern about the impact of pesticides and the need for transparency about their use.
- **Balanced Growth:** A need to manage population growth by concentrating development in urban areas and preserving rural areas for agriculture, natural habitats, and low-density living.
- **Public Safety and Resources:** Acknowledgment of the need for resources to address issues such as rural homelessness and ensuring public safety while maintaining the rural lifestyle.

Overall, the comments reflect a commitment to environmental stewardship, sustainable living, and thoughtful urban planning to protect and preserve rural landscapes and natural habitats.

What housing issues are you seeing in Skagit County?

The comments highlight pressing issues related to housing affordability, density, and planning, with a strong focus on balancing development with the preservation of natural areas and community needs. Key themes include:

- **Affordable Housing**: There is a critical need for more affordable housing options, particularly for low-income and essential workers. Concerns include rising rents, insufficient low-income housing, and long waitlists. Many advocate for mandating affordable units in new developments and exploring alternative housing models like tiny homes and ADUs.

- **Housing Density and Development**: Support for increasing housing density in urban areas to prevent sprawl and better utilize existing infrastructure. Calls to restrict or eliminate short-term rentals (e.g., Airbnb) to free up housing for residents and avoid mega-mansions in favor of more modest, varied housing types.
- **Public Transit and Green Space**: Emphasis on integrating housing with public transit and ensuring access to green spaces. This includes the need for new housing to be near transit, groceries, and parks to promote livability and reduce traffic congestion.
- **Preservation and Regulation**: Advocates for protecting rural lands and natural resources from excessive development. There are suggestions for stricter regulations on ADUs to maintain neighborhood aesthetics and avoid environmental degradation.
- **Senior and Special Needs Housing**: Acknowledgment of the growing need for senior housing and accessible living options. Concerns about seniors losing their homes due to rising costs and a lack of affordable, single-level housing options are prominent.
- **Development Policies**: Calls for better zoning regulations, streamlined permitting processes, and incentives for green and sustainable building practices. Some propose revisiting existing policies to enhance housing affordability and ensure that new developments include necessary amenities and services.
- **Community and Quality of Life**: Desire to maintain a high quality of life with adequate public services, green spaces, and community facilities. There is also a focus on creating diverse, mixed-income neighborhoods to avoid socio-economic segregation.

Overall, the comments reflect a desire to address housing challenges through increased density, better regulation, and strategic development while safeguarding natural resources and ensuring community well-being.

What improvements or additions would you like to see in our community's public facilities, such as sidewalks, parks, sewer, water systems, or other government services, to better meet the needs of residents now and in the future?

The comments reflect a strong desire for improved infrastructure and transportation options, with a focus on safety, accessibility, and environmental sustainability. Key points include:

- **Infrastructure Improvements**: There is a significant push for developing more sidewalks, bike lanes, and multi-use trails to enhance safety and encourage walking and cycling. Specific requests include separated motor, bike, and pedestrian routes, better sidewalks in high-traffic areas, and improved bike trails connecting cities. Concerns about current infrastructure include broken sidewalks, inadequate bike paths, and unsafe conditions for pedestrians and cyclists.
- **Public Transportation**: Many advocate for expanded and more efficient public transit options, including shelters at bus stops, increased stops in various areas, and better connections to parks and community spaces. Suggestions also include electric taxis and improved services for remote areas like Marble Mount.
- **Climate and Environmental Concerns**: There is a call for transportation planning that addresses climate impacts such as sea-level rise, increased flooding, and drought. This

includes developing plans for road maintenance and improvements in vulnerable areas and integrating green infrastructure to mitigate these effects.

- **Community Amenities**: Suggestions for new and improved community spaces include additional parks, trails, and recreational facilities like community pools and fairgrounds. There is also interest in creating spaces for mental and physical health care clinics and centralized facilities for social services.
- **Water Management**: Concerns about water supply and conservation are highlighted, with recommendations for better water monitoring, floodwater storage, and alternative water systems. There is also a call for protecting water intake sources and using sustainable practices like composting toilets and grey water systems.
- **Safety and Accessibility**: Emphasis on making transportation routes safer and more accessible, particularly for pedestrians, cyclists, and individuals with disabilities. This includes creating safer crosswalks, marked school zones, and improving transportation infrastructure to accommodate various needs.
- **Educational Facilities**: Addressing overcrowding in schools is a concern, with calls for more schools and resources to improve educational opportunities.
- **Recycling and Waste Management**: Requests for improved recycling pick-up services and waste management, including better handling of recycling and more options for composting.

Overall, the comments advocate for a comprehensive approach to transportation and infrastructure planning that considers safety, environmental impact, community needs, and accessibility.

What should we do about climate change in Skagit County?

The comments highlight a range of suggestions and concerns regarding climate change, environmental protection, and community planning:

- **Climate Action and Resilience**: There expressed interest to integrate climate change considerations into the SMP and the Growth Management Act (GMA) Plan. Comments stress the need for open discussion about climate impacts and increased efforts to build community resilience. Creating a Conservation Advisory Committee and a Climate Citizen's Advisory Committee is recommended to advocate for environmental protection and climate resilience.
- **Sustainable Energy and Transportation**: There is support for transitioning to non-fossil fuel energy sources and expanding renewable energy, including solar and hydroelectric power. Suggestions include increasing gasoline taxes, offering local incentives for solar installations, and promoting electric vehicles and public transportation. The need for electric vehicle charging stations and improvements in bike trails and public transit are also emphasized.
- **Environmental Protection and Restoration**: Many comments advocate for enhancing environmental conservation efforts. This includes planting more native trees, protecting forests, improving the water quality of lakes and rivers, and reducing pollution. There is a

call to stop clearcutting without replanting and to avoid hard armoring of shorelines, which can exacerbate erosion.

- **Community Planning and Development**: Recommendations include focusing on developing walkable, livable communities with good public transit and bike connectivity. There's a push for zoning changes to support commercial composting and better land management practices. Additionally, there is support for housing initiatives that cater to various income levels and for educational workshops on climate change and conservation.
- **Consultation and Involvement**: Comments stress the importance of consulting with local scientific experts, such as the Skagit Climate Science Consortium, and involving Tribal knowledge and perspectives in planning and decision-making processes.
- **Miscellaneous Concerns**: Some comments express skepticism about the extent of human impact on climate change and advocate against specific initiatives, such as Initiative 2117. Others suggest practical actions for individuals, such as reducing water and energy use.

Overall, the comments reflect a desire for proactive, science-based approaches to environmental protection and climate action, with a focus on sustainability, community resilience, and comprehensive planning.

What actions do you think Skagit County government should prioritize to enhance its preparedness and resiliency to changing climate?

The comments emphasize a range of priorities and actions for addressing climate change, environmental protection, and community planning:

- **Shoreline Management and Flood Protection:** There is a strong call to update the SMP to include considerations for sea level rise and avoid using hard armoring, which exacerbates erosion. Comments mention the need for collaboration with science-related communities and experts for climate related issues.
- **Development and Land Use**: Many comments advocate against further development in flood plains and areas prone to sea level rise. There's support for avoiding development on landslide-prone slopes and high-risk areas. Suggestions include focusing new growth in urban areas and avoiding urban development in flood plains. Land conservation should be prioritized alongside agricultural and forestry considerations.
- **Climate Action and Energy**: The need for a rapid transition to renewable energy sources, including solar, wind, and geothermal, is emphasized. Comments suggest increasing electrification and reducing fossil fuel use. There's also a call to support community solar projects, consider small-scale nuclear plants as a bridge fuel, and incentivize homeowners to switch to native plants and trees.
- **Disaster Preparedness and Resilience**: Recommendations include improving disaster preparedness, such as ensuring functional bridges and planning for extreme weather events. Educational workshops on climate change and conservation are suggested to help communities prepare for issues like wildfires and extreme temperatures.

- **Environmental and Community Health:** Comments highlight the importance of preserving green spaces, improving water quality, and managing forest lands. There is support for better land management, protecting water sources, and addressing pollution.
- **Education and Policy**: There is a call for creating and updating comprehensive climate action frameworks and plans. This includes forming an Environmental and Sustainability Committee and implementing educational workshops for climate change and nature conservation. Leadership should focus on informing the public about climate policy and the importance of taking action.
- **Community Involvement and Equity:** Ensuring that climate action and environmental policies address inequities and are responsive to lower-income communities is a key concern. Consulting with local tribes and integrating their knowledge and solutions is also advocated.

Overall, the comments reflect a broad consensus on the need for science-based, proactive measures to address climate change, protect natural resources, and enhance community resilience.

What climate impacts are you most concerned about?

The comments provided reflect a wide range of concerns about the environment, economy, health, and community. Several comments mentioned concerns with a loss of quality of life from heightened wildfire activity, smoke, heat, and drought. There are also significant concerns about shoreline erosion and landslides, alongside the challenges in managing shorelines effectively.

- **Water Supply**: educed snowpack melt in the summer leading to decreased in-stream flows. Flooding and tree loss are critical concerns, emphasizing that the cost of inaction will be much higher than taking preventive measures now.
- **Air Quality and Pollution**: Comments also focus on greenhouse gas emissions, pollution, and declining air quality. The health consequences of heat and smoke are severe, affecting air quality and increasing disease rates. Reducing reliance on coal or oil trains to cut air pollution, fires, and explosions are suggested. Concerns about pollution from cars and component manufacturing.
- **Sea-Level Rise**: Comments express the need for effective responses to sea level rise, including saltwater intrusion, and tidal marshlands, as well as flooding.
- **Heat**: There is a strong emphasis on the loss of biodiversity, with pollution from greenhouse gases exacerbating this issue. The heat dome phenomenon, wildfire smoke, loss of trees, and drought are seen as interconnected problems, leading to heat, flooding, and wildfires. The extreme cold and winter weather in some areas, combined with inadequate shelter or housing, further compound these issues. Planting more trees and protecting animals are suggested as important measures.
- **Biodiversity Degradation and Loss**: Concerns about degradation of ecosystems will increase the vulnerability to climate related hazards. Loss of tree cover/canopy can lead to an increase in heat. Loss of vegetation can lead to increased landslides. Loss of wetlands can lead to further problems with flooding and sea level rise. Changes in plant and animal phenologies, such as altered food sources during bird migration and reproductive failures, are worrying.

- **Wildfire and Smoke:** Comments address several impacts from wildfires including environmental degradation and smoke. Local wildfire hazards are a significant threat, and fires have been known to devastate wetlands. The loss of trees and vegetation due to wildfires is mentioned frequently. The agricultural sector is also suffering, with fires and extreme heat displacing wildlife and causing a loss of bird species.

Overall, these comments reflect a comprehensive concern for the multifaceted impacts of climate change on various aspects of life, urging for immediate and thoughtful action to mitigate these effects.

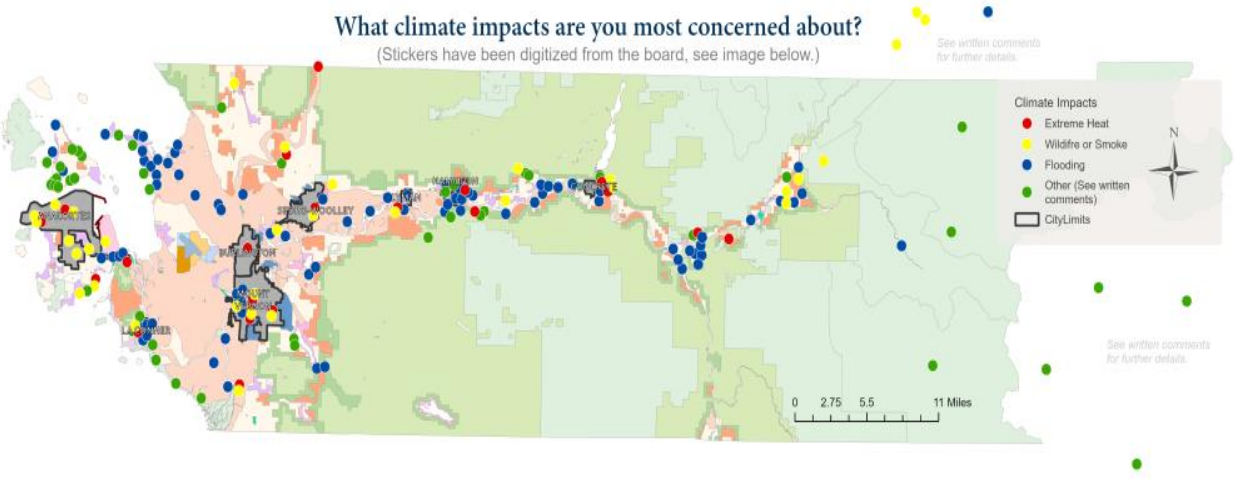


Figure 4 "What climate impacts are you most concerned about?" Map Activity Results from June Open Houses. See Appendix G for larger version.

At the open houses, attendees were invited to participate in a map activity asking them to put stickers around Skagit County identifying climate impacts they were most concerned about. Reds dots are areas where attendees have experienced extreme heat. Yellow dots are areas where attendees have experienced wildfire or smoke. Blue dots are areas where attendees have experienced flooding. Green dots represent some other climate impacts further discussed in the comments above. A larger map to view the dots in greater detail is provided in Appendix G.

The highest of concentrations of dots identifying flooding are clustered around La Conner, Hamilton, Concrete, Rockport, and other areas along the Skagit River.

The highest concentrations of dots identifying wildfire or smoke are clustered around developed areas, typically cities. This is most likely identifying that particpants were concerned about impacts from smoke where they live.

The highest concentrations of dots identifying extreme heat are clustered around cities.

Summary of Participant Data.

At all open houses, participants were given the option to submit demographic data. Demographic data helps ensure input is collected from all community members and helps assess further community engagement strategies.

Almost 25% of survey responses came from participants living in the 98221 ZIP code which is the City of Anacortes and Guemes Island. The second most participants, boasting over 20%, came from the ZIP code 98284 which is the City of Sedro Woolley, Town of Hamiton and the surrounding area.

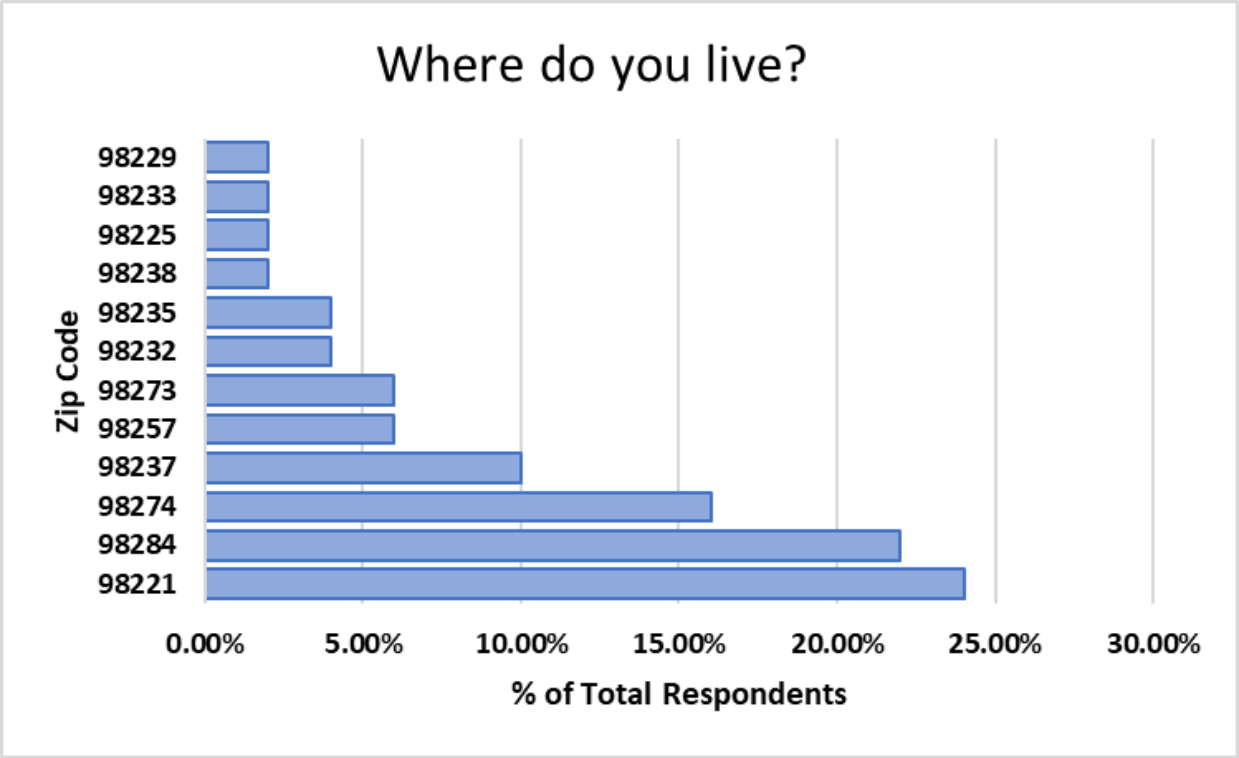
Women made up 54% of the participants in this survey, 40% of respondents were men, and 6% preferred not to say.

The majority (86%) of respondents in Skagit County self-identified as White or Caucasian. Following that was those who identified as multiracial (4%). Black or African American and Other both accounted for 2% of the survey population.

When asked what decade the participants were born in, about 33% stated that they were born between the years 1950 and 1959. The next largest group of respondents stated that they were born before 1950. The survey saw the least engagement with individuals who were born after the year 2000.

Participants that stated they had achieved an advanced degree made up 42% of the survey and 29% of respondents stated that they have earned a 4-year degree. A total of 15% of participants identified that they had completed some college or a 2-year degree and 2% had stated that they are a high school graduate.

Out of the 52 participants, 31 of them responded to the survey at the Sedro-Woolley Open House. At the Anacortes Open House there were 13 participants. Concrete Open House saw the lowest number of participants with 8.

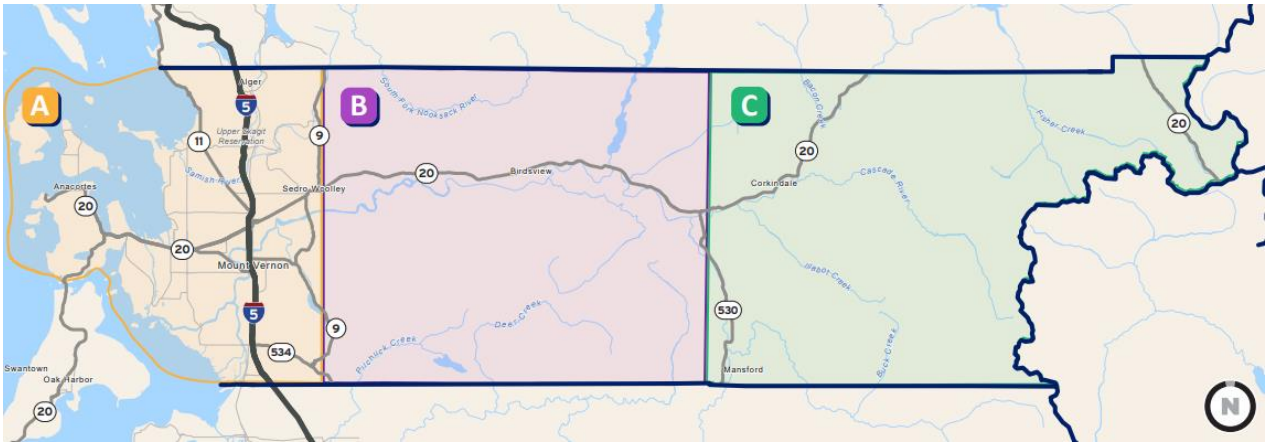


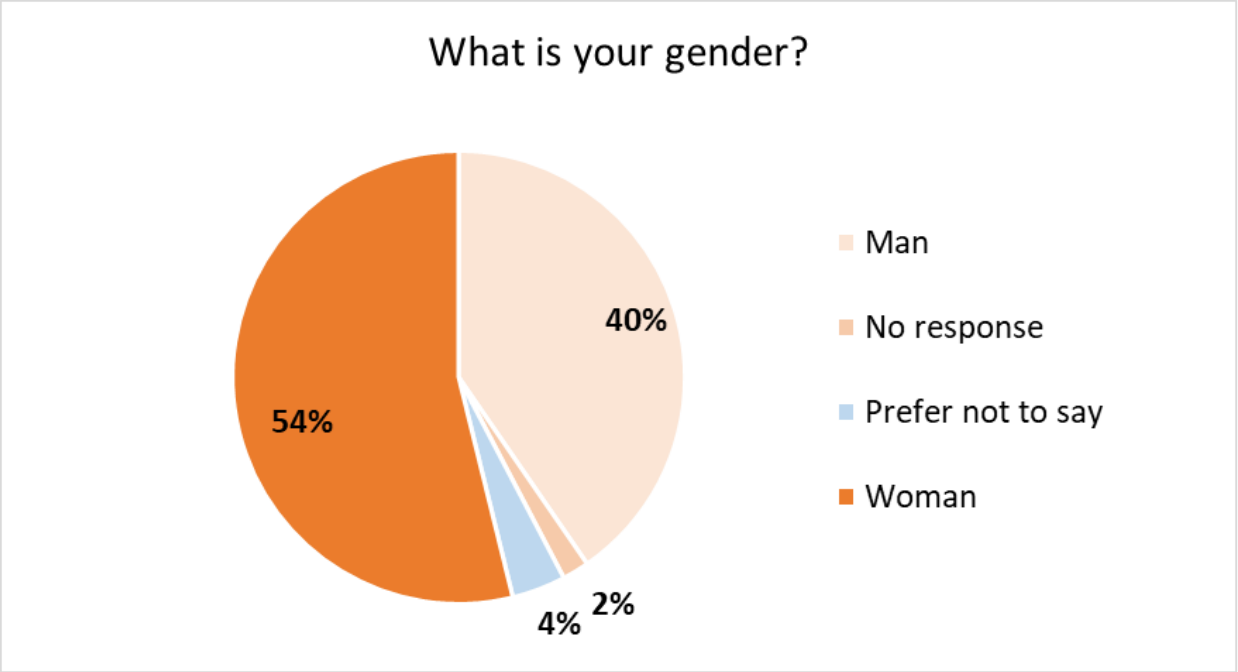
Region A Zip Codes: 98221 (Anacortes), 98284 (Sedro-Woolley), 98273 & 98274 (Mount Vernon), 98232 (Bow), 98233 (Burlington), 98235 (Clearlake), 98238 (Conway), 98257 (La Conner),

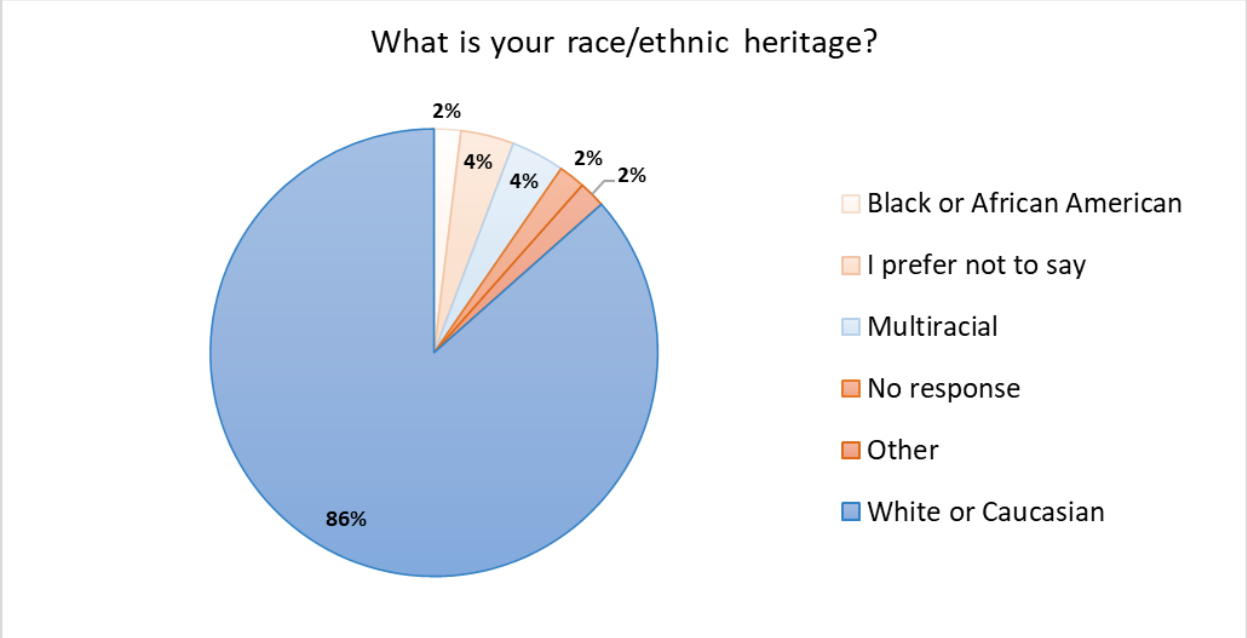
Region B Zip Codes: 98284 (Hamilton and Lyman)

Region C Zip Codes: 98237 (Concrete)

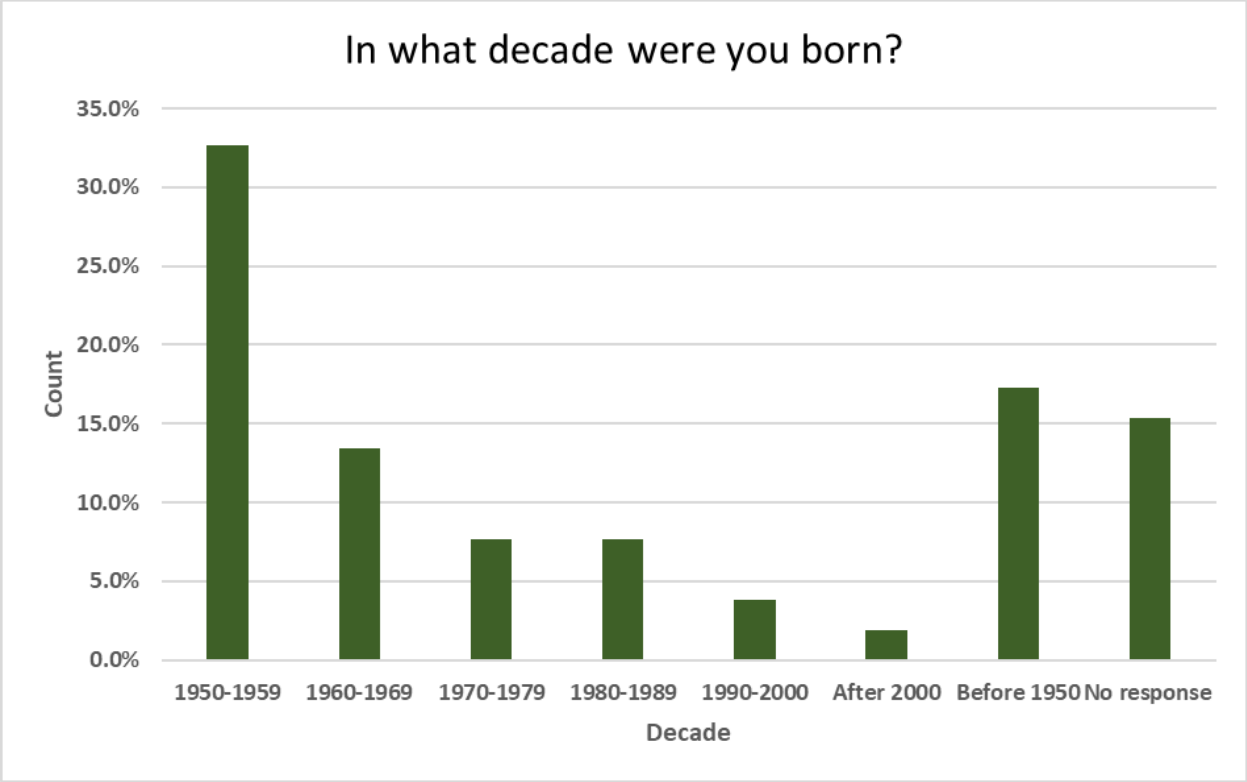
Other Zip Codes: 98229 & 98225 (Bellingham)

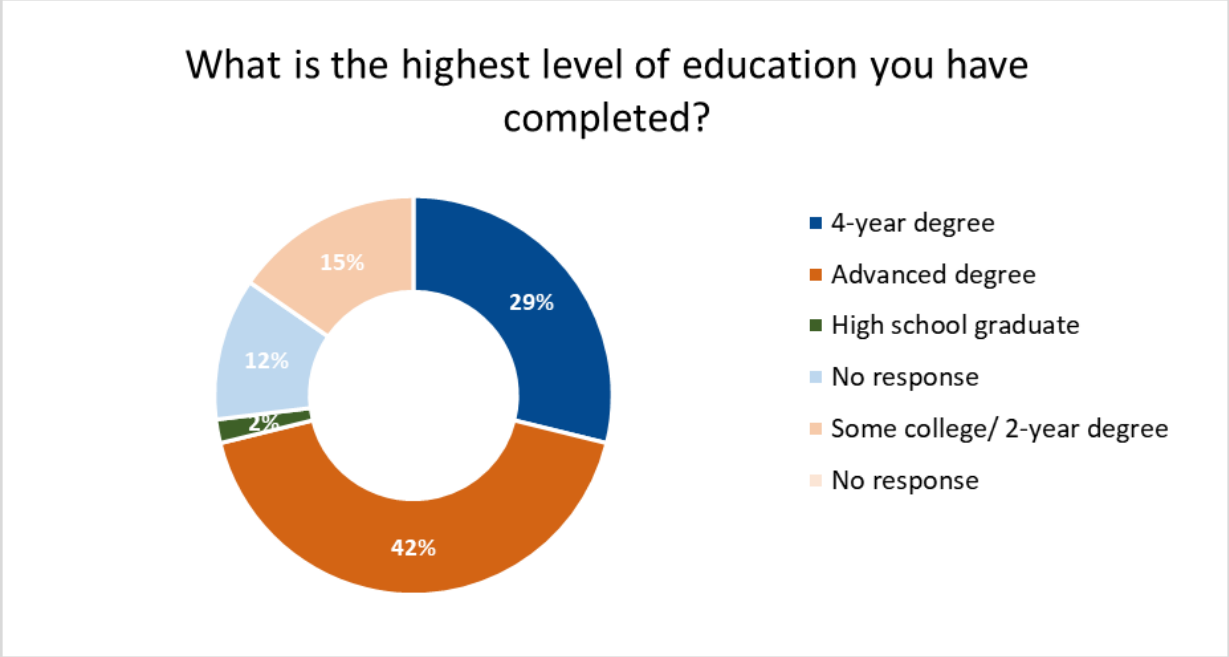


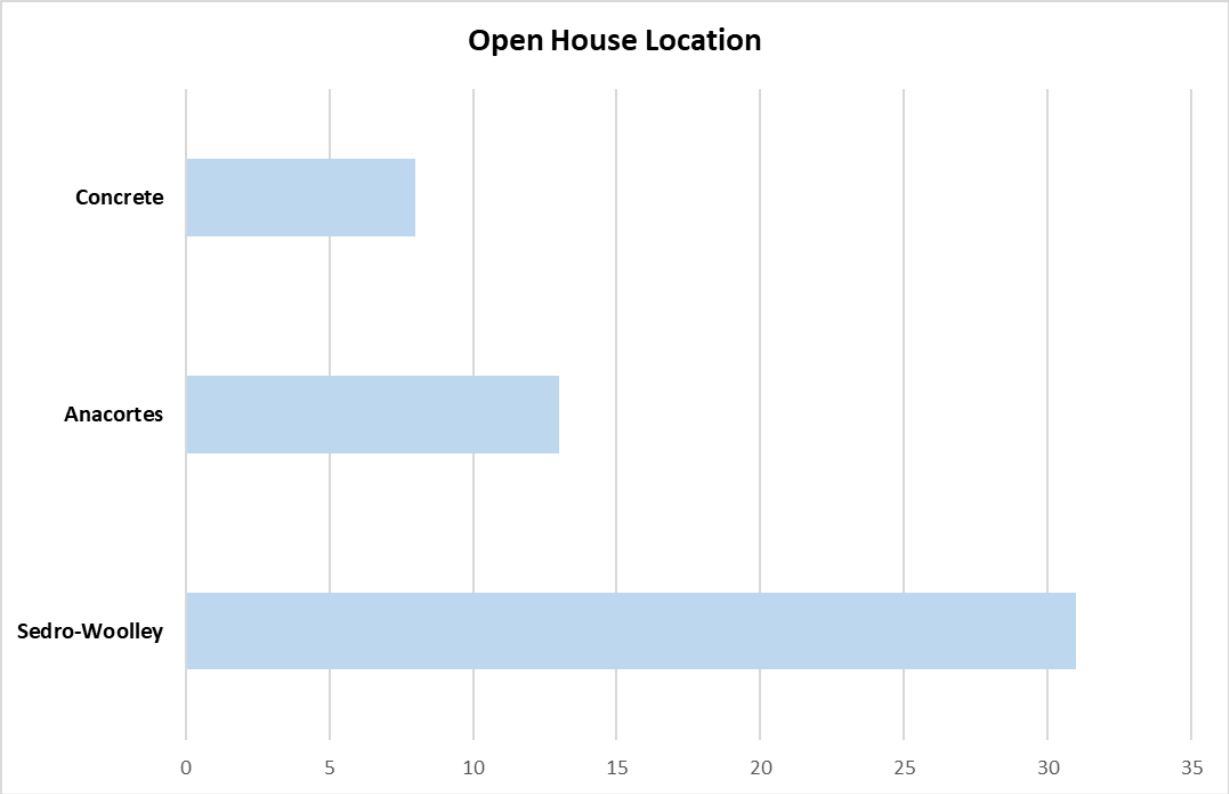

What is your gender?
40%
54%
4%
2%
Man
No response
Prefer not to say
Woman


What is your race/ethnic heritage?
2%
4%
4%
2%
2%
86%
Black or African American
I prefer not to say
Multiracial
No response
Other
White or Caucasian

Please visit the project website at https://skagitcounty.net/2025cpa for more information.







Other Comments Received Prior to July 2024

Throughout the project, PDS staff receives comments about the Comprehensive Plan through written comments and email. These comments are recorded in this report for review by the public, Planning Commission and Board of County Commissioners. Comments have been copied and pasted or re-typed as submitted to PDS staff expect where typos or formatting issues occurred.

Emailed to staff on June 26, 2024, by Puget Sound Energy

> Dear Jack Moore,
> On behalf of Puget Sound Energy (PSE), I am reaching out to convey our thoughts for your consideration as part of the periodic update to the comprehensive plan and development regulations under the Revised Code of Washington (RCW), specifically Chapters 36.70A and 43.21C. The attached spreadsheet contains suggested language as it relates to customer programs and our shared climate goals. In the attached, you will find 7 tabs grouped by category. At PSE, we recognize that climate change is one of the biggest existential threats facing our planet today. As one of the largest producers of renewable energy in the Pacific Northwest, PSE has been an early leader in addressing climate change and investing billions in renewable resources and energy efficiency for homes and businesses. Now, PSE is on the path to meet the current and future needs of its customers and to deliver on the requirements to decarbonize operations and serve its customers and communities equitably. This transition is unprecedented in terms of the magnitude of the change and the accelerated time frame in which it must be achieved. By working together, we can successfully drive towards our

shared clean energy goals. PSE looks forward to providing input as the comprehensive plan items are discussed in more detail. Together, we can reduce emissions and keep energy safe, reliable, and affordable.
Thank you,

Emailed to staff on June 25, 2024, by Gena DiLabio.

Dear Senior Planners,
Please do not use farmland or forests in update. Provide for more parks for recreational use. Please protect wetlands, Puget Sound, salmon streams and the Skagit River. Provide for the health and safety of those people who live and work in the planning area. Coordinate water systems and preserve as much open space as possible. Scientists warn us that the climate is changing rapidly because of fossil fuel use, please keep this in mind as you plan for the future.
Thank you for considering my input.
Sincerely,

Written comments submitted to staff on July 16, 2024, by Puget Sound Partnership. This was a formal letter

Dear Skagit County Board of Commissioners,

On behalf of the Puget Sound Partnership's (PSP) Ecosystem Coordination Board (ECB), we submit this letter with respect to your jurisdiction's current periodic update process, and associated updates to development regulations. The Puget Sound Partnership's Ecosystem Coordination Board supports the Leadership Council in carrying out its duties, including the development and implementation of the Action Agenda. The ECB is made up of 33 members, representing local, state, federal, and tribal governments, environmental and business interests. This broad representation supports the ECB to provide cross-caucus reporting and dialogue on priority issues, such as how to ensure the protection and restoration of habitat for ecologically sustainable watersheds for the future of all species through local periodic updates. This letter provides background on the priorities described in the Action Agenda and the resources available to support Comprehensive Plans and Critical Areas Ordinance (CAO) amendments to align with those priorities. While this letter does not respond to materials produced as part of your comprehensive plan update, it does offer many specific recommendations and resources that will support the protection and recovery of the Puget Sound.

The recovery of Puget Sound is vital to human wellbeing in the region, to sustain threatened salmon, orcas, and numerous other species, and to preserve Puget Sound's ecosystem functions and values for current and future generations. But the Puget Sound ecosystem is under increasing threats from the development of ecologically important habitats, forests, farmlands, and other working lands, especially outside of urban growth areas. The smart growth strategy in the 2022-2026 Action Agenda identifies a key opportunity to "improve the implementation of the Growth Management Act within local jurisdictions land use planning and decisions, and across jurisdictions to include the protection of natural areas and working lands."

New planning requirements, updated science, and learning from the past ~8 years of Growth Management Act (GMA) implementation make this round of Comprehensive Plan updates a critical juncture and inspiring opportunity in our region's collective work to recover Puget Sound. As you know, the Comprehensive Plan sets the stage for development activities and decisions which all have an impact on how well we achieve our goals to protect and restore Puget Sound. To support recovery of the Puget Sound, we recommend that jurisdictions in the Puget Sound region make use of the many science-based resources available to support development of Comprehensive Plan and CAO amendments that protect natural areas and working lands.

Our collective understanding of the complex relationships between land cover, development, and ecosystem health improves over time, and this is why cities and counties must include current, best available science and information in their local land use planning amendments during the periodic update. Fortunately, our state Departments of Fish and Wildlife, Ecology, Natural Resources, and Commerce have been busy updating and distributing science-based guidance to support local governments in this process. Cities and counties should leverage these resources below, and other science-based resources, to effectively amend their Comprehensive Plans and Critical Areas Ordinances:

- Local Integrating Organizations (LIOs) and LIO Ecosystem Recovery Plans
- Local Salmon Recovery Watershed Chapters
- Department of Fish and Wildlife's current Priority Habitats and Species Information

  Riparian Management Zone Checklist for Critical Areas Ordinances
- Ecology's Wetland Guidance for Critical Areas Ordinance (CAO) Updates
- Ecology's Climate Resilience and Shoreline Management webpage
- Commerce's Critical Areas Handbook and Checklist

To ensure smart growth in the Puget Sound region, the ECB recommends that jurisdictions consider and take action on the following:

1) **At key points in the Comprehensive Plan update process, review and apply the Sound Choices Implementation Checklist.** The checklist was developed by the Puget Sound recovery community and is intended to help local jurisdictions make updates to their comprehensive plans that align with Puget Sound recovery strategies and actions.

2) **Ensure your local planning department takes advantage of funding for additional staff resources to incorporate salmon and Puget Sound recovery into local planning by applying for the** Salmon Recovery through Local Planning Grant Program. Depending on funding availability, Washington State Department of Commerce will hold a fall 2024 round of funding. For more information contact angela.sanfilippo@commerce.wa.gov.

3) **Understand how your local land use decisions will support region-wide efforts to achieve positive trends in Regional Land Use Indicators.** The Puget Sound Partnership assesses the status and trends of threats through a set of regional land use

indicators. Jurisdiction specific trend data for your county is available in the attached appendix.

4) **Reach out to and involve local experts in Puget Sound recovery** including Local Integrating Organization members, Salmon Recovery Lead Entities, as well as your local representatives on the Ecosystem Coordination Board, Ron Wesen, County Commissioner and Bill Blake. For additional support in facilitating connections with local experts please reach out to Laura.Rivas@psp.wa.gov.

As you help shape the future of Skagit County at this pivotal moment in time, the ECB requests that you take advantage of the valuable tools and resources included in this letter to ensure we are doing all we can to support our local communities and Puget Sound recovery. Thank you for considering our recommendations, tools, and resources.

Sincerely,

Written comments submitted on June 26, 2024, by Joan Stamm.

Dear Tara and Robby,

Thank you for hosting tonight's community meeting in Sedro Woolley. I learned a lot about various community needs and issues. Although I attended to specifically address preserving the Eaglemont Golf Course land asa pristine wilderness and wildlife corridor, I now understand that I need to take my concerns primarily to the City of Mount Vernon. However, since the Eaglemont lands border unincorporated County lands, including the Eaglemont land, county involvement in including these lands into your Open Space Plans would seem to be relevant. Please consider. As a member of the Skagit Land Trust, the Washington Native Plant Society, the Xerces Society and a working member of Skagit Master Gardeners, I would like to see a more sustainable and ecologically balanced approach to all land in Skagit County. Some ideas include:

1. Incentivizing homeowners to remove all or some of their turf lawn (as some counties already do) to be planted with native trees, shrubs and wildflowers. This would provide more wildlife habitat, sequester more carbon, encourage pollinators, contribute to biodiversity and address water conservation.

2. Encourage public schools, community centers, government buildings, and libraries to plant trees and native plants, to install solar panels and to compost food and yard waste.

3. Preserve open spaces, forests, meadows, and farmland for future generations.

4. Incentivize buying electric powered lawn mowers and leaf blowers to reduce carbon emissions, or switching, where feasible, to rakes, brooms & push mowers.

5. Reduce or eliminate the use of pesticides, herbicides and insecticides on County controlled land in order to preserve pollinators and to reduce air and water contamination.

The County has great potential in reducing carbon emissions, water and air pollution, habitat loss, and species extinction. Government regulations are needed to create a healthier ecosystem. I hope you will use your power and influence to do just that.

Best regards,

Emailed comment submitted on June 25, 2024, by Morgan Randall.

> Protect and plant more trees.
>
> The more trees we have, i.e. the more trees we plant and the more trees we save, the less impact there will be in our county from global hearing. It is as complex and as simple as that.
>
> Thank you for your consideration.

Email comments submitted on June 28, 2024, by Betty Carteret representing Citizens Climate Education Washington Chapter.

> Tara and Robby,
>
> I was very nice meeting you at the Comprehensive Plan meeting in Sedro Woolley. I was the one with the typed comments on the shipping labels that I left with Robby (that I have attached again here). As a little background, I am a mechanical engineer retired from the Pacific Northwest National Laboratory in the Tri Cities. Since retiring in 2005, I have been focused on climate change education and outreach and have taught classes and give countless presentations in the area on climate change and the transition to clean energy and electrification.
>
> I am currently the lead for the Skagit Chapter of Citizens Climate Education, a national organization with over 500 chapters in the US. We have a small, active chapter of people working on climate change outreach in Skagit County that is solutions oriented. I am personally working on educating people about building efficiency and electrification, but I am also very concerned about water issues in Skagit County driven by climate change. I believe there is a great opportunity to find integrated solutions to the current and projected increases of flooding and drought in our county. I personally urge that you include in your climate resilience element a study to identify the best options to store floodwater from the Skagit River (reservoirs, underground storage, aquifer recharge – or others) that can be drawn on during summer months for agricultural irrigation, residential and business use, as well as for salmon recovery and recreation. The solution(s) are going to be big projects and costly, so it is important that the county get started now on this as part of our resilience work and take advantage of funding available for such work through the Dept. of Commence and the Climate Commitment Act. There are several other areas that I'd like to discuss as the planning process unfolds.
>
> I also encourage you to establish a climate advisory team that can help with the planning process and bring in perspectives from residents, local nonprofits, community leaders and trusted voices for key stakeholder groups. This is recommended in Section 2 of the State GMA Climate Element guidance prepared by the Department of Commerce. Skagit County is lucky to have our own local experts on climate change, the Skagit Climate Science Consortium, as well as several nonprofits committed to this area that could provide representatives to support such a team. Our organization would be happy to appoint a representative to work with you and we are collaborating also with the Skagit Clean Energy Alliance another group that might be interested in participating.
>
> Thanks for hosting the informative session on July 26th and I look forward to continuing to connect with you as the process continues.

