CHAPTER 3 AFFECTED ENVIRONMENT, ENVIRONMENTAL IMPACTS, MITIGATING MEASURES, AND UNAVOIDABLE ADVERSE IMPACTS

3.1 Water

The Bayview Ridge Subarea is located within the Padilla Bay watershed, at the southern end of a topographic bench above the Skagit Valley floodplain. Generally, the land slopes gently to the south, with more pronounced east-facing slopes located along the eastern edge of the Subarea. The highest elevation, approximately 160 feet, lies in the northwestern portion of the Subarea at Josh Wilson Road; the low areas (elevation 20) lie along the southwestern and eastern edges, at the base of the hill. Subarea topography is shown in Figure 7.

Surface waters within the Subarea include existing open ditch drainage systems, numerous wetlands, and a portion of Higgins Slough. Runoff from the Subarea drains to farmland at the base of the hill.

In 2002, Skagit County began preparation of a Bayview Watershed Stormwater Management Plan for the Bayview Sub-basin. It is anticipated that this Plan will be completed by the end of 2003. The Plan will identify existing drainage patterns and existing drainage problems, project future drainage needs, and determine what future drainage facilities will be needed to adequately accommodate drainage from this watershed. How upland drainage can be accommodated without impacting the lowland farmland, and how upland runoff will or will not be part of the proposed "Skagit River Flood-Control By-Pass Project," will be significant issues. The Plan will primarily address water quantity, rather than water quality issues.

Skagit County and the U.S. Army Corps of Engineers are co-sponsoring a "Skagit River Flood-Control By-Pass Project" which during times of high water, would divert a portion of the Skagit River to the Swinomish Channel. The by-pass would run along the south side of SR-20 in the vicinity of the Subarea and may also be used to discharge upland runoff. The project is currently in the study phase.

3.1.1 Surface Water and Stormwater

3.1.1.1 Affected Environment

Storm Drainage

Existing surface drainage within the Bayview Ridge Subarea is accommodated by drainage systems (primarily open ditches) in the developed areas and by sheet flow in undeveloped areas. No natural channelized systems exist within the Subarea. Higgins Slough flows along the southeast corner of the Subarea. The southeastern and southwestern portions of the Subarea lie

Figure 7 – Bayview Ridge Subarea Plan: Topography

within Drainage District 19; the remainder of the Subarea lies within the Skagit County Drainage Utility and Drainage District 14. Downstream, drainage from Bayview Ridge flows to drainage ditches constructed and maintained by Drainage Districts 8, 14, and 19 and the Skagit County Drainage Utility, and to sloughs which outlet to Padilla Bay.

Soil types within Bayview Ridge typically have slow permeability and a perched water table near the surface, severely limiting infiltration of stormwater. Existing drainage problems within the Subarea include: impacts to the downstream drainage ditches and flooding of farmland; localized ponding of water, especially along Josh Wilson and Farm to Market Roads; and rapid run-off from residential development along Peterson Road. Numerous wetlands that provide natural storage for runoff are located within the study area and will be preserved per existing Skagit County regulations (see Section 3.1.2 Wetlands).

As the Bayview Ridge Subarea has developed, the increased impervious surfaces have resulted in increased volumes of surface water runoff and increased peak flow rates. Some stormwater detention and water quality facilities have been constructed within the Subarea, including within the Port of Skagit County ownership. Although detention facilities have been constructed within the residential area, these facilities are not always adequately maintained, and this results in little or no detention capability.

Downstream recipients of stormwater runoff from the Bayview Ridge Subarea include Drainage Districts 8, 14 and 19. The boundaries of these districts are shown in Figure 8. Drainage District 8 is currently being annexed by Dike District 12. Generally, the downstream drainage district ditch systems are at capacity, and run-off from the Subarea can increase flooding of farmland near the base of the hill. The individual Districts have different drainage facilities, and consequently, different approaches to accommodating upland drainage. Stormwater discharge to downstream drainage district facilities is not coordinated at this time.

Drainage District #8, adjoining the Subarea on the west, utilizes a system of pumps and tide gates to discharge water to Padilla Bay. District #8 has expressed concern that requiring detention of upland storm water runoff may exacerbate existing problems by not fully utilizing all low tide events. As noted, this District is now being annexed to Dike District 12.

Drainage District #19 encompasses the southern portion of the Subarea as well as adjacent valley farmland. In 1966, Drainage District #19 entered into an agreement with the Port of Skagit County to accept runoff from Port property. The Port compensates District #19 for capital costs associated with improvements to the District's drainage system that are required to accommodate the additional runoff. The District is not responsible for the Port's stormwater system outside the District's boundary. District #19 maintains one pump station, 16 culverts with flap gates, and over 56 miles of open ditch. District #19 maintains all drainage facilities to accommodate the 10-, 25-, or 100-year design storm, depending on the significance of the facility and the size and characteristics of the tributary area. The District reports adequate capacity for all facilities at this time.

Drainage District #14 lies northeast of the Subarea. A drainage analysis was prepared by District #14 in 2002 (*Letter Report*, January 29, 2002, Semrau Engineering), which analyzed the capacity

Figure 8 – Bayview Ridge Subarea Plan: Drainage Districts

of the District's ditches and outfalls. That portion of the Bayview Ridge Subarea which drains to District #14, drains to the South Spur Ditch; this ditch is a very flat, gravity ditch, which flows into the Joe Leary Slough system. The outfall of the Joe Leary Slough is dependent on tidal fluctuations. The South Spur Ditch currently has insufficient capacity to accommodate storm flows.