Water Management: projected flooding and drought due to climate change present an opportunity to develop joint solutions when you look at this as managing water to store

excess for times of drought. Skagit County should evaluation options for developing large water storage capacity that can be drawn down during summer months to support agricultural

irrigation, residential and business usage, tourism/water sports, and also as a resource for wildfire suppression and to recharge aquifers.

Water management – start planning on developing new infrastructure for water storage from flooding early to enable time for thorough analysis, planning, and seeking funding to pay for such large infrastructure projects. Identify needs for revenue from grants, state programs, and possibly funding from residents of the county through appropriate measures (fees, taxes etc).

This needs to be a priority.

Reduce GHG Emissions through electrification: Electrification of residential, rental, and business properties can make a major contribution towards reducing emissions in Skagit. There are organizations in the County that can help with this such as the Skagit Clean Energy Association and Skagit Citizens' Climate Education (I am local chapter lead). Provide free mentors or coaches who can get people started with planning and refer to experts.

Look for ways that Skagit County can participate and benefit from building out of the electrical grid. This is happening to meet the increased electricity demands and could be an opportunity for the County.

Evaluate and streamline county planning requirements, permitting and regulations to support transition to electric vehicles, home HVAC, and other residential and business electrification efforts.

Find ways to make mass transit more attractive to a larger segment of the population. Find out what limits peoples use of buses and find ways to improve the barriers. Improve bike travel on county roads. Look to work done in other communities to provide bike trails both for recreation and for transit. Consider increasing bike lanes and other safety measures.

Look for ways for Skagit County to use funding resources available from both the State (Dept. of Commerce) and Federal Government that area available through the WA Climate Commitment Act, US Infrastructure and Inflation Reduction Acts. These funds are available now and can help the county with funds for planning, education, and infrastructure development.
Develop programs in partnership with the state and PSE to educate homeowners, renters, landlords and businesses on the benefits of energy efficiency and electrification to achieving goals for reducing greenhouse gas emissions. There are many resources to help with this and local groups that can help such as our chapter of Citizens' Climate Education.

Review permitting for residential and business building and look to limit development in areas that are vulnerable to flooding, sea level rise, and wildfires.

Look at strategies for retreating from hazardous areas on the coast versus increasing shoreline armoring that impacts marine habitat and species.

Because the PNW will see less impacts of climate change we can expect large population growth in coming decades due to climate migration. We need to be planning ahead on how to manage this growth while protecting our critical farmland, which will be even more

important as other areas such as California and Midwest are impacted harder by climate change.

Population growth in future will need to be managed by looking at urban growth and identifying ways to site housing and transit to limit the need for car travel. Avoid concepts of Fully Contained Communities that drive increased GHG from car emissions.

Develop public education campaigns on the projected impacts of climate change in Skagit County but include education on what individuals, businesses, and visitors can do to reduce their carbon footprint including residential electrification; transition to EVs; supporting county and other programs that work for this.

Educate county employees on the plans and goals for the climate actions included in the new Comp Plan to increase support and participation. Create incentives that could get people excited about their work and efforts.

Educate public on funding available to help them transition to electric appliances, HVAC, EVs, and other items. This will help increase participation and reduce

GHG emissions.

Educate landlords and large property developers about goals to reduce emissions through efficiency and electrification. Create goals to reduce emissions from large residential units (apartments etc.) and support things like solar panels, weatherization etc.
Look for programs already developed in other counties and cities that can be replicated in Skagit County.

Form a Climate Policy Advisory Team including representatives of local organizations, citizens, community leaders (especially in lower income communities).

Email comments submitted on June 27, 2024, y Rosann Wuebbels.

Hello, I couldn't make the Anacortes open house but have some suggestions. Revise development regulations relating to land use, natural resources lands, rural character, and environment, to ensure they are compliant with new state laws and reflect our community’s priorities. My priority is to keep our farmland, open space and forestlands from development. Any development belongs in the city boundaries. Develop goals and policies to encourage housing affordable to all income levels. Update transportation plans to support future road improvements and additional modes of transportation. Make our towns easier and safer to get around via bikes and walking. Create a community more resilient to climate exacerbated hazards and reduce greenhouse gas emissions.

Emailed comment submitted on June 27, 2024, by Kimberlei Rawson.
Dear Ms. Satushek,

Thank you for offering opportunities to learn about the Comprehensive Plan Update 2025 at the Berry Dairy Days and subsequent Open Houses. I have been a resident of

Skagit County since 1995, and have lived in the Prairie, Cedardale areas. I have also lived in Colorado and Arizona. I am an educator, teaching mathematics and the performing arts for 31 years, and I have performed locally at McIntyre Hall and other venues in a variety of ensembles. My family has a background in agriculture, and I am aware that Skagit County has historically provided an extremely important role in seeds and products that feed the world. While we may be challenged to roll back the paving over of our rich farmland, we can do much to protect what is left. In an effort to address several of the items on the posters for the Open Houses, here are my "sticky note" responses to some of those questions:

Transportation: Hooray for the 90x and 80x and all the bus services in our area! My son was able to attend EvCC and also gain weekend access to return from UW because of your services. Thank you! If we could increase service in smaller vehicles to allow for connections (or more frequent connections) to Stanwood, Arlington, and Smokey Point, that would help get more of us commuters out of our single-occupant vehicles. Greater outreach with organizing van pools could be helpful. Smaller vehicles with more frequency could help facilitate greater ridership throughout our region between Mount Vernon/Burlington, Sedro-Woolley, and Anacortes. This would also help with agricultural tourism.

We are hoping for high-speed rail to be available in Bellingham or other nearby city so we can access Vancouver, BC, Seattle, and Portland to reduce our carbon footprint and improve transportation efficiency. In the meantime, increased frequency of Amtrak service would be helpful.

Locally, we need something like the monorail (gondola over rivers) to get us off I5 and the Skagit River Bridges, with frequent local vans to get everyone where they need to go. Sidewalks and Lime bikes, electric 3-wheel bikes for older folks, etc. could help. The major road corridors need to be utilized for through-traffic. We need to plan now for the big increase in population, BEFORE it becomes so expensive to retrofit. A monorail would be easier and less expensive than light rail because you can put it overhead in many existing roadways.

Climate: See above. See Housing below. Frequently-available public transportation is key. We can expect a large influx of climate refugees from our neighbors in more southern states.

Climate Concerns: We need to ban public fireworks altogether due to fire risk (more of a policy issue, I realize.)

Flooding: We should re-visit the idea of using the Nookachamps area to store excess water during the 500-yr flood events, compensating land owners there and having a plan in place to evacuate farm animals. This would serve to protect the proposed infrastructure needed to address transportation, housing, and the business core of the county.

Housing/Rural Character/Justice: We need to increase density in our cities through multi-use zoning. Farmland and forest are rural; in towns and cities we need to encourage at least 4-story buildings (more stories would be better in certain areas) near public transportation hubs that feature restaurants, retail, grocery, and services so residents don't have to travel far to get what they need (leading to reduced greenhouse

emissions). Increased education and permitting of ADU's would be helpful as well. By increasing the supply of housing in our area, we bring down the cost of living, thereby providing more access and a more just society for those with lower incomes. I hear the concerns of people who say they do not want the character of our towns to change. The reality, however, is that the population is going to grow dramatically, and we can recognize the importance of preserving farmland because we humans can go up, while there is only a set amount of fertile land for feeding everyone. Yes, science can improve yields, but those increases in yields will need to be used for the increase in population. This also affects food justice, keeping healthy food available close to home and available for many others in our country and indeed, around the world (seeds).

Justice/Climate/Housing: Along with increasing density and expanding public transportation, we need to reduce the requirements for parking lots. We should consider reclaiming some of our vast parking lots and return some patches to community gardens, planting more trees and reducing temperatures. For starters, we should pursue efforts to build multi-story retail plus housing units at the mostly-vacant Cascade Mall.

Thank you for taking the time to consider my comments.

Written comments submitted on July 11, 2024, by the Skagit Land Trust.

Recommendation for The Board of County Commissioners to Create an Environmental Advisory Board.

Reason for this recommendation

Although 2023 Washington state legislation requires that local comprehensive plans include specific goals and policies for climate change preparedness, response, and recovery, Skagit County does not have a committee or board to advise and make recommendations on all of the foundational elements of these issues. Our county needs an environmental board focused on Skagit County's open space and natural lands that would also provide input on plans critical to climate change adaptation and carbon emissions reduction.

Natural ecosystems are all of a piece. They work together to regulate our climate, lock away carbon, clean and store the water we drink, provide adequate habitat for native fish and wildlife to adapt, slow and alleviate flooding, control storm water and filter pollutants, create natural beaches protecting communities, help deter invasive species, protect biodiversity, and allow people from all communities to connect with nature in healthy, low carbon ways.

None of our commissioner-appointed advisory boards associated in any way with the environment is charged with looking at Skagit County's natural lands from a holistic point of view. The Agricultural Advisory Board (AAB) and Forest Advisory Board (FAB) have a commercial interests' focus. The County Parks and Recreation Advisory Board focuses largely on the recreational aspects of lands within the county parks system. The Marine Resources Committee is concerned principally with science, monitoring, education and restoration projects and does not play as advisory board role.

Critical area regulations do not cover the significant need the county has to identify and plan for conservation and restoration of a broad range of interconnected natural lands and environments, especially their critical role in climate adaptation and mitigation.

The County needs an environmental board with a diverse membership to evaluate Skagit County's natural lands and related policies through a variety of lenses, including social justice, biological and ecological sciences, climate science, and sustainability concepts to help the commissioners and the County make balanced decisions about the totality of our natural world and the people who inhabit it.

Proposed Primary Role and Duties

The Environmental Advisory Board reports to and makes recommendations to the Skagit County Board of Commissioners and Planning Agency on natural resource and environmental plans, policies and programs including, but not limited to:

A. Existing and proposed legislation affecting natural lands, open space, waters and wildlife habitat of Skagit County
B. Land uses as they impact the long-term sustainability of natural processes (river process, marine shoreline, etc.)
C. Ways to maintain, enhance, collaborate on, and promote natural solutions to improve climate preparedness.
D. Ways to maintain, enhance, collaborate on, and promote environmental justice and environmental stewardship.

For example, a key role of an Environmental Advisory Board would be to review and comment on evolving drafts of the comprehensive plan and climate change elements concerning the environment. Reviewing and commenting on plans is one of the main roles of the FAB and the AAB and would thus also apply here.
The Commissioners do not need to adopt a comprehensive plan policy calling for an Environmental Advisory Board in advance of its establishment; however, such a policy should be included in the proposed comprehensive plan update.

The advisory board would complement and not compete with any other governmental efforts to restore and manage the natural environment.

Additional roles of the Environmental Conservation Advisory Board

- Examine and advise on possible solutions and options for natural resource and environmental issues as they arise in Skagit County.
- Ensure that best available science is consistently available for consideration in local planning.
- Advise on updates and priorities in the County's Open Space Concept Plan to account for climate change.
- Advise on Integrated Plans as they develop; in particular, areas of fish and wildlife habitat and corridors.
- Make recommendations on measures that may be needed to protect the Skagit's unique natural ecosystems.
- Advise on ways to honor private property rights while supporting voluntary conservation and restoration.

Groups and Community Members that might be considered for appointment to the board include:

- **Nonprofit and Public Conservation and Restoration organizations that focus on environmental sustainability in the Skagit Area** (Skagit Land Trust, Skagit Fisheries Enhancement Group, Skagit River Systems Cooperative,

Skagit Watershed Council, Skagit Conservation District, The Nature Conservancy, etc.)

- **Organizations focused on education or research about the environment, including climate change** (Skagit Climate Science Consortium, North Cascades Institute, Padilla Bay National Estuarine Research Reserve, Skagit Audubon Society, Evergreen Islands, etc.)
- **Conservation-oriented businesses and nonprofits with demonstrated knowledge, interest and experience in one of the following areas:** natural sequestering of carbon; recycling; gleaning; native habitat restoration and/or engineering; surface water management; conservation biology; climate impacts on forests; aquatic or terrestrial ecology; hydrology etc.
- **Next generation groups with environmental programs** (Skagit Valley College, Triumph Teen Centre, Vamos Outdoors, Anacortes Green Club, etc.)
- **Community members and landowners at large from each district including young people** (under 23), those interested or with expertise in environmental issues, and members of an underserved community that may be disproportionally affected by climate change impacts.
- **This group would consult as needed with others including: tribal representatives; large ecosystem public land managers** (National Park Service, US Forest Service, Bureau of Land Management, WA Department of Fish and Wildlife, WA Department of Natural Resources, WA State Parks, etc.); **other entities** planning for natural lands and open space locally; **natural resources** boards etc.
-

Submitted on July 11, 2024 on behalf of Skagit Land Trust
Molly Doran, Executive Director

Written comment submitted by Skagit Land Trust on July 12, 2024.

Climate Change
Form a task force to work with staff to write a Climate Action Framework for Skagit County. The more communities participate in planning and strategy, the more realistic and effective the plan.

- **Compose a diverse task force with representatives from organizations and community members that reflect our "whole system".** At the table should be those focused on health, transportation, housing, conservation, natural resources, business, tourism, social justice, etc.
- Aim to work across jurisdictions (towns, cities, county) and have common, integrated goals and programs**.**
- **Climate impacts fall hardest on those that did the least to cause them.** Actions must assist these people and **they must be at the table.**

A Framework will not only help the County but also assist community-based organizations to help develop climate solutions.

- **Make a base map of the areas most vulnerable** to climate change as part of the Comprehensive Plan Supplemental Map section. This should include sea level rise, river flooding, excessive fire danger, geologic hazard areas (landslides, alluvial fans,

erosion areas), areas with infrastructure hazards/potential failure that will be at increased risk with climate changes.

- **Speed up efforts to map the true 100-year flood plain**. Map how it will change over time.

- **Consult with the Skagit Climate Science Consortium. They** are local experts on climate change and have local data to inform this map.
    - Their maps use best available science and are free: ww.skagitclimatescience.org/flood-scenario-map/

Resiliency

EDUCATION:

- **Publish the map of potentially impacted areas that climate models show.** If people know they are vulnerable, they are more likely to move voluntarily or submit to voluntary buy outs or other options.
    - We also appreciate the County's mapping exercise at Open Houses which incorporates local knowledge and should be used with above.

- **Explore how resiliency options could work and make the options public so that people are educated on concepts and how they work. Consider:**
    - Managed retreat.
    - A Transfer of Development Rights (TDR) program or other incentives to encourage property owners to move or exchange development rights voluntarily.
    - Use of grant funds and mitigation programs for voluntary buy outs by government organizations and conservation organizations.

- **Make a county web page on Climate Change and Resiliency: facts, tactics, science, stories and guidance such as "Best ways to lower your carbon footprint"**

REGULATION:

- **Pass Conservation Subdivision regulations.** This would allow professional conservation organizations or government entities to purchase part of a property from a voluntary landowner for strict conservation purposes without going through the current arduous and expensive subdivision process. A conservation easement would be placed on the land purchased to ensure it was not developed. This is a win-win for adapting to climate change and for landowners who often want to keep the productive parts of their land, or move their home to a resilient location, but do not want to manage sensitive or increasingly hazardous excess acreage.

- **Have a Goal to Stop Putting Development in Harm's Way. Enact a mixture of voluntary incentives, education and regulations to:**
    - restrict further development in the 100-year flood plan.
    - restrict new development in natural hazard areas.
    - restrict new development in areas most vulnerable to sea level rise.

- **Enact code that allows more land to be "sponges" and pollution strainers.**
    - Allow for 100% recycling of household grey water in appropriate circumstances.

- Lessen impact of storm water system through controlled release and evaporation systems (natural greenspace protection, green roofs)
- Allow for experimentation in new homes or neighborhoods i.e. circular sewer systems.
- Add stricter code that protects aquifers, with special attention to sole source aquifers.

- **Skagit County should actively plan for sea level rise and climate change by updating the Shoreline Master Program in the next three years**.
  - Conduct a sea-level rise vulnerability assessment and make it public.
  - Add language that avoids construction in tidal and storm surge areas.
  - Select a base elevation for all structures, utilities, and septic systems that will withstand inundation or destabilization for at least 60 years based on best available science.
  - Ensure robust shoreline buffers on both marine and freshwater shorelines with strict limits for variances.
  - Require that development on feeder bluffs have setbacks that reflect the typical lifespan of a building (i.e. 55 -100 years).
  - Stress avoidance of new overwater structures. Any new overwater structures should minimize and mitigate impacts to eelgrass, kelp, and other critical environments.
  - Limit hard armoring of shorelines to situations where there is no other alternative to protect an existing structure.
  - Do not classify boulders as soft armoring.
  - Require that new development be situated to avoid needing shoreline stabilization.

- **Develop systems to preserve our forests, wetlands, water and soils for natural carbon storage** as a way to reduce carbon emissions in the County.
  - Identify carbon sequestration as a compatible forestry practice for Open Space taxation.
  - Allow increased carbon storage (bio-char, etc.), including through mitigation programs, as compatible agricultural land uses for Open Space taxation.
  - Adopt strict critical area code for science-based buffer widths to protect and restore healthy freshwater and coastal wetlands in all land use areas. These store more carbon per acre than any habitat on earth. They also buffer communities from sea level rise, flooding, and fire.

PLANNING & STRATEGY

- **In the comprehensive plan chapters on Land Use, Natural Resources, and Environment elevate natural resource conservation for all types of land.** Prioritize conserving lands that mitigate climate change while helping provide clean water, unpolluted air, the ability for communities to adapt to changing conditions, and places for fish and wildlife to adapt.

- **Develop a transportation plan that incorporates sea level rise and natural hazard conditions into its planning.**
  - Identify roads at risk of erosion, natural hazards, or inundation due to climate change.

- Have a plan that accepts that not all lands currently behind dikes or levees will remain viable for development or agriculture.
- Develop ways for towns and neighborhoods with access roads at risk to help pay for dike and drainage infrastructure protecting those roads.

- **Update the Skagit Countywide UGA Open Space Concept Plan with climate change and green connectors in mind. Reduction of Greenhouse Gases (GHGs)**

- **Focus on the causes of GHG emissions.** Every solution should be linked to the causes.

- **Create incentives to build electric vehicle charging infrastructure in rural areas,** including eastern Skagit County. Currently there are no public charging stations upriver, which greatly reduces incentives to move to electric transportation.

- **Prioritize the development of interconnected trails systems between towns and cities to decrease the use of motorized vehicles.**
  - Increase ways for communities to use non-carbon transportation- trails, bike paths, electric charging stations.
  - Allow public access trails on dikes. Develop incentives and protections for dike districts and adjacent landowners.
  - Develop additional trails to attract recreationists and eco-tourists (such as birders) increasing the county's tourist economy without increasing the carbon footprint. Eco-tourism contributes over $20 billion to Washington's GDP and growing. Skagit County is uniquely positioned to capitalize on this trend with more tourist infrastructure such as trails and wildlife viewing sites.
  - Make completing the Centennial Trail from Snohomish County to Whatcom County a priority.
  - Develop a bike path from Edison to Burlington. The Samish Flats are a tourism site needing safer passage for bikers and walkers.

- **Work with cities and towns to help them plan for and absorb more people, homes, and businesses.** Modify the population distribution goal so that 90% of new population growth is in urban areas (rather than the current 80% goal).

- **Encourage 20-minute neighborhoods**. 20-minute neighborhoods are places where residents have easy, convenient access to many of the places and services they use daily including grocery stores, restaurants, schools, and parks, without relying heavily on cars. Increasing the walkability of neighborhoods will reduce the county's carbon output. **Encourage smaller "truck" farms on the edges of cities and towns through zoning incentives.**

- **Focus strongly on keeping growth in urban areas and making those urban areas livable.**
  - Establish high thresholds for when cities and towns are allowed to expand their Urban Growth Areas (UGAs).
  - Do not allow UGAs to expand into floodplain or critical areas.
  - Have programs that purchase development rights around UGAs to contain development and provide green spaces, parks, and trails. Green spaces will also help absorb storm waters and keep urban areas cooler.

- Stop sprawl by outlawing Fully Contained Communities (FCC) in rural areas. FCCs increase GHG emissions as they contribute to increased vehicle use.

- **Develop Plans to Reduce harm including erosion, floods, and sea level rise by planning for green systems that allow natural processes to operate**.

- **Focus on connecting green spaces and wildlife corridors so wildlife can move freely as their habitat changes or is lost.**

Preliminary Draft Policy Public Comment Periods

Between July and October 2024, Skagit County presented preliminary draft policy changes to the Planning Commission as part of an ongoing effort to engage the community and gather input on potential updates. The draft policies were introduced to the Planning Commission according to a specific schedule, outlined below, ensuring a structured and transparent review process.

Following each Planning Commission meeting where draft policies were presented, the County provided a 30-day public comment period. During this time, residents and stakeholders were encouraged to share their feedback via the Skagit County website. This process aimed to foster community participation and ensure diverse perspectives were considered in shaping the proposed policies.

The results and summaries of the feedback gathered during these public comment periods are presented in the sections that follow, offering an overview of the input received and its potential impact on the proposed policy changes.

Comprehensive Plan Element	Planning Commission Date	Public Comment Period Deadline	Public Comments Collected
Rural	July 23, 2024	8/22/2024	13
Natural Resource Lands	July 23, 2024	8/22/2024	13
Land Use	August 20, 2024	9/19/2024	5
Housing	August 20, 2024	9/19/2024	12
Economic Development	August 20,2024	9/19/2024	6
Transportation	September 24, 2024	10/24/2024	7
Capital Facilities	September 24, 2024	10/24/2024	3
Environment	October 22, 2024	11/22/2024	12
Climate and Resiliency (New Element)	October 22, 2024	11/22/2024	90

Climate Engagement Summary

Skagit County is adding a Climate Element into its Comprehensive Plan in response to Washington State House Bill (HB) 1181, passed in 2023. The Climate Element will include goals and policies to reduce emissions and prepare for climate-intensified natural hazards.
Public input and feedback are critical to Climate Element development and to ensuring the plan and policies reflect the Skagit community. The project team developed and implemented an engagement strategy to reach Skagit County's community members to meaningfully hear feedback and integrate community input. Findings from this process informed the development of actionable policies.
Climate Element-specific engagement took place in October 2024 and built on a phase of engagement about the Comprehensive Plan more broadly, which took place in June 2024. Cascadia Consulting Group led Climate Element Engagement alongside County staff, in partnership with Kimley Horn and Facet.
This document describes the engagement strategies used to collect input about the Climate Element and a summary of key findings across engagement touchpoints. Please see individual engagement summaries for full details about the questions asked and the comments received.

Engagement Strategies

Engagement for the Climate Element included three main strategies: an in-person open house, a community-wide online survey, and stakeholder group interviews. After each engagement strategy, the project team summarized findings in an engagement summary.
Engagement strategies at a glance:

Engagement strategy	Date(s)	Summary	Number of participants
Open house	Oct. 1, 2024	An in-person drop-in event where community members read and engaged with posters about the Climate Element and Critical Areas Element, shared their feedback, and asked questions.	35
Community survey	Oct. 11-31, 2024	An online survey hosted on SurveyMonkey with questions about how Skagit residents understand and are impacted by climate change, and about potential Climate Element policy areas.	652
Stakeholder interviews	Oct. 3-14, 2024	A set of five virtual interviews with Skagit County community groups.	7

Open House

Skagit County and the consulting team hosted a public open house to inform the community about the Climate Element, understand how residents are impacted by climate change, and gather feedback on key policy areas. The event took place on Tuesday, October 1, 2024, from 5:30-7 PM at Jefferson Elementary School in Mount Vernon, with 35 participants attending.
The open house was a drop-in event featuring nine posters organized into four stations: Comprehensive Plan and Climate Element Overview, GHG Emissions Reduction, Climate Resilience, and Critical Areas and the Environment. Posters included informational content and interactive activities, allowing participants to share their experiences with climate impacts, identify policy priorities, and offer suggestions for the Climate Element. Feedback collected from the event helped to inform policy development.

Community-wide Survey

Skagit County and the consulting team developed and hosted a survey to inform the community about the Climate Element, learn more about how Skagit residents understand and are impacted by climate change, and gather input on key policy areas. The survey included six sections: Climate Awareness, Climate Concerns, Policies and Actions, Challenges and Opportunities, Your Connection to Skagit County, and Demographics.

The survey was hosted via SurveyMonkey and linked on the County's webpage for the planning effort. It was promoted at the Climate Open House on October 1, 2024 and online; participants in stakeholder interviews were also invited to share the survey with their networks. The survey was open from October 11, 2024 through October 31, 2024 and was available in English and Spanish. It received 652 total responses.

Stakeholder Interviews

Skagit County and Cascadia Consulting Group conducted interviews with key community organizations and stakeholders to inform Climate Element policy development.

The interviews aimed to:1) include groups typically excluded from planning processes or significantly impacted by policy implementation, and 2) build trust by drawing on community expertise and addressing equity concerns.

Five virtual interviews were held with seven interviewees between October 3 and October 14, 2024. Cascadia led the interviews, with Skagit County staff attending all sessions and Kimley-Horn staff attending two. Interviewees included:

- Skagit Land Trust
- Evergreen Islands
- Mark Lundsen
- Skagit Watershed Council
- Familias Unidas por la Justicia / Community 2 Community

Interview questions focused on actions Skagit County should prioritize to reduce greenhouse gas emissions and strengthen resilience to climate-intensified natural hazards. Feedback from these interviews complemented other engagement efforts and guided the development of policies.

Key Findings

Overall Support for Climate Policies

Across all three engagement strategies, participants expressed strong overall support for the Climate Element and its goals to reduce greenhouse gas (GHG) emissions and strengthen climate resilience.

Over 70% of survey respondents strongly or somewhat favored the resilience policy areas presented, while a majority (50% or more) supported all of the GHG emissions reduction policy areas.

Climate Concerns

Sea level rise, flooding, wildfire and smoke, and heat-related impacts are the climate impacts that participants most raised concerns about.

- **Flooding**: Flooding ranked among the top three climate concerns for survey respondents (89% of respondents were concerned). In open-ended responses, many respondents highlighted risks to homes and property in the floodplain, including difficulties obtaining insurance, and limited resources for protecting or maintaining homes against extreme weather. At the open house and in interviews, participants recommended limiting development in floodplains and improving education on risks to lives and properties from flooding.
- **Wildfire and Smoke:** Wildfire (91% of respondents were concerned) and wildfire smoke (90% were concerned) ranked among the top concerns for survey respondents. Across engagement strategies, participants mentioned that wildfire and wildfire smoke pose a threat to both personal safety and community assets,

particularly agricultural lands, homes, and infrastructure. Farmworkers face unsafe working conditions due to smoke and extreme heat. Ecosystems are also likely to be damaged by fires and smoke.

- **Heat-related Impacts**: Participants in all engagement strategies raised concerns about higher summer temperatures and more frequent heat waves, including impacts to farmworkers and other outdoor workers, elderly people, and other vulnerable communities. Farmworkers are highly impacted by extreme heat; as is the agricultural industry more broadly.
- **Sea Level Rise**: Participants, particularly at the open house, expressed that addressing sea level rise is a high priority and called for explicit mention of it in resilience policies.

Top Policy Areas

Expanding renewable energy, improving transit and multimodal access, and conserving ecosystems were the policy areas with the most support across engagement strategies.

- **Renewable Energy:** Renewable energy was the most supported GHG reduction policy area at the open house and was supported by a majority of interviewees and survey respondents. Interviewees suggested that the County map possible areas for battery energy storage systems, solar, and wind, rather than waiting for developers to submit proposals. 73 written survey responses mentioned renewable energy suggestions, including supporting solar, wind, and other renewable energy projects, as well as updating waste infrastructure to support emission reductions.
- **Transportation and Public Transit**: Support for improved public transit, cycling, and pedestrian infrastructure appeared consistently across engagement strategies. Among interviewees, transitioning buses to electric and improving transit frequency were key recommendations. Within the survey, 140 out of 378 open-ended responses about specific Climate Element policy suggestions mentioned transportation solutions. These included expanding public transit, improving bike and pedestrian infrastructure, and providing electric vehicle (EV) incentives to reduce emissions from transportation.
- **Ecosystem Conservation**: Protecting and restoring natural ecosystems emerged as a top priority across engagement strategies. At the open house, ecosystem protection was the most supported resilience policy area. Interviewees emphasized protection of shorelines, floodplains, wetlands, and forests as a resilience strategy. Survey respondents similarly supported protecting urban trees, open space, and forest lands.

Participants voiced particular support for policies to prevent development in forests and hazard-prone areas; encourage dense, mixed-use development in urban areas to minimize sprawl; and build resilience to drought and flooding across agricultural lands.

Concerns and Barriers

Participants raised concerns about the costs of climate policies and emphasized the importance of equity and inclusion.

- **Concern about costs**: Cost-related challenges, including retrofitting homes or transitioning to electric vehicles (EVs), were consistently raised. In open-ended survey responses, many mentioned that costs, such as expensive retrofits or high utility bills, limit their ability to adapt their homes or properties to climate risks. Some respondents voiced caution, seeking assurances that climate policies would not harm local jobs or economic stability, especially for agriculture and small businesses.
- **Equity and Inclusion**: Ensuring diverse and underrepresented groups have a voice was a recurring theme, though perspectives varied. Interviewee and survey respondents noted the need to address the unique challenges faced by rural areas and frontline communities, including farmworkers and Tribes.

- **Community collaboration**: Many participants expressed an interest in continuing to be engaged in climate planning and projects. Open house and interview participants proposed creating an Environmental Advisory Committee and recommended supporting farmworkers with an ongoing seat at the table to make climate-related decisions. Many open-ended survey respondents suggested greater collaboration with residents or organizations and enhancing public education efforts.

Demographics

The survey asked each respondent their age, gender, and race/ethnicity. Over half of respondents indicated that they are at least 55 years old and over 90% of participants who chose an option other than “I prefer not to say” indicated that they are White or Caucasian, suggesting significant underrepresentation of younger and more diverse populations.

Climate Open House

Open House Overview

Date & Time	Tuesday October 1, 2024 5:30-7PM
Location	Jefferson Elementary School 1801 E Blackburn Rd, Mount Vernon, WA 98274
# of Participants	35

County and Consulting Attendees	• Skagit County
	  ○ Robby Eckroth
	  ○ Tara Satushek
	  ○ Betsy Stevenson
	  ○ Andy Wargo
	  ○ Caitie Sheban
	• Cascadia Consulting
	  ○ Maddie Seibert
	  ○ Sarah Farbstein
	• Kimley Horn
	  ○ Erin O'Kelley
	  ○ Heidi Rous
	  ○ Joel Farias
	• Facet
	  ○ Dan Nickel

Open House Posters

- Poster 1: Comprehensive Plan Overview
- Poster 2: Climate Element Overview
- Poster 3: What Causes Climate Change?
- Poster 4: Prioritizing GHG Emission Reduction Policies*
- Poster 5: How Will Climate Change Impact Skagit County?
- Poster 6: How are you affected?*
- Poster 7: Where do you see climate impacts?*
- Poster 8: Prioritizing Climate Resilience Policies*

*See Appendix A for images of the open house poster activities and the written responses.

Key Takeaways

- Most attendees who attended the open house were supportive of the Climate Element. Many individuals who attended the open house are actively involved with environmental and conservation groups in Skagit County.
- Several attendees voiced concerns about using credible and consistent science to the project team.
- Many attendees were concerned about the impacts of sea level rise and were worried it would not be adequately addressed in the Climate Element.
- Of the six shared GHG emissions reduction policy categories, renewable energy sources received the most support and electric vehicles received the least.

- Of the eight shared climate resilience policy categories, natural ecosystem protection and restoration received the most support and building weatherization received the least.
- There were a few policy ideas that were common among attendees suggestions:
  - Supporting agricultural practices that reduce GHG emissions and sequester carbon
  - Increasing bike and pedestrian infrastructure
  - Creating a Climate or Environmental Advisory Committee
  - Reducing lawns and planting native flora and trees
  - Supporting farm worker working in extreme heat and poor air quality.
  - Ensuring sea-level rise is adequately addressed in resilience policies.

Climate Change Impacts in Skagit County

Participants were asked, “How have climate impacts, such as warmer temperatures, flooding, wildfires, or smoky days, personally affected you or your household? How have they affected others in your community?”. Below are the common themes from responses.

Air Quality and Smoke:

- Wildfire smoke prevents outdoor activities, triggers asthma, and forces windows to remain closed. Poor air quality means fewer days spent outside.
- Smoke from wildfires affects entire communities, including children and those with respiratory issues. Farmworkers face unsafe working conditions due to smoke and extreme heat.

Flooding and Sea Level Rise:

- Development continues around shorelines and floodplains despite rising sea levels, putting homes at risk. Flooding and epic weather events are now regular, affecting homes in flood-prone areas.
- Coastal communities are already experiencing flooding and sewage treatment issues due to sea level rise. Infrastructure is not prepared for the increasing frequency of storms and extreme river events, and dikes need repair.

Extreme Heat and Temperature Variations:

- Warmer days affect garden growth and cause erosion. Extreme heat makes outdoor activities, such as walking, difficult due to lack of tree cover. Heatwaves limit day-to-day activities for households with vulnerable members (e.g., elderly, asthma sufferers).
- As temperatures rise, more people (especially the elderly and underprivileged) are experiencing heat-related deaths. Schoolchildren and farmworkers are also affected, with concerns about safety in extreme heat.

Environmental Degradation and Loss of Biodiversity:

- There is frustration over pavement sprawl and biologically empty lawns replacing diverse, natural landscapes. Concerns about the regression of recycling efforts are also growing.
- The loss of wildlife and plant diversity is seen as reducing the overall quality of life. Climate anxiety is rising as people feel their communities are not prepared for these changes.

Public Transportation and Infrastructure:

- Households want to use public transportation more, but the lack of bus routes, frequency, and bike paths make this difficult, especially outside major cities.
- Communities are grappling with outdated infrastructure that is not prepared for climate impacts like higher tides and more frequent storms. There's also a lack of updated mapping and data to guide responsible development.

Policy Areas Feedback

GHG Emissions Reduction

Participants were asked to place a star by the GHG emissions reduction policies they support and would like to see prioritized. Of the 6 GHG emissions reduction policy categories, renewable energy sources received the most votes with 12, followed by alternative transportation options (11), energy efficient buildings (10), land conservation & sprawl reduction (10), waste reduction (7), and electric vehicles with the fewest votes at 6.
Participants were also asked to share what else the County should consider, beyond the listed policy categories. The following are the policy recommendations shared:

Sector	Recommendation	Instances
Agriculture & Food Systems	Incentivize farmers to use practices that reduce GHG emissions and sequester carbon, such as reducing tillage and increasing organic matter	3
Buildings & Energy	Create incentives for community solar on commercial buildings and parking lots.	1
Buildings & Energy	Develop a map of where it would be possible to site commercial scale solar, wind, and battery storage facilities.	2
Buildings & Energy	Encourage the reduction of energy use through educational campaigns	2
Ecosystems	Sequester carbon through marshland restoration.	1
Ecosystems	Sequester carbon by protecting and restoring forests.	1
Ecosystems	Evaluate and conserve areas that contribute to “blue carbon”	1
Transportation	Increase bike and pedestrian infrastructure to reduce vehicle miles traveled. Add ‘green connectors’ in cities to support travel by walking, biking, and other forms of active transportation.	4
Transportation	Increase EV charging stations, especially east of I-5.	1
Transportation	Convert all buses to electric and increase bus services.	2
Transportation	Install EV charging infrastructure for public transportation and private vehicles in all developed areas of Skagit County.	1
Transportation	Develop a program to incentivize alternative modes of transportation by offering rebates on e-bike.	1
Waste Management	Sequester carbon through the production of biochar	1
Waste Management	Support recycling of waste materials, particularly glass.	1
Waste Management	Develop community food waste reduction plans and compost facilities	1
Waste Management	Develop incentives for businesses and residents to pay for food/yard waste pick up.	1
Zoning & Development	Reduce spawl and encourage growth in cities. Increase urban density.	1
Zoning & Development	Require EV charging stations in new apartment buildings.	1

Climate Resilience

Participants were asked to place a star by the climate resilience policies they support and would like to see prioritized. Of the 8 climate resilience policy categories, natural ecosystem protection

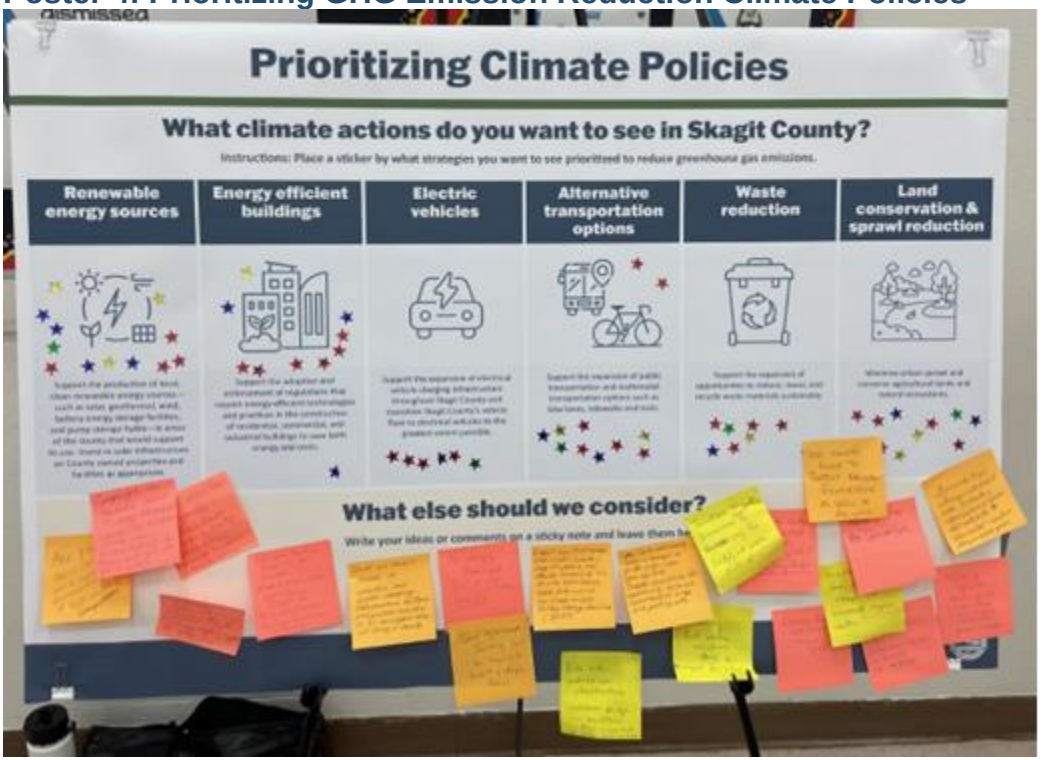
and restoration received the most votes with 17, followed by community education and outreach (11), infrastructure resilience (10), water protection and conservation (10), environmental justice and social equity (8), agriculture and food systems (8), community preparedness and response (7), and building weatherization with the fewest votes at 6.
Participants were also asked to share what else the County should consider, beyond the listed policy categories. The following are the policy recommendations shared:

Sector	Recommendation	Instances
General	Create a Climate or Environmental Advisory Committee	3
Agriculture & Food Systems	Support the agricultural industry to decrease water use, fertilizers that pollute, green gas emissions, and crops that need enormous resource support.	1
Agriculture & Food Systems	Support regional farms providing community food system resilience	1
Buildings & Energy	Plan for moving critical energy facilities out of the floodplain (e.g. electric substations) and do not permit any more (e.g. battery storage) in the floodplain.	1
Ecosystems	Protect salmon habitat, natural ecosystems, and agricultural land.	2
Ecosystems	Create incentives for planting trees, such as providing free trees.	3
Ecosystems	Transform parking lots into natural spaces and parks.	1
Ecosystems	Widen sidewalk strips and bury powerlines in residential neighborhoods to plant big conifers to mitigate heat, store carbon, and restore native landscape.	1
Ecosystems	Protect salt marshes to mitigate sea level rise and protect wildlife habitat.	1
Emergency Management	Conduct citizen training by emergency management services for emergency hazard response.	1
Emergency Management	Move dikes back to mitigate sea level rise.	2
Emergency Management	Ensure sea-level rise is adequately addressed in resilience policies.	3
Emergency Management	Create a TDR program to incentivize shoreline, riparian, and floodplain homeowners to move out of harms way	1
Emergency Management	Update geohazard mapping with a multi-decade horizon considering sea level rise, heavier rain episodes, and bigger floods.	1
Emergency Management	Plan for 80-100 years of infrastructure and setbacks to absorb climate impacts such as sea level rise.	1
Health & Well-being	Create a campaign to reduce poisons and chemicals under the kitchen sink in flood zones.	1

Health & Well-being	Increase tree canopy on playgrounds and at schools for heat control.	2
Health & Well-being	Support farm worker with protections against working in extreme heat and poor air quality.	3
Water Resources	Encourage homeowners to reduce lawns and plant native flora and trees in yards to conserve water resources and increase tree canopy.	6
Water Resources	Develop an integrated plan for all watersheds in the region.	1
Zoning & Development	Strictly enforce regulations against building in geohazard zones.	1

Appendix A: Climate Element Open House Poster Activities

Poster 4: Prioritizing GHG Emission Reduction Climate Policies

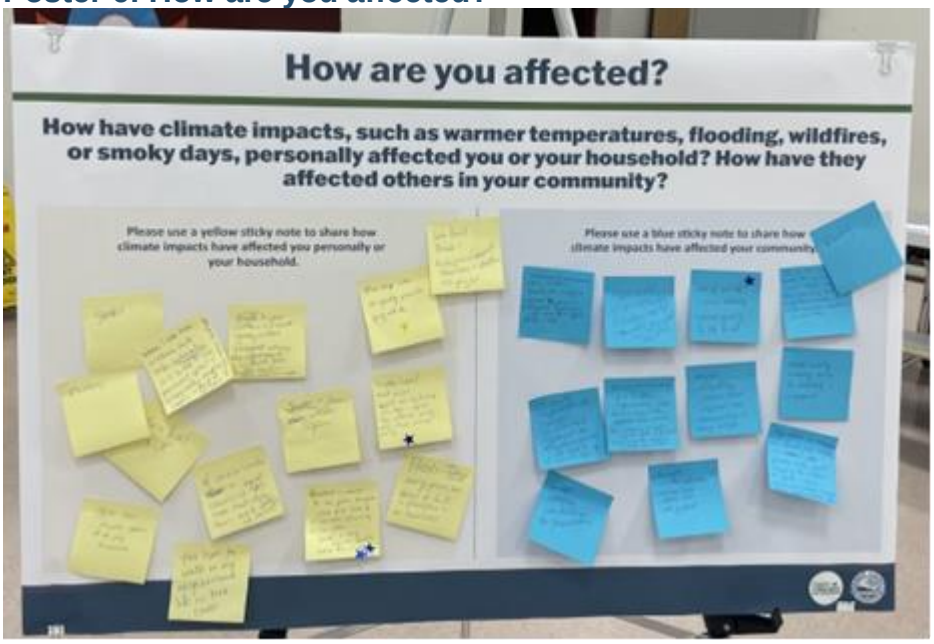


Renewable energy sources – 12 votes
Energy efficient buildings – 10 votes
Electric vehicles – 6 votes
Alternative transportation options – 11 votes
Waste reduction – 7 votes
Land conservation & sprawl reduction – 10 votes
What else should we consider?

- 90% of growth should go in cities. Make cities dense and livable with green connectors.
- Carbon sequestration by 1) marshland restoration 2) biochar 3) forests
- Crazy that we can't recycle glass!
- Incentives to farms for reduced tillage and increased organic matter

- What are the industry related actions that the County can action or regulate?
- Community food waste reduction plans and compost facilities
- Bike and pedestrian infrastructure – pedestrian bridge in downtown Mount Vernon connected to bike paths and lanes.
- Facilitate community solar – arrays on public buildings and over parking lots. Create incentives for community solar on commercial buildings and parking lots.
- Least conflict solar and wind: create a map of where in County it would be okay to site commercial scale solar and wind facilities – also battery storage facilities (BESS)
- New apartment buildings should be required to have EV charging stations
- No charging stations past I-5 to east currently, easy fix
- Convert all buses to electric and install charging infrastructure for them and private vehicles in all developed areas of Skagit County.
- We are treating these 1:1 and reactive. Make map where green energy should go BESS, wind, solar, etc. Go out 50-100 year in thinking
- Incentives to businesses/ residents to pay for food/yard waste pick up
- Habitat protection for salmon – resilience policy
- Given the large estuary and intertidal area, evaluate and then conserve areas that contribute to “blue carbon”
- Use county funds to protect natural ecosystems as well as ag land - resilience policy
- Plant more trees in yards, reduce lawns by planting native flora, encourage meadows instead of lawns - resilience
- Reduce use of electricity power/or other, turn off lights at night for instance
- Campaign to reduce poisons and icky chemicals under the kitchen sink in flood zones so these don’t get into flood waters – resilience
- Are you cross checking your carbon numbers emissions data with Port of Skagit?

Poster 6: How are you affected?

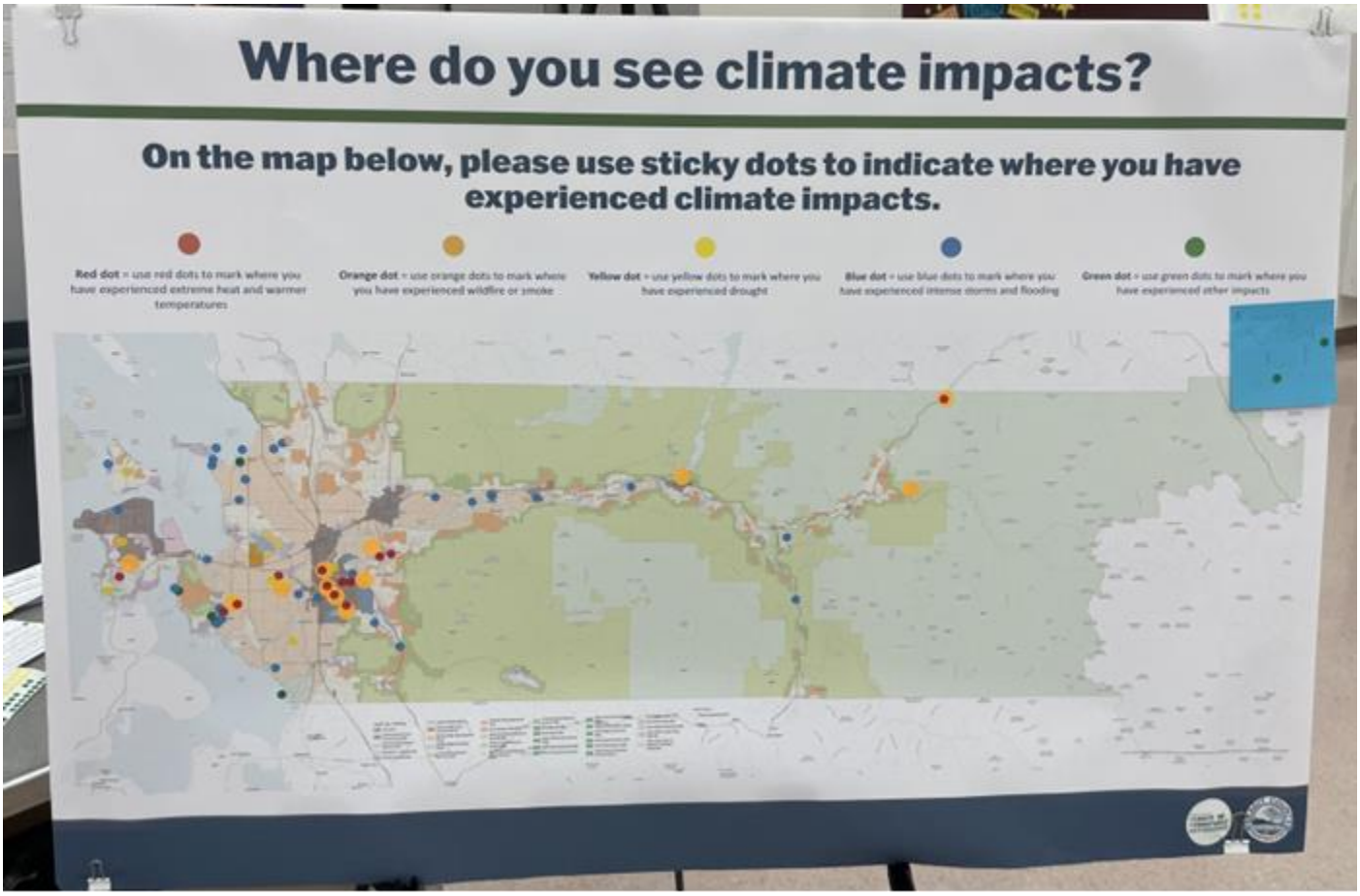


How climate impacts have affected you personally or your household	How climate impacts have affected your community

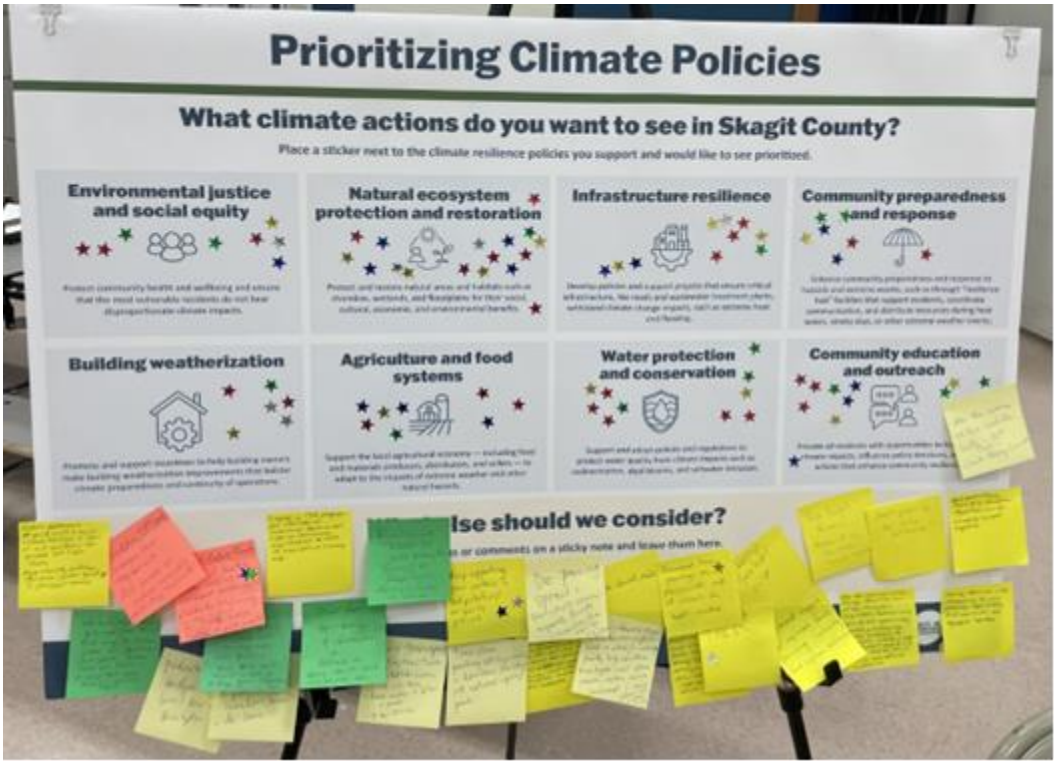
Sea level rise – development around shorelines and floodplains still going on!	Flooding
More days when air quality prevents going outside. +1	As an ICU nurse, I've cared for multiple underprivileged and elderly folks who have died of hyperthermia due to hotter summer weather in our area.
Flooding	Climate anxiety increasing. Feeling the community is unprepared.
When I see how Western WA looks naturally, it is so sad to see pavement sprawl and biologically empty lawns instead of tall trees and diverse nature landscape	My town is considering sea level rise mitigation (La Conner), farmers talk about keeping the dikes in good repair. Uncertainty of actual changes keep people unable to make definitive decisions.
Smoke	Loss of wildlife and plant diversity = lowered quality of life for all +1
Wildfire smoke triggers asthma and prevents opening windows	Sea level rise already flooding coastal communities and sewage treatment facilities
Unexpected warmer days affect growth in vegetable garden. Rainfall increases erosion in yard.	Flooding in communities along Salish Sea. Smoke from wildfires. Warmer and unexpected temperatures affect garden crop.
Sea level rise	Water, flooding issues that impact community in many ways
Hate that recycling appears to be going backwards	Drought, weather extreme, smoky days, extreme heat, risk of flood
Too hot to walk in neighborhood because no tree cover	We are already seeing impact of older infrastructure, more storms and higher tides, extreme river events. Our mapping is not up to date. Infrastructure and building still happening without good data.
Of course smoke and concern of forest fires from dead and dying trees due to years of drought	Climate impacts on school children with respect to temperature (too hot) and anxiety
Smoke – less time outside so far	Unsafe working conditions for farmworkers
Smoky days/heat waves affect our day to day activities – spouse has asthma, young children in house, elderly family. +1	
Household want to use public transport more but lack of 1)bus routes/frequency 2)bike paths - makes it very difficult especially outside main cities +2	
Floods – epic weather events every year now homes at risk in floodplain and on shorelines	

Poster 7: Where do you see climate impacts?

Please visit the project website at https://skagitcounty.net/2025cpa for more information.



Poster 8: Prioritizing Climate Resilience Policies



Environmental justice and social equity – 8 votes
Natural ecosystem protection and restoration – 17 votes
Infrastructure resilience – 10 votes
Community preparedness and response – 7 votes
Building weatherization – 6 votes
Agriculture and food systems – 8 votes
Water protection and conservation – 10 votes
Community education and outreach – 11 votes
What else should we consider?

- Use the science we have available locally – Skagit Climate Science Consortium. Create a Climate Advisory Committee
- Have more citizen training by emergency management services for emergency hazard response
- Start planning for dike setbacks!
- Provide farmers with incentives to use practices that reduce GHG emissions and sequester carbon – GHG policy
- Sea level rise!! Name it as an issue! Look at impacts
- Plan for moving critical energy facilities out of the floodplain (e.g. electric substations) and do not permit any more (e.g. battery storage) in the floodplain. Create a map of where it would be okay to site such facilities as well as solar and wind installations.
- Increased tree planting on playgrounds and at schools for heat control +1
- De-paving sprawl in Burlington/Mt. Vernon – Miyawaki forests, incentives/free trees for big 3 conifers
- Environment needs its own advisory board (Council) at Skagit County, farming and forestry have one
- Create a TDR program and other ways to incentivize shoreline and riparian homeowners, also floodplain residents to move out of harms way

- Update geohazard mapping with a multi-decade horizon in light of sea level rise and heavy rain episodes and bigger floods. More strictly enforce regulations against building in geohazard zones.
- Building weatherization – reduce power requirements, ask people to reduce amount of power they use/waste - GHG policy
- We love agriculture but we need to find ways to lower water use, fertilizers that pollute, green gas emissions, and crops that need enormous resource support
- Plant native plants; get rid of lawns (stop mowing and increase carbon sequestration); holds the land securely in case of flood; plant more trees on private property +2
- Get all the players together who work with conservation, rivers, dikes, farmland and the government entities and do a full scale / all watershed integrated plan
- Plan for 80-100 year of infrastructure and setbacks to absorb climate impacts and sea level rise
- Incentivize / support residents to plan wildflower meadows/trees and de-lawn
- Pedestrian bike bridge to West Mount Vernon and Burlington
- Green transportation infrastructure – protected bike lanes, e-bike subsidies, train routes to Bellingham and Seattle, increase bus service – GHG policy
- Keep supporting farm workers in heat protection/air quality policies +2
- Transform parking lot by river in downtown Mt. Vernon into natural space/ park!
- Widen sidewalk strips in residential neighborhood to allow/incentivize planning big conifers to mitigate heat, store carbon, restore native landscape, and bury powerlines so trees can grow
- Sea level rise
- To make well informed decisions, the Planning Commission and the BOCC need ready access to advice from something like environmental advisory board with scientists, resource management, and stakeholders
- More trees +1
- Address sea level rise
- Use salt marsh to help absorb wave energy, move dikes back to allow saltwater marsh to develop or continue to exist as sea level rises, this will also protect important wildlife habitat
- Increased support for regional farms providing community food system resilience

Climate Interviews

To inform Climate Element policy development, Skagit County and Cascadia Consulting Group (Cascadia) hosted interviews with key community organizations in Skagit County. Interviews with key stakeholders aimed to:

- **Address gaps in representation** in the overall Climate Element community engagement process, particularly for groups typically excluded from planning processes or those significantly impacted by plan implementation.
- **Build community trust** by drawing from community lived experience and expertise, and by incorporating feedback from those likely to be impacted by policy changes.

Five virtual interviews with a total of seven interviewees took place from October 3 through October 14, 2024. Cascadia led the interviews and Skagit County staff attended. Kimley-Horn staff attended two of the interviews.

Interviewee Organization	Interview Date
Skagit Land Trust	October 3, 11:00am-12:00pm
Community 2 Community	October 3, 2:00-3:00pm
Mark Lundsen	October 10, 2:00-3:00pm
Evergreen Islands	October 10, 1:00-2:00pm
Skagit Watershed Council	October 14, 11:00am-12:00pm

Interview Results

Interviews discussed greenhouse gas (GHG) emissions reduction policy areas, resilience policy areas, high-priority climate impacts and groups to focus on in policy development, and additional considerations for the County. Key takeaways and findings by topic are presented below.

Key Takeaways

- Attendees were overall strongly supportive of the County creating GHG emissions reduction and resilience policies through the Climate Element.
- The most supported GHG emissions reduction policy topics among interviewees included:
  - Evaluate frequency and timing of Skagit County buses to expand bus access.
  - Transition Skagit County buses to electric vehicles.
  - Map possible areas for battery energy storage systems, solar, and wind, rather than waiting for developers to submit proposals.
- The most supported resilience policy topics included:
  - Protect shorelines, wetlands, and floodplains
  - Provide education about risks of owning property in floodplains. Offer assistance for people to make plans to mitigate hazards.
  - Do not encourage building in rural areas; maintain farmland, forest land, and conservation as main uses in rural areas.

- Community 2 Community's perspective filled a gap in farmworker representation for this Climate Element engagement process. Key takeaways from this conversation are:
    - Ensuring that the local agricultural economy is resilient means making sure that farmworkers survive and live well – including being protected in case of climate disruptions.
    - Farmworkers are underrepresented in engagement and decision-making and are marginalized in many ways.
    - Disruptions for farmworkers related to climate are many and varied. They include shifting agricultural seasons, which disrupts yearly work schedules; migrating workers from warmer places into Skagit County; dangerous work conditions, and missed work days.
    - Farmworkers would like a seat at tables regarding climate change and agriculture in Skagit County and will need support and flexibility to participate in co-governance with the County.

Policy Areas Feedback

GHG Emissions Reduction

Participants were first shown a set of possible policy areas for the Climate Element, including:

- Support the production of local, clean renewable energy sources such as solar, geothermal, wind, battery energy storage facilities, and pump storage hydro, in areas of the county that would support this use.
- Invest in solar infrastructure on County owned properties and facilities as appropriate.
- Support the adoption and enforcement of regulations that ensure the construction of residential, commercial and industrial buildings use energy-efficient technologies and practices that save energy and costs.
- Support the expansion of electrical vehicle charging infrastructure throughout Skagit county.
- Transition Skagit County's motor pool fleet to electrical vehicles to the greatest extent possible.
- Support the expansion of public transportation and multimodal transportation options such as bike lanes, sidewalks and trails.
- Support the expansion of opportunities to reduce, reuse, and recycle waste materials sustainably.

Then, they answered:

- What specific actions should Skagit County prioritize to **reduce its impact on climate change** (e.g., reduce emissions)?
- What else **should the County keep in mind** as we draft and implement emissions reduction policies for the Climate Element?

Their responses are paraphrased and grouped into the Climate Element's policy sectors below:

Sector	Recommendation	Organization
Overarching	Prioritize community education and incentives over mandates	Mark Lundsen
Agriculture & Food Systems	Protect food-producing land from development; minimize sprawl.	Community 2 Community
Buildings & Energy	Map possible areas for battery energy storage systems, solar, and wind, rather than waiting for developers to submit proposals.	Skagit Land Trust, Evergreen Islands
Buildings & Energy	Consider subsidies for small businesses to use energy-efficient technologies.	Community 2 Community

Buildings & Energy	Provide financial assistance for low-income residents to address natural gas leakage in their homes.	Community 2 Community
Ecosystems	Explore blue carbon sequestration	Evergreen Islands
Transportation	Expand electric vehicle charging, especially east of I-5. Include e-bikes.	Skagit Land Trust
Transportation	Transition Skagit County buses to electric vehicles.	Skagit Land Trust, Mark Lundsen
Transportation	Support electric vehicle expansion through education and demonstration vehicles.	Skagit Land Trust
Transportation	Establish and promote subsidies for low-income communities to buy electric vehicles and to maintain efficiency of ICE and EV vehicles they already own.	Community 2 Community
Transportation	Evaluate frequency and timing of Skagit County buses. Increase frequency between Skagit County and Bellingham and offer more buses in early mornings.	Skagit Land Trust, Community 2 Community, Mark Lundsen
Transportation	Update the County Open Space Plan and plan for more trails and trail connections.	Skagit Land Trust
Transportation	Expand bike lanes, particularly over bridges.	Skagit Land Trust
Waste Management	Establish waste management-related goals.	Community 2 Community
Zoning & Development	Require that 90% of development occurs in UGAs.	Skagit Land Trust
Zoning & Development	Discourage development in floodplains.	Skagit Land Trust
Zoning & Development	Support mixed use development, green spaces, and 15-minute walkable communities.	Skagit Land Trust

Climate Resilience

High Priority Climate Risks

Participants called out the following climate-intensified hazards as high priority for their organizations and/or communities:

a. They mentioned that **sea level rise and riverine flooding** are increasing concerns; so are storm-related **winds, flooding, and landslides in alluvial areas**.

d. **Fire and wildfire smoke** were frequently mentioned as concerns, particularly around the forested lands in Skagit County.

e. Community 2 Community noted that **wildfire smoke** and **heat domes** have impacted farmworkers' health and earnings the most and impact agricultural products as well. Farmworkers are migrating to Skagit County because it is too hot in places like California.

High Priority Areas and Groups

Participants mentioned the following groups as particularly high priority for policies to focus on:

- Hamilton, Edison, LaConner. Edison and LaConner – these towns are vulnerable to flooding.
- Rural areas, floodplains, and working forests are important to protect, not develop.
- Farmworkers are marginalized, overburdened, and underrepresented.

Resilience Policy Areas Feedback

Participants were first shown a set of possible policy areas for the Climate Element. Then, they answered:

- What specific actions should Skagit County prioritize to strengthen the **preparedness and resilience** of its services (such as Planning, Public Works, Public Health, Parks & Recreation) and the communities they serve in response to climate change-intensified natural hazards?
- What else **should the County keep in mind** as we draft and implement resilience policies for the Climate Element?

The following are the policy recommendations shared:

Sector	Recommendation	Organization
Overarching	Establish an environmental advisory board	Skagit Land Trust
Agriculture & Food Systems	Financially support local farm workers by establishing a fund to replace lost wages and provide emergency housing if needed due to extreme weather.	Community 2 Community
Agriculture & Food Systems	Establish a seat for farmworkers to participate in County policy decision-making, potentially on an advisory board, and provide support for them to participate.	Community 2 Community
Buildings & Energy	Streamline permit systems to facilitate building green infrastructure.	Mark Lundsen
Ecosystems	Analyze permit requests for forest conversions and protect forests from conversion.	Skagit Land Trust, Evergreen Islands
Ecosystems	Establish protections for secondary forests at the same level as protections for industrial forests. Consider buying development rights.	Skagit Land Trust
Ecosystems	Increase funding for conservation futures and expand their usage beyond farmland.	Skagit Land Trust
Ecosystems	Conduct a tree census and preserve trees	Community 2 Community
Ecosystems	Protect shorelines, wetlands, and floodplains	Mark Lundsen, Skagit Watershed Council
Emergency Management	Provide education about risks of owning property in floodplains. Offer assistance for people to make plans to mitigate hazards.	Skagit Land Trust, Mark Lundsen, Evergreen Islands
Emergency Management	Map vulnerable communities and climate hazards to fully understand potential climate impacts on communities. Share the underlying data.	Community 2 Community, Evergreen Islands
Emergency Management	Create public spaces with ample space for families to play, run around, relax, and cook during extreme weather, including during hot, cold, and smoky days.	Community 2 Community
Emergency Management	Establish Skagit County emergency response fund.	Mark Lundsen
Emergency Management	Plan road systems for adequate evacuation routes.	Evergreen Islands
Health & Well-being	Promote and incentivize green industries. Explore opportunities for green jobs for people working at oil refineries.	Mark Lundsen

Health & Well-being	Communicate when algal blooms occur.	Evergreen Islands
Zoning & Development	Do not encourage building in rural areas; maintain farmland, forest land, and conservation as main uses in rural areas.	Skagit Land Trust, Mark Lundsen

Additional Considerations

Participants mentioned some additional considerations for planning.

b. **Mitigating climate change and resilience planning is critical**. We need to protect and restore natural systems to slow climate change. Natural ecosystems are carbon sinks.
c. **It's critical to keep people out of harm's way**. Healthy ecosystems are going to help us adapt better to climate better. We expect more flooding and landslides. There is a cost to inaction around these topics.
d. **Insurance will be as important as policy** as we think about a changing climate.
e. **We value the diverse wildlife habitats** in this County. As the Climate Element is developed, we hope there is a recognition of the importance of biodiversity.
f. **Recognize that funding is important** – restoration projects that help with community resilience can be an efficient use of dollars, more than replacing the same infrastructure.
g. **The County should avoid offsets** to meet its climate goals.
h. **Disruptions from climate impacts have real potential to interrupt our ability to feed ourselves locally.** This is an agricultural economy and anything that harms that needs to be looked at, including industrialization.
i. **It is difficult for farmworkers and other largely non-white populations to participate in all white spaces, and not all spaces are culturally appropriate,** such as all English-language spaces and Roberts Rule spaces. It would be ideal for farmworkers to work in co-governance with the County. It can take support for farmworkers to participate in these spaces.

Appendix A. Interview Guide

Introduction

Interviewers and interviewees share name, pronouns, organization, and roles.
Washington House Bill (HB) 1181, passed in 2023, updates the Washington Growth Management Act (GMA) to require cities and counties to integrate greenhouse gas (GHG) emissions reduction and climate change resilience policies into comprehensive plan updates. The Climate Element will include two important sub-elements: the Greenhouse Gas Emissions Reduction Sub-element and the Resilience Sub-element. The Greenhouse Gas Emissions Reduction Sub-element will include policies that reduce Skagit County's GHG emissions, reduce per-person driving miles, and prioritize actions that benefit overburdened communities. The Resilience Sub-element will include policies that enhance resilience to climate-intensified natural hazards.
We have completed some initial research and community engagement and are currently developing draft policies. On October 22, we will bring draft policies to Skagit County Planning Commission. As part of this phase, we're conducting interviews with community- and climate-related groups. This interview will inform policy development and the final Climate Element.

Interviews with key stakeholders aim to:

- Address gaps in representation, particularly for groups typically excluded from planning processes or those significantly impacted by plan implementation.
- Build community trust by drawing from community lived experience and expertise, and by incorporating feedback from those likely to be impacted by policy changes.

Ground rules:

- There are no right or wrong answers. We are interested in participants' honest opinions.

We have 11 questions to cover and 60 minutes. Do you have any questions for me before we get started?

Interview Questions

First, a general question:

1. In your own words, what is your role at your organization and how do you consider your work to be related to climate change?

Reducing Emissions

The next questions will focus on the greenhouse gas emissions reduction sub-element. The Greenhouse Gas Emissions Reduction Sub-element will include policies that reduce Skagit County's GHG emissions, reduce per-person driving miles, and prioritize actions that benefit overburdened communities.

Policy areas could include:

- Support the production of local, clean renewable energy sources such as solar, geothermal, wind, battery energy storage facilities, and pump storage hydro, in areas of the county that would support this use.
- Invest in solar infrastructure on County owned properties and facilities as appropriate.
- Support the adoption and enforcement of regulations that ensure the construction of residential, commercial and industrial buildings use energy-efficient technologies and practices that save energy and costs.
- Support the expansion of electrical vehicle charging infrastructure throughout Skagit county.
- Transition Skagit County's motor pool fleet to electrical vehicles to the greatest extent possible.
- Support the expansion of public transportation and multimodal transportation options such as bike lanes, sidewalks and trails.
- Support the expansion of opportunities to reduce, reuse, and recycle waste materials sustainably.

2. What specific actions should Skagit County prioritize to **reduce its impact on climate change** (e.g., reduce emissions)?

3. What else **should the County keep in mind** as we draft and implement emissions reduction policies for the Climate Element?

Enhancing Preparedness and Resilience

The next couple of questions will cover climate hazards and possible resilience policies for the Resilience Sub-element.

Examples of climate-intensified natural hazards include drought, extreme rainstorms, flooding, increased pests that threaten crops and trees, heat waves, severe cold weather events, loss of habitat and species, sea level rise, coastal erosion, landslides, wildfires, and wildfire smoke.

4. Given your role/community, which climate-intensified hazards do you believe should be Skagit County's **highest priority to address**, and why?
5. Are there **specific areas or populations** (e.g., low-income communities, rural areas) in Skagit County that you believe will be more impacted than others by these hazards? If so, where and why?

Policy areas in the Resilience sub-element could include:

- Protect community health and wellbeing and ensure that the most vulnerable residents do not bear disproportionate climate impacts.
- Protect and restore natural areas and habitats such as shoreline, wetlands, and floodplains for their social, cultural, economic, and environmental benefits.
- Enhance community preparedness and response to hazards and extreme events, such as through “resilience hub” facilities that support residents, coordinate communication, and distribute resources during heat waves, smoky days, and/or other extreme weather.
- Promote and support incentives to help building owners make building weatherization improvements that bolster climate preparedness and continuity of operations.
- Support and adopt policies and regulations to protect water quality from climate impacts such as sedimentation, algal blooms, and saltwater intrusion.

6. What specific actions should Skagit County prioritize to strengthen the **preparedness and resilience** of its services (such as Planning, Public Works, Public Health, Parks & Recreation) and the communities they serve in response to climate change-intensified natural hazards?
7. What else **should the County keep in mind** as we draft and implement resilience policies for the Climate Element?

Co-Benefits of Climate Policy

The next question is about co-benefits, which are the additional social, economic, and environmental benefits of a climate policy, aside from reducing GHG emissions or building resiliency to hazards. Examples of co-benefits include improves salmon recovery,

promotes economic development, promotes equity and justice, provides cost savings, protects tribal treaty rights, improves public health and well-being, improves air quality, builds community knowledge, protects water quality, supports housing supply and diversity. Understanding which co-benefits are valuable to the community will help us prioritize, implement, and communicate about policies.

8. What **co-benefits** are most important to you/your community?

Additional Considerations

The final set of questions will cover any additional considerations for the County to keep in mind through policy development.

9. Does your community face **any barriers to participation** in climate policy planning? If so, how can the County address these barriers?
10. What type of **resources and/or support** would your community benefit the most from (e.g., financial, educational)?
11. Are there **any additional considerations** the County should make as climate policies are developed and implemented?

Climate Survey

Introduction

Skagit County is adding a Climate Element into its Comprehensive Plan in response to Washington State House Bill (HB) 1181, passed in 2023. The Climate Element will include goals and policies to reduce emissions and prepare for climate-intensified natural hazards. This survey aimed to inform the community and gather input on key policy areas for the Climate Element. The survey included six sections: Climate Awareness, Climate Concerns, Policies and Actions, Challenges and Opportunities, Your Connection to Skagit County, and Demographics. The survey was hosted via SurveyMonkey and linked on the County's webpage for the planning effort. It was promoted at the Climate Open House on October 1, 2024. The survey was open from October 11, 2024 through October 31, 2024 and available in English and Spanish. The survey received 652 responses.

After the survey closed, results were analyzed to create this summary. Close-ended questions were reviewed using bar graphs, while open-ended responses were coded into 11-14 categories that captured the majority of themes. Each open-ended response was assigned to one or more categories, as applicable. Key findings were then summarized by combining insights from all the question.

Key Findings

Here are the key findings from the Skagit County Climate Element Community Survey:

1. Climate Awareness and Concerns

- **High Awareness and Concern:** Most respondents reported being well-informed (53.15%) about climate change issues and thinking about climate change a moderate to a great deal (68.66%). A significant portion (63%) were moderately to extremely concerned about climate-related impacts in their community.
- **Top Climate Concerns:** The top climate concerns, when accounting for responses that reporting slight, somewhat, moderate, and extreme concern, were wildfire (90.53%), wildfire smoke (90.48%), and flooding (89.28%). Respondents identified these as threats to both personal safety and community assets, particularly agricultural lands, homes, and infrastructure.
- **Climate Change Skepticism:** In the open ended responses, a small subset of respondents expressed doubt about the validity of climate change and saw it as exaggerated or politically motivated.

2. Challenges in Addressing Climate Impacts

- **Financial Limitations:** In open-ended responses, many mentioned that costs, such as expensive retrofits or high utility bills, limit their ability to adapt their homes or properties to climate risks.
- **Housing Risks**: Many respondents highlighted risks to homes and property, including being in the floodplain, difficulties obtaining insurance, and limited resources for protecting or maintaining homes against extreme weather.
- **Resistance to Government Regulation:** A smaller portion of individuals expressed concerns about government overreach, misuse of power, and inefficiency, feeling that policies could limit personal choice or impose economic burdens.

3. Support for Climate Resilience and GHG Reduction Policies

- **Strong Support for Resilience Measures:** A strong majority of respondents (70% or more) either somewhat or strongly favored all of the resilience solutions. Respondents showed high support for policies to promote land use strategies (85.96% strongly or somewhat favor) and enhance community preparedness and

response to hazards and extreme weather events (80.04% strongly or somewhat favor).

- **Emission Reduction Priorities:** The majority of respondents (50% or more) either somewhat or strongly favored all of the GHG emission reduction solutions. Many respondents supported actions such as limiting tree loss, promoting sustainable land management, and working with local industries to reduce pollution from industrial processes. The solution that received the strongest opposition was facilitating the transition to electric vehicles (31.02% strongly or somewhat oppose). However, in open-ended responses, support for EVs, public transportation, and expanding walking and cycling paths was notable.
- **Concerns Over Economic Impact:** In open-ended responses, some respondents voiced caution, seeking assurances that climate policies would not harm local jobs or economic stability, especially in agriculture and small businesses.

4. Suggestions for County Climate Actions

- **Public Transit:** Open-ended responses frequently supported developing public transit options to reduce emissions and provide safe routes for alternative transportation options.
- **Land Use and Zoning**: Open-ended responses often mentioned the need for preserving green spaces and farmland, planting trees, limiting development in hazard prone areas and encouraging dense, mixed-use development.
- **Education and Public Engagement:** Respondents expressed a desire for more education on climate impacts and involvement in policy decisions, with an emphasis on transparent, science-based approaches. Some made calls to ensure policies address the needs of frontline communities and those disproportionately impacted by climate change.
- **Focus on Rural Access:** Some respondents highlighted the unique needs of rural communities, such as access to public transit and rural-specific resources, advocating for a more inclusive approach in policy development.

5. Demographic Insights

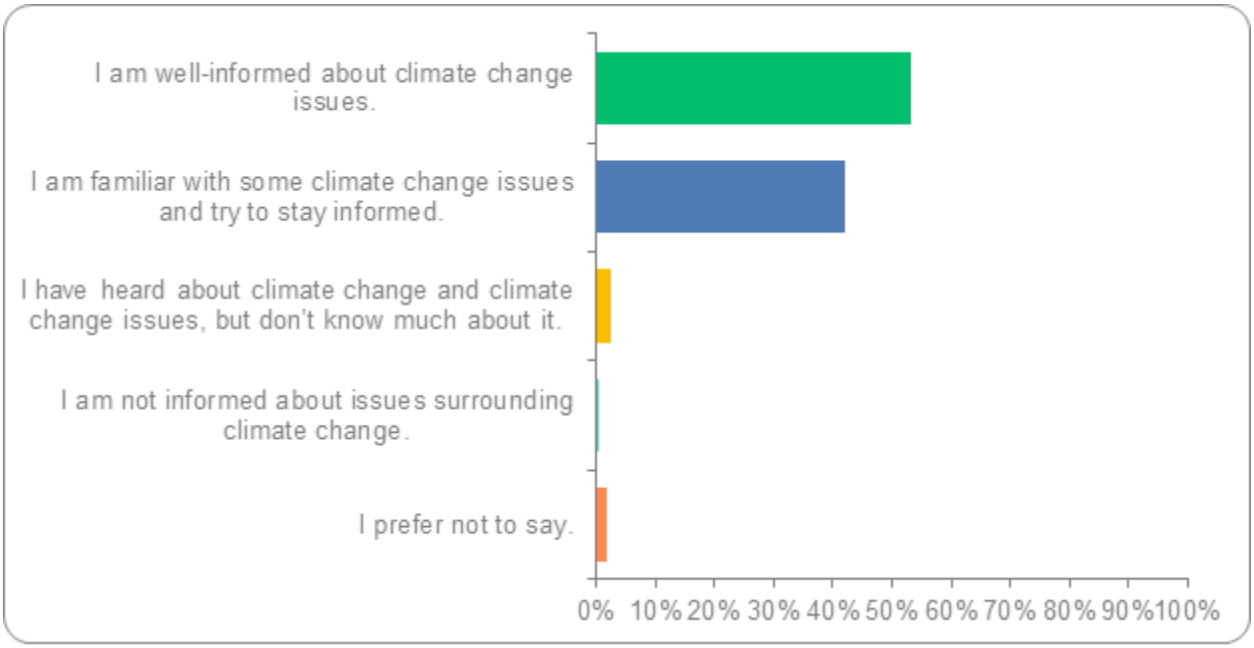
- **Older and More Educated Respondents:** The survey had respondents from various towns within Skagit County, including a diverse range of ages, income levels, and occupations. Survey respondents were predominately white (78.84%), which is reflective of the county's predominantly white population (90%). However, respondents were generally older (55+) and more likely to hold a bachelor's degree or higher when compared to the county's overall population. This suggests that the survey responses may disproportionately reflect the views and priorities of older, formally educated residents. Future outreach efforts could aim to engage younger and more diverse groups to capture a broader spectrum of community perspectives.

Survey Responses

Q1: How would you best describe your awareness and understanding of climate change issues?

Answered: 651 Skipped: 1

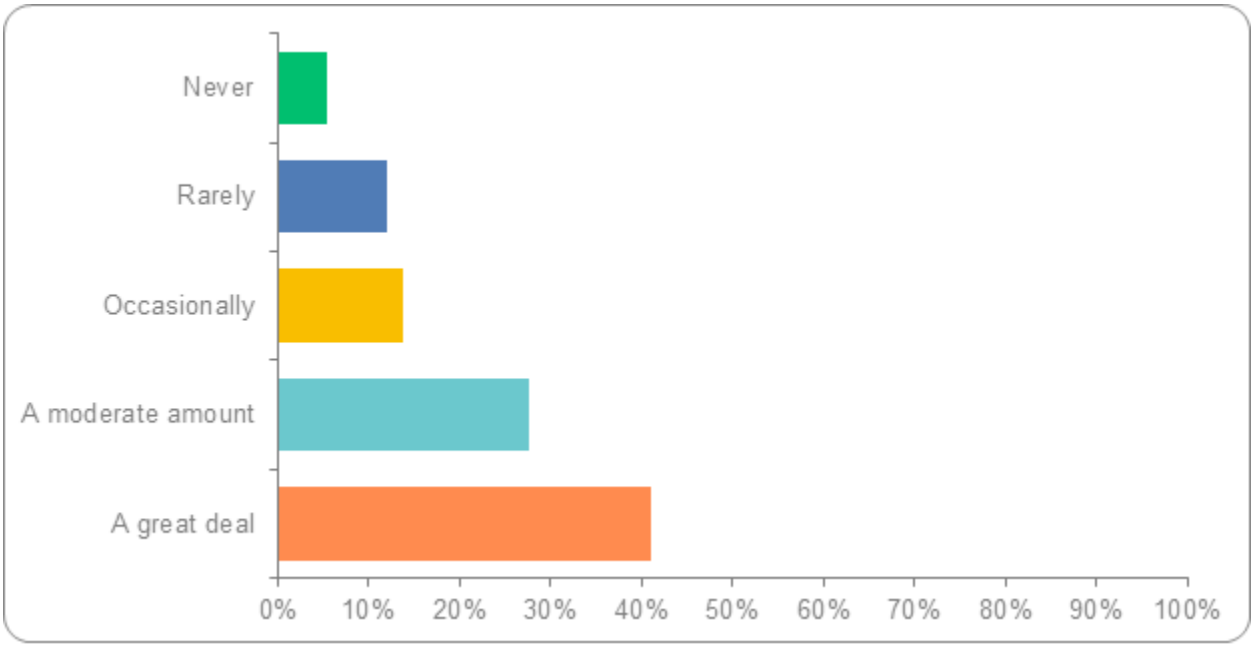
Most respondents feel well-informed (53.15%) or familiar with climate change issues (42.09%), with a smaller portion reporting limited (2.61%) or no knowledge. Only a few preferred not to answer (1.69%).



Q2: How often do you think about climate change?

Answered: 651 Skipped: 1

Most respondents think about climate change a great deal (41.01%) or a moderate amount (27.65%), with smaller portions reporting they only think about climate change occasionally (13.82%), rarely (12.14%), or never (5.38%).

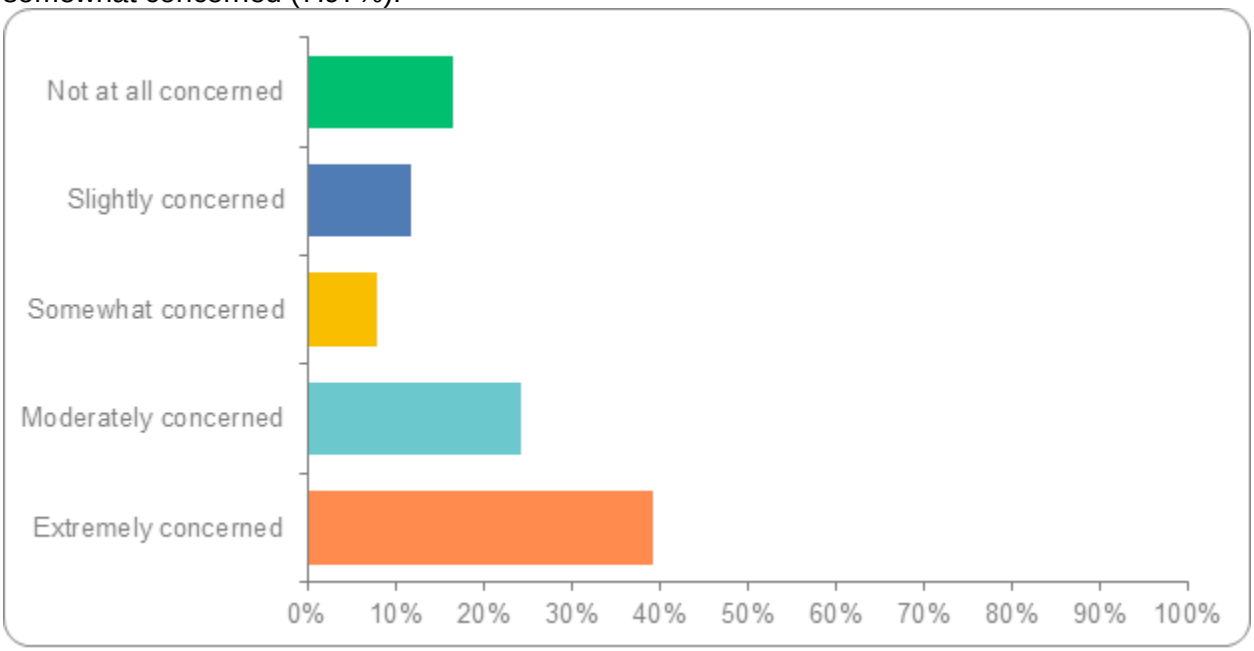


Q3: Generally, how concerned are you about extreme weather and climate change impacts in your community?

Answered: 627 Skipped: 25

Most respondents report being either extremely (39.23%) or moderately concerned (24.40%) about extreme weather and climate change impacts, while some report being slightly concerned

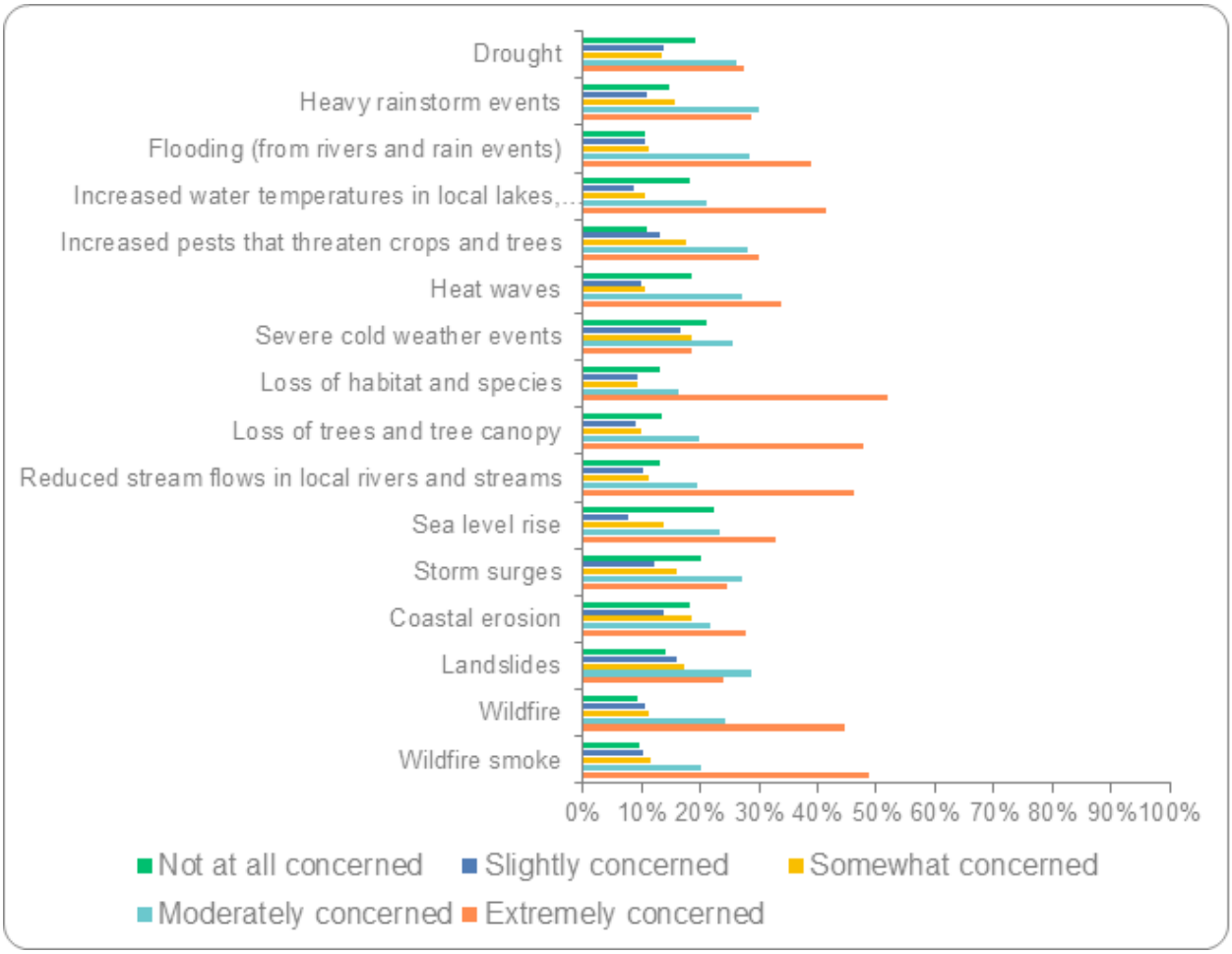
(11.80%) or not at all concerned (16.59%). The smallest portion of respondents report being somewhat concerned (7.97%).



Q4: How concerned are you with the following extreme weather and climate change impacts in Skagit County? Please indicate your level of concern per impact.

Answered: 624 Skipped: 28

The majority of respondents (over 50%) report being either extremely or moderately concerned with almost all the extreme weather and climate impacts. Severe cold weather events and coastal erosion were the two notable exceptions. When combining those who are either extremely or moderately concerned, the top climate impact concerns are wildfire smoke (68.87%), wildfire (68.70%), and loss of habitat and species (68.28%). The climate impacts with the least overall concern are severe cold weather events (44.02%), coastal erosion (49.60%), and storm surges (51.78%).



Q5: Based on your responses to the previous question, tell us more about why you feel this way. Include if you've been personally affected by these climate impacts, and which community assets or members you anticipate being most impacted.

Answered: 458 Skipped: 194

The following are themes and examples quotes from the 458 responses to question 5:

Concern about Climate Impacts: Many respondents expressed concern about climate impacts, particularly flooding (97 mentions), wildfire smoke (101 mentions), wildfire (82 mentions), drought (62 mentions), and extreme heat (56 mentions). Other noted impacts included reduced snowpack, sea level rise, habitat loss, and increased pests.

- *"As a fishing and logging family, I'm concerned about the long term sustainability and health of natural resources in our region in the face of heat, drought, etc, like forests and salmon. With other family members, I have concerns about heat waves and severe weather events and with older folks and kids with asthma, air quality issues from pollution and wildfire smoke has been an issue."*

Personal Experiences: Many shared firsthand accounts of extreme weather, particularly heatwaves and flooding, and described challenges to their health, homes, and work, especially in agriculture.

- *"My house on Lafayette Rd flooded in Nov 2021 when the Skagit river flooded and my current home was threatened by an early brush fire in April of 2024."*

Vulnerable Communities and Critical Assets: Respondents frequently highlighted risks to specific communities—such as youth, the elderly, farmers, Tribal/Indigenous populations, low-

income groups, those with limited English proficiency, and those with respiratory issues—and to critical assets like agricultural land, salmon, forests, and shellfish. Concern for these groups and assets was mentioned 118 times.

- *"…I'm acutely aware of the negative implications of climate change on the valley. Farmers will be heavily impacted. Low- and middle-class families and individuals are at risk…Everyone will be impacted, right now the elderly are especially vulnerable."*

Climate Skepticism: A subset of responses (74 mentions) reflected skepticism about climate change, ranging from doubts about its severity to views that it is politically motivated.

- *"Climate change is a hoax."*
- *"Concern is overblown to facilitate political desires."*

Limited Concern or Irrelevance: A small number of respondents (10 mentions) expressed no concern about climate change, while others (11 mentions) provided responses that did not fit into other categories or were too vague to categorize.

- *"Not worried."*

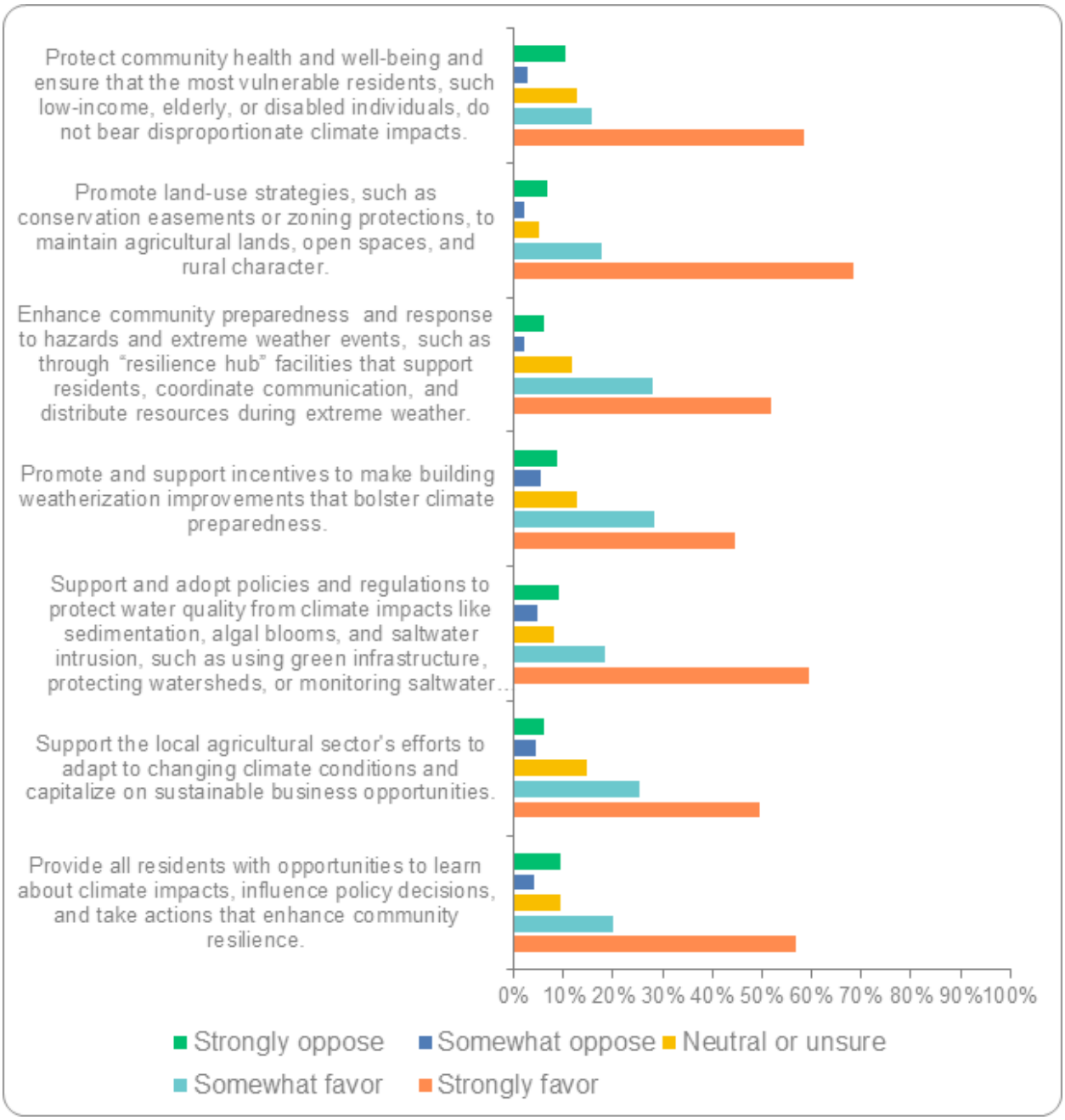
In order to capture the key themes from question 5, responses were coded into 11 categories that captured the majority of themes. Each open-ended response was assigned to one or more categories, as applicable. The following table reflects the major themes and their instances in response to question 5:

Q5	Instances
Concern for Specific Assets or Groups	118
Other Climate Impacts	115
Wildfire Smoke	101
Flooding	97
General Concern	87
Wildfire	82
Climate Skepticism	74
Drought	62
Extreme Heat	56
Miscellaneous/Other	11
Not concerned	10

Q6: Please indicate your level of support for each of the following types of resilience solutions intended to prepare Skagit County for extreme weather and climate impacts.

Answered: 593 Skipped: 59

All of the resilience solutions received strong support from survey respondents (over 70% either somewhat or strongly favor). The solutions that received the most support were promoting land use strategies (85.96% strongly or somewhat favor) and enhancing community preparedness and response to hazards and extreme weather events (80.04% strongly or somewhat favor). The solutions that received the strongest opposition were incentives to make building weatherization improvements (14.21% somewhat or strongly oppose) and policies and regulations to protect water quality (14.09% somewhat or strongly oppose).

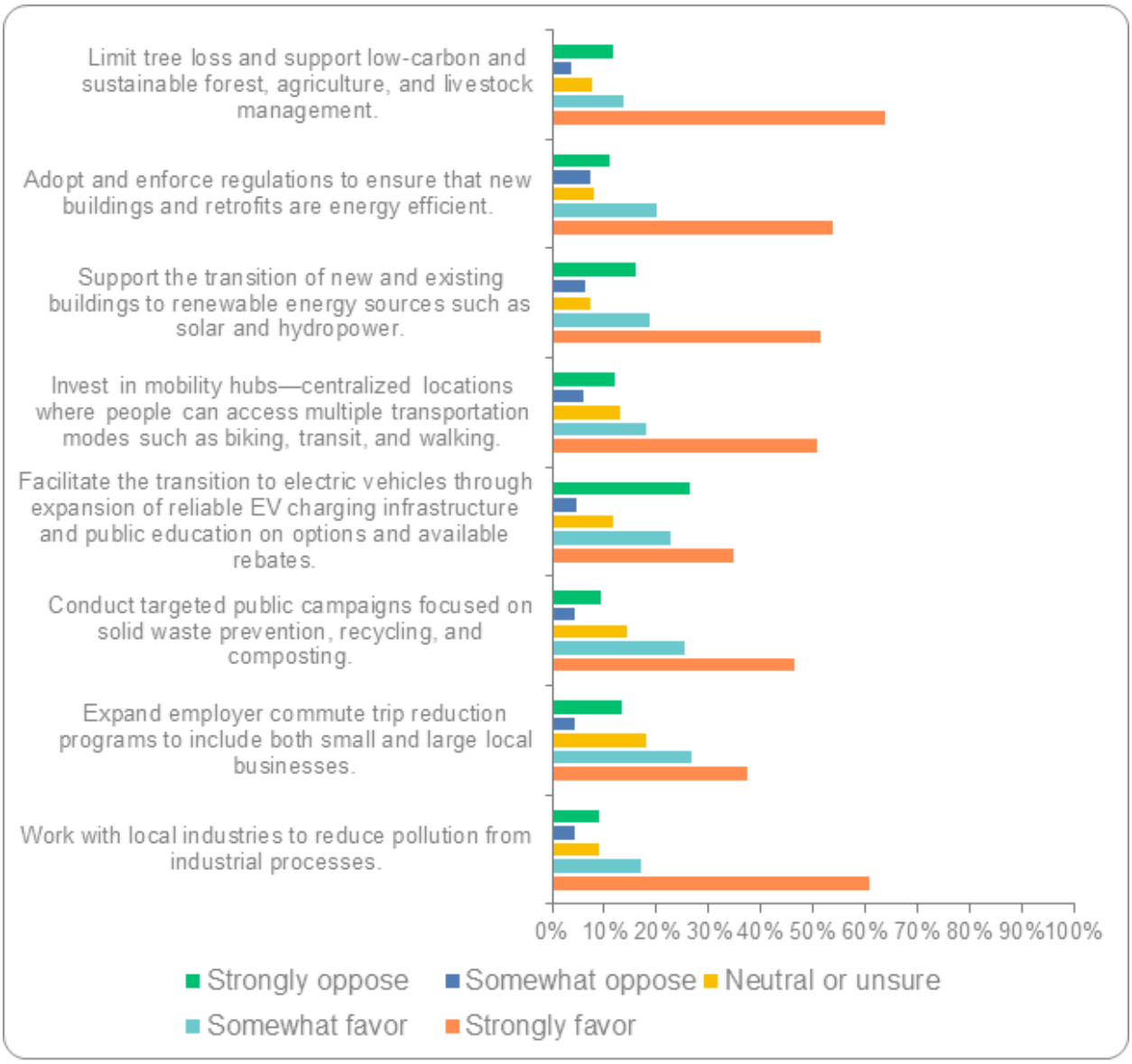


Q7: Please indicate your level of support for each of the following types of GHG emission reduction solutions intended to reduce Skagit County's contributions to climate change.

Answered: 594 Skipped: 58

The majority of respondents either somewhat or strongly favored all of the GHG emission reduction solutions. The solutions with the most support included working with local industries to reduce pollution from industrial processes (77.83% strongly or somewhat favor) and limiting tree loss and supporting low-carbon and sustainable forest, agriculture, and livestock management (77.33% strongly or somewhat favor). The solutions that received the strongest opposition were facilitate the transition to electric vehicles (31.02% strongly or somewhat oppose) and support

the transition of new and existing buildings to renewable energy sources (22.30% strongly or somewhat oppose).



Q8: Please describe any challenges or barriers you and/or your household/family may face in addressing extreme weather and impacts from climate change.

Answered: 334 Skipped: 318

The following are themes and examples quotes from the 334 responses:

Financial Barriers: The most frequently mentioned challenge (97 mentions) was the high cost of resilience measures, such as heat pumps, home retrofits, or flood insurance. Many noted these costs were prohibitive, even with subsidies or assistance.

- *"Updating our home to withstand climate change is expensive. We are not low income so we don't qualify for many programs and out of pocket and home loans would be our only way to ensure our home is ready and energy efficient."*

Housing and Property Risks or Limitations: Respondents (71 mentions) highlighted risks to homes and property, including being in the floodplain, difficulties obtaining insurance, and limited resources for protecting or maintaining homes against extreme weather.

- *"Our house is 112 years old and has little insulation, no air conditioning, and the summers are getting very tough during smoke season."*
- *"We live near the coast just above sea level. Given the housing market, we can't afford to move farther inland to avoid impacts of flooding even if we wanted to."*

Emergency Preparedness and Safety: Challenges included concerns around emergency preparedness (36 mentions), such as from power loss, availability of emergency supplies, and evacuation challenges.

- *"Flooding on access roads so we cannot leave to get to safe areas or emergency vehicles cannot get to us."*

Infrastructure Limitations: Respondents also mentioned infrastructure limitations (31 mentions), such as a lack of bike paths, poorly maintained dikes, and limited access to alternative energy for multifamily homes.

- *I bicycle but Skagit County needs to plan for and build safe routes from rural areas into the cities/towns and make safe routes/bike paths in the cities/towns so I can bicycle to get groceries, etc without fear of vehicles running me down."*

Natural Resource and Environmental Management: 21 respondents mentioned concerns with natural resource and environmental management, such as water, dike, and forest management.

- *"Lack of active and effective forest management is detrimental to the County and WA generally. It unnecessarily endangers people, livestock and industry."*

Lack of Community or Government Support: A lack of adequate community and government support (32 mentions) was frequently cited, with concern around climate skepticism in the community and calls for more government intervention.

- *"So far, the primary barrier to addressing impacts from climate change has been the lack of county leadership on this issue."*
- *"Climate denial and misinformation in general are the biggest threats we have in my view."*

Climate Skepticism and Distrust in Government: As previously noted, a subset of respondents (16 mentions) expressed skepticism or denial of climate change, questioning its validity or framing it as politically motivated. 18 responses reflected distrust of government policies, with concerns about overreach, inefficiency, or burdensome regulations.

- *"There are no barriers. Climate Change is a farce."*
- *"The only challenge we have with climate change is that the government, both local and federal, makes mandates that are pointless and simply stand to be a drain on the citizens of this country."*

Health and Aging: Health-related barriers (13 mentions) such as asthma and challenges associated with aging and mobility (12 mentions) were highlighted.

- *"Challenges for me are my advancing age and the slow downs that come with that and the fact I have a rare disease limiting me."*

No barriers: 32 respondents reported facing no barriers at all.

- *"I have not had any challenges or barriers due to climate change."*

In order to capture the key themes from question 8, responses were coded into 12 categories that captured the majority of themes. Each open-ended response was assigned to one or more categories, as applicable. The following table reflects the major themes and their instances in response to question 8:

Q8	Instances
Financial	97
Housing/Property Risks and Limitations	71
Emergency Preparedness and Safety	36
Lack of Community or Government Support	32
No barriers	32
Infrastructure Limitations	31
Natural Resource and Environmental Management	21
Government Distrust	18
Climate Skepticism	16
Miscellaneous/Other	16
Health	13
Aging and Mobility Issues	12

Q9: What specific actions or changes do you think would most help Skagit County reduce its greenhouse gas emissions and build resilience to climate change impacts?

Answered: 378 Skipped: 274

The following are themes and examples quotes from the 378 responses:

Transportation and Transit Improvements: The most frequently mentioned actions (140 responses) included expanding public transit, improving bike and pedestrian infrastructure, and providing electric vehicle (EV) incentives to reduce emissions from transportation.

- *"Expand and encourage public transportation, EV conversion of ALL county vehicles, and construction of SAFE bicycle lanes from high density residential areas to city centers. Provide bicycle racks, lockers or other secure areas in specific destinations (libraries, Big Box Stores, Municipal Buildings) to encourage bicycling by county residents."*

Land Use and Zoning: 78 respondents advocated for land use and zoning changes, such as prioritizing dense, mixed-use, transit-oriented development and preserving natural areas and farmlands to minimize emissions and protect ecosystems.

- *"More compact development in cities supported by stronger bike/ped networks and public transit; less development in rural areas subject to floods, wildlife, etc."*

Renewable Energy and Waste Infrastructure: 73 responses suggested increasing solar, wind, and other renewable energy projects, as well as updating waste infrastructure to support emission reductions.

- *"In order for the County to reduce its GHG emissions, it should invest in the production of renewable energy in Skagit County"*

Building Efficiency and Electrification: 53 respondents encouraged improving energy efficiency in buildings and transitioning to electric appliances and systems.

- *"Retrofit buildings with electric heating and cooling. Stop allowing new buildings to use fossil fuels for heating and cooling and promote solar on large energy users."*

Agriculture and Forestry Practices: 56 responses focused on sustainable farming, forestry practices, and carbon sequestration initiatives to reduce emissions and promote resilience.

- *"Focus on supporting farmers to be resilent in the face of a changing climate - building soil organic matter, reducing run off, diversifying operations, research for best practices, etc."*

Education and Public Awareness: 37 respondents emphasized the need for community education on climate action and its importance in addressing emissions and resilience.

- *"Educate the public about the realities of how climate change affects us locally - droughts, more coverage of wildfires and smoke."*

Emergency Preparedness and Resilience Planning: 34 responses highlighted the importance of preparing for natural disasters and building resilience to climate hazards.

- *"I think the best course of action is for our County's Emergency System (Fire, Ambulance,Hospital/Medical, Police) Departments to be as fully trained and ready as possible for any and all catastrophic events, so they need to be adequately funded. I also am a firm believer in neighbor helping neighbor so it would behoove this County to encourage folks, who are willing, to volunteer to receive training in emergency response should the need ever arise for their assistance."*

Regulating Industry: 23 respondents suggested regulating or closing refineries and other polluting corporations to reduce industrial emissions.

- *"Shut down the refinery."*

Distrust and Skepticism: As previously noted, some respondents criticized government overreach and inefficiency (30 mentions). 19 respondents expressed doubt about climate change or its human causes. On occasion, these sentiments were voiced together.

- *"Hopefully common sense will prevent the waste of taxpayer's money being spent on "green" agenda items that ultimately accomplish nothing beneficial."*

In order to capture the key themes from question 9, responses were coded into 12 categories that captured the majority of themes. Each open-ended response was assigned to one or more categories, as applicable. The following table reflects the major themes and their instances in response to question 9:

Q9	Instances
Transportation and Transit Improvements	140
Land Use and Zoning	78
Renewable Energy and Waste Infrastructure	73
Agriculture and Forestry Practices	56
Building Efficiency and Electrification	53
Education and Public Awareness	37
Miscellaneous/Other	37
Emergency Preparedness and Resilience Planning	34

Government Distrust or Desire to Limit	30
Regulate Industry	23
Climate Skepticism	19
Equity and Inclusion	3

Q10: Is there anything else you would like us to consider for the development of the Climate Element as part of Skagit County's Comprehensive Plan update?

Answered: 302 Skipped: 350

The following are themes and examples quotes from the 302 responses:

Land Use and Zoning: 50 mentions emphasized concerns about farmland preservation, urban planning, and limiting development in sensitive areas.

- *"Focus on sustainable development and growth, with an emphasis on high density building strategies in urban areas and high traffic corridors and medium to lower density the further you are from those areas."*

Urgency and Action: 38 mentions called for immediate action and acknowledgment of the climate crisis as a pressing issue.

- *"Act fast. Not every solution will be right. But lack of action is an action and it is likely to be deadly. Perfect is the enemy of good here. We need to take good actions quickly."*

Economic Concerns: 32 mentions raised concerns about costs, affordability, and potential economic impacts of proposed actions.

- *"All of this is expensive. We need to develop accounting systems that measure upstream and downstream costs and ensure that unintended actions and decisions are paid for by the polluters."*

Renewable Energy and Waste Infrastructure: 32 mentions suggested increasing renewable energy such as solar and wind, and improving waste infrastructure to reduce emissions.

- *"Focus on renewable energy and allowing wind and solar farms."*
- *"Assist and incentivize consumers to recycle and reuse."*

Community Involvement and Education: 26 mentions suggested greater collaboration with local residents or organizations and enhancing public education efforts.

- *"Get more people informed and involved."*

Transportation and Transit Improvements: 22 mentions included suggestions to reduce vehicle emissions, improve public transit, and expand alternative transportation options like cycling and walking.

- *"Increase bus routes and increase incentives (including low or no cost service) to reduce single occupancy vehicle use."*

Addressing Climate Impacts: 16 mentions highlighted specific impacts, like flooding and sea level rise, as critical considerations for resilience planning.

- *"Identify areas where retreat from relative sea level rise may be the most cost effective approach and plan accordingly for those areas."*

Agriculture and Forestry Practices: 11 mentions focused on sustainable farming and forestry practices to reduce emissions and promote resilience.

- *"Please please please take care of our forests. They deserve it. They are the means of our survival."*

Increase or Enforce Government Regulations: 12 mentions called for better enforcement of current regulations and suggested increasing government regulations and resources.

- *"Enforce building codes. Don't allow exceptions."*

Distrust and Skepticism: Some respondents criticized government overreach and inefficiency, and voiced concerns about spending taxpayers' money (38 mentions). 16 respondents reflected

skepticism about climate change, ranging from doubts about its severity to views that it is politically motivated.

- *"Stop looking for ways to spend taxpayer money. Look for ways to save taxpayers money."*
- *"Look into the possibility that the whole climate change agenda is political and a power grab."*

Scientific Basis: 6 mentions urged grounding decisions in science and called for a broader review of data sources.

- *"Consider all sources of scientific knowledge on the topic of climate."*

Equity and Inclusion: 6 mentions emphasized ensuring that climate actions address the needs of frontline communities and Tribes.

- *"Center the needs and voices of those furthest from climate justice and those most impacted by climate change - farmworkers, immigrants & refugees, people of color, people living in poverty."*

In order to capture the key themes from question 10, responses were coded into 14 categories that captured the majority of themes. Each open-ended response was assigned to one or more categories, as applicable.The following table reflects the major themes and their instances in response to question 10:

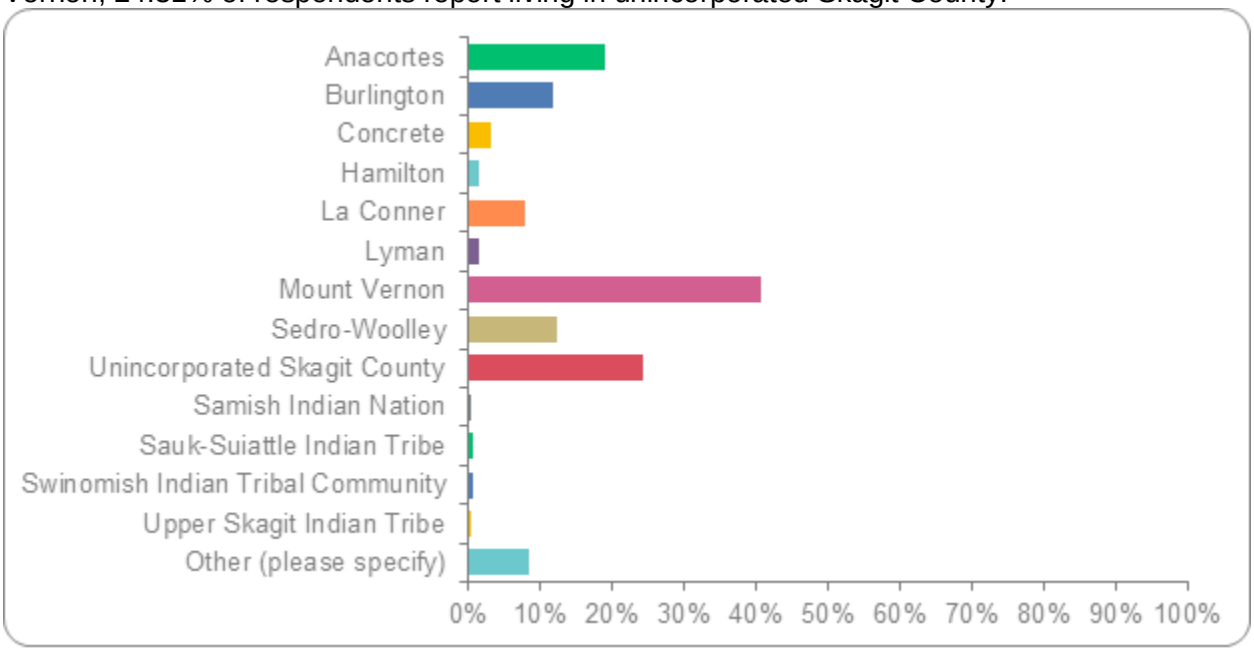
Q10	Instances
Land Use and Zoning	50
Government Distrust or Desire to Limit	38
Climate Urgency and Action	38
Miscellaneous/Other	33
Economic Concerns	32
Renewable Energy and Waste Infrastructure	32
Community Involvement and Education	26
Transportation and Transit Improvements	22
Climate Skepticism	16
Addressing Climate Impacts	16
Increase/Enforce Gov. Regulations and Resources	12
Agriculture and Forestry Practices	11
Scientific Basis	6
Equity and Inclusion	6

Connection to Skagit County and Demographic Survey Responses

Q11: Please tell us where you live or work in Skagit County and/or provide your Tribal affiliation. (Select all that apply)

Answered: 576 Skipped: 76

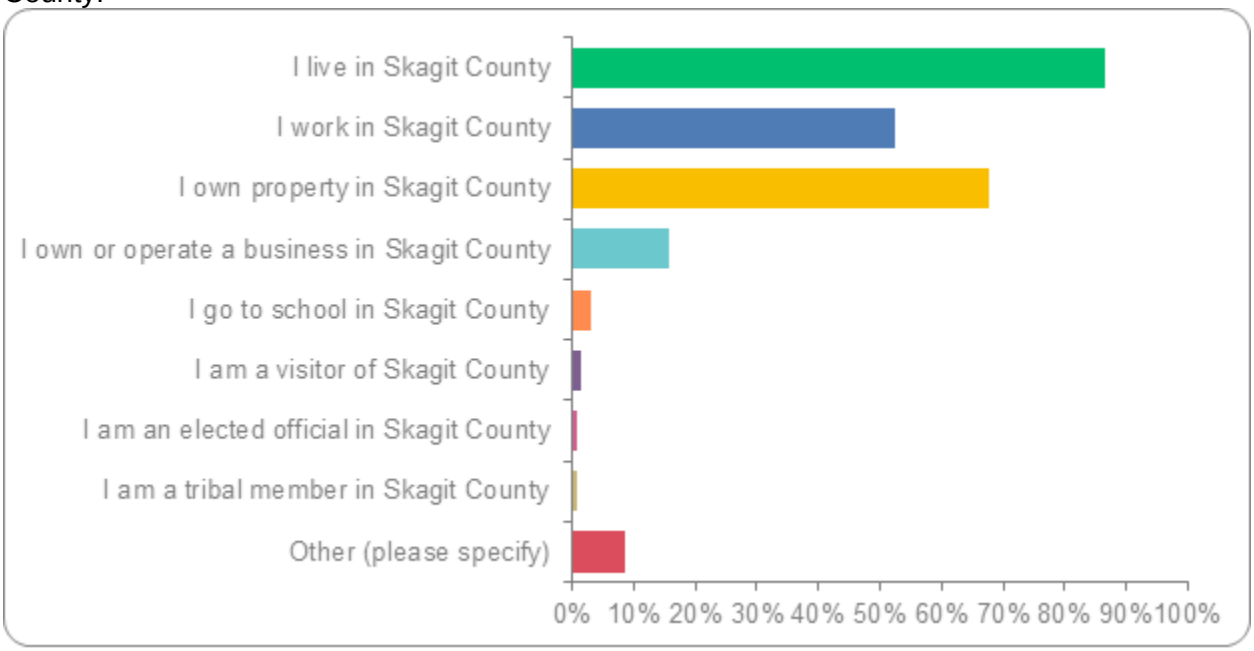
A signficant portion of respondents (40.80%) report living in Mount Vernon. Following Mount Vernon, 24.31% of respondents report living in unincorporated Skagit County.



Q12: Which of the following best defines your role in your community? (Select all that apply)

Answered: 576 Skipped: 76

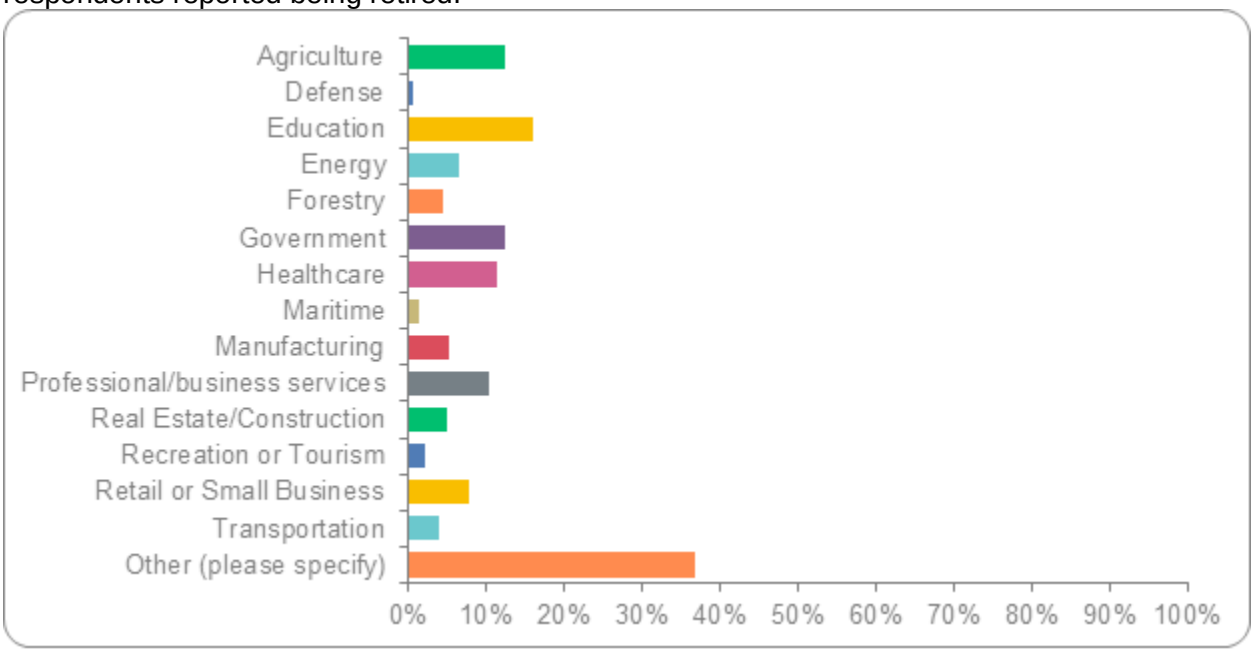
The majority of respondents live (86.63%) work (52.43%), and own property (67.88%) in Skagit County.



Q13: What industry do you work in? (Select all that apply)

Answered: 542 Skipped: 110

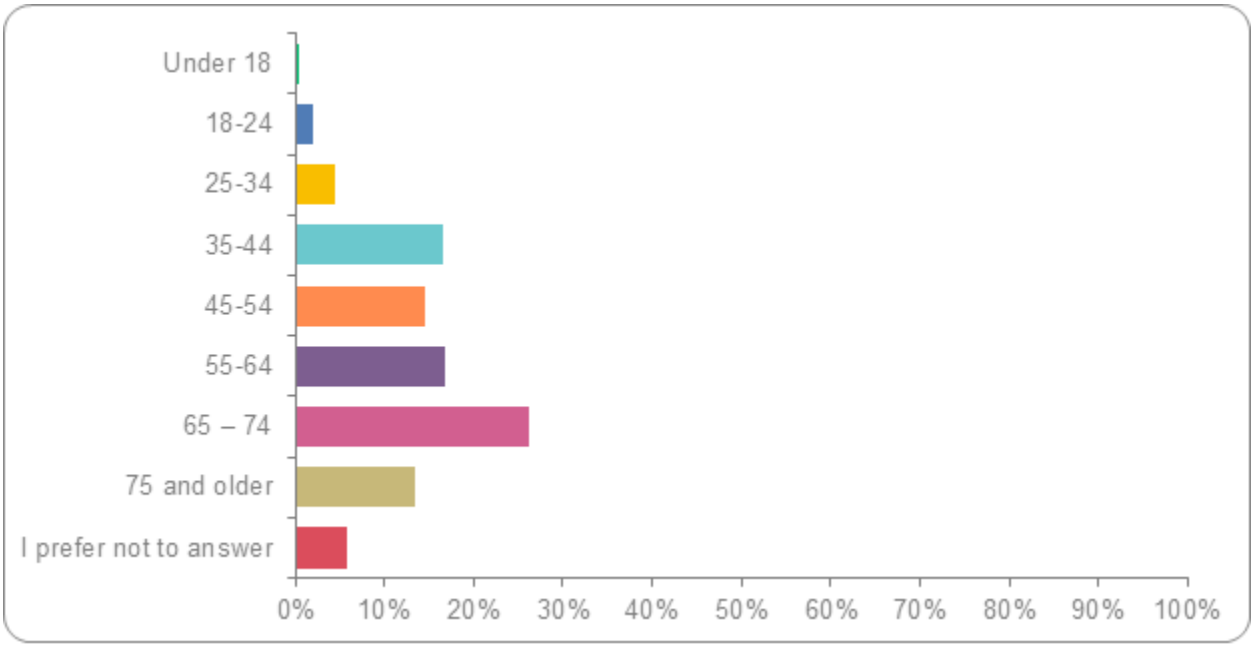
The industry with the highest percentage was other (36.9%), followed by education (16.05%). Individuals who marked other report working in fields like journalism and nonprofit. 17.8% of respondents reported being retired.



Q14: What is your age?

Answered: 575 Skipped: 77

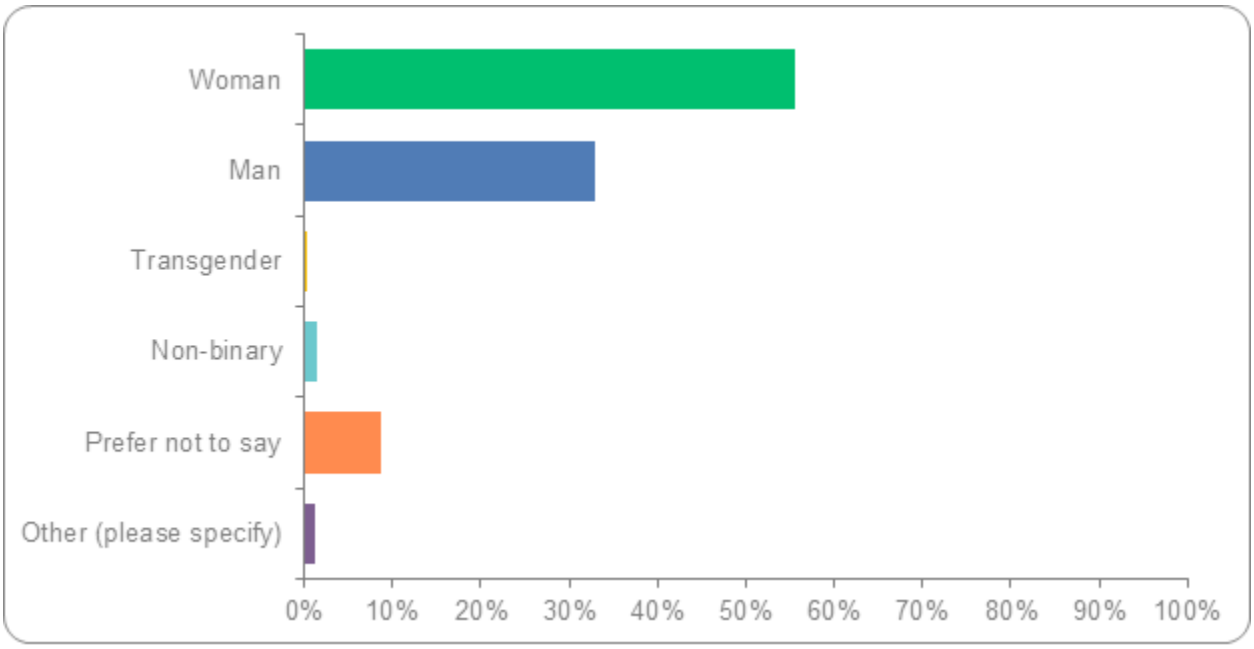
The majority of respondents were 55 years and older (56.18%).



Q15: What is your gender?

Answered: 569 Skipped: 83

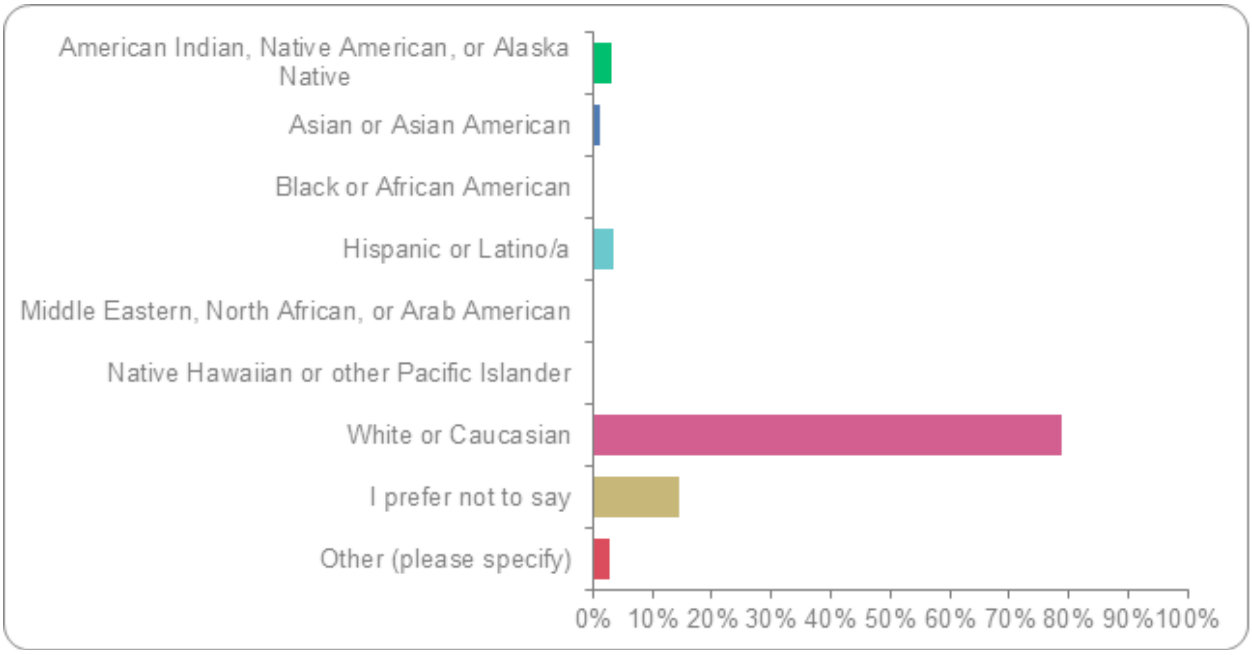
A slight majority of respondents identified as women (55.54%).



Q16: What is your race/ethnicity? (Select all that apply)

Answered: 567 Skipped: 85

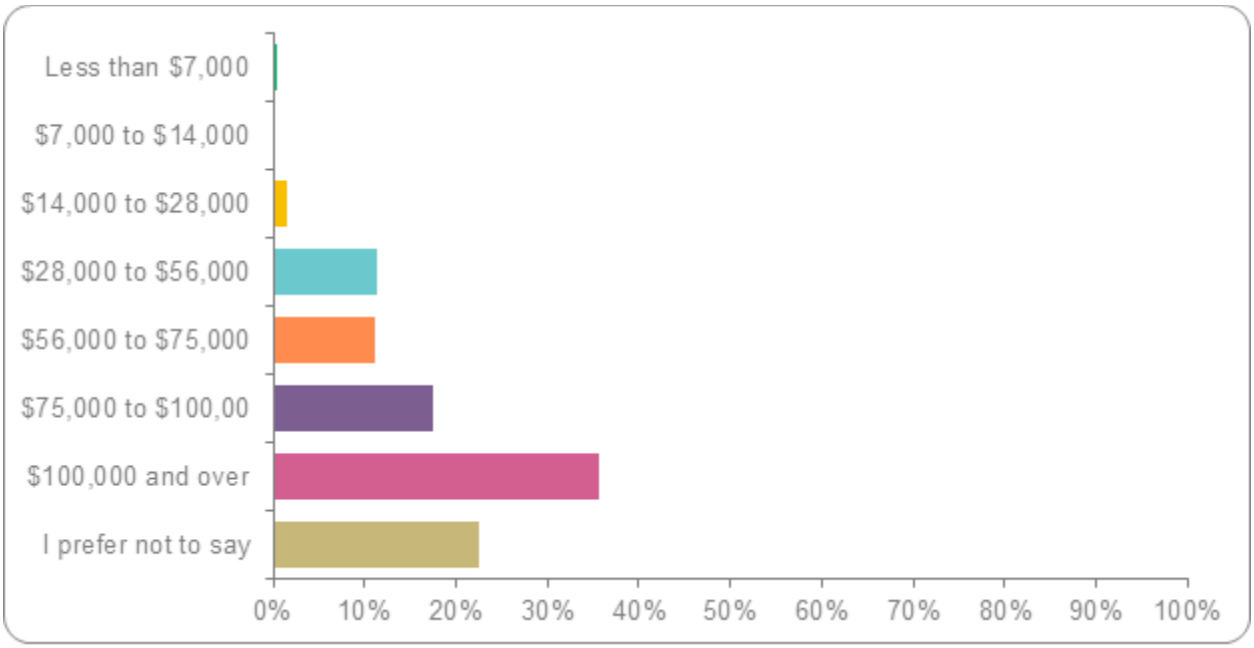
A majority of respondents identified as white or caucasian (78.84%).



Q17: What is your approximate household income?

Answered: 568 Skipped: 84

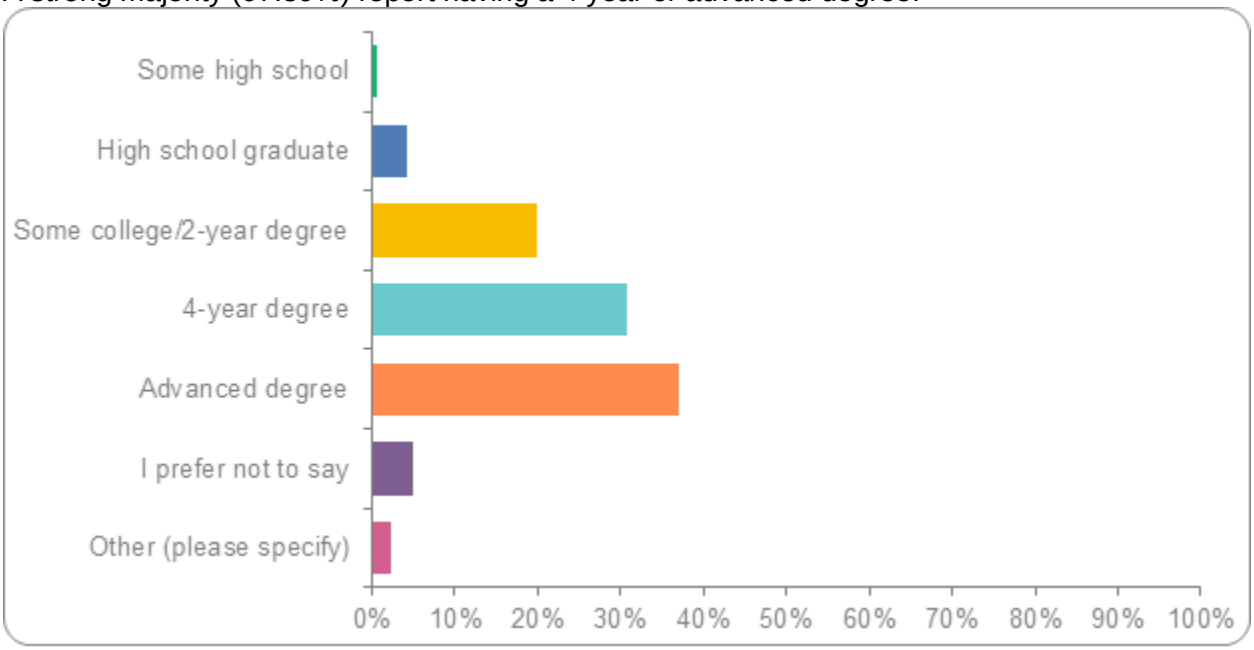
A majority of respondents report a household income of $75,000 or more per year (52.99%).



Q18: What is your highest level of education?

Answered: 573 Skipped: 79

A strong majority (67.89%) report having a 4 year or advanced degree.



Next Steps

Between February 2025 to June 2026 Skagit County Planning Commission will hold several briefings open to the public and public hearings with additional comment periods in March. After

the public hearing and comment period in March the Skagit County Board of County Commissioners will hold a public hearing and comment period.

Appendices

Appendix A. First Survey Results

Survey results exported from Survey Monkey start on the next page.

Appendix B. Stakeholder List

Organization	Website	Contact
Agricultural Advisory Committee	Link to Website	Malia Agpawa
Skagit County Drainage and Irrigation Consortium		Jenna Friebel
Forestry Advisory Committee	Link to Website	Kendra Smith
Marine Resource Center	Link to Website	Tracy Alker
Skagit Habitat for Humanity	Link to Website	Tina Tate
Helping Hands Foodbank	Link to Website	Rebecca Skrinde
Economic Development Alliance of Skagit County	Link to Website	John Sternlicht
Skagit/Island Counties Builders Association	Link to Website	Wayne Crider
Skagit County Farmers		Tony Wisdom, Skagit Valley Farm Diane Szukovathy, Jello Mold Farm Jason Vander Kooy Harmony Dairy Amy Frye, Boldly Grown Farms

Appendix C. Stakeholder Interview Questions

Participants were provided these questions ahead of stakeholder interviews but were not asked to fill out the form and return them. The stakeholder interviews were structured in a discussion format to foster open and honest conversations.

Questions for the 2025 Skagit County Comprehensive Plan Periodic Update

Land Use

1. What are your primary concerns regarding planning for population growth in Skagit County over the next 20 years?
2. What is Skagit County currently doing to manage growth that you hope will continue for the next 20 years?
3. What is Skagit County currently doing to manage its natural resources and working lands (forest and farmland) that you hope will continue for the next 20 years?
4. Can you think of any planning efforts or services that Skagit County should consider incorporating in the future to help improve your quality of life?

Housing

1. On a scale of 1-7 where 1 is *not at all,* 4 is *somewhat* and 7 is *extremely,* to what extent are you concerned about housing affordability in Skagit County?

   Not at all Somewhat Extremely

   1 2 3 4 5 6 7

2. Washington State law requires Skagit County to allow zoning for affordable housing within the unincorporated areas of the County.
3. Where would you advise Skagit County to focus planning for additional housing, particularly affordable housing, located outside of our existing cities and towns?
4. Using that same 7-point scale, to what extent would you support Skagit County focusing multiple-family housing and affordable housing in the County's existing LAMRIDs (Limited Area of More Intensive Rural Development)? – e.g., within Clear Lake, Edison, Big Lake, and Alger.

   Not at all Somewhat Completely

   1 2 3 4 5 6 7

5. Are there areas in Skagit County that should not be utilized for more intense housing development? If so, where?

Transportation

1. To what extent do you feel Skagit County is able to plan for and meet your transportation needs?

   Not at all Somewhat Extremely

   1 2 3 4 5 6 7

Please explain:

2. Thinking of transportation infrastructure and the needs in the unincorporated areas of Skagit County (outside of cities or towns) - What transportation options and opportunities would you like to see Skagit County aim for in the next 20 years?
3. Skagit County is required by State law to come up with ways to reduce the number of vehicle miles traveled in the County.
4. What ideas do you have about how Skagit County can achieve this?

Climate Change

1. To what extent are you concerned about climate intensified hazards such as drought, sea level rise, wildfires, or increased frequency and severity of floods in Skagit County?

   Not at all Somewhat Extremely

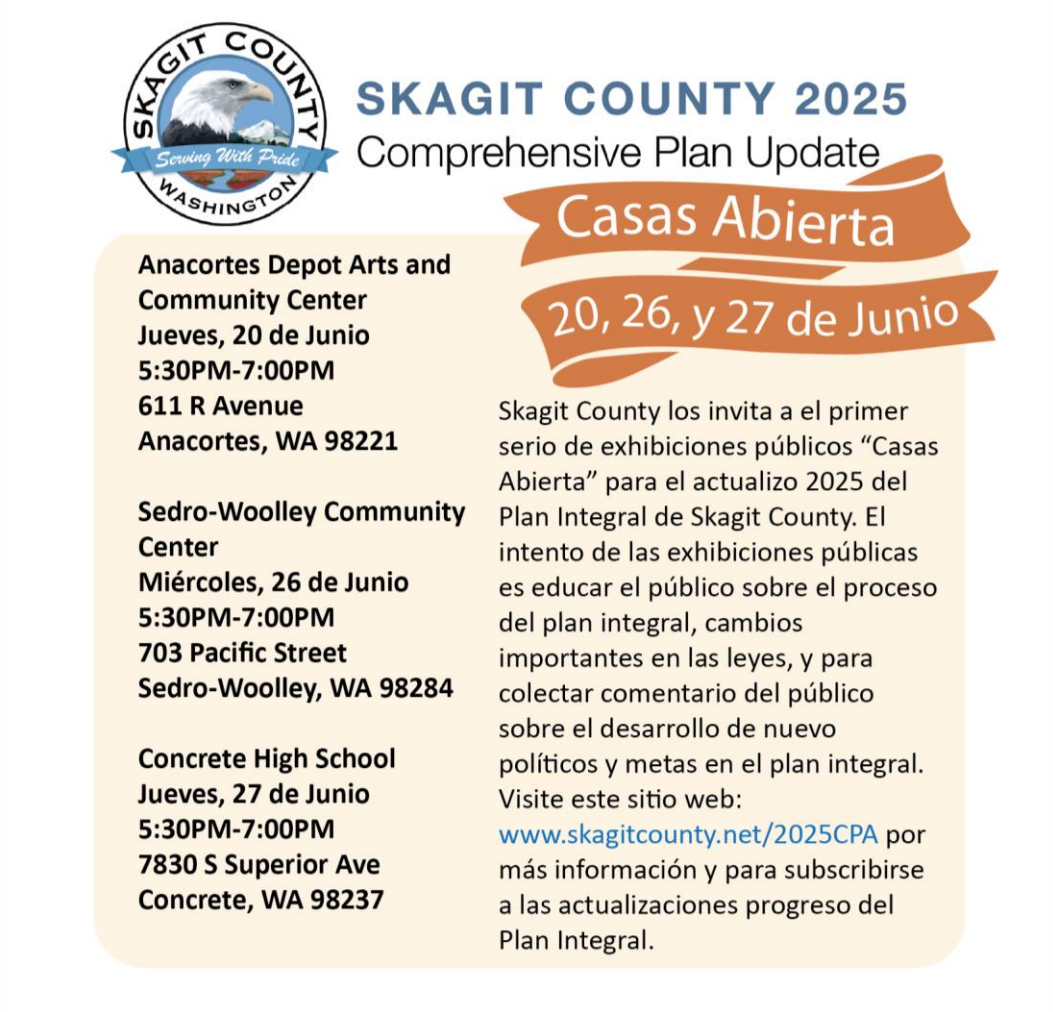
   1 2 3 4 5 6 7
2. Skagit County is required by State Law to plan for climate intensified natural hazards such as extreme temperatures, wildfires, increased flooding, sea level rise, etc.
3. Which of the climate change intensified natural hazards (*review list above)* do you feel Skagit County should focus on as the highest priority? Why?
4. Are there specific areas or populations in Skagit County that you believe will be more impacted by these hazards? If so, where/why?
5. Considering the various governmental services provided by Skagit County (Planning, Public Works, Public Health, Parks & Recreation, etc.), what specific actions can Skagit County take to enhance the preparedness and resilience of these services and the populations they serve in response to climate change-induced natural hazards?
6. What actions do you think Skagit County government should prioritize to enhance its preparedness and resiliency to changing climate?

Appendix D. Stakeholder Interview Discussion Boards

Stakeholder interview discussion boards start on the next page.

Appendix E. June 2024 Open House Notices and Advertisements

To advertise for the June open houses, Skagit County issued a press release on June 13th, 2024. Notifications were uploaded to social media websites, like Facebook, and emails were sent out to survey respondents that requested to received notifications about future Comprehensive Plan engagement opportunities. Advertisements for the open were distributed in both English and Spanish. Spanish translation services were available at all three events.



Please visit the project website at https://skagitcounty.net/2025cpa for more information.

SKAGIT COUNTY 2025 Comprehensive Plan Update

Open Houses
June 20, 26, 27, 2024

Join us for the first series of open houses to learn about and contribute to Skagit County's 2025 Comprehensive Plan Update.

Why Attend?

Learn: Find out about the comprehensive plan process and why it matters.

Updates: Hear about important changes in state law affecting the plan.

Contribute: Share your feedback to help shape the county's future goals and policies.

Open House Details:

Format: Walk-in with engagement activities and educational posters.

Experts: Skagit County staff and other experts will be available to answer your questions.

No Formal Presentation: Drop by anytime during the open houses.

How to Get Involved:

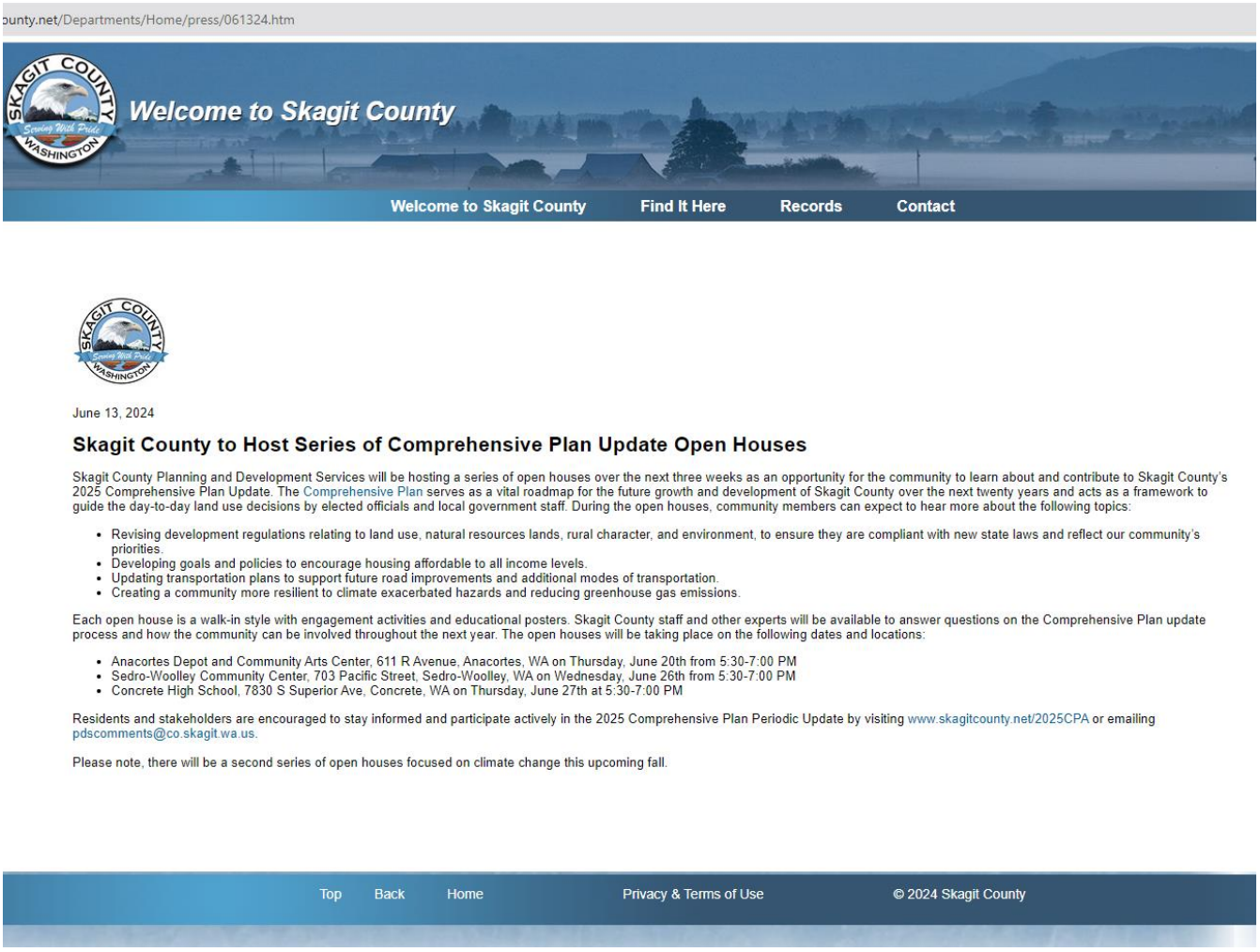
Visit the Website: Go to www.skagitcounty.net/2025CPA for more details.

Sign Up: Register on the website to receive updates about the comprehensive plan update project.

Your input is vital. Help us plan the future of Skagit County by attending the open houses and sharing your thoughts. We look forward to seeing you there!

Anacortes Depot Arts & Community Center **Thursday, June 20th** **5:30PM-7:00PM** 611 R Avenue Anacortes, WA	**Sedro-Woolley Community Center** **Wednesday, June 26th** **5:30PM-7:00PM** 703 Pacific Street Sedro-Woolley, WA	**Concrete High School** **Thursday, June 27th** **5:30PM-7:00PM** 7830 S Superior Ave Concrete, WA
Transit: Available upon request. Text 360-399-2552 stop 2332 on Route 409 or route 410.	**Transit**: Route 300, bus stop 5157, runs until ~ 7:30pm. Route 301 Burlington to Sedro-Woolley, bus stop 5157 runs until ~ 7:30pm.	**Transit**: Route 717 (flex route) runs until ~ 7:30pm. Route 70X Concrete to Mount Vernon runs to stop 5134. (8-minute walk to location).
Visit Skagit Transit website or call 360-757-4433		

Please visit the project website at https://skagitcounty.net/2025cpa for more information.



ounty.net/Departments/Home/press/061324.htm

Welcome to Skagit County

Welcome to Skagit County | Find It Here | Records | Contact

June 13, 2024

Skagit County to Host Series of Comprehensive Plan Update Open Houses

Skagit County Planning and Development Services will be hosting a series of open houses over the next three weeks as an opportunity for the community to learn about and contribute to Skagit County's 2025 Comprehensive Plan Update. The Comprehensive Plan serves as a vital roadmap for the future growth and development of Skagit County over the next twenty years and acts as a framework to guide the day-to-day land use decisions by elected officials and local government staff. During the open houses, community members can expect to hear more about the following topics:

- Revising development regulations relating to land use, natural resources lands, rural character, and environment, to ensure they are compliant with new state laws and reflect our community's priorities.
- Developing goals and policies to encourage housing affordable to all income levels.
- Updating transportation plans to support future road improvements and additional modes of transportation.
- Creating a community more resilient to climate exacerbated hazards and reducing greenhouse gas emissions.

Each open house is a walk-in style with engagement activities and educational posters. Skagit County staff and other experts will be available to answer questions on the Comprehensive Plan update process and how the community can be involved throughout the next year. The open houses will be taking place on the following dates and locations:

- Anacortes Depot and Community Arts Center, 611 R Avenue, Anacortes, WA on Thursday, June 20th from 5:30-7:00 PM
- Sedro-Woolley Community Center, 703 Pacific Street, Sedro-Woolley, WA on Wednesday, June 26th from 5:30-7:00 PM
- Concrete High School, 7830 S Superior Ave, Concrete, WA on Thursday, June 27th at 5:30-7:00 PM

Residents and stakeholders are encouraged to stay informed and participate actively in the 2025 Comprehensive Plan Periodic Update by visiting www.skagitcounty.net/2025CPA or emailing pdscomments@co.skagit.wa.us.

Please note, there will be a second series of open houses focused on climate change this upcoming fall.

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Appendix F. June 2024 Open House Boards and Comments

Board Activity Question: What does rural character mean to you?

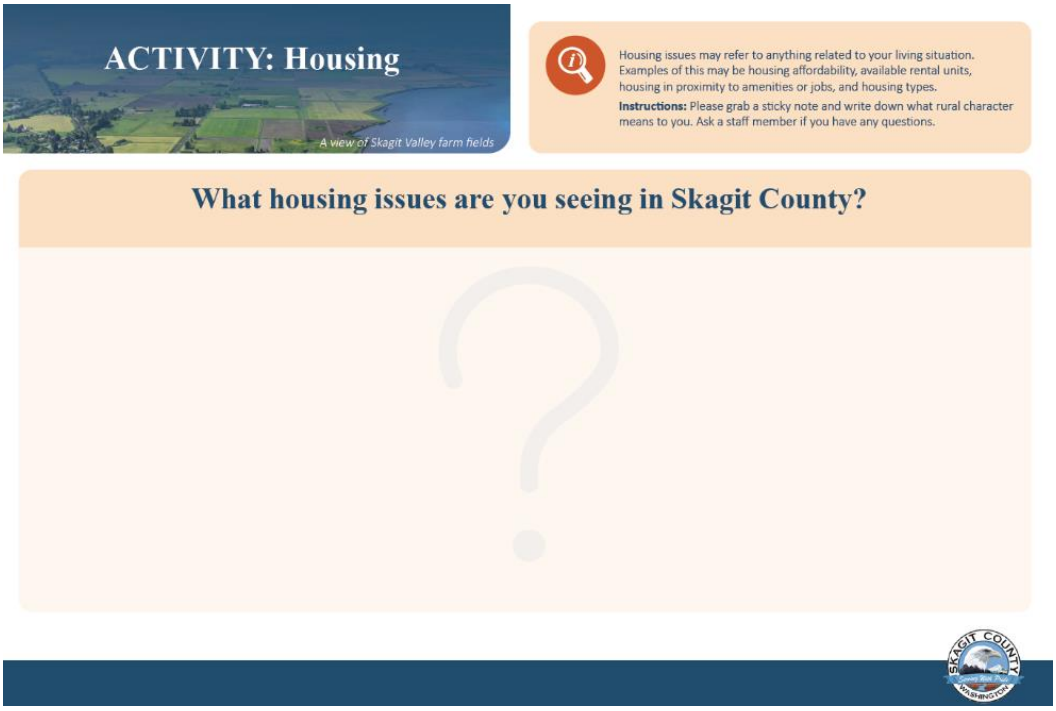


Want habitats for: eagles, ospreys, herons, pelicans, water birds, etc. Harbor seals – beaches to haul out on or safely leave a pup for hours a day.
No FCC.
Protect fish, forests, bird habitats, sustainable farming methods.
Greenbelts, parks, preservation of ag land.
Rural lands are conservation lands, farmlands, forest, wetlands. All should be preserved for their function in reducing GHG as they sequester carbon. Population growth should be restricted urban areas."
Rural = sparce population and no development.
Protect the farmland. *Key
No urban sprawl. Preservation of open spaces. Protected habitats for wildlife.
Protect farm, fish, and forests.
Rural character: open spaces, scenic vistas, peace and quiet, native plants, happy animals, no smoke.
Animal habitat, forests, waterways, farmland, open space, acknowledgment of culture that supports and accompanies all these.
No sprawl. Protection of farmland.
If growth = residential housing, then clustered housing with 50-60% open space easements.
Green grass and trees. Walking areas.

Scenic beauty.
Open spaces, fields, forests, farming, elk, free flowing streams and rivers.
Don't take farmland for single-family residential development.
New homes that don't have to look 'modern' i.e., steel boxy boxes.
Have the county commissioners form a natural/conservation lands advisory committee to advise on non-commercial use of natural lands – forests for carbon sequestration, etc.
Rural character: no housing development, no non-agricultural enterprises or businesses. Agricultural activity – growing food, raising cattle, sheep, etc.
Environment – not rural; means intact forests, wetlands, and rivers where our water and air are filtered, animals thrive.
Urban/land use element. How do we catch up to density requirements in cities. Need enforcement or incentive to keep rural areas rural.
Planning inclusive of the "natural" environment that takes into account change in the climate in relation to existing resources and human habitation, use, and preservation.
Farmland, open space, protected areas, decreased density, decreased traffic.
Fewer houses on the landscape
"Rural character" means ag, but a lot more. It means protected habitat for the full variety of wildlife. It means having plenty of places people can walk/hike in natural areas (forests, fields, shorelines).
Close community
Save farmland for farming
Too many farmlands and acres are being converted to wildlife habitat such as elk and salmon.
New climate solutions allowed on all lands, i.e., storing bio char
Employment opportunities
Dar información sobre los pesticidas que utilizan los agricultores para sus siembras para proteger a los animales y personas que viven en esas áreas (Provide information about the pesticides that farmers use on their crops to protect the animals and people that live in those areas).
Let river take its natural course. It will eventually anyway.
Modification of existing zoning to allow for more viable housing solutions.
Caring for each other
Trees, green areas, less traffic, sense of community/connectedness
Open space; untouched conserved land for future generations; farmland preserved.
Zoning needs updated. Need more space for housing.
Parks; farms; protected spaces; animals; clean
A sense of community. Let's get back to that!
Land for wildlife; protection of critical areas.
Lack of pavement; green space; quiet/solitude; forests nearby; farming; wildlife habitat

Critical areas. Not enough. We need broader protection goal for rural.
Open space where people and wildlife are co-existing.
Agricultural use; forests; parks; natural areas; environmentally sensitive areas; open space; nurseries; low-density residential
Protecting the Earth. Less concrete; sustainable development
Respect for the land, people, and all creatures that share this incredible place on the planet. Believe in a shared ecosystem.
Low-density development. More farms, forests, undeveloped areas.
Community-controlled area with few governmental intrusions. Open space, farms, no strip malls
Healthy ecosystems and high-quality water
Open spaces, which means not having the crowds & congestion of the city.
Keep open spaces resource lands – ag, forestry, wetlands. Close wetlands. BANK
Open space; farmers getting to farm without government overreach; parks; trees
Land that is left untouched by communities
Human-inhabited buffer around wild places where wildlife and trees find refuge.
We care for all neighbors, especially those who suffer.
Where all people matter and are treated with respect.
Look at Germany – strict limits of town vs rural. They get it because they had to.
90% new growth in cities
Wetlands; native forests; wild rivers; trails; wildlife; Some comparable commerce (ag, tourism, forestry)
Los químicos de pesticidas de los agrícolas (Agricultural pesticide chemicals)
Lots of open space
Ability to be spaced apart from other homes; have room to grow crops, raise animals
Roads that branch out like a tree, or its roots. Not like a grid. But you know? Without some good general and specialty stores nearby, it'll all wither on the vine.
Important to protect existing farmland.
Keep farmlands. No more city enforcement.
Importance of public safety with rural homelessness. Need more resources.

Board Activity Question: What housing issues are you seeing in Skagit County?



Consider eliminating or restricting short-term (Airbnb, etc.) rentals so people who live and work here can afford housing.
Lack of affordable housing.
Public transit supporting dense housing.
No mandate on developers to include sufficient affordable housing.
No more mega-mansion enclaves.
Incentives for ADUs in city, where double lots may have high taxes. Tax forgiveness for owners works sometimes.
Need housing close to transit, groceries, and with green space and trees. Focus on low-income (which is middleclass at this point) and high-density. No sprawl. Preserve mature forests and trees.
Not enough senior living apartments.
Housing should be mixed. Let's not squeeze lower income all together and reinforce inequality.
Dense housing – more traffic congestion.
Affordable housing for essential workers while safeguarding rural lands.
Housing plenty! Use or re-use available i.e., Mt. Vernon, Sedro Woolley.
Mandates on developers to provide affordable housing and green space.
Interest in protecting rural natural resource land from expanded housing needs. Cities are better positioned to absorb housing density. Better for climate and transportation.

Regulate ADUs to protect trees, upkeep in neighborhoods. What will ramshackle ADUs look like in a decade?
The requirement to have apartments be tiny sq. ft. We need variety housing for seniors with no stairs, single level. Shouldn't be required to have buildings look 'modern.' Keep it 'local,' wood 'log cabin' rustic, not all steel.
Consolidate housing and new growth to existing towns and UGAs. Stop landscape fragmentations.
In Anacortes: Negative bias towards low-income housing, and towards Habitat for Humanity.
Concentrate residential development in cities – 90º urban residential growth. Discourage housing in flood plains and forests.
County should consider tiny homes attached to full facility homes as a good way to provide housing on rural land that is more affordable.
Lack of affordable and high-density housing.
What policies can ensure affordability?
Affordability especially for work force. Any way to limit the size of homes? Some of the McMansions are simply obscene. Enforce regulations for building/remodels/additions. R/T environmental protections.
Unhoused population needs cold weather protection. Currently none in Anacortes this last winter.
Need trees/green spaces near dense housing. Research shows this decreases crime and supports mental health.
Appreciative of the 1,200 sf ADU allowance. Has been a good size home for me as my family and I recently moved back.
Additional parks should be added along with increased density.
Affordability; complex permit processing; limited units in rural zones.
Don't need more building. Use what we have, i.e., old homes falling apart – build apartments.
Rent is too high for young people starting out.
The waitlist is long for those with low income.
Rent rising
No affordable rentals or new housing with "green" features
Rent too high – more than necessary for expenses
Need more apartments/duplexes, ADUs in cities.
Many apartment complexes seem to be perpetual poverty traps. Need to find a way to increase density while maintaining ownership. Townhouses? Or at least better-quality apartments with gyms, pools, etc.
Mas programas de Vivienda asequible (More affordable housing programs)
No housing available
Require all multi-family apartments to include 20% of units permanently affordable to people with poverty level incomes.

Not enough housing. Not dense enough housing within UGAs. More ADUs and creative denser housing solutions.
Seniors are losing their households due to increases in costs. Unhoused seniors.
New housing impeding on forest/vulnerable areas. Prefer focusing on infill/density and preserving natural resources.
Two friends, both employed, can't find affordable rentals. One aged 52, one aged 67.
Buscar soluciones para mejorar el costo de Vivienda por que todo está muy caro y dejar de construir casas muy grandes en áreas naturales (Look for more solutions to improve the cost of housing because everything is very expensive and stop building very large houses in natural areas).
Need more diverse options for all! More affordable, more eviction prevention. Housing for essential workers – teachers & healthcare for example
Senior housing, handicapped accessible
No small rural acreage available for hobby farms, etc.
Affordable housing; lower rents; adequate public services; open space parks; community service; available parking; adequate walking/bike lanes.
No affordable rental for my kids! Skagit County should not be as expensive as Snohomish County.
Less government interference and easier permitting would allow more building.
Make middle- and lower-income neighborhoods livable. Parks, trees, trails.
Too many apartments. How will the schools and medical facilities handle the increase of populations. Who will fill all these new apartments?
Low income/affordable housing is not affordable.
Revisit card open space options. Need more employment opportunities.
20-minute neighborhoods anywhere there is clustered housing. "Villages" – especially in cities and towns.
Ignoring issues does not solve problems. What is being done?
Type of houses are limited.
I like the ideas of ADUs and infilling in cities. Provides affordable housing opportunities without extreme concentration.
More flexible zoning. Local ordinances to create diverse options. Think outside the box.
Antiquated Section 8 voucher process.
Employment opportunities do no cover housing costs. Need better paying jobs.
Limited low-income housing. High rent and taxes going up.
Not enough housing
Viviendas para familias de bajo recursos programas (Housing programs for low-income families)
Need more middle-income housing
More programs for mid-income, single-parent households

Costs too high with too many barriers
Lacking services in temp housing
We know what isn't working. Need to try new ways.
So many car campers – RVs, shacks, unsanitary housing, housing damaged by floods, needs weatherization and rehab. Rural homelessness.
Mi preocupación personal es a los precios de viviendo en general está muy caro y los dueños de los apartamentos suben muy seguido las renta pero nuestro salario sigue igual (My personal concern is that the cost of living in general is very expensive, the apartment owners raise the rent very often, but our salary remains the same.)
Rents are ridiculously high, supply is for too little, much housing appear to be of low quality. We need to make it easier to builds multi-family housing in the towns and cities – higher density. No FCCs, which = sprawl.
Keep strict UGA boundaries. Force housing density.
Long waitlists for low-income. AMI does not match cost of living or housing.
Limited low-income housing options in the foreseeable future.
Lack of long-term low-income housing compared to wages and job opportunities in the area.
Types of housing is very limited
Middle housing
Too many apartments. No additional schools for the added kids.
Zero transitional housing options.
Multi-family housing options with ore of a neighborhood model.
Need for more low-income and middle-income housing.
Too much high-density housing going in. Need affordable single-family.
Permit process is costly. Try to make it more efficient.
Places like Martha's Place in Sedro-Woolley
Your chart does not address the rise in cost of housing (rent/own)
Water rights; available parking for apartments and cottage housing
Tiny homes for veterans. Many have HUD vouchers but no place to go.
Different types of housing – transitional, shelters, tiny home villages, cottage housing, apartments with green space, town homes with courtyards
More housing vouchers
The market is just too high. Gotta ramp it down before it crashes. But people can't afford to live in houses, so however it comes down would be nice.
Homes for sale in upper valley are priced beyond what residents can afford and some are not even livable. To remove and build again is cost prohibitive and requires too much red tape.
Create a program that existed in Seattle, through the Seattle Senior Center in the '90s. They matched seniors who were not ready to go into assisted living yet with people who needed a lace to live and could provide services in exchange to stay with the senior (they screened both parties).

Use Anacortes Family Center to consult with on what they are doing. 90% success rate.

Sustainable; green; low-impact; high-plant material

Let's chat! Chuck – WOAWW (4##) 5##-4### [censored]

There is low to no rental vacancy. Housing prices have skyrocketed.

We could use a variety of intentional tiny home villages that address different needs.

Board Activity Question: What improvements or additions would you like to see in our community's public facilities, such as roads, sidewalks, parks, sewer, water systems, or other government services, to better meet the needs of residents now and in the future?



Need parallel but separated motor, bike, and walking routes throughout the county, especially in built-up areas.

Speed limits on trails. Silent e-bikes can create conflict.

Sidewalks needed on 12th & Oakes. Dangerous for walking and bikes.

Need more sidewalks.

Efforts to support more bicycle use around towns to decrease use of cars.

Bicycle roads connecting the cities.

How plan for low snowpack and water shortage?

Concurrency for infill.

An effort to increase use of public transportation and decrease dependency on personal cars (housing by transit or near shopping).

Shelters at every bus stop.

Sidewalks where there are none and fix the broken ones so easy to walk, use a wheelchair, etc. All areas should promote walking.

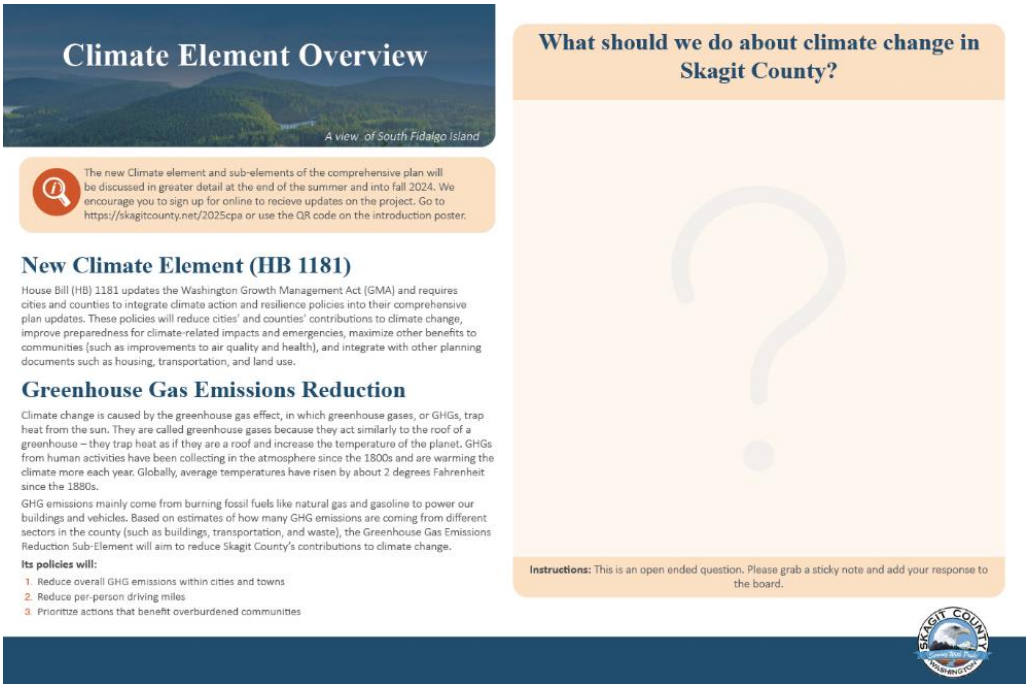
Safer pedestrian (bicycle) routes. Protect water supply especially with drought and sea-level rise. Increase water conservation (improve water monitoring with remote sensors).
Develop a transportation plan that addresses climate impacts, seal-level rise, increased flooding of roads, etc. How will this be addressed?
Map all the areas in the county vulnerable to climate change and sea-level rise, floods, landslides, alluvial fans, wildfire. Then map all the roads in those vulnerable areas and develop a plan for how those roads can be changed so transportation will be possible even when disaster happens.
I-5 traffic. Getting on I-5 in Burlington is sometimes very slow going north and south.
Community spaces that are not shopping.
Walker, biker friendly traffic separation.
Planning for sea-level rise/increased flooding.
Community pool: Olympic size, HS swim meets, lap swimming. Parking for trails: Tommy Thompson, Tribal meeting center. Parking lot on Tommy Thompson Trail near RV park by Fidalgo Bay Rd.
More sidewalks. Skagit Transit to east county past Concrete
More parks. More sidewalks to encourage walking.
Serve Bayview with sanitary sewer
Trails for hikes
Creating flood water storage for drought use. Reservoirs, aquifer recharge, etc.
More kid activities
Need updated fairgrounds with better amenities. Centrally located in county.
Safe biking lanes and walking for urban and rural commuters.
Need more schools in McGarigle
Consider green infrastructure to mitigate flood TSLR & clean water. Important as utilities.
More stops in Skagit Transit routes (Sedro-Woolley)
Long-term camping areas
Greatly increase the acreage in the county parks system. Skagit has 2,200 acres; Whatcom has 16,000 acres; Snohomish has over 10,000 acres. Parks & park acreage should also grow with population.
Water system that does not require chloramines.
Better ways to prevent backflow (enhanced air gaps?). More alternative transportation. Transport alternatives in face of disaster (bridge down).
Mas clinicas de atencion sobre salud mental y fisico (More mental and physical health care clinics)
Paved bike/hiking trails between Mt. Vernon, Burlington, Sedro-Woolley. Paved!
More crosswalks clearly marked with lights in school zones. Sedro-Woolley High School, Central Elementary
Mas oficinas de welfer (More welfare assistance offices)

Need to centralize emergency services
What's the plan & cost to increase infrastructure like sewage treatment for all the new houses?
Ayudar más a las escuelas para que tengan más recursos para formar mejores ciudadanos (help schools get more resources to form better citizens)
Many people now have ebikes. They can be a realistic means of commuting to work locally. We need a more comprehensive system of bike lanes and paved bike trails to encourage this form of "green" commuting.
Se necesita mas escuelas porque hay mucha sobre poblucion en los edificios escolares (more schools are needed because there is a lot of overcrowding in existing school buildings)
Some of the income from the lottery and sale of cannabis should be used for roads & schools. We could use more bike lanes as we improve our roads!
Necesitamos mas escuelas para todos los grados (We need more schools for all grades)
More parks (natural areas – not soccer fields) near dense neighborhoods
More trails and multi-use paths. Rail-to-trail projects!
More bike trails; more hike trails; more walk trails; more waterfront parks!!!!
Protect our water intake sources via conservation
Increase transit & trail connections to parks (county, state, and other areas for public access)
Government managed/sponsored shelter/housing facilities
Improve public transit to reduce auto dependance. Improve regionally significant biking trails & infrastructure to encourage use.
Electric taxis. Low cost & subsidized running known routes.
Centralized facilities for social services. Easier access to broad scope of service.
All new apartments. Need charging stations.
Plan to move roads inland. Managed retreat.
We need charging stations upriver.
In the 1920s when Clear Lake was a happening place, there were 3 types of public transportation there, 20x a day. Improved public transit helps economic growth & opportunity.
Allow for/encourage composting toilets to reduce water use and positive sewage use. Encourage grey water use/water capture.
More redundancy for Hwy 20. Landslides in a few key places can strand a lot of people by making roads impassable.
Build an elk crossing bridge over Hwy 20.
Bus service is needed in Marble Mount, even though not many people upriver, service is still needed.
Recycling pick-up
Slow traffic on Hwy 20 through Concrete. More sidewalks, better roads, and use of materials to repave in county.
More public transportation past Concrete

Please provide recycling pick-up. I do not have garbage pick-up because I have to bring recycle items to transfer station. I would pay for garbage pick-up if recycle pick-up were also provided.
See the Concrete Herald issues, May & June. Letters from Mike Brondi about budget shortfalls.
Do NOT build elk bridge over Hwy 20. It will not work! No way to funnel them to that location. Huge waste of money!!
Thank you for the East County Resource Center.
Please repair rails to trails, washout near Concrete.

Please visit the project website at https://skagitcounty.net/2025cpa for more information.

Board Activity Question: What should we do about climate change in Skagit County?

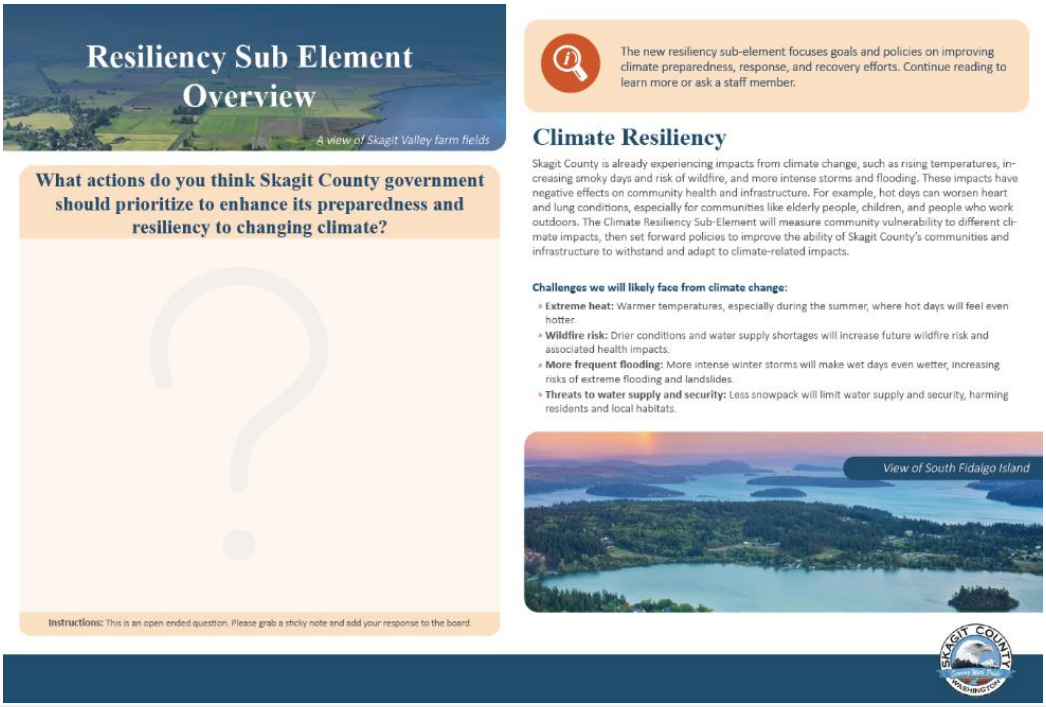


Get the Shoreline Master Plan included in the new GMA Plan.
Talk much more openly about the current and predicted impacts of climate change and lead efforts to help community members build resiliency to change and respond.
Refineries – but not oil. Other products?
Address sea level rise in Shoreline Management Plan now.
We build more housing for seniors, so they move out of their 4-bedroom house. No new housing needed.
Overreach in demands concerns me. I don't believe we affect nature/climate like the government wants us to believe.
Say NO to Initiative 2117.
Do not promote false dichotomy of economy vs environment. Not planning for and trying to minimize climate change is our most costly (and futile) choice.
Create Conservation Advisory Committee to advocate for environment and natural resources and climate resilience.
Use Skagit Climate Consortium – great resource right here! Emphasize less consumerism, being more thoughtful about it.
Consult with Skagit Climate Science Consortium which has local expertise and data.
When will you know the damage from electricity?!
Move as quickly as possible to move to non-fossil fuel energy sources, thoughtfully planning a transition to mitigate harm.
Increase tax on gasoline

Plant more native trees, shrubs, & wildflowers. Stop mowing lawns with gas mowers. Ban leaf blowers.
Electric public vehicles
Talleres educativos sobre cambio climático (Educational workshops on climate change)
Review zoning, allowing commercial composting. Need more.
Go electric. Offer incentives to remove lawns, install solar.
Reforestar mas, limpiar los lagos, ríos y áreas públicos. Poner información para educar a la gente sobre el medio ambiente (More Reforesting, clean lakes, rivers, and public areas by providing information to educate people about the environment)
Create a Climate Citizen's Advisory Committee and educate the community
Housing for middle income folks. More public transit.
Grow trees
Who is on the "Climate Policy Advisory Team"?? Get the Skagit Climate Science Consortium involved now.
Require heat and cold amelioration in urban areas. Shade trees along streets and around housing. Good design with insulation. Solar power!
Expand renewable energy of hydroelectric power
Protect healthy forests. Implement conservation easements to maintain forest lands.
Paneles solares para apartamentos (Solar panels for apartments)
Protect our water quality, stop runoff pollution flowing into Skagit River and streams
Plan for sea level rise! Include language in Shoreline program to require hearing examiner and public review. Listen to scientists, including when planning riparian buffers. Use 2100 projections of sea level rise to adapt buildings/structures. Protect aquatic vegetation.
Lo que aria o ya lo estay haciendo mis hijos y yo es tomar baños más cortos para ahorrar agua y cuidar q' las luses de casa no se usen están apagadas (What my children and I would do or already to is take shorter baths to save water and make sure the house lights are not turned on.)
Get rid of hard armoring
Stop clearcut without replanting!
Require solar on all new builds. Otherwise, where will all new needed electricity generate from?
Go electric. No fossil fuels (methane gas or oil).
Make sure urban areas are good places to live to encourage density. Plan for livable communities; walkable. Improve public transit and thoughtful regional biking trails.
Increase availability of public transportation. Increase and improve the network of bike trails. Encourage development in UGAs in the form of walkable neighborhoods – stores, services, all within ready walking distance of housing.
Electrify county buildings and transportation.
Community solar. Make it easy!
Safe and connected bike lanes/paths to encourage alternatives to cars!

Plant trees. Stop indiscriminate cutting. Replant conifers.
Listen to the scientists
The county should be protecting the sole source aquifer and managing new wells on Guemes Island. It is not acceptable the 40 residences have lost their wells to seawater intrusion.
Consult the Tribes! They know how to steward our land and water.
Support community solar projects; promote tiny home community living – small footprints; support our local organic farmers; let's talk compost!
Encourage towns to be more reliant on solar power
Encourage the tribes to participate and bring their solutions to the table. Make them essential stakeholders if they are willing.
Electric vehicle charging stations

Board Activity Question: What actions do you think Skagit County government should prioritize to enhance its preparedness and resiliency to changing climate?



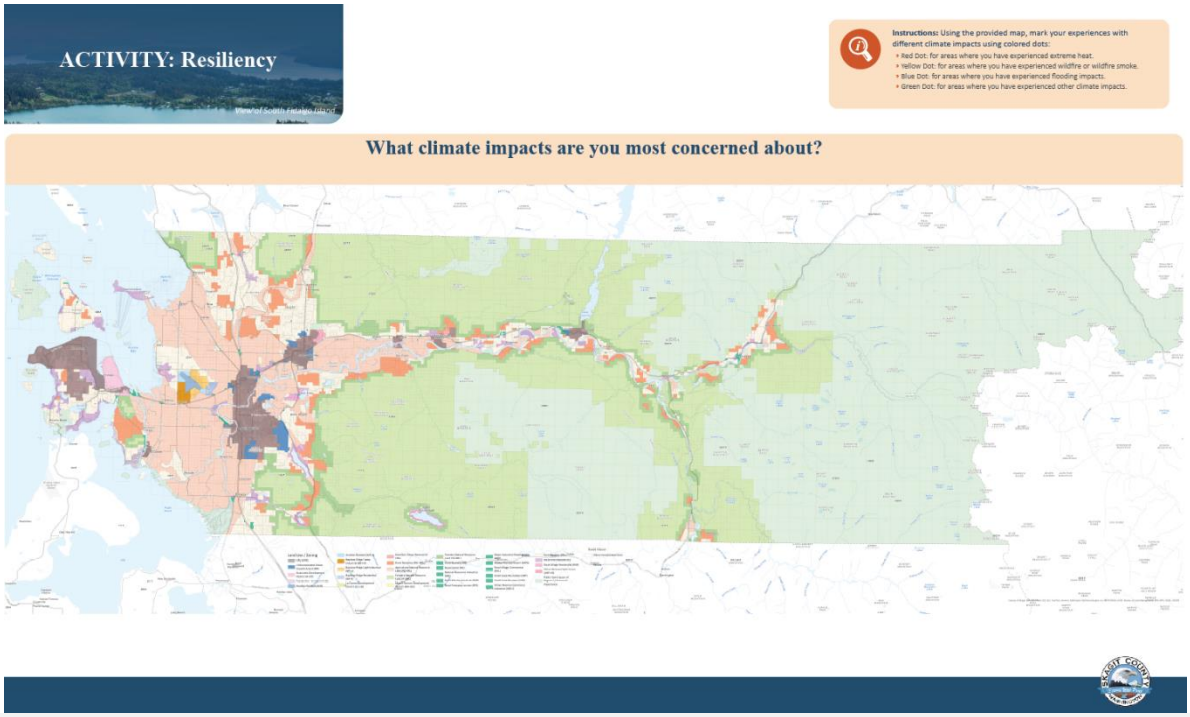
Shoreline management without use of armory which only causes increased erosion in adjacent areas.
No further development in the Skagit flood plain.
A solid Shoreline Master Plan based on science and goal of protection.
Consult with Skagit Climate Science Consortium for solid scientific local data on the impacts of climate change in Skagit County. Base County decisions on their data.
Set back dikes, restore lost wetlands, plant more trees, stop fragmentation of landscape.
Disaster preparedness (bridges functional).

Ban greenhouse gas in all ways possible as quickly as possible. This should be core to all of the planning.
Responsiveness to impact on lower income. Awareness of inequities.
More trees, more enforcement of setbacks. Where is the SMP – started in 2010, it is needed, based on science! Enforce/limit armoring to regs soft/not hard.
Earthquakes of 9+ stemming from subduction zone off the Pacific Coast is more of a threat than cyclical changes in climate.
Forest management, climate, encroachment from development, manage fire.
Reductions in greenhouse gas emissions; increase in electrification.
Support Climate Commitment Act.
Water quality and runoff
Green = salination of soils
Avoid development on landslide prone slopes
Solar is not cost effective (I have solar). Allow small scale nuclear plant. Don't close off use of natural gas. We need bridge fuel.
Avoid development in areas forecast for flooding & sea level rise
Update the Shoreline Master Plan to take into account sea level rise by 2028
Wildfire preparedness and risk reduction
Emphasis of green infrastructure such as healthy streams, open space, & healthy forests to buffer the impacts of climate change, especially heat.
Program of buy outs and TDR programs for identified areas prone to climate impacts
Write a Climate Action Framework. Comp Plan will not be detailed enough to make targeted change.
Map hazard areas and be strict about compliance. Currently people still getting permits in hazard areas.
Education: communities, schools, county/city, priority education regarding climate change. Everyone/every neighborhood required to learn about and be prepared for wildfire evacuation and for neighborhood and home preparedness.
Green dots natural hazard such as landslide risk with increased winter rains.
Use only green energy. Allow solar & wind & geothermal
First, create a map (with public input) of all areas at risk from sea level rise. Then, prepare a prioritized list of actions to take (e.g., moving roads, incentivizing shoreline residents to move inland, etc.)
God controls the climate. This is an agenda I don't participate in.
Taller educativo sobre cambio climático (educational workshop over climate change)
Completely update the county's open space concept plan to take into account climate & flooding, sea level rise
Reforzar presas y bordes de ríos para tener mejor protección para las familias que viven cerca de esos áreas (reinforce dams and river edges to have greater protection for families who live near these areas)

Backflow in sewer & water contamination
Leaders must act to reduce warming. Reduce use of fossil fuels.
Implementar talleres sobre conservación de la naturaleza (implement workshops about nature conservation)
Stop allowing development in areas that will not be resilient. High costs long term.
Incentivize people moving out of high-risk areas
Identify opportunities to work with changing natural landscapes instead of against them. Use best available science to guide decision making.
Plan for extreme weather. Emergency shelters for heat dome and freezing temps.
Better land management; better research into effects of land changes in our most rural areas; better public transportation for the same areas; more restorative farms.
Avoid steep slopes and erosion hazard areas. Control tree cutting and removal.
Offer incentives to homeowners to remove turf lawn and plant native plants & trees.
Focus 90% of new growth in cities
Elevate land conservation besides agriculture and working forests in the comp plan
Aser más talleres con información de cómo Podemos evitar el desperdicio de agua (do more workshops with information on how we can avoid wasting water)
Form an Environmental & Sustainability Committee. Nothing like this exists yet.
Climate has been changing forever. Just like the weather, you have to live with it.
Leadership must act for the county and inform the public about how others can act.
Leadership must educate and inform the public about why climate policy is necessary.
Help the county to transition move to renewable electricity
Avoid urban development in flood plains and flood maps. Habitat protections.
Have a conservation subdivision mechanism so people can keep home or move it but sell and to government or conservation orgs.
County leadership must lead on effective climate policy.
Revise regulations to prohibit additional development in areas vulnerable to sea level rise (and tsunamis). Actively plan and promote planting of trees in towns & cities for shade and cooling and in rural areas for carbon sequestration.
Climate protection is a pay now or pay much more later issue.
If you think paying to protect climate now, wait till we have to pay later.
Set policy to reduce fossil fuels. Set aside/protect areas of most risk of flooding. Don't let people build in flood plain/alluvial fans.
Preserve green areas, forest land. Plant native plants. Plant more trees.
Consider habitat restoration as a response to mitigate shoreline SLR.
Leadership must act to mitigate consequences of warming. All consequences.
Do not allow hard armoring on shorelines.

Extreme heat and extreme cold. Last winter our temps dropped to -1˚F. The previous record was 9˚ F
Consulting with the local tribes on solutions to climate change.

Board Activity Question: What climate impacts are you most concerned about?



Increases in cost of living due to increasing need to mitigate climate effects.
Loss of quality of life. Increase in wildfire/smoke, heat, drought.
I'm most concerned about the impacts of rising heat and landscape degradation due to development and drought driving degradation of the ecosystem to the point it cannot recover.
Increases in erosion of shoreline and landslides.
Shoreline management challenges.
In Skagit specifically – sea level rise, saltwater intrusion into wells, drought, heat, wildfire, impact on pollinators.+
Warming the water.
As climate changes and things get harder, fear will increase. Can we prepare community resilience and fight tendency to "hunker down" with guns?
Use common sense in requirements; many changes we see are just part of nature and always changing.
Water supply in summer, reduced snowpack melt, in-stream flows
Local wildfire hazard
Fire and drowned wetlands
Losing trees and vegetation
Wildfires ruining every last summer of my life
Harm to agriculture
Displaced wildlife and loss of birds sue to fires and extreme heat

Flooding
Loss of trees!!
Paying later will be much more expensive than paying now if we don't act now.
Wildfire
GHG, emissions, pollution, air quality
Loss of trees, landslides, wildfires
Water too much at times and too little (drought) at times
Estamos teniendo gran impacto de calor y creo q la contaminación la a disminuido y estas cosas creo que nos causan mas enfermedades (We are having a great heat impact and I think that pollution has increased I think cause more diseases)
Health consequences of heat/smoke
Air quality
Risk of forest fire
Sea level rise; drier vegetation leads to fire; drought; pressure on wildlife & habitat; growing food
Reciclar el plástico, el carton, el vidrio, la ropa usada (Recycle plastic, cardboard, glass, used clothes)
No more coal or oil trains, air pollution, fire, & explosives, please
Higher food costs due to crop damage, less water
Sea level rise – response and prevention
Sea level rise, saltwater intrusion, melting glaciers, drought, wildfires, loss of farmland, loss of tidal marshlands, flooding, death of species
Para la deforestación y el uso inadecuado de productos nocivos para el medio ambiente (For deforestation and inappropriate use of harmful products for the environment)
Flooding
Floods
Tree canopy
SLR & flooding will drastically impact large areas of the county. Forests are already stressed – will need thoughtful, ecologically minded management.
La contaminación por gas de efecto invernadero (Pollution due to the greenhouse gas effects)
Loss of biodiversity in this incredible place
Heat dome, wildfire smoke, loss of trees, drought,
Heat, flooding, & wildfires
Wildfire, drought
Extreme cold & winter weather in east county & no shelter/poor housing for many
Sembrar mas arboles (Plant more trees)
Proteccion de los animals (Animal protection)

Changes in plant & animal phenologies, e.g., leading to lack of traditional food sources during bird migration and breeding, and reproductive failure
Sea level rise, saltwater intrusion onto farmland. Protecting farmland and farm workers.
We should keep our dams!
Heat, wildfire/smoke, reduced snowpack/drought
Salmon – they need cooler waters. Plant shade trees to help.
Plastic pollution; “forever” chemicals. Biodegradable packaging/products would be nice to encourage.
Flooding & land slides blocking access to roads/communities in Cape Horn/Cedar Grove.
Concerned about electric cars and disposal of used batteries; pollution caused by getting component parts, etc.
Rubber preservative on vehicle tires. As tires wear, this chemical goes into the streams (from rainwater). It confuses the salmon’s directionality, and they can’t figure out which way to go!

Board Activity Question: Other questions/comments

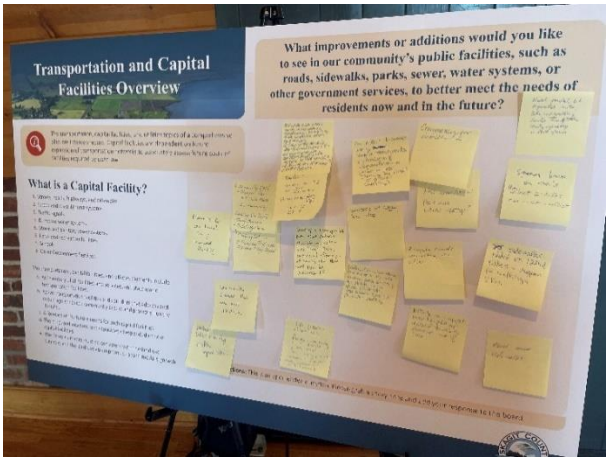
Concerned about farm conversion to residential use.
No resource extraction near sensitive areas.
Are there going to be changes to critical area maps – ensure availability.

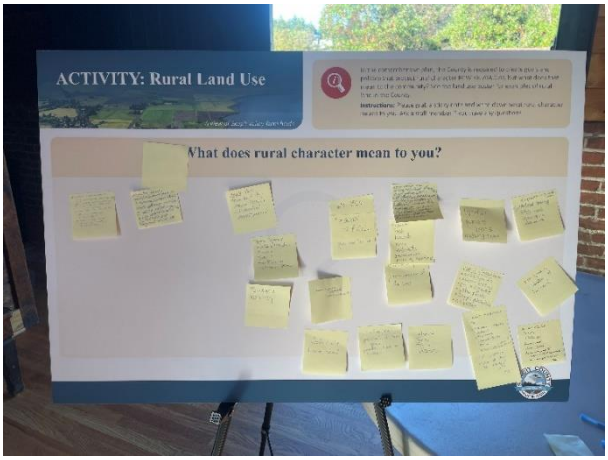
Appendix G: June 2024 Open House Map Activity Sticker Response

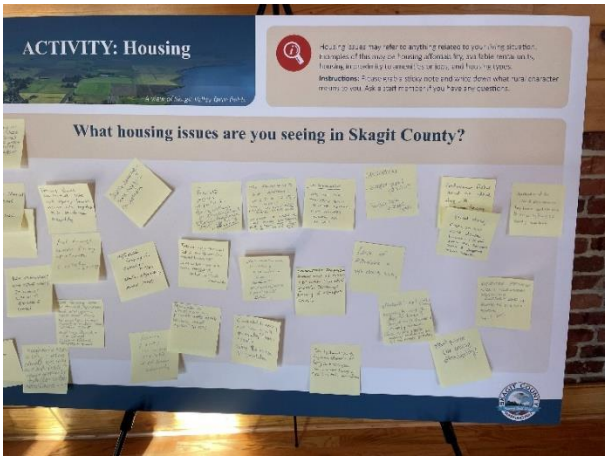
Large format map on next page.

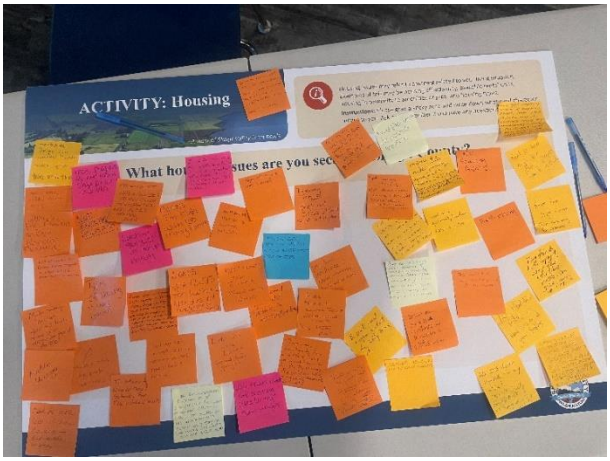
Please visit the project website at https://skagitcounty.net/2025cpa for more information.

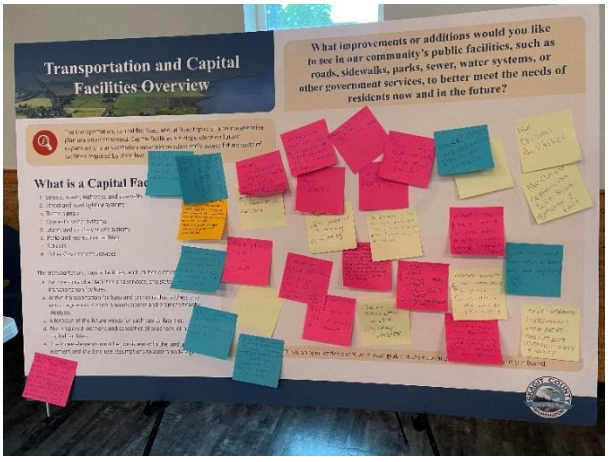
Appendix H: June 2024 Open House Photo Gallery

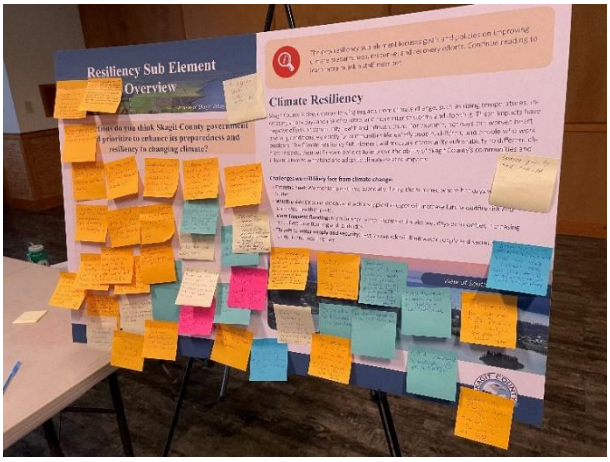












Appendix I: June 2024 Open House Demographic Responses (Anonymous)

Scanned demographic surveys start on next page.

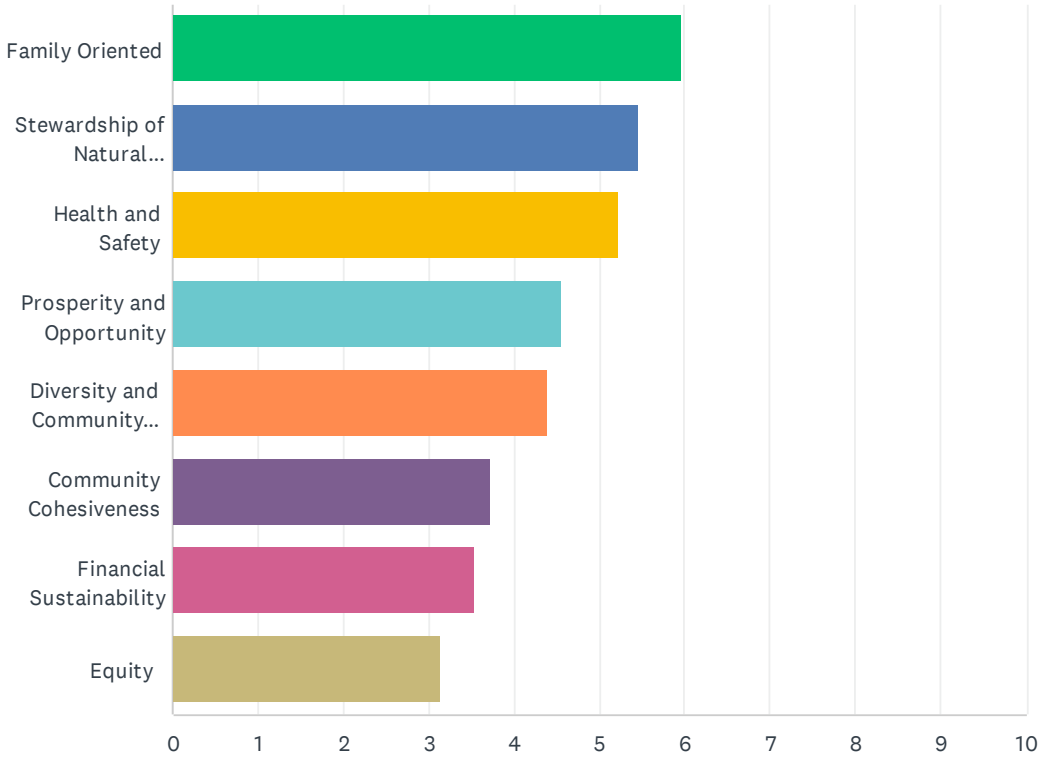
Appendices

Appendix A. First Survey Results

Survey results exported from Survey Monkey start on the next page.

Q1 What values best describe Skagit County? Please rank your priorities (1-highest; 8-lowest).

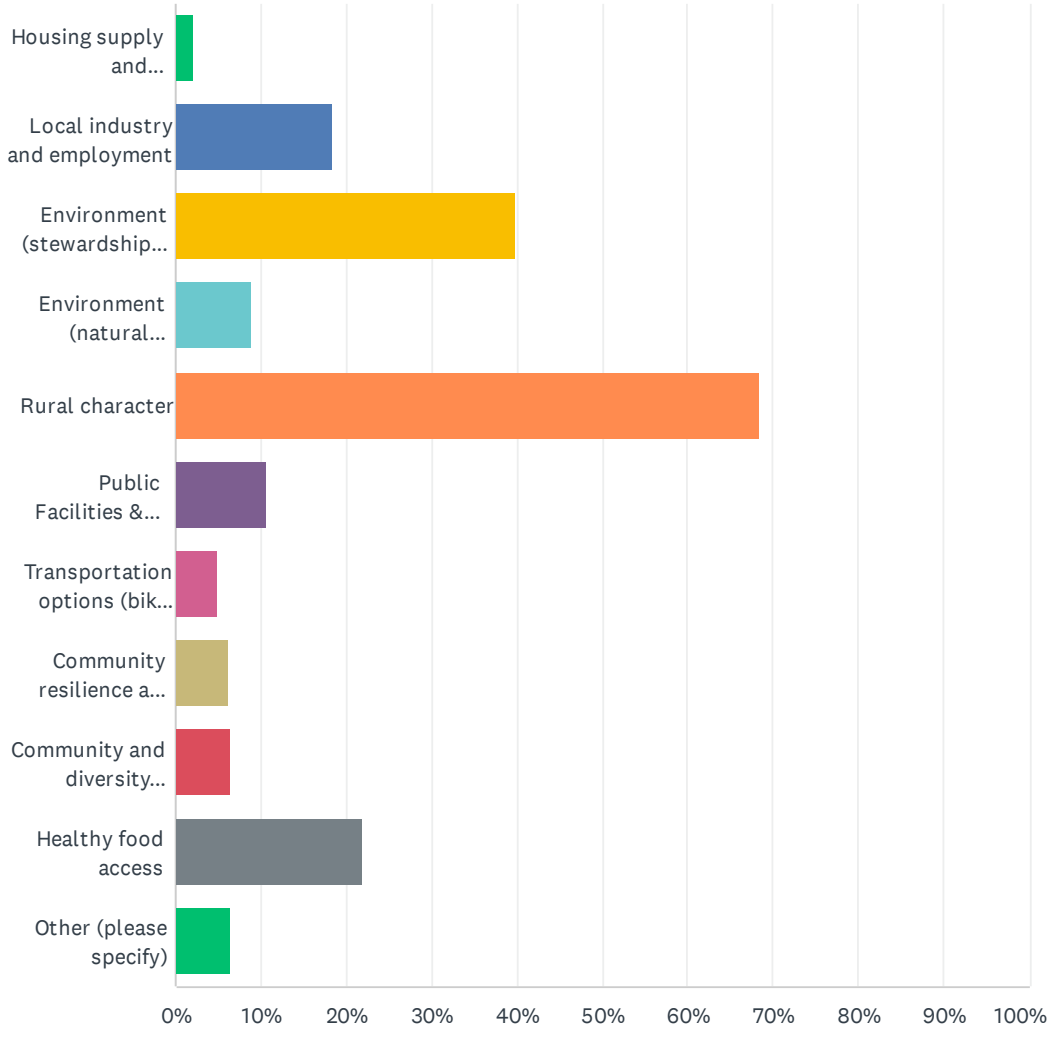
Answered: 710 Skipped: 7



	1	2	3	4	5	6	7	8	TOTAL	SCORE
Family Oriented	33.80% 240	21.13% 150	11.97% 85	8.73% 62	7.61% 54	6.06% 43	5.21% 37	5.49% 39	710	5.98
Stewardship of Natural Resources	28.73% 204	12.96% 92	12.68% 90	10.28% 73	10.99% 78	9.58% 68	9.86% 70	4.93% 35	710	5.45
Health and Safety	9.44% 67	17.32% 123	21.27% 151	18.45% 131	15.35% 109	10.14% 72	5.21% 37	2.82% 20	710	5.22
Prosperity and Opportunity	6.34% 45	15.07% 107	15.21% 108	16.06% 114	14.37% 102	13.10% 93	11.27% 80	8.59% 61	710	4.56
Diversity and Community Inclusion	10.56% 75	17.18% 122	11.83% 84	9.58% 68	9.58% 68	10.28% 73	15.49% 110	15.49% 110	710	4.39
Community Cohesiveness	3.80% 27	5.77% 41	10.28% 73	12.25% 87	15.63% 111	24.08% 171	16.48% 117	11.69% 83	710	3.73
Financial Sustainability	6.34% 45	7.18% 51	10.56% 75	11.55% 82	11.41% 81	10.28% 73	12.39% 88	30.28% 215	710	3.54
Equity	0.99% 7	3.38% 24	6.20% 44	13.10% 93	15.07% 107	16.48% 117	24.08% 171	20.70% 147	710	3.13

Q2 What are Skagit County’s greatest strengths? (Pick two).

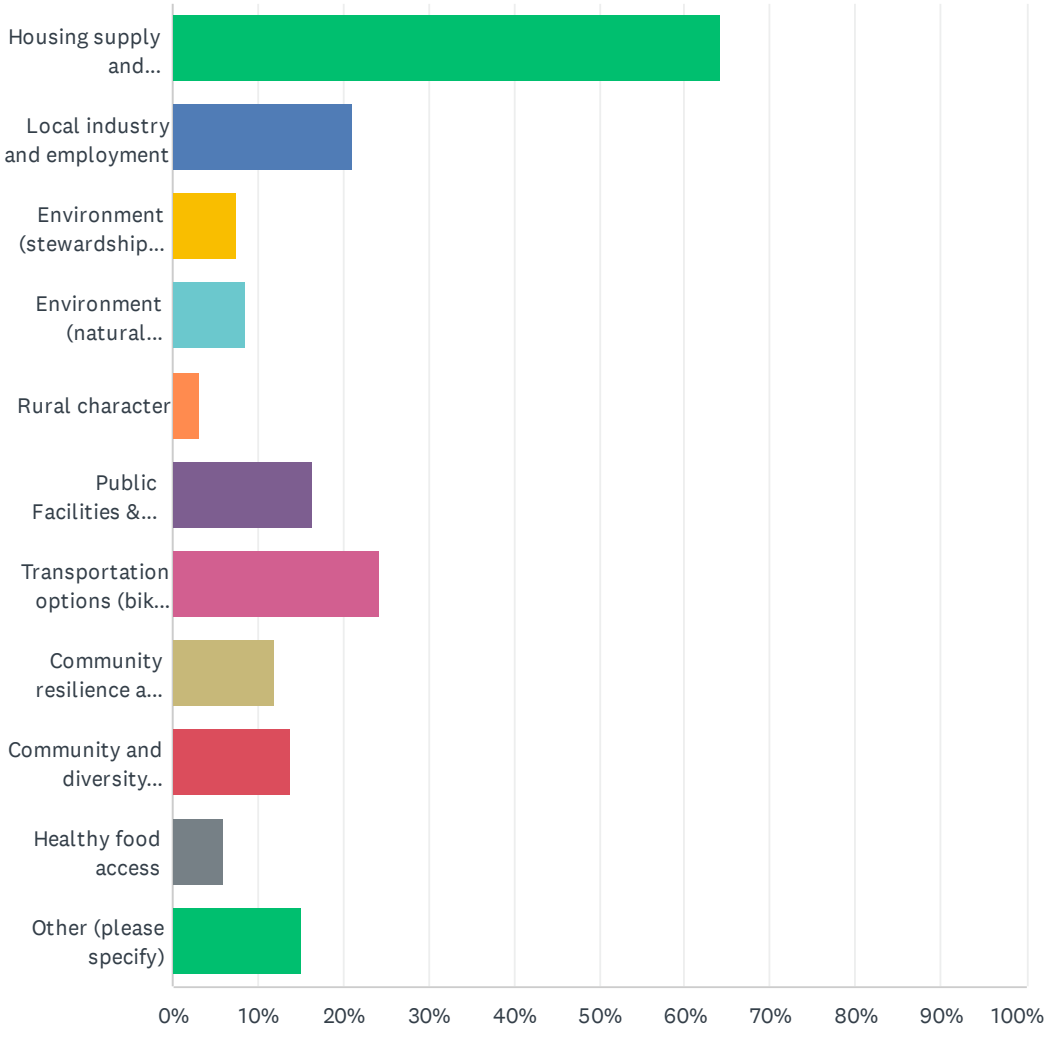
Answered: 717 Skipped: 0



ANSWER CHOICES	RESPONSES	
Housing supply and affordability	2.09%	15
Local industry and employment	18.27%	131
Environment (stewardship and water resources)	39.89%	286
Environment (natural resource extraction)	8.93%	64
Rural character	68.34%	490
Public Facilities & Services (Roads, parks, and community buildings)	10.74%	77
Transportation options (bike, bus, car, and walking)	4.88%	35
Community resilience and natural hazard mitigation	6.14%	44
Community and diversity inclusion	6.42%	46
Healthy food access	21.90%	157
Other (please specify)	6.42%	46
Total Respondents: 717		

Q3 What are Skagit County's greatest weaknesses? Pick two.

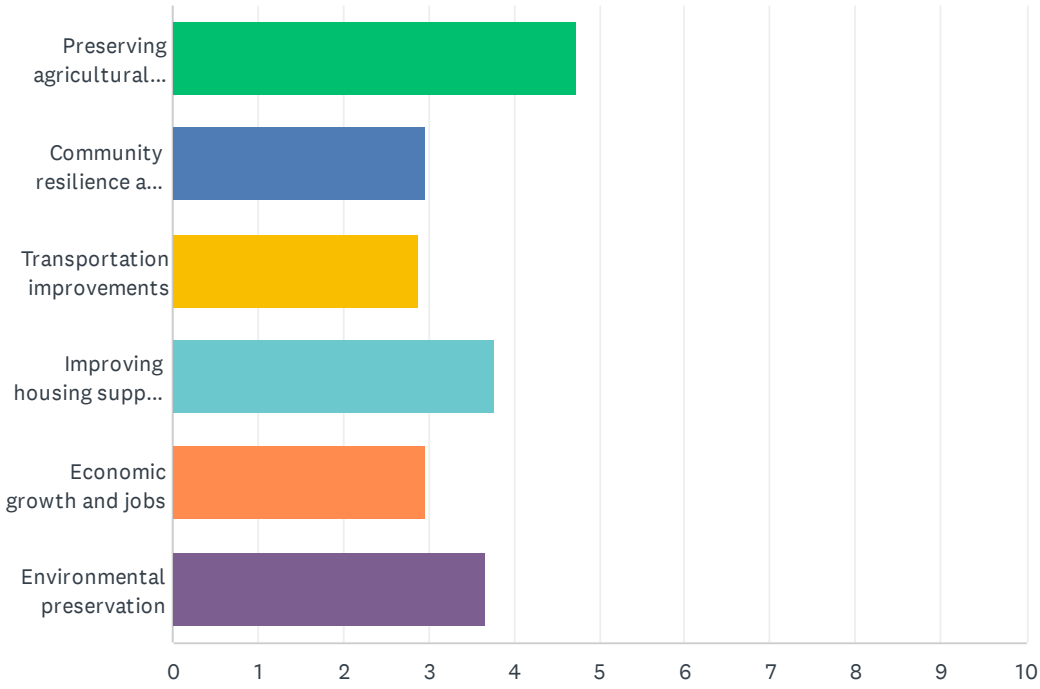
Answered: 717 Skipped: 0



ANSWER CHOICES	RESPONSES	
Housing supply and affordability	64.16%	460
Local industry and employment	21.06%	151
Environment (stewardship and water resources)	7.39%	53
Environment (natural resource extraction)	8.51%	61
Rural character	3.21%	23
Public Facilities & Services (Roads, parks, and community buildings)	16.32%	117
Transportation options (bike, bus, car, and walking)	24.41%	175
Community resilience and natural hazard mitigation	11.99%	86
Community and diversity inclusion	13.95%	100
Healthy food access	6.00%	43
Other (please specify)	15.20%	109
Total Respondents: 717		

Q4 Skagit County is aiming to establish a vision to guide the comprehensive plan and for the County of the next 20 years. We want to know what is most important to you. What priorities do you feel are most important to focus on over the next 20 years? Please rank your priorities (1-highest; 6-lowest).

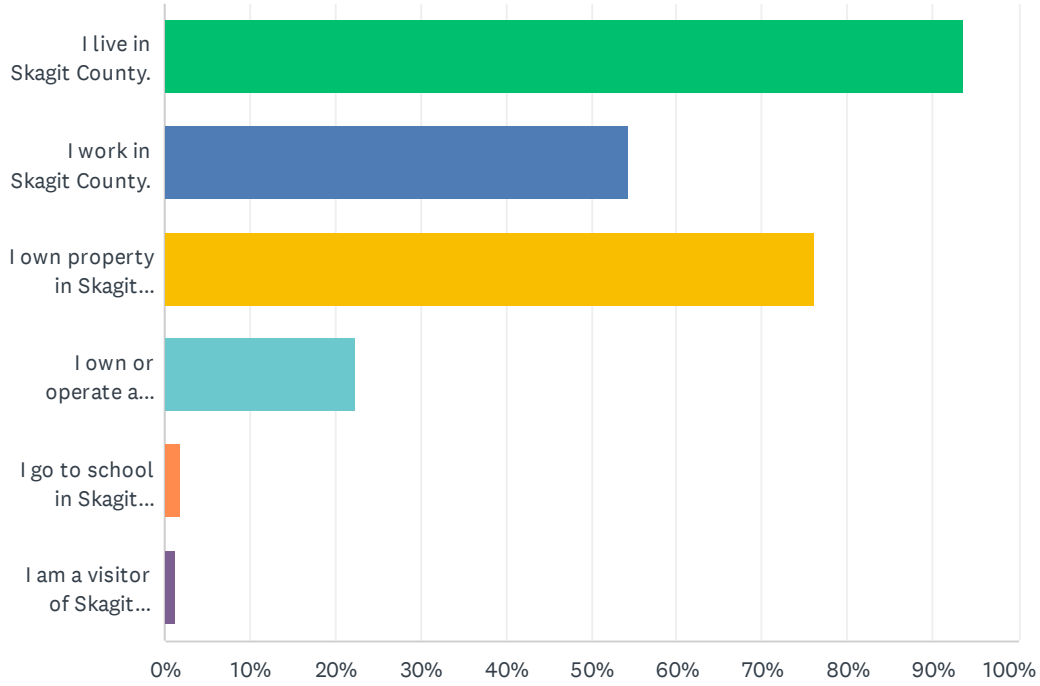
Answered: 714 Skipped: 3



	1	2	3	4	5	6	TOTAL	SCORE
Preserving agricultural land	45.52% 325	19.89% 142	14.01% 100	9.80% 70	5.46% 39	5.32% 38	714	4.74
Community resilience and hazard mitigation	4.62% 33	11.48% 82	18.49% 132	23.95% 171	23.25% 166	18.21% 130	714	2.96
Transportation improvements	3.22% 23	8.96% 64	19.75% 141	26.47% 189	24.09% 172	17.51% 125	714	2.88
Improving housing supply and affordability	21.29% 152	15.97% 114	19.75% 141	15.69% 112	17.09% 122	10.22% 73	714	3.78
Economic growth and jobs	7.70% 55	17.37% 124	14.71% 105	13.31% 95	18.35% 131	28.57% 204	714	2.97
Environmental preservation	17.65% 126	26.33% 188	13.31% 95	10.78% 77	11.76% 84	20.17% 144	714	3.67

Q5 What best describes you? Select all that apply.

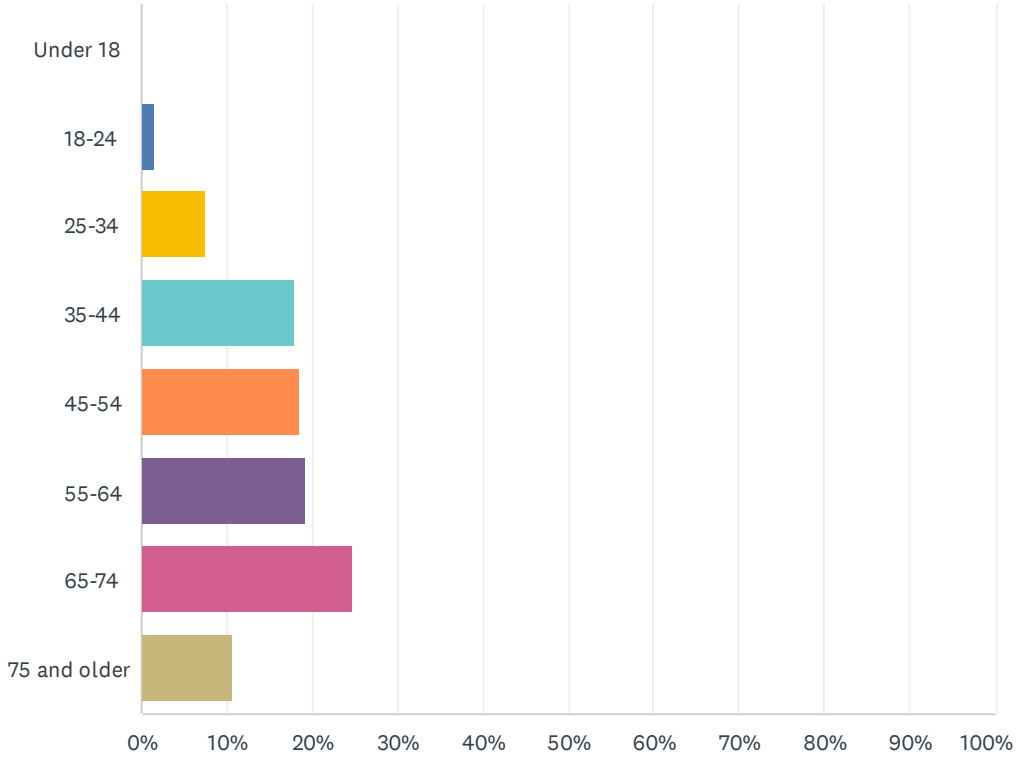
Answered: 717 Skipped: 0



ANSWER CHOICES	RESPONSES	
I live in Skagit County.	93.58%	671
I work in Skagit County.	54.39%	390
I own property in Skagit County.	76.15%	546
I own or operate a business in Skagit County.	22.45%	161
I go to school in Skagit County.	1.95%	14
I am a visitor of Skagit County.	1.26%	9
Total Respondents: 717		

Q6 How old are you?

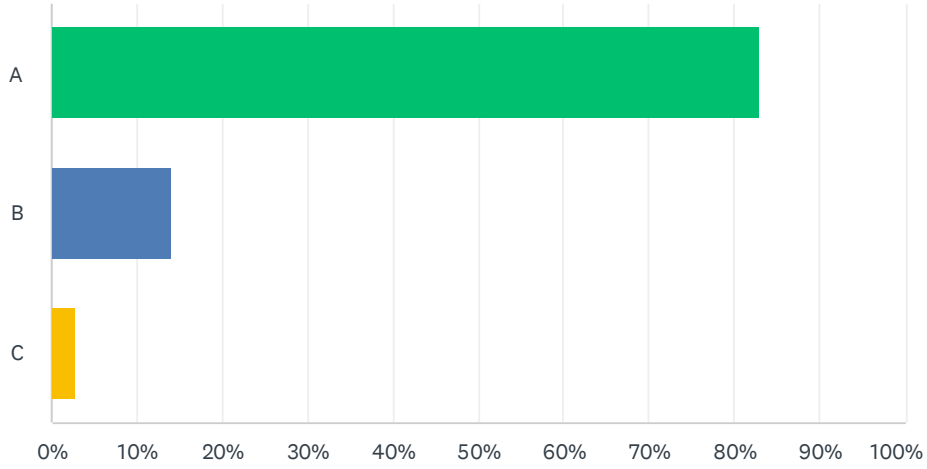
Answered: 710 Skipped: 7



ANSWER CHOICES	RESPONSES	
Under 18	0.00%	0
18-24	1.55%	11
25-34	7.46%	53
35-44	17.89%	127
45-54	18.59%	132
55-64	19.15%	136
65-74	24.65%	175
75 and older	10.70%	76
TOTAL		710

Q7 Where do you live?

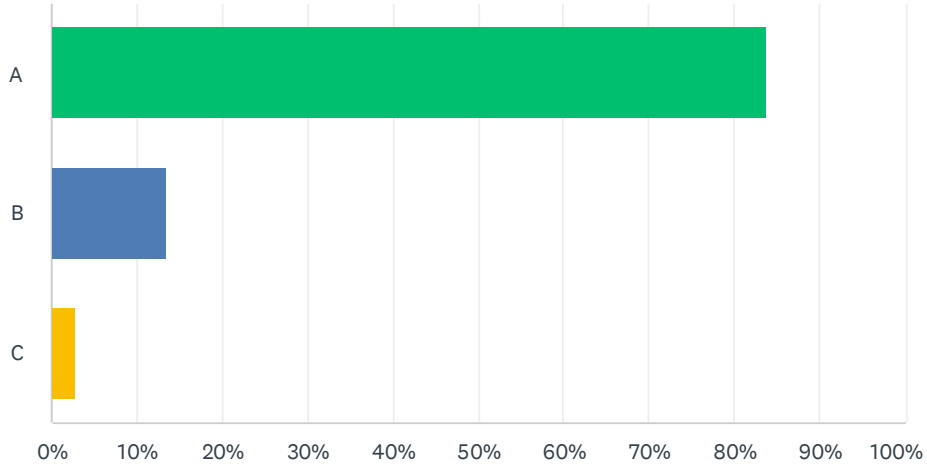
Answered: 700 Skipped: 17



ANSWER CHOICES	RESPONSES	
A	83.00%	581
B	14.14%	99
C	2.86%	20
TOTAL		700

Q8 Where do you work?

Answered: 547 Skipped: 170



ANSWER CHOICES	RESPONSES	
A	83.73%	458
B	13.53%	74
C	2.74%	15
TOTAL		547

Q9 If you would like to be added to the mailing list for project updates, please provide your email.

Answered: 304 Skipped: 413

Appendix B. Stakeholder List

Organization	Website	Contact
Agricultural Advisory Committee	Link to Website	Malia Agpawa
Skagit County Drainage and Irrigation Consortium		Jenna Friebel
Forestry Advisory Committee	Link to Website	Kendra Smith
Marine Resource Center	Link to Website	Tracy Alker
Skagit Habitat for Humanity	Link to Website	Tina Tate
Helping Hands Foodbank	Link to Website	Rebecca Skrinde
Economic Development Alliance of Skagit County	Link to Website	John Sternlicht
Skagit/Island Counties Builders Association	Link to Website	Wayne Crider
Skagit County Farmers		Tony Wisdom, Skagit Valley Farm Diane Szukovathy, Jello Mold Farm Jason Vander Kooy Harmony Dairy Amy Frye, Boldly Grown Farms

Appendix C. Stakeholder Interview Questions

Participants were provided these questions ahead of stakeholder interviews but were not asked to fill out the form and return them. The stakeholder interviews were structured in a discussion format to foster open and honest conversations.

Questions for the 2025 Skagit County Comprehensive Plan Periodic Update

Land Use

1. What are your primary concerns regarding planning for population growth in Skagit County over the next 20 years?
2. What is Skagit County currently doing to manage growth that you hope will continue for the next 20 years?
3. What is Skagit County currently doing to manage its natural resources and working lands (forest and farmland) that you hope will continue for the next 20 years?
4. Can you think of any planning efforts or services that Skagit County should consider incorporating in the future to help improve your quality of life?

Housing

1. On a scale of 1-7 where 1 is *not at all,* 4 is *somewhat* and 7 is *extremely,* to what extent are you concerned about housing affordability in Skagit County?

   Not at all Somewhat Extremely

   1 2 3 4 5 6 7

2. Washington State law requires Skagit County to allow zoning for affordable housing within the unincorporated areas of the County.
3. Where would you advise Skagit County to focus planning for additional housing, particularly affordable housing, located outside of our existing cities and towns?
4. Using that same 7-point scale, to what extent would you support Skagit County focusing multiple-family housing and affordable housing in the County's existing LAMRIDs (Limited Area of More Intensive Rural Development)? – e.g., within Clear Lake, Edison, Big Lake, and Alger.

   Not at all Somewhat Completely

   1 2 3 4 5 6 7

5. Are there areas in Skagit County that should not be utilized for more intense housing development? If so, where?

Transportation

1. To what extent do you feel Skagit County is able to plan for and meet your transportation needs?

   Not at all Somewhat Extremely

   1 2 3 4 5 6 7

   Please explain:

2. Thinking of transportation infrastructure and the needs in the unincorporated areas of Skagit County (outside of cities or towns) - What transportation options and opportunities would you like to see Skagit County aim for in the next 20 years?
3. Skagit County is required by State law to come up with ways to reduce the number of vehicle miles traveled in the County.
4. What ideas do you have about how Skagit County can achieve this?

Climate Change

1. To what extent are you concerned about climate intensified hazards such as drought, sea level rise, wildfires, or increased frequency and severity of floods in Skagit County?

   Not at all Somewhat Extremely

   1 2 3 4 5 6 7

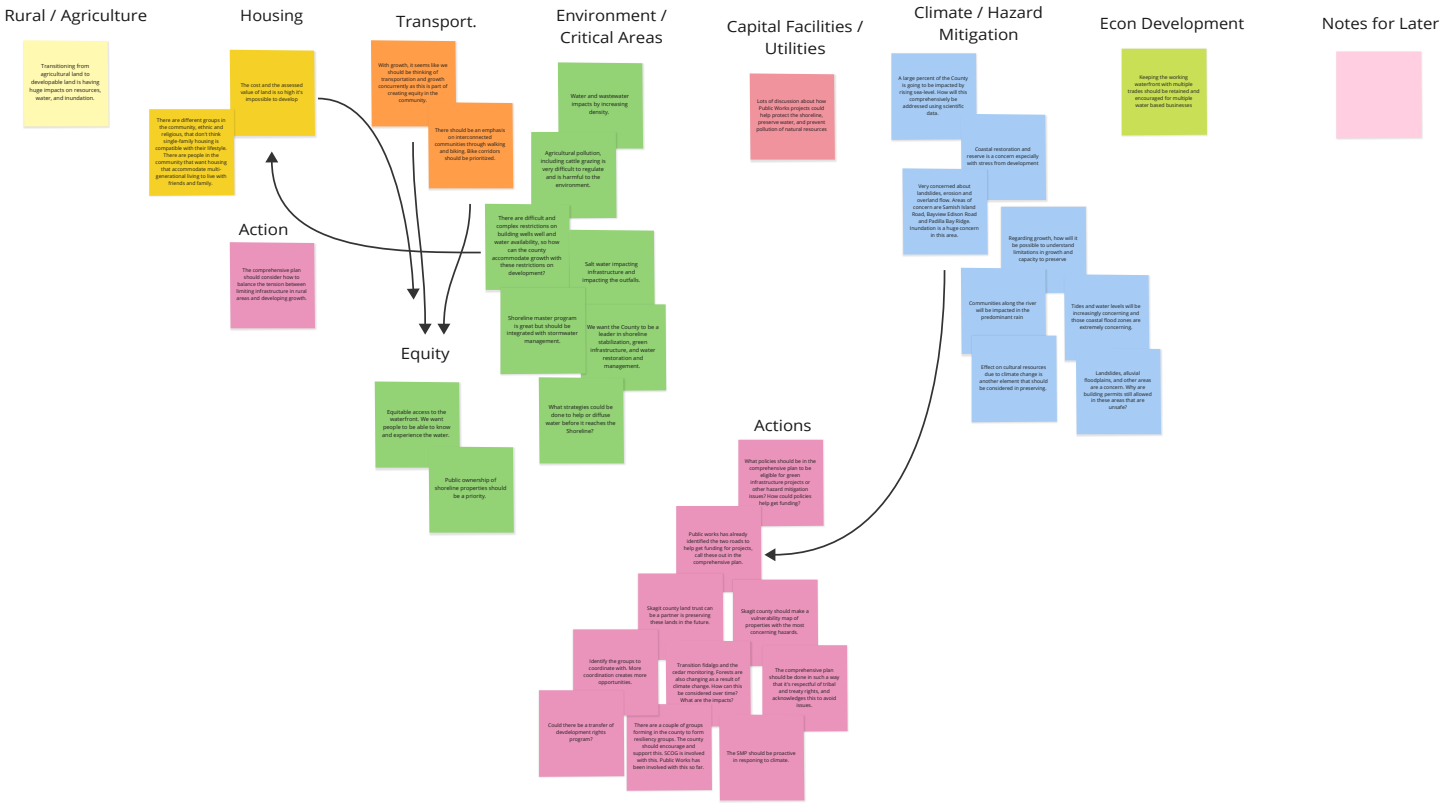
2. Skagit County is required by State Law to plan for climate intensified natural hazards such as extreme temperatures, wildfires, increased flooding, sea level rise, etc.
3. Which of the climate change intensified natural hazards (*review list above)* do you feel Skagit County should focus on as the highest priority? Why?
4. Are there specific areas or populations in Skagit County that you believe will be more impacted by these hazards? If so, where/why?
5. Considering the various governmental services provided by Skagit County (Planning, Public Works, Public Health, Parks & Recreation, etc.), what specific actions can Skagit County take to enhance the preparedness and resilience of these services and the populations they serve in response to climate change-induced natural hazards?
6. What actions do you think Skagit County government should prioritize to enhance its preparedness and resiliency to changing climate?

Appendix D. Stakeholder Interview Discussion Boards

Stakeholder interview discussion boards start on the next page.

9 People attended

Marine Resource Center June 21, 2024 Comments Heard



Forestry Advisory Committee June 12, 2024 Comments Heard

Rural / Agriculture

Housing

In eastern Skagit county there is a huge decline in schools and there is cheaper housing but the jobs are on the western side of the County. Concrete, Rockport, Marblemount parts of this decline is from the forest service decline in management and milling.

The remote work has shifted the use of rural communities. The increase in rural communities is people with remote jobs. Now there is a huge disparity between the newcomers and the long-term residents in income and gentrification will occur.

Transport.

Environment / Critical Areas

Policies needs to support the industry.

Compatibility with adjacent uses for natural resource lands. Supporting natural resources is a really big deal.

Potential Goal: build a good relationship "good neighbor authority" between the County and the U.S. Forest Service.

The policies in the comp plan are not strong enough to align with forestry and health and industry growth.

Promote the flexibility of management for timber industry.

Policies should support fuel reduction and proper management of lands and putting this in the comp plan will reflect and share the community value to federal agencies like DNR.

Continue to support the forestry advisory board to demonstrate commitment to natural resources preservation.

Updating bridges, there are several bridges that have restrictions for hauling which is disruptive to the industry. They have a list of roads.

Capital Facilities / Utilities

Updating bridges, there are several bridges that have restrictions for hauling which is disruptive to the industry. They have a list of roads.

HUGE CONCERN for loss of infrastructure. Once it is gone it makes a large problem for future timber industries to grow.

Grab the list of bridges that need updates for the capital facilities plan.

Hazard Mitigation

Econ Development

In eastern Skagit County there is a huge decline in schools and there is cheaper housing but the jobs are on the Western side of the County. Concrete, Rockport, Marblemount parts of this decline is from the forest service decline in management and milling.

Could we support businesses in areas where people live. There is a sawmill in Darrington that is losing employees and they can't afford housing and they can't afford the living wage.

Notes for Later

Concerns

There have been previous attempts where adjacent uses have moved in and tried to disrupt the forest clearing.

Concern about critical areas ordinance, previous policies have tried to disrupt the industry. Applying the CAO to timber harvest.

The Concern: that the new climate regulations will impact the ability to harvest wood.

Loss of pulp mills have gone away and impacted the ability to gain revenue off lower quality goods.

The revenue from the timber industry goes to the junior taxing districts and contribute to capital facilities and schools.

They would like clear direction on following the DNR rules versus the county rules. In some instances county rules have been applied where they shouldn't have been.

We need to work ahead of time in fuel reduction. We need to be thinking out 20 years in advance as far as wildfire mitigation. The work in the county CWPP could be integrated

Action

We need to ensure we are coordinating with DEM and all of the hazard mitigation community wildfire protection plan.

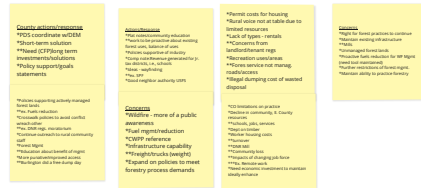
Educate the public on the importance of natural resource programs in the county: the tax benefits, the open space benefits, the revenue, the jobs,

Think of a program to acknowledge "you are entering natural resource areas" lands. Small funding programs.

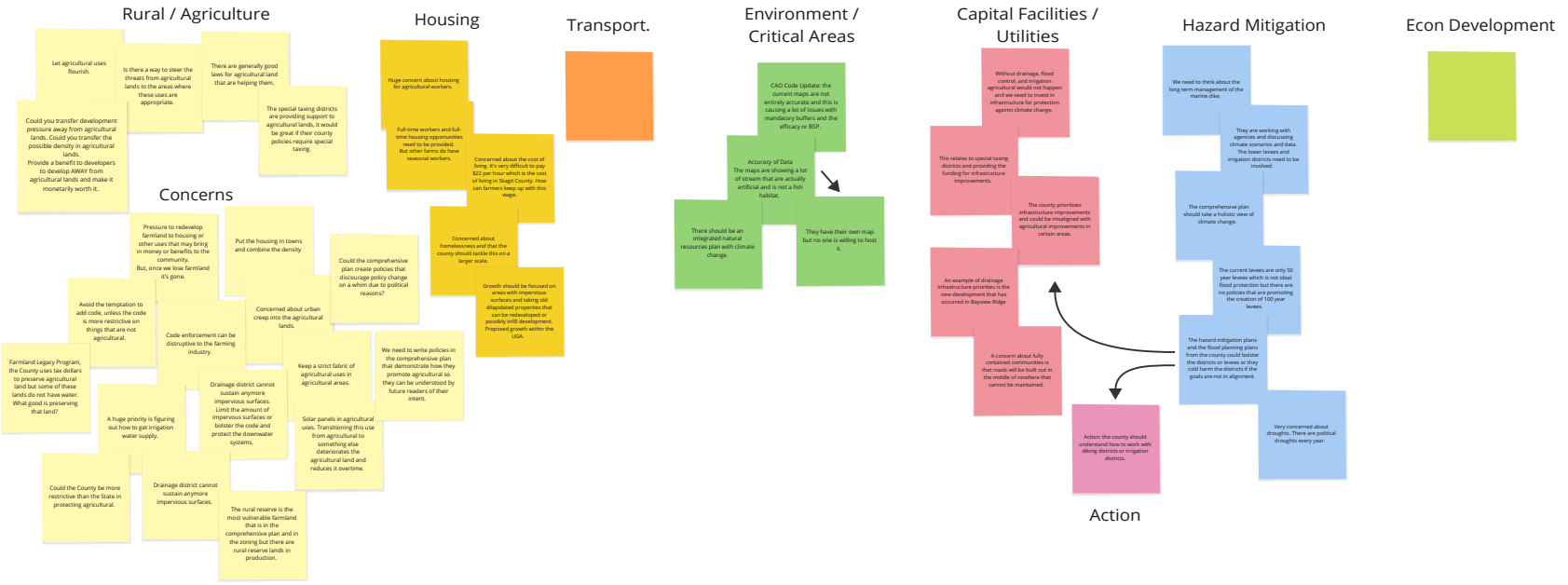
Overall the County implements natural resource notes on the plats to notify adjacent uses and properties. Real estate agents have also incorrectly labelled properties.

Explain in the comp plan how the forest industry will be promoted BUT STILL be able to mitigate climate in certain ways and emphasize fuel deduction more than CO2 capture.

Handwritten sticky notes from meeting



Farmer Stakeholder Interview Comments Heard



EDASC Stakeholder Interview Comments Heard

Rural / Agriculture

Developable land is hard to find for expanding businesses or housing especially in rural areas.

Businesses involved in some kind of food business; i.e. hospitality and breweries. Businesses should be to make a living on the farm land that they own.

Currently they are having a hard time making a living with the land that they own, need to not close off avenues for them

Business owners, particularly in the agricultural businesses have mostly been in the unincorporated county.

Housing

If people can't live here, they can't work here. Need more multi family and rental properties for younger populations as well as everyone along the curve.

New housing projects should be located near work

There are people in Skagit county that don't like density, but also don't like sprawl. If you don't like one, one can assume you would support the other

Housing in BayView Ridge. This location has been discussed as a potential site.

There are not a lot of options; farmland is taken, flood plains are not great sites, doing it near the population centers and the work centers is where the focus is.

The price point is a problem if you talk to the builders. They can't charge enough to make their money back.

Going to have to accept more density to preserve the beauty of the landscape.

It is currently difficult for families to encourage their kids to grow up and live within the County.

There are people who don't want change, or people who don't want multi family housing because of the demographics of the lower income levels.

More housing at every level is necessary.

The school district has some land where development could occur.

The talk surrounding the self contained community and the gravel pit by the golf course inflicted fear of people coming from Seattle/CA coming and buying all the houses.

The county is way behind on housing and have been for 10 years. Have to make it happen by reducing costs for the builders, find a way for the public sector to share the risk and cost.

The Skagit Housing Consortium encourages group conversation, talks about NIMBY vs YIMBY.

Martha's Place is a model for addressing homelessness, but it does not address the issue of workforce housing. We need a range of housing projects that specifically target different housing problems.

The unincorporated areas have potential for housing, not sure where but there is potential there.

Transport.

Connecting people to where they work and where they recreate is the most important.

Connecting the train to the bus is what people want. Taking people off the roads and using different nodes of transportation. This way support is given to the lower income population that can't afford gas,etc.

There are people who are trying to figure out what the best levers are. The legislators and the commissioners are involved in figuring out what the demand curve is for the next 20-30 years.

Transportation is an equity issue for the lower income population. In addition to the environmental benefits, they want to make sure that people can get to and from work.

From a survey 3-4 years ago found that transportation was an issue pertaining to the workforce. The concern was around the hours of the different nodes of transportation.

Environment / Critical Areas

The county is protecting their farmland. Maybe protecting it too much, making it almost impossible to make money off their land.

Capital Facilities / Utilities

Broadband is much better than it was. The county jumpstarted it in 2015. The goal was to bring as many people to the county as we could.

An infrastructure problem is power. Businesses are finding that they don't have access to enough power. The county is currently working on that, they are bringing up these issues to the county and legislators.

Hazard Mitigation

In 2022 there was a huge flood that impacted the community, close to a million dollars was given to the community.

Natural disasters such as cold spells can damage crops, burst pipes. Wildfires that affected the community also received relief.

It is easier for businesses to reach out to FEMA but EDASC cannot speak to households.

Have been working with a diverse group when it comes to hazard mitigation. Businesses out in rural areas get affected the most.

Econ Development

Home businesses that EDASC interacts with are small or consulting businesses. There are more entrepreneurs now more than ever.

A tiff development has been talked about recently with the port.

During the pandemic, a lot of work was done with public health. If you are not understanding the importance of public health in the economy then you are not paying attention.

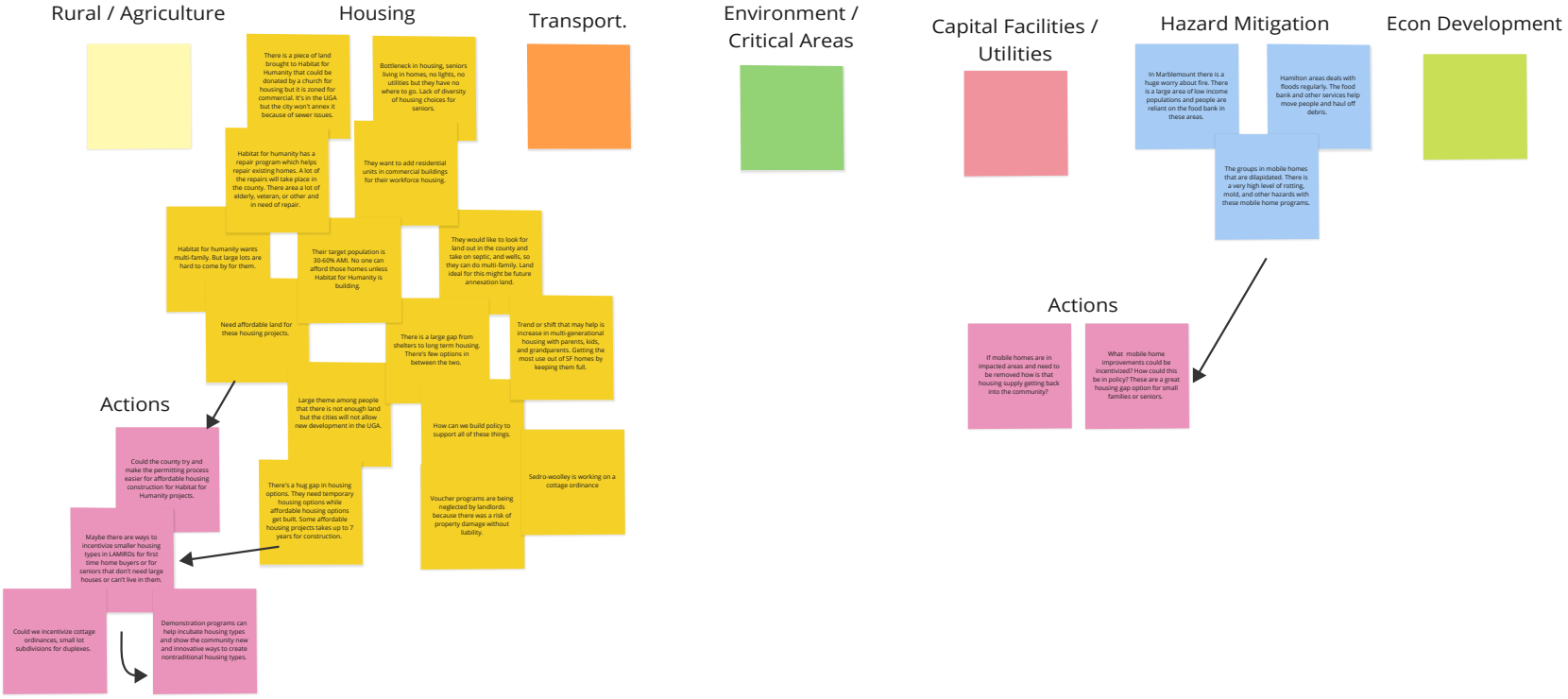
Skagit Leadership works across disciplines. There is a tendency to admire the problem for a long time before taking action. There are a lot of people who understand the issues but help is needed to move the process along.

People tend to criticize a solution if it doesn't fix every element of the problem.

The growth for Skagit County is not nearly as large as other counties. It is not explosive growth it is incremental growth. There is a want to prioritize the economy by ensuring that people can both work and live within the county.

The more childcare seats that are available the better, best to have them near where parents work.

Housing Groups June 12, 2024 Comments Heard



Farmer Group June 11, 2024 Comments Heard

Rural / Agriculture

Farm diversity is a good thing but there seems to be a loss of diversity among farms.

SOME agritourism strategies are beneficial for future farming generations. How can we use agritourism to educate people about local farming.

Housing

Having a long-term affordable housing option for workforce housing. They have 12 full-time employees.

There is a lack of supply and rental prices are not feasible.

Conway, Port of Skagit, Boughhill. Infill and density opportunities should be considered instead of developing raw land that could be used for farming.

Community oriented housing options like courtyard housing could be compatible in rural.

Incentives for ADUs that could provide rental spaces.

Transport.

The biggest thing for transportation needs is larger regional transportation needs in and out of the County.

Making sure the County's future growth is going to align with the transit plans locally and regionally.

Roundabouts are useful as a traffic management tool.

Environment / Critical Areas

Capital Facilities / Utilities

Schools: how does the County work with the school districts? The County is responsible for integrating school district planning in the comprehensive plan however, these are not always aligned. The goal is to plan for growth and future goals.

Hazard Mitigation

Food security is a concern. Some local farmers have the capability to produce local self sustaining food that isn't reliant on larger regional resources.

Very concerned about the impacts of climate change especially the variable and extreme weather events.

How can the county support agricultural uses amongst the new or increasing frequency of climate related hazards.

How can farmers keep their labor force safe during extreme heat.

Is the County prepared for evacuation and communication in the rural areas. How can this paired with the Hazard Mitigation plan.

Econ Development

Concerns

Uses in LAMIRDs need to provide neighborhood services to reduce vehicle miles travelled.

Investing in trades.

Permitting buildings and functions for agricultural business activities could be better. Example: taking three years to get a building permit complete.

Current procedures cater more to large farm production than small family farming.

Some of the current policies and procedures make it hard to start a small family farm.

What can the County do to assist first generation famers or the next generation of farmers.

The single-family use is an accessory use but sometimes that isn't always the case.

Could there be tax incentives for living on the property that you're farming.

For the agritourism issue, the county could have done a better job creating multi-perspective stakeholder working groups.

We should engage partners like EDASC and the farm credit west who provide lending to farmers.

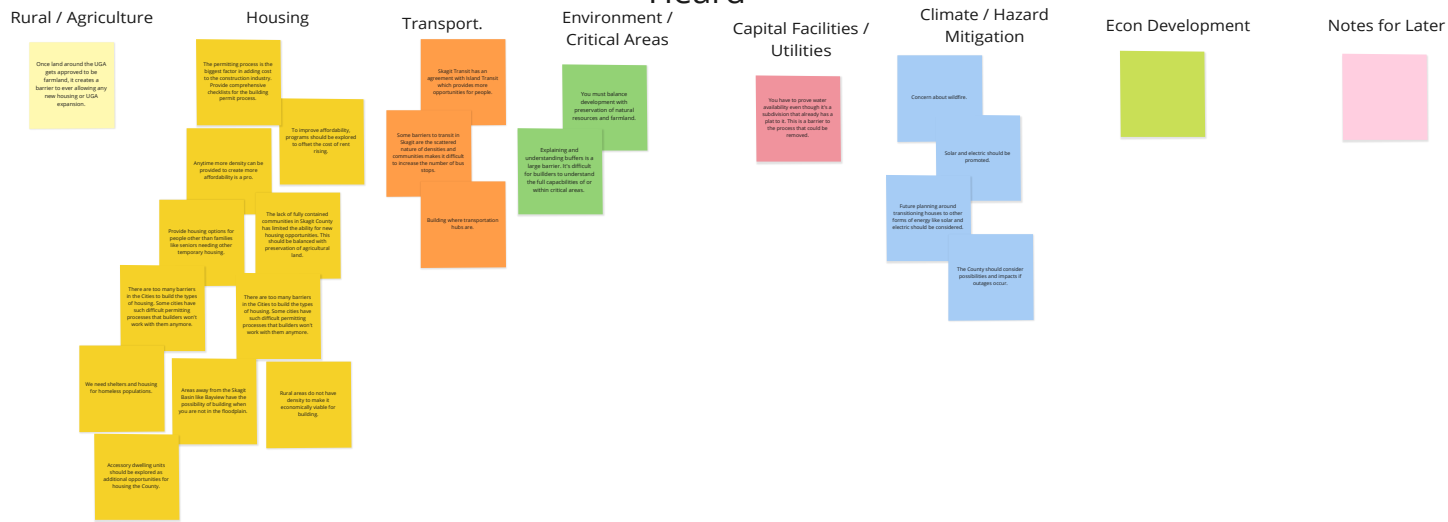
The restrictions on subdividing in the NRL is generally a good thing. But limiting the ability to subdivide can prevent smaller farms from acquiring land.

This could be a future action in the comprehensive plan to engage companies that assist farmers in their business operations.

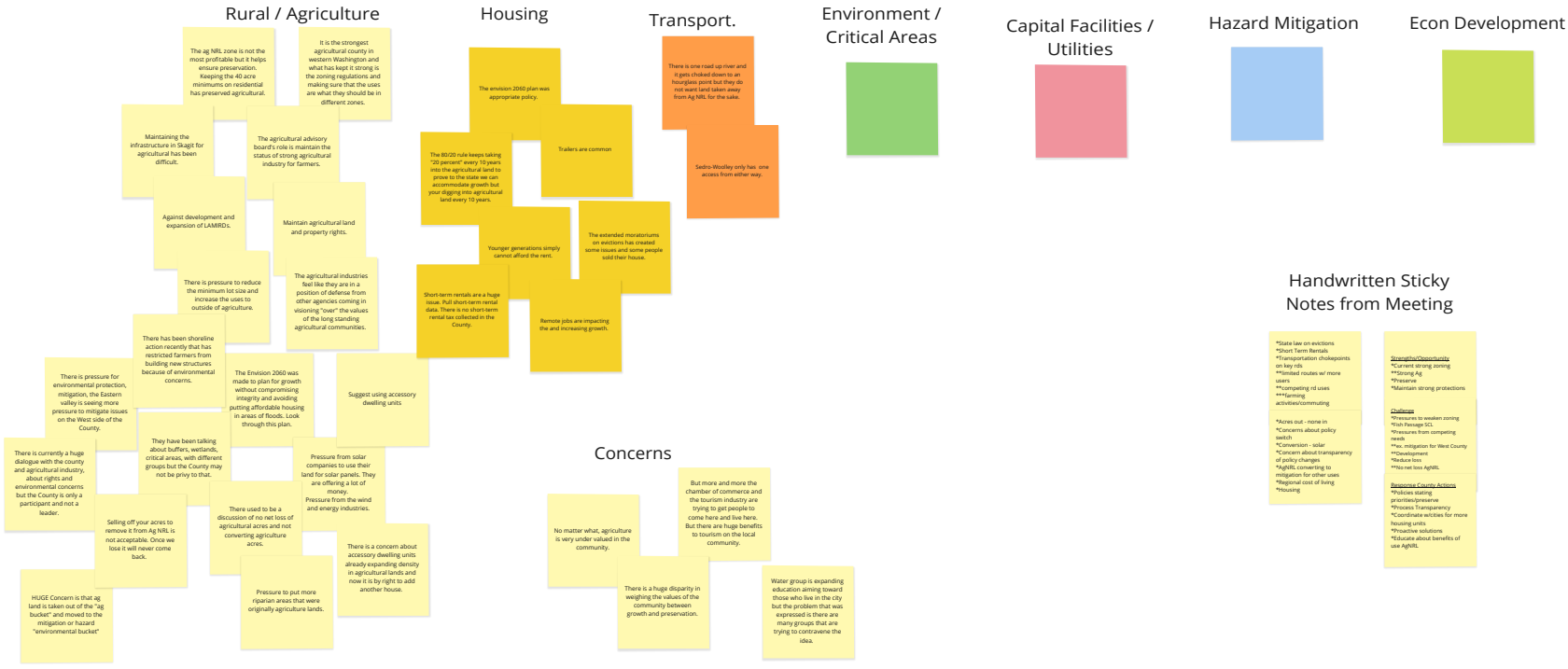
Viva farms is an incubator farming group that helps get small farms off the ground.

9 People attended

Skagit County Builders Association July 10, 2024 Comments Heard

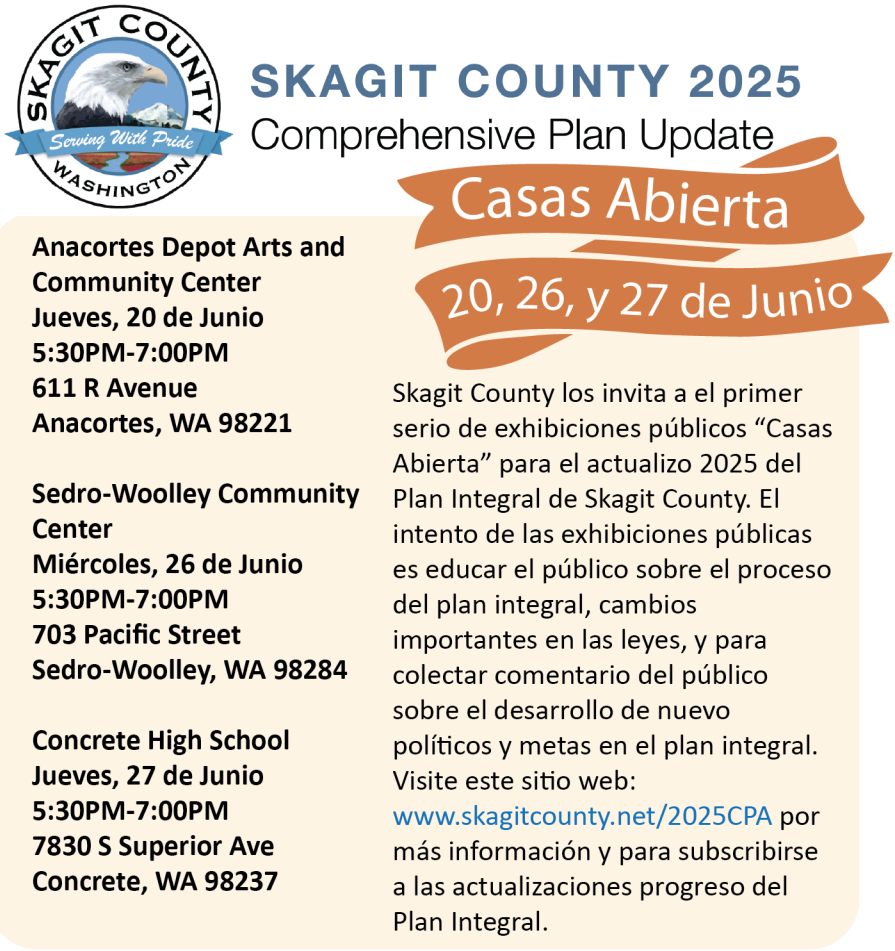


Agriculture Advisory Board June 12, 2024 Comments Heard



Appendix E. June 2024 Open House Notices and Advertisements

To advertise for the June open houses, Skagit County issued a press release on June 13th, 2024. Notifications were uploaded to social media websites, like Facebook, and emails were sent out to survey respondents that requested to received notifications about future Comprehensive Plan engagement opportunities. Advertisements for the open were distributed in both English and Spanish. Spanish translation services were available at all three events.



SKAGIT COUNTY 2025 Comprehensive Plan Update

Open Houses

June 20, 26, 27, 2024

Join us for the first series of open houses to learn about and contribute to Skagit County's 2025 Comprehensive Plan Update.

Why Attend?

Learn: Find out about the comprehensive plan process and why it matters.

Updates: Hear about important changes in state law affecting the plan.

Contribute: Share your feedback to help shape the county's future goals and policies.

Open House Details:

Format: Walk-in with engagement activities and educational posters.

Experts: Skagit County staff and other experts will be available to answer your questions.

No Formal Presentation: Drop by anytime during the open houses.

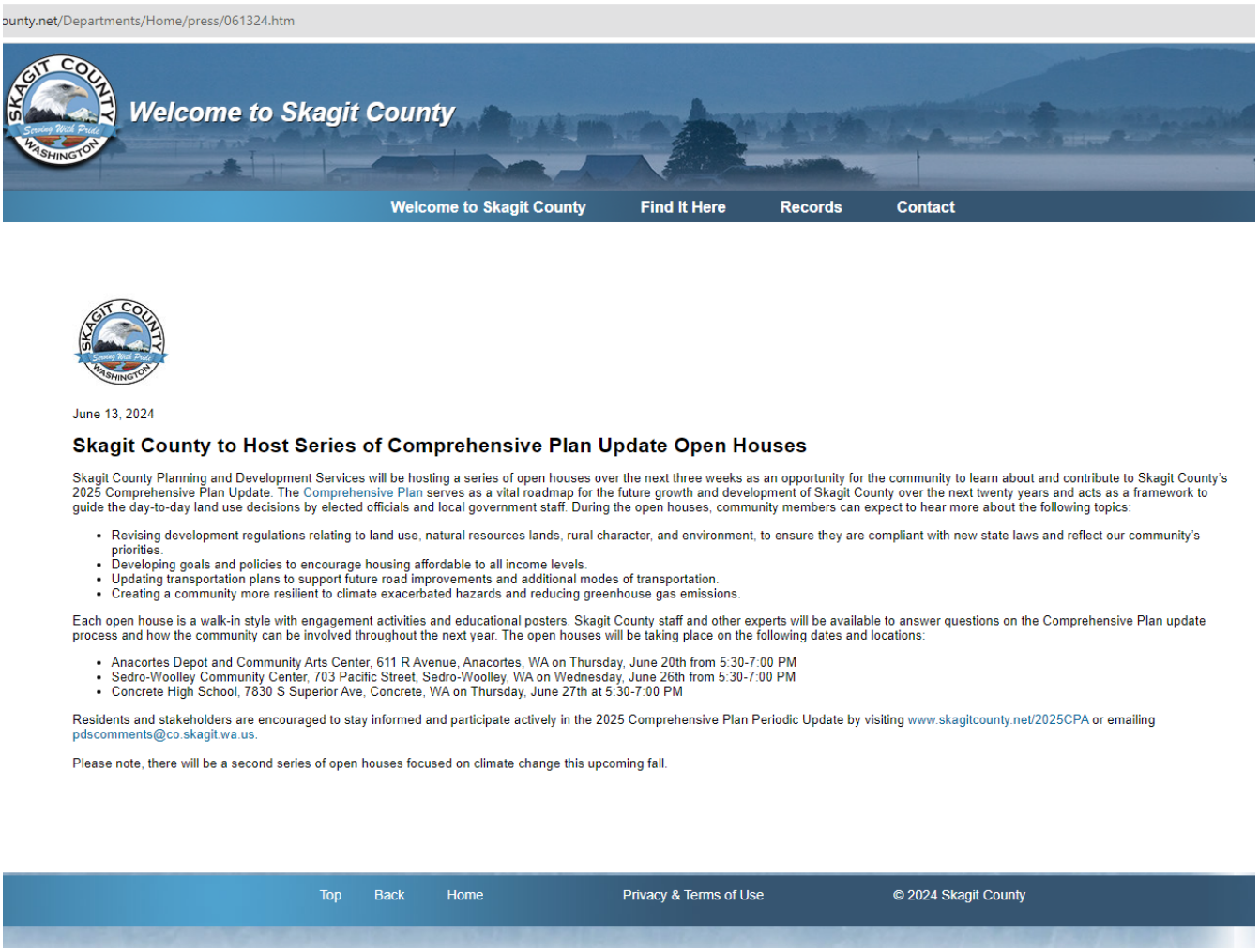
How to Get Involved:

Visit the Website: Go to www.skagitcounty.net/2025CPA for more details.

Sign Up: Register on the website to receive updates about the comprehensive plan update project.

Your input is vital. Help us plan the future of Skagit County by attending the open houses and sharing your thoughts. We look forward to seeing you there!

Anacortes Depot Arts & Community Center **Thursday, June 20th** **5:30PM-7:00PM** 611 R Avenue Anacortes, WA	**Sedro-Woolley Community Center** **Wednesday, June 26th** **5:30PM-7:00PM** 703 Pacific Street Sedro-Woolley, WA	**Concrete High School** **Thursday, June 27th** **5:30PM-7:00PM** 7830 S Superior Ave Concrete, WA
Transit: Available upon request. Text 360-399-2552 stop 2332 on Route 409 or route 410.	**Transit**: Route 300, bus stop 5157, runs until ~ 7:30pm. Route 301 Burlington to Sedro-Woolley, bus stop 5157 runs until ~ 7:30pm.	**Transit**: Route 717 (flex route) runs until ~ 7:30pm. Route 70X Concrete to Mount Vernon runs to stop 5134. (8-minute walk to location).
Visit Skagit Transit website or call 360-757-4433		



ounty.net/Departments/Home/press/061324.htm

Welcome to Skagit County

Welcome to Skagit County | Find It Here | Records | Contact

June 13, 2024

Skagit County to Host Series of Comprehensive Plan Update Open Houses

Skagit County Planning and Development Services will be hosting a series of open houses over the next three weeks as an opportunity for the community to learn about and contribute to Skagit County's 2025 Comprehensive Plan Update. The Comprehensive Plan serves as a vital roadmap for the future growth and development of Skagit County over the next twenty years and acts as a framework to guide the day-to-day land use decisions by elected officials and local government staff. During the open houses, community members can expect to hear more about the following topics:

- Revising development regulations relating to land use, natural resources lands, rural character, and environment, to ensure they are compliant with new state laws and reflect our community's priorities.
- Developing goals and policies to encourage housing affordable to all income levels.
- Updating transportation plans to support future road improvements and additional modes of transportation.
- Creating a community more resilient to climate exacerbated hazards and reducing greenhouse gas emissions.

Each open house is a walk-in style with engagement activities and educational posters. Skagit County staff and other experts will be available to answer questions on the Comprehensive Plan update process and how the community can be involved throughout the next year. The open houses will be taking place on the following dates and locations:

- Anacortes Depot and Community Arts Center, 611 R Avenue, Anacortes, WA on Thursday, June 20th from 5:30-7:00 PM
- Sedro-Woolley Community Center, 703 Pacific Street, Sedro-Woolley, WA on Wednesday, June 26th from 5:30-7:00 PM
- Concrete High School, 7830 S Superior Ave, Concrete, WA on Thursday, June 27th at 5:30-7:00 PM

Residents and stakeholders are encouraged to stay informed and participate actively in the 2025 Comprehensive Plan Periodic Update by visiting www.skagitcounty.net/2025CPA or emailing pdscomments@co.skagit.wa.us.

Please note, there will be a second series of open houses focused on climate change this upcoming fall.

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Appendix F. June 2024 Open House Boards and Comments

Board Activity Question: What does rural character mean to you?



Want habitats for: eagles, ospreys, herons, pelicans, water birds, etc. Harbor seals – beaches to haul out on or safely leave a pup for hours a day.
No FCC.
Protect fish, forests, bird habitats, sustainable farming methods.
Greenbelts, parks, preservation of ag land.
Rural lands are conservation lands, farmlands, forest, wetlands. All should be preserved for their function in reducing GHG as they sequester carbon. Population growth should be restricted urban areas."
Rural = sparce population and no development.
Protect the farmland. *Key
No urban sprawl. Preservation of open spaces. Protected habitats for wildlife.
Protect farm, fish, and forests.
Rural character: open spaces, scenic vistas, peace and quiet, native plants, happy animals, no smoke.
Animal habitat, forests, waterways, farmland, open space, acknowledgment of culture that supports and accompanies all these.
No sprawl. Protection of farmland.
If growth = residential housing, then clustered housing with 50-60% open space easements.
Green grass and trees. Walking areas.

Scenic beauty.
Open spaces, fields, forests, farming, elk, free flowing streams and rivers.
Don't take farmland for single-family residential development.
New homes that don't have to look 'modern' i.e., steel boxy boxes.
Have the county commissioners form a natural/conservation lands advisory committee to advise on non-commercial use of natural lands – forests for carbon sequestration, etc.
Rural character: no housing development, no non-agricultural enterprises or businesses. Agricultural activity – growing food, raising cattle, sheep, etc.
Environment – not rural; means intact forests, wetlands, and rivers where our water and air are filtered, animals thrive.
Urban/land use element. How do we catch up to density requirements in cities. Need enforcement or incentive to keep rural areas rural.
Planning inclusive of the "natural" environment that takes into account change in the climate in relation to existing resources and human habitation, use, and preservation.
Farmland, open space, protected areas, decreased density, decreased traffic.
Fewer houses on the landscape
"Rural character" means ag, but a lot more. It means protected habitat for the full variety of wildlife. It means having plenty of places people can walk/hike in natural areas (forests, fields, shorelines).
Close community
Save farmland for farming
Too many farmlands and acres are being converted to wildlife habitat such as elk and salmon.
New climate solutions allowed on all lands, i.e., storing bio char
Employment opportunities
Dar información sobre los pesticidas que utilizan los agricultores para sus siembras para proteger a los animales y personas que viven en esas áreas (Provide information about the pesticides that farmers use on their crops to protect the animals and people that live in those areas).
Let river take its natural course. It will eventually anyway.
Modification of existing zoning to allow for more viable housing solutions.
Caring for each other
Trees, green areas, less traffic, sense of community/connectedness
Open space; untouched conserved land for future generations; farmland preserved.
Zoning needs updated. Need more space for housing.
Parks; farms; protected spaces; animals; clean
A sense of community. Let's get back to that!
Land for wildlife; protection of critical areas.

Lack of pavement; green space; quiet/solitude; forests nearby; farming; wildlife habitat
Critical areas. Not enough. We need broader protection goal for rural.
Open space where people and wildlife are co-existing.
Agricultural use; forests; parks; natural areas; environmentally sensitive areas; open space; nurseries; low-density residential
Protecting the Earth. Less concrete; sustainable development
Respect for the land, people, and all creatures that share this incredible place on the planet. Believe in a shared ecosystem.
Low-density development. More farms, forests, undeveloped areas.
Community-controlled area with few governmental intrusions. Open space, farms, no strip malls
Healthy ecosystems and high-quality water
Open spaces, which means not having the crowds & congestion of the city.
Keep open spaces resource lands – ag, forestry, wetlands. Close wetlands. BANK
Open space; farmers getting to farm without government overreach; parks; trees
Land that is left untouched by communities
Human-inhabited buffer around wild places where wildlife and trees find refuge.
We care for all neighbors, especially those who suffer.
Where all people matter and are treated with respect.
Look at Germany – strict limits of town vs rural. They get it because they had to.
90% new growth in cities
Wetlands; native forests; wild rivers; trails; wildlife; Some comparable commerce (ag, tourism, forestry)
Los químicos de pesticidas de los agrícolas (Agricultural pesticide chemicals)
Lots of open space
Ability to be spaced apart from other homes; have room to grow crops, raise animals
Roads that branch out like a tree, or its roots. Not like a grid. But you know? Without some good general and specialty stores nearby, it'll all wither on the vine.
Important to protect existing farmland.
Keep farmlands. No more city enforcement.
Importance of public safety with rural homelessness. Need more resources.

Board Activity Question: What housing issues are you seeing in Skagit County?



Consider eliminating or restricting short-term (Airbnb, etc.) rentals so people who live and work here can afford housing.
Lack of affordable housing.
Public transit supporting dense housing.
No mandate on developers to include sufficient affordable housing.
No more mega-mansion enclaves.
Incentives for ADUs in city, where double lots may have high taxes. Tax forgiveness for owners works sometimes.
Need housing close to transit, groceries, and with green space and trees. Focus on low-income (which is middleclass at this point) and high-density. No sprawl. Preserve mature forests and trees.
Not enough senior living apartments.
Housing should be mixed. Let's not squeeze lower income all together and reinforce inequality.
Dense housing – more traffic congestion.
Affordable housing for essential workers while safeguarding rural lands.
Housing plenty! Use or re-use available i.e., Mt. Vernon, Sedro Woolley.
Mandates on developers to provide affordable housing and green space.
Interest in protecting rural natural resource land from expanded housing needs. Cities are better positioned to absorb housing density. Better for climate and transportation.

Regulate ADUs to protect trees, upkeep in neighborhoods. What will ramshackle ADUs look like in a decade?
The requirement to have apartments be tiny sq. ft. We need variety housing for seniors with no stairs, single level. Shouldn't be required to have buildings look 'modern.' Keep it 'local,' wood 'log cabin' rustic, not all steel.
Consolidate housing and new growth to existing towns and UGAs. Stop landscape fragmentations.
In Anacortes: Negative bias towards low-income housing, and towards Habitat for Humanity.
Concentrate residential development in cities – 90º urban residential growth. Discourage housing in flood plains and forests.
County should consider tiny homes attached to full facility homes as a good way to provide housing on rural land that is more affordable.
Lack of affordable and high-density housing.
What policies can ensure affordability?
Affordability especially for work force. Any way to limit the size of homes? Some of the McMansions are simply obscene. Enforce regulations for building/remodels/additions. R/T environmental protections.
Unhoused population needs cold weather protection. Currently none in Anacortes this last winter.
Need trees/green spaces near dense housing. Research shows this decreases crime and supports mental health.
Appreciative of the 1,200 sf ADU allowance. Has been a good size home for me as my family and I recently moved back.
Additional parks should be added along with increased density.
Affordability; complex permit processing; limited units in rural zones.
Don't need more building. Use what we have, i.e., old homes falling apart – build apartments.
Rent is too high for young people starting out.
The waitlist is long for those with low income.
Rent rising
No affordable rentals or new housing with "green" features
Rent too high – more than necessary for expenses
Need more apartments/duplexes, ADUs in cities.
Many apartment complexes seem to be perpetual poverty traps. Need to find a way to increase density while maintaining ownership. Townhouses? Or at least better-quality apartments with gyms, pools, etc.
Mas programas de Vivienda asequible (More affordable housing programs)
No housing available
Require all multi-family apartments to include 20% of units permanently affordable to people with poverty level incomes.

Not enough housing. Not dense enough housing within UGAs. More ADUs and creative denser housing solutions.
Seniors are losing their households due to increases in costs. Unhoused seniors.
New housing impeding on forest/vulnerable areas. Prefer focusing on infill/density and preserving natural resources.
Two friends, both employed, can't find affordable rentals. One aged 52, one aged 67.
Buscar soluciones para mejorar el costo de Vivienda por que todo está muy caro y dejar de construir casas muy grandes en áreas naturales (Look for more solutions to improve the cost of housing because everything is very expensive and stop building very large houses in natural areas).
Need more diverse options for all! More affordable, more eviction prevention. Housing for essential workers – teachers & healthcare for example
Senior housing, handicapped accessible
No small rural acreage available for hobby farms, etc.
Affordable housing; lower rents; adequate public services; open space parks; community service; available parking; adequate walking/bike lanes.
No affordable rental for my kids! Skagit County should not be as expensive as Snohomish County.
Less government interference and easier permitting would allow more building.
Make middle- and lower-income neighborhoods livable. Parks, trees, trails.
Too many apartments. How will the schools and medical facilities handle the increase of populations. Who will fill all these new apartments?
Low income/affordable housing is not affordable.
Revisit card open space options. Need more employment opportunities.
20-minute neighborhoods anywhere there is clustered housing. "Villages" – especially in cities and towns.
Ignoring issues does not solve problems. What is being done?
Type of houses are limited.
I like the ideas of ADUs and infilling in cities. Provides affordable housing opportunities without extreme concentration.
More flexible zoning. Local ordinances to create diverse options. Think outside the box.
Antiquated Section 8 voucher process.
Employment opportunities do no cover housing costs. Need better paying jobs.
Limited low-income housing. High rent and taxes going up.
Not enough housing
Viviendas para familias de bajo recursos programas (Housing programs for low-income families)
Need more middle-income housing

More programs for mid-income, single-parent households
Costs too high with too many barriers
Lacking services in temp housing
We know what isn't working. Need to try new ways.
So many car campers – RVs, shacks, unsanitary housing, housing damaged by floods, needs weatherization and rehab. Rural homelessness.
Mi preocupación personal es a los precios de viviendo en general está muy caro y los dueños de los apartamentos suben muy seguido las renta pero nuestro salario sigue igual (My personal concern is that the cost of living in general is very expensive, the apartment owners raise the rent very often, but our salary remains the same.)
Rents are ridiculously high, supply is for too little, much housing appear to be of low quality. We need to make it easier to builds multi-family housing in the towns and cities – higher density. No FCCs, which = sprawl.
Keep strict UGA boundaries. Force housing density.
Long waitlists for low-income. AMI does not match cost of living or housing.
Limited low-income housing options in the foreseeable future.
Lack of long-term low-income housing compared to wages and job opportunities in the area.
Types of housing is very limited
Middle housing
Too many apartments. No additional schools for the added kids.
Zero transitional housing options.
Multi-family housing options with ore of a neighborhood model.
Need for more low-income and middle-income housing.
Too much high-density housing going in. Need affordable single-family.
Permit process is costly. Try to make it more efficient.
Places like Martha's Place in Sedro-Woolley
Your chart does not address the rise in cost of housing (rent/own)
Water rights; available parking for apartments and cottage housing
Tiny homes for veterans. Many have HUD vouchers but no place to go.
Different types of housing – transitional, shelters, tiny home villages, cottage housing, apartments with green space, town homes with courtyards
More housing vouchers
The market is just too high. Gotta ramp it down before it crashes. But people can't afford to live in houses, so however it comes down would be nice.
Homes for sale in upper valley are priced beyond what residents can afford and some are not even livable. To remove and build again is cost prohibitive and requires too much red tape.
Create a program that existed in Seattle, through the Seattle Senior Center in the '90s. They matched seniors who were not ready to go into assisted living yet with people who needed a

lace to live and could provide services in exchange to stay with the senior (they screened both parties).

Use Anacortes Family Center to consult with on what they are doing. 90% success rate.

Sustainable; green; low-impact; high-plant material

Let's chat! Chuck – WOAWW (4##) 5##-4### [censored]

There is low to no rental vacancy. Housing prices have skyrocketed.

We could use a variety of intentional tiny home villages that address different needs.

Board Activity Question: What improvements or additions would you like to see in our community's public facilities, such as roads, sidewalks, parks, sewer, water systems, or other government services, to better meet the needs of residents now and in the future?



Need parallel but separated motor, bike, and walking routes throughout the county, especially in built-up areas.

Speed limits on trails. Silent e-bikes can create conflict.

Sidewalks needed on 12th & Oakes. Dangerous for walking and bikes.

Need more sidewalks.

Efforts to support more bicycle use around towns to decrease use of cars.

Bicycle roads connecting the cities.

How plan for low snowpack and water shortage?

Concurrency for infill.

An effort to increase use of public transportation and decrease dependency on personal cars (housing by transit or near shopping).

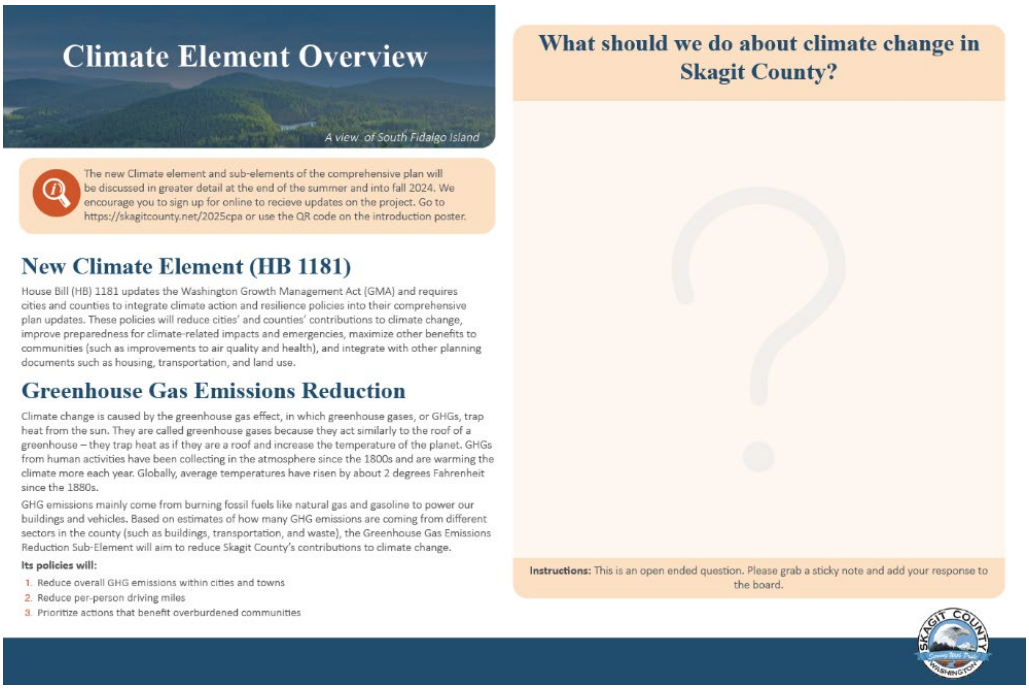
Shelters at every bus stop.

Sidewalks where there are none and fix the broken ones so easy to walk, use a wheelchair, etc. All areas should promote walking.
Safer pedestrian (bicycle) routes. Protect water supply especially with drought and sea-level rise. Increase water conservation (improve water monitoring with remote sensors).
Develop a transportation plan that addresses climate impacts, seal-level rise, increased flooding of roads, etc. How will this be addressed?
Map all the areas in the county vulnerable to climate change and sea-level rise, floods, landslides, alluvial fans, wildfire. Then map all the roads in those vulnerable areas and develop a plan for how those roads can be changed so transportation will be possible even when disaster happens.
I-5 traffic. Getting on I-5 in Burlington is sometimes very slow going north and south.
Community spaces that are not shopping.
Walker, biker friendly traffic separation.
Planning for sea-level rise/increased flooding.
Community pool: Olympic size, HS swim meets, lap swimming. Parking for trails: Tommy Thompson, Tribal meeting center. Parking lot on Tommy Thompson Trail near RV park by Fidalgo Bay Rd.
More sidewalks. Skagit Transit to east county past Concrete
More parks. More sidewalks to encourage walking.
Serve Bayview with sanitary sewer
Trails for hikes
Creating flood water storage for drought use. Reservoirs, aquifer recharge, etc.
More kid activities
Need updated fairgrounds with better amenities. Centrally located in county.
Safe biking lanes and walking for urban and rural commuters.
Need more schools in McGarigle
Consider green infrastructure to mitigate flood TSLR & clean water. Important as utilities.
More stops in Skagit Transit routes (Sedro-Woolley)
Long-term camping areas
Greatly increase the acreage in the county parks system. Skagit has 2,200 acres; Whatcom has 16,000 acres; Snohomish has over 10,000 acres. Parks & park acreage should also grow with population.
Water system that does not require chloramines.
Better ways to prevent backflow (enhanced air gaps?). More alternative transportation. Transport alternatives in face of disaster (bridge down).
Mas clinicas de atencion sobre salud mental y fisico (More mental and physical health care clinics)
Paved bike/hiking trails between Mt. Vernon, Burlington, Sedro-Woolley. Paved!

More crosswalks clearly marked with lights in school zones. Sedro-Woolley High School, Central Elementary
Mas oficinas de welfer (More welfare assistance offices)
Need to centralize emergency services
What's the plan & cost to increase infrastructure like sewage treatment for all the new houses?
Ayudar más a las escuelas para que tengan más recursos para formar mejores ciudadanos (help schools get more resources to form better citizens)
Many people now have ebikes. They can be a realistic means of commuting to work locally. We need a more comprehensive system of bike lanes and paved bike trails to encourage this form of "green" commuting.
Se necesita mas escuelas porque hay mucha sobre poblucion en los edificios escolares (more schools are needed because there is a lot of overcrowding in existing school buildings)
Some of the income from the lottery and sale of cannabis should be used for roads & schools. We could use more bike lanes as we improve our roads!
Necesitamos mas escuelas para todos los grados (We need more schools for all grades)
More parks (natural areas – not soccer fields) near dense neighborhoods
More trails and multi-use paths. Rail-to-trail projects!
More bike trails; more hike trails; more walk trails; more waterfront parks!!!!
Protect our water intake sources via conservation
Increase transit & trail connections to parks (county, state, and other areas for public access)
Government managed/sponsored shelter/housing facilities
Improve public transit to reduce auto dependance. Improve regionally significant biking trails & infrastructure to encourage use.
Electric taxis. Low cost & subsidized running known routes.
Centralized facilities for social services. Easier access to broad scope of service.
All new apartments. Need charging stations.
Plan to move roads inland. Managed retreat.
We need charging stations upriver.
In the 1920s when Clear Lake was a happening place, there were 3 types of public transportation there, 20x a day. Improved public transit helps economic growth & opportunity.
Allow for/encourage composting toilets to reduce water use and positive sewage use. Encourage grey water use/water capture.
More redundancy for Hwy 20. Landslides in a few key places can strand a lot of people by making roads impassable.
Build an elk crossing bridge over Hwy 20.
Bus service is needed in Marble Mount, even though not many people upriver, service is still needed.

Recycling pick-up
Slow traffic on Hwy 20 through Concrete. More sidewalks, better roads, and use of materials to repave in county.
More public transportation past Concrete
Please provide recycling pick-up. I do not have garbage pick-up because I have to bring recycle items to transfer station. I would pay for garbage pick-up if recycle pick-up were also provided.
See the Concrete Herald issues, May & June. Letters from Mike Brondi about budget shortfalls.
Do NOT build elk bridge over Hwy 20. It will not work! No way to funnel them to that location. Huge waste of money!!
Thank you for the East County Resource Center.
Please repair rails to trails, washout near Concrete.

Board Activity Question: What should we do about climate change in Skagit County?



Get the Shoreline Master Plan included in the new GMA Plan.
Talk much more openly about the current and predicted impacts of climate change and lead efforts to help community members build resiliency to change and respond.
Refineries – but not oil. Other products?
Address sea level rise in Shoreline Management Plan now.
We build more housing for seniors, so they move out of their 4-bedroom house. No new housing needed.
Overreach in demands concerns me. I don't believe we affect nature/climate like the government wants us to believe.
Say NO to Initiative 2117.
Do not promote false dichotomy of economy vs environment. Not planning for and trying to minimize climate change is our most costly (and futile) choice.
Create Conservation Advisory Committee to advocate for environment and natural resources and climate resilience.
Use Skagit Climate Consortium – great resource right here! Emphasize less consumerism, being more thoughtful about it.
Consult with Skagit Climate Science Consortium which has local expertise and data.
When will you know the damage from electricity?!
Move as quickly as possible to move to non-fossil fuel energy sources, thoughtfully planning a transition to mitigate harm.
Increase tax on gasoline

Plant more native trees, shrubs, & wildflowers. Stop mowing lawns with gas mowers. Ban leaf blowers.
Electric public vehicles
Talleres educativos sobre cambio climático (Educational workshops on climate change)
Review zoning, allowing commercial composting. Need more.
Go electric. Offer incentives to remove lawns, install solar.
Reforestar mas, limpiar los lagos, ríos y áreas públicos. Poner información para educar a la gente sobre el medio ambiente (More Reforesting, clean lakes, rivers, and public areas by providing information to educate people about the environment)
Create a Climate Citizen's Advisory Committee and educate the community
Housing for middle income folks. More public transit.
Grow trees
Who is on the "Climate Policy Advisory Team"?? Get the Skagit Climate Science Consortium involved now.
Require heat and cold amelioration in urban areas. Shade trees along streets and around housing. Good design with insulation. Solar power!
Expand renewable energy of hydroelectric power
Protect healthy forests. Implement conservation easements to maintain forest lands.
Paneles solares para apartamentos (Solar panels for apartments)
Protect our water quality, stop runoff pollution flowing into Skagit River and streams
Plan for sea level rise! Include language in Shoreline program to require hearing examiner and public review. Listen to scientists, including when planning riparian buffers. Use 2100 projections of sea level rise to adapt buildings/structures. Protect aquatic vegetation.
Lo que aria o ya lo estay haciendo mis hijos y yo es tomar baños más cortos para ahorrar agua y cuidar q' las luses de casa no se usen están apagadas (What my children and I would do or already to is take shorter baths to save water and make sure the house lights are not turned on.)
Get rid of hard armoring
Stop clearcut without replanting!
Require solar on all new builds. Otherwise, where will all new needed electricity generate from?
Go electric. No fossil fuels (methane gas or oil).
Make sure urban areas are good places to live to encourage density. Plan for livable communities; walkable. Improve public transit and thoughtful regional biking trails.
Increase availability of public transportation. Increase and improve the network of bike trails. Encourage development in UGAs in the form of walkable neighborhoods – stores, services, all within ready walking distance of housing.
Electrify county buildings and transportation.
Community solar. Make it easy!

Safe and connected bike lanes/paths to encourage alternatives to cars!

Plant trees. Stop indiscriminate cutting. Replant conifers.

Listen to the scientists

The county should be protecting the sole source aquifer and managing new wells on Guemes Island. It is not acceptable the 40 residences have lost their wells to seawater intrusion.

Consult the Tribes! They know how to steward our land and water.

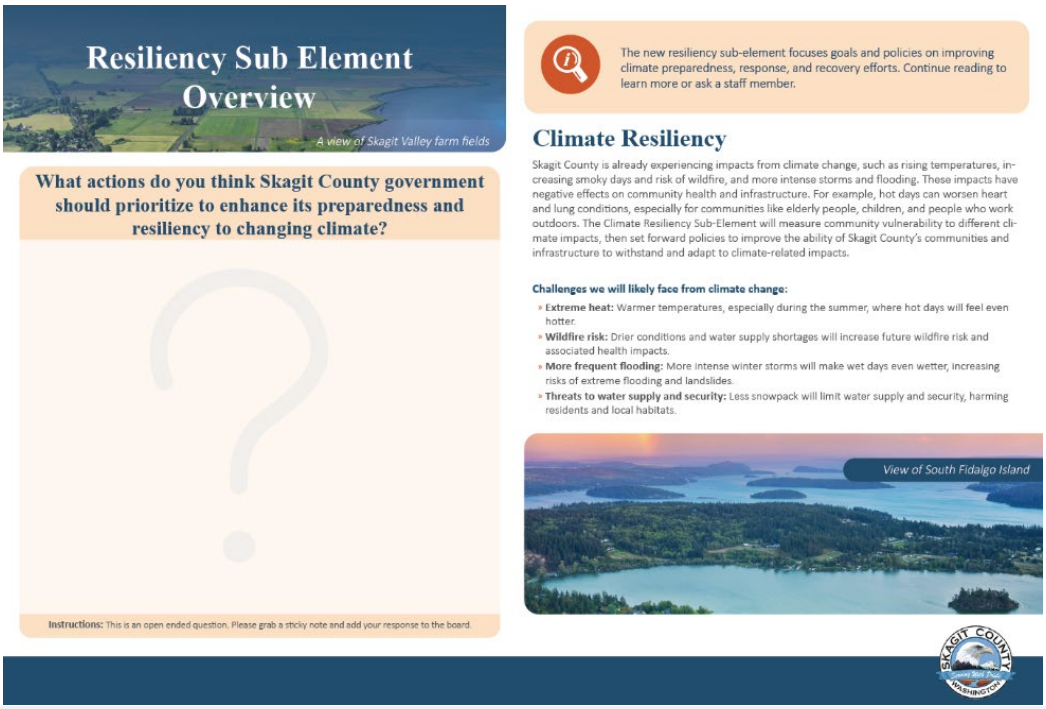
Support community solar projects; promote tiny home community living – small footprints; support our local organic farmers; let's talk compost!

Encourage towns to be more reliant on solar power

Encourage the tribes to participate and bring their solutions to the table. Make them essential stakeholders if they are willing.

Electric vehicle charging stations

Board Activity Question: What actions do you think Skagit County government should prioritize to enhance its preparedness and resiliency to changing climate?



Shoreline management without use of armory which only causes increased erosion in adjacent areas.

No further development in the Skagit flood plain.

A solid Shoreline Master Plan based on science and goal of protection.

Consult with Skagit Climate Science Consortium for solid scientific local data on the impacts of climate change in Skagit County. Base County decisions on their data.

Set back dikes, restore lost wetlands, plant more trees, stop fragmentation of landscape.

Disaster preparedness (bridges functional).
Ban greenhouse gas in all ways possible as quickly as possible. This should be core to all of the planning.
Responsiveness to impact on lower income. Awareness of inequities.
More trees, more enforcement of setbacks. Where is the SMP – started in 2010, it is needed, based on science! Enforce/limit armoring to regs soft/not hard.
Earthquakes of 9+ stemming from subduction zone off the Pacific Coast is more of a threat than cyclical changes in climate.
Forest management, climate, encroachment from development, manage fire.
Reductions in greenhouse gas emissions; increase in electrification.
Support Climate Commitment Act.
Water quality and runoff
Green = salination of soils
Avoid development on landslide prone slopes
Solar is not cost effective (I have solar). Allow small scale nuclear plant. Don't close off use of natural gas. We need bridge fuel.
Avoid development in areas forecast for flooding & sea level rise
Update the Shoreline Master Plan to take into account sea level rise by 2028
Wildfire preparedness and risk reduction
Emphasis of green infrastructure such as healthy streams, open space, & healthy forests to buffer the impacts of climate change, especially heat.
Program of buy outs and TDR programs for identified areas prone to climate impacts
Write a Climate Action Framework. Comp Plan will not be detailed enough to make targeted change.
Map hazard areas and be strict about compliance. Currently people still getting permits in hazard areas.
Education: communities, schools, county/city, priority education regarding climate change. Everyone/every neighborhood required to learn about and be prepared for wildfire evacuation and for neighborhood and home preparedness.
Green dots natural hazard such as landslide risk with increased winter rains.
Use only green energy. Allow solar & wind & geothermal
First, create a map (with public input) of all areas at risk from sea level rise. Then, prepare a prioritized list of actions to take (e.g., moving roads, incentivizing shoreline residents to move inland, etc.)
God controls the climate. This is an agenda I don't participate in.
Taller educativo sobre cambio climático (educational workshop over climate change)
Completely update the county's open space concept plan to take into account climate & flooding, sea level rise

Reforzar presas y bordes de ríos para tener mejor protección para las familias que viven cerca de esos áreas (reinforce dams and river edges to have greater protection for families who live near these areas)
Backflow in sewer & water contamination
Leaders must act to reduce warming. Reduce use of fossil fuels.
Implementar talleres sobre conservación de la naturaleza (implement workshops about nature conservation)
Stop allowing development in areas that will not be resilient. High costs long term.
Incentivize people moving out of high-risk areas
Identify opportunities to work with changing natural landscapes instead of against them. Use best available science to guide decision making.
Plan for extreme weather. Emergency shelters for heat dome and freezing temps.
Better land management; better research into effects of land changes in our most rural areas; better public transportation for the same areas; more restorative farms.
Avoid steep slopes and erosion hazard areas. Control tree cutting and removal.
Offer incentives to homeowners to remove turf lawn and plant native plants & trees.
Focus 90% of new growth in cities
Elevate land conservation besides agriculture and working forests in the comp plan
Aser más talleres con información de cómo Podemos evitar el desperdicio de agua (do more workshops with information on how we can avoid wasting water)
Form an Environmental & Sustainability Committee. Nothing like this exists yet.
Climate has been changing forever. Just like the weather, you have to live with it.
Leadership must act for the county and inform the public about how others can act.
Leadership must educate and inform the public about why climate policy is necessary.
Help the county to transition move to renewable electricity
Avoid urban development in flood plains and flood maps. Habitat protections.
Have a conservation subdivision mechanism so people can keep home or move it but sell and to government or conservation orgs.
County leadership must lead on effective climate policy.
Revise regulations to prohibit additional development in areas vulnerable to sea level rise (and tsunamis). Actively plan and promote planting of trees in towns & cities for shade and cooling and in rural areas for carbon sequestration.
Climate protection is a pay now or pay much more later issue.
If you think paying to protect climate now, wait till we have to pay later.
Set policy to reduce fossil fuels. Set aside/protect areas of most risk of flooding. Don't let people build in flood plain/alluvial fans.
Preserve green areas, forest land. Plant native plants. Plant more trees.

Consider habitat restoration as a response to mitigate shoreline SLR.
Leadership must act to mitigate consequences of warming. All consequences.
Do not allow hard armoring on shorelines.
Extreme heat and extreme cold. Last winter our temps dropped to -1° F. The previous record was 9° F
Consulting with the local tribes on solutions to climate change.

Board Activity Question: What climate impacts are you most concerned about?



Increases in cost of living due to increasing need to mitigate climate effects.
Loss of quality of life. Increase in wildfire/smoke, heat, drought.
I'm most concerned about the impacts of rising heat and landscape degradation due to development and drought driving degradation of the ecosystem to the point it cannot recover.
Increases in erosion of shoreline and landslides.
Shoreline management challenges.
In Skagit specifically – sea level rise, saltwater intrusion into wells, drought, heat, wildfire, impact on pollinators.+
Warming the water.
As climate changes and things get harder, fear will increase. Can we prepare community resilience and fight tendency to "hunker down" with guns?
Use common sense in requirements; many changes we see are just part of nature and always changing.
Water supply in summer, reduced snowpack melt, in-stream flows
Local wildfire hazard
Fire and drowned wetlands
Losing trees and vegetation
Wildfires ruining every last summer of my life
Harm to agriculture

Displaced wildlife and loss of birds sue to fires and extreme heat
Flooding
Loss of trees!!
Paying later will be much more expensive than paying now if we don't act now.
Wildfire
GHG, emissions, pollution, air quality
Loss of trees, landslides, wildfires
Water too much at times and too little (drought) at times
Estamos teniendo gran impacto de calor y creo q la contaminación la a disminuido y estas cosas creo que nos causan mas enfermedades (We are having a great heat impact and I think that pollution has increased I think cause more diseases)
Health consequences of heat/smoke
Air quality
Risk of forest fire
Sea level rise; drier vegetation leads to fire; drought; pressure on wildlife & habitat; growing food
Reciclar el plástico, el carton, el vidrio, la ropa usada (Recycle plastic, cardboard, glass, used clothes)
No more coal or oil trains, air pollution, fire, & explosives, please
Higher food costs due to crop damage, less water
Sea level rise – response and prevention
Sea level rise, saltwater intrusion, melting glaciers, drought, wildfires, loss of farmland, loss of tidal marshlands, flooding, death of species
Para la deforestación y el uso inadecuado de productos nocivos para el medio ambiente (For deforestation and inappropriate use of harmful products for the environment)
Flooding
Floods
Tree canopy
SLR & flooding will drastically impact large areas of the county. Forests are already stressed – will need thoughtful, ecologically minded management.
La contaminación por gas de efecto invernadero (Pollution due to the greenhouse gas effects)
Loss of biodiversity in this incredible place
Heat dome, wildfire smoke, loss of trees, drought,
Heat, flooding, & wildfires
Wildfire, drought
Extreme cold & winter weather in east county & no shelter/poor housing for many

Sembrar mas arboles (Plant more trees)
Proteccion de los animals (Animal protection)
Changes in plant & animal phenologies, e.g., leading to lack of traditional food sources during bird migration and breeding, and reproductive failure
Sea level rise, saltwater intrusion onto farmland. Protecting farmland and farm workers.
We should keep our dams!
Heat, wildfire/smoke, reduced snowpack/drought
Salmon – they need cooler waters. Plant shade trees to help.
Plastic pollution; “forever” chemicals. Biodegradable packaging/products would be nice to encourage.
Flooding & land slides blocking access to roads/communities in Cape Horn/Cedar Grove.
Concerned about electric cars and disposal of used batteries; pollution caused by getting component parts, etc.
Rubber preservative on vehicle tires. As tires wear, this chemical goes into the streams (from rainwater). It confuses the salmon’s directionality, and they can’t figure out which way to go!

Board Activity Question: Other questions/comments

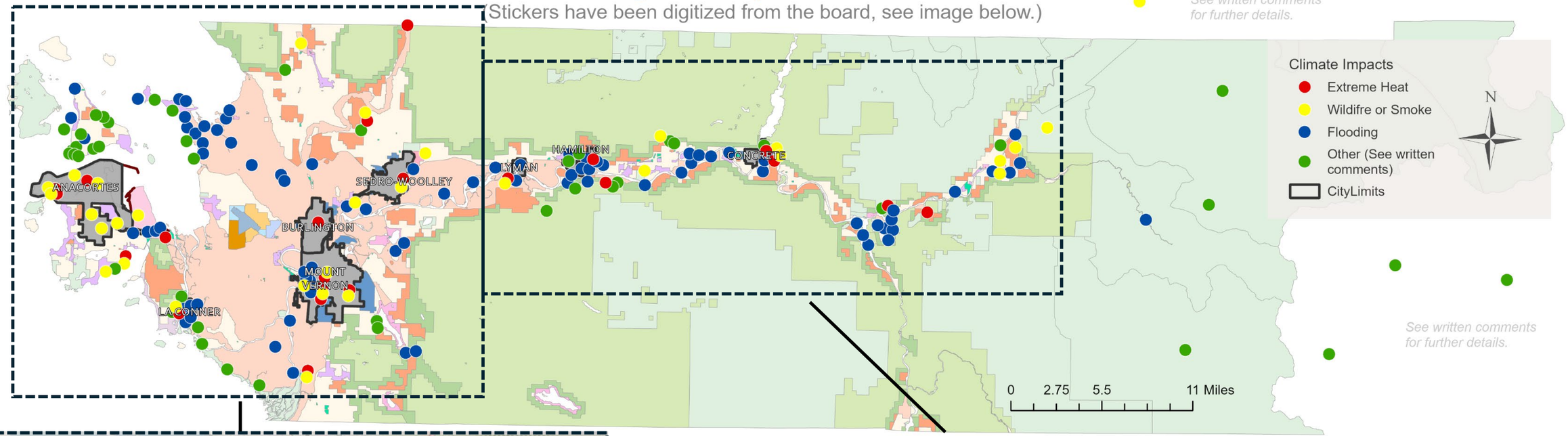
Concerned about farm conversion to residential use.
No resource extraction near sensitive areas.
Are there going to be changes to critical area maps – ensure availability.

Appendix G: June 2024 Open House Map Activity Sticker Response

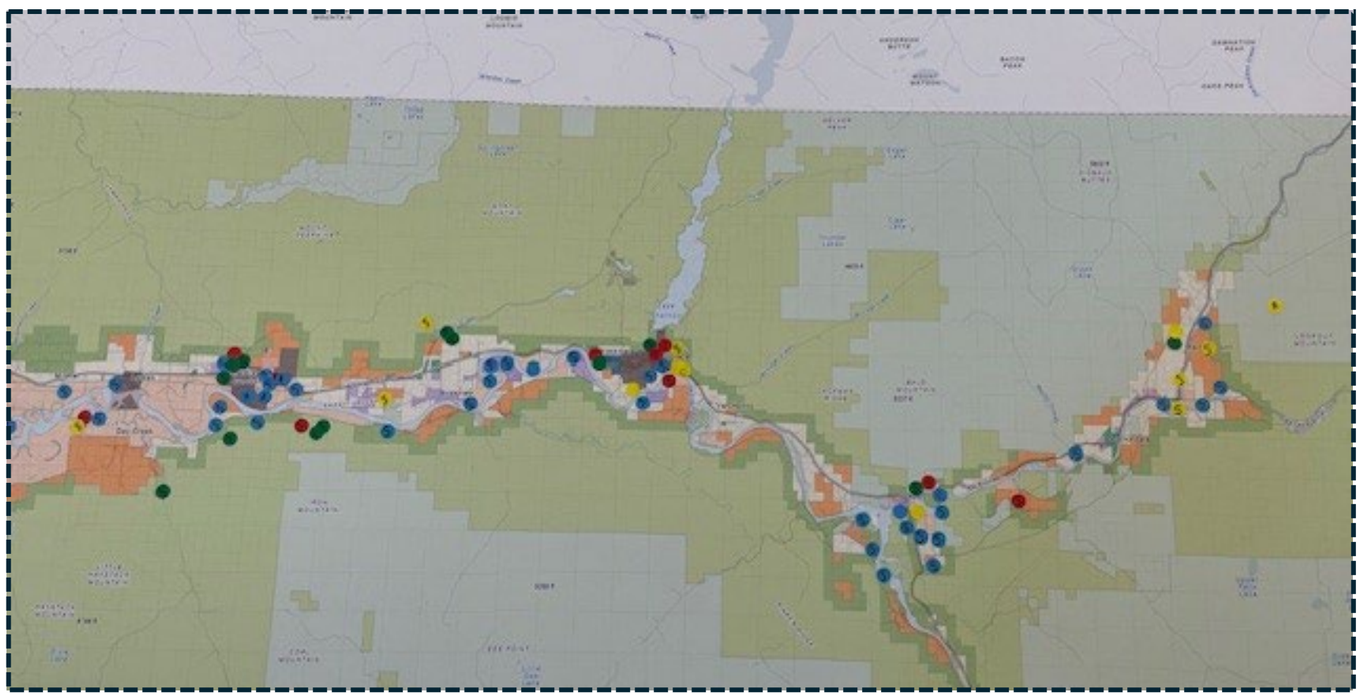
Large format map on next page.

What climate impacts are you most concerned about?

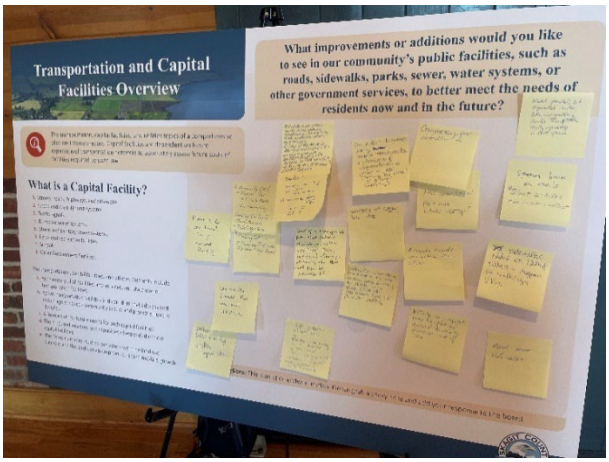
(Stickers have been digitized from the board, see image below.)

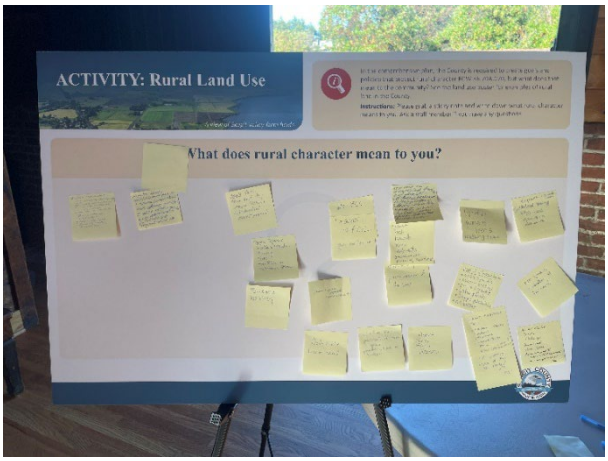


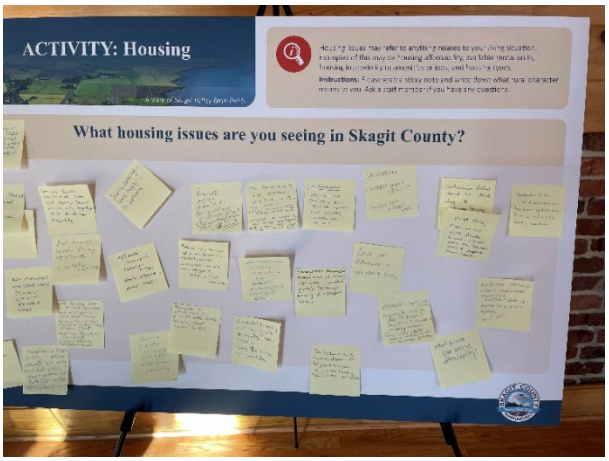




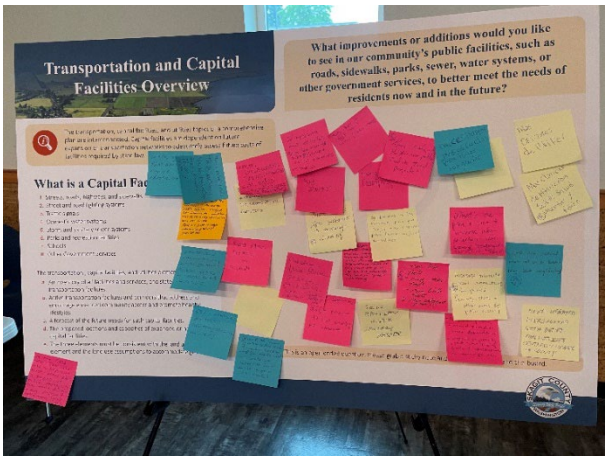
Appendix H: June 2024 Open House Photo Gallery

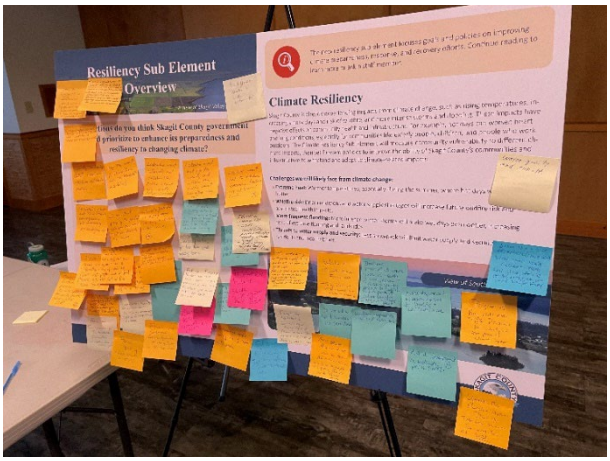












Appendix I: June 2024 Open House Demographic Responses (Anonymous)

Scanned demographic surveys start on next page.

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98274
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)
Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98221
2. **What is your gender?**
   - Man
   - (Woman)
   - A different gender
   - Prefer not to say

PUT ME TO WORK!

3. **Which of the following best represents your race and/or ethnic heritage?**
   - (White or Caucasian)
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

AND OR INCLUDE COMMENTS → QUALITATIVE DATA USING QUALTRICS, IM PROFICIENT IN SPSS, EXCEL, STATVIEW, STATPRO, SURVEY MONKEY, QUALTRICS, I'M A BIT RUSTY BUT WOULD PICK IT UP EASILY!

Demographics Information Survey Second Page

4. In what decade were you born?
   - After 2000
   - 1990-2000
   - 1980-1989
   - 1970-1979
   - 1960-1969
   - (1950-1959) 1953
   - Before 1950
   - I prefer not to say

5. What is the highest level of education you have completed?
   - Some high school
   - High school graduate
   - Some college/2-year degree
   - 4-year degree
   - (Advanced degree) MS & PhD
   - Other
   - I prefer not to say

drrobindmittelstaedt@gmail.com
ROBIN MITTELSTAEDT
740-438-1357

FAMILY HAS BEEN IN ANACORTES & ON GUEMES SINCE 1902 8-9 GENERATIONS

YOU SHOULD ASK ABOUT INCOME. THERE IS A HUGE DISPARITY BETWEEN THE WEALTHY WITH AUTH HOMES AND MLD & LOW-INCOME

I HAVE A PhD IN STATISTICS & RESEARCH TAUGHT THESE SUBJECTS FOR 25 YRS. I WOULD LOVE

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)
Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98221
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

SKAGIT COUNTY 2025
Comprehensive Plan Update

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98221
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

SKAGIT COUNTY 2025
Comprehensive Plan Update

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98277
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)
Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98221
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98221
2. **What is your gender?**
   - Man
   - (Woman)
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - (White or Caucasian)
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

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    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98238
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

SKAGIT COUNTY 2025
Comprehensive Plan Update

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98221
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

SKAGIT COUNTY 2025
Comprehensive Plan Update

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98222
2. **What is your gender?**
   - Man
   - (Woman)
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - (White or Caucasian)
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

SKAGIT COUNTY 2025
Comprehensive Plan Update

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98284
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

SKAGIT COUNTY 2025
Comprehensive Plan Update

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98221
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

SKAGIT COUNTY 2025
Comprehensive Plan Update

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98221
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)
Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98284
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98237
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98273
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)
Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98225
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98237
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)
Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98237
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

SKAGIT COUNTY 2025
Comprehensive Plan Update

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98237
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98237
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
   - After 2000
   - 1990-2000
   - 1980-1989
   - 1970-1979
   - 1960-1969
   - 1950-1959
   - Before 1950
   - I prefer not to say

5. What is the highest level of education you have completed?
   - Some high school
   - High school graduate
   - Some college/2-year degree
   - 4-year degree
   - Advanced degree
   - Other
   - I prefer not to say

SKAGIT COUNTY 2025
Comprehensive Plan Update

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98257
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

SKAGIT COUNTY 2025
Comprehensive Plan Update

Demographics Information Survey Second Page

4. In what decade were you born?
   - After 2000
   - 1990-2000
   - 1980-1989
   - 1970-1979
   - 1960-1969
   - 1950-1959
   - Before 1950
   - I prefer not to say

5. What is the highest level of education you have completed?
   - Some high school
   - High school graduate
   - Some college/2-year degree
   - 4-year degree
   - Advanced degree
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
   - After 2000
   - 1990-2000
   - 1980-1989
   - 1970-1979
   - 1960-1969
   - 1950-1959
   - Before 1950
   - I prefer not to say

5. What is the highest level of education you have completed?
   - Some high school
   - High school graduate
   - Some college/2-year degree
   - 4-year degree
   - Advanced degree
   - Other
   - I prefer not to say

SKAGIT COUNTY 2025
Comprehensive Plan Update

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code _____**
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

SKAGIT COUNTY 2025
Comprehensive Plan Update

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98274
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
   - After 2000
   - 1990-2000
   - 1980-1989
   - 1970-1979
   - 1960-1969
   - 1950-1959
   - Before 1950
   - I prefer not to say

5. What is the highest level of education you have completed?
   - Some high school
   - High school graduate
   - Some college/2-year degree
   - 4-year degree
   - Advanced degree
   - Other
   - I prefer not to say

SKAGIT COUNTY 2025
Comprehensive Plan Update

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98235
2. **What is your gender?**
   - Man
   - ~~Woman~~
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - ~~I prefer not to say~~

Demographics Information Survey Second Page

4. In what decade were you born?
   - After 2000
   - 1990-2000
   - 1980-1989
   - 1970-1979
   - 1960-1969
   - X 1950-1959
   - Before 1950
   - I prefer not to say

5. What is the highest level of education you have completed?
   - Some high school
   - High school graduate
   - Some college/2-year degree
   - X 4-year degree
   - Advanced degree
   - Other
   - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98284
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

SKAGIT COUNTY 2025
Comprehensive Plan Update

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

SKAGIT COUNTY 2025
Comprehensive Plan Update

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98232
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98232
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

SKAGIT COUNTY 2025
Comprehensive Plan Update

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code _____**
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

SKAGIT COUNTY 2025
Comprehensive Plan Update

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98221
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98274
2. **What is your gender?**
   - Man
   - ✓ Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - ✓ White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98284
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98229 (Alger area not B'ham)
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

SKAGIT COUNTY 2025
Comprehensive Plan Update

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98284
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

SKAGIT COUNTY 2025
Comprehensive Plan Update

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98284
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98284
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98284
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98274
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98274
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98257
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98221
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98257
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98274
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

SKAGIT COUNTY 2025
Comprehensive Plan Update

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98273
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
   - After 2000
   - 1990-2000
   - 1980-1989
   - (•) 1970-1979
   - 1960-1969
   - 1950-1959
   - Before 1950
   - I prefer not to say

5. What is the highest level of education you have completed?
   - Some high school
   - High school graduate
   - (•) Some college/2-year degree
   - 4-year degree
   - Advanced degree
   - Other
   - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98284
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98274
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

SKAGIT COUNTY 2025
Comprehensive Plan Update

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98274
2. **What is your gender?**
   - Man
   - (•) Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - (•) White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

SKAGIT COUNTY 2025
Comprehensive Plan Update

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98284
2. **What is your gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98284
2. **What is your gender?**
   - Man
   - ~~Woman~~
   - A different gender
   - Prefer not to say
3. **Which of the following best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - Black or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - ~~Other~~
   - I prefer not to say

SKAGIT COUNTY 2025
Comprehensive Plan Update

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say

Skagit County Comprehensive Plan Demographics Information Survey (This is double sided!)

Please fill in or circle your responses.

1. **Where do you live? ZIP Code** 98233
2. **What is ~~your~~ gender?**
   - Man
   - Woman
   - A different gender
   - Prefer not to say
3. **Which of the ~~following~~ best represents your race and/or ethnic heritage?**
   - White or Caucasian
   - ~~Black~~ or African American
   - Latino, Latina, or Latinx
   - Asian or Asian American
   - Native American, American Indian, or Alaska Native
   - Arab American
   - Native Hawaiian or other Pacific Islander
   - Multiracial
   - Other
   - I prefer not to say

Demographics Information Survey Second Page

4. In what decade were you born?
    - After 2000
    - 1990-2000
    - 1980-1989
    - 1970-1979
    - 1960-1969
    - 1950-1959
    - Before 1950
    - I prefer not to say

5. What is the highest level of education you have completed?
    - Some high school
    - High school graduate
    - Some college/2-year degree
    - 4-year degree
    - Advanced degree
    - Other
    - I prefer not to say