Water Quality

Water quality in the larger Padilla Bay/Bayview Watershed is of concern. The 2002 "Water Quality Summary for WRIA 3" lists Indian Slough, Joe Leary Slough, and No Name Slough (all downstream of Bayview Ridge) as "Problem Areas" that do not meet water quality standards for fecal coliform, dissolved oxygen, and/or temperature. Higgins Slough is not listed as a Problem Area. In the past, ditch erosion, low oxygen, elevated temperature, oil-based pollutants, and other miscellaneous contaminants from the Bayview industrial area have contributed to downstream water quality problems. Existing Port of Skagit County facilities now include water quality treatment on site-by-site basis. Drainage from the existing residential area receives little or no water quality treatment.

3.1.1.2 Environmental Impacts

New development within the Subarea will increase the amount of impervious area due to construction of proposed buildings, parking lots, and roadways. The resulting effect will be larger volumes of stormwater runoff and higher peak discharges, which if left unmitigated, could cause increased erosion, destruction of downstream fish habitat, flooding of farmlands, and possible impacts to wetlands.

The four proposed alternatives differ in the density and timing of new development, and hence the amount of new impervious surface which would be created. Impacts to the recipient drainage districts differ depending on what portion of the study area is developed. The design and maintenance of the new storm drainage systems to be constructed within the study area may also differ with different densities of development. For all alternatives, development both inside and outside the UGA will comply with Skagit County stormwater regulations as contained in Skagit County Code 14.32.

Existing Drainage Regulations

Skagit County has adopted the Washington State Department of Ecology *Stormwater Management Manual for Western Washington*, revised August 2001 (formerly *Stormwater Management Manual for the Puget Sound Basin*), which requires stormwater detention and water quality treatment. Regarding detention standards, detention facilities must be designed such that the post-development 2-year runoff is released at a maximum of 50 percent of the pre-developed 2-year rate, and the post development 10-year, 25-year, and 100-year runoff is released at the pre-development rates for each respective storm event. Water quality treatment must be provided for a 6-month storm event in the developed condition.

Subsequent to completion and adoption of the *Bayview Watershed Stormwater Management Plan*, the existing stormwater regulations may be modified to allow regional, drainage capital

facility improvements within the Bayview Ridge area. Water quality impacts resulting from new development will be dealt with on a site-by-site basis (vs. a regional basis).

Storm drainage planning within Bayview Ridge must also acknowledge the presence of Skagit Regional Airport. The Federal Aviation Administration has developed an Advisory Circular, AC 150/5200 *Wildlife Attractions On or Near Airports* to address the concern of increasing bird populations and the resulting danger to air traffic. This circular recommends that, on airport property, wildlife attractions be located a minimum of 10,000 feet from the edge of any turbine use runway, such as at the Skagit Regional Airport. Chapter 3 of the circular provides an exception for linear water detention basins that "hold water during rainy weather and drain off shortly thereafter."

Water Quality

With all alternatives, urban stormwater runoff may contain pollutants such as heavy metals (lead, zinc, copper), oils, greases, nutrients (phosphorous, nitrates), and other substances which, if left untreated, could cause significant degradation of water quality.

Water quality treatment is required by the *Stormwater Management Manual for the Puget Sound Basin*. Within urban areas, water quality treatment is typically achieved with biofiltration swales and water quality ponds. Catch basins can be designed to allow precipitation of pollutant-bearing particulates and oil/water separators to assist in the removal of lighter-than-water runoff materials such as oils (prior to discharge to water quality ponds or biofiltration ponds).

Temporary sedimentation devices such as hay bales, silt fences, temporary retention, and sedimentation ponds are typically used to reduce silt-laden waters during the construction phase of a development project.

Alternative 1: Industrial UGA and Rural Residential Development (No Action)

Alternative 1 would result in urban development of the 1,830-acre Port ownership (254 acres of which are available for new development) and 235 acres of privately held industrial land in the western half of the Subarea. There are 741 acres of privately held potential industrial land that are now proposed to remain undeveloped through 2015. The remainder of the Subarea outside the UGA would retain its Rural Reserve and Rural Intermediate designations, and new development would consist of low-density, rural residential uses. New single-family development would be limited to 1 unit per 2.5 acres in the Rural Intermediate (RI) zone, and 1 unit per 5 acres under CaRD standards in the Rural Reserve (RRv) zone.

Alternative 1 would result in the least amount of new impervious surface within the UGA and Subarea. The most significant increase in impervious surface would be located on Port property, and on the private industrial property within the UGA. In the absence of limitations on impervious surface, it may be assumed that up to 75 percent of the "developable" portion of a building lot in the industrial area could be considered impervious surface. Wetlands are not considered buildable, and are therefore excluded from the "developed" area.

The proposed Bayview Ridge Industrial and Heavy Industrial development standards do not specifically limit the amount of impervious surface for industrial properties. There is, however, a 15 percent open space requirement, consistent with the Airport Environs Overlay (AEO) zone.

Under Alternative 1, potential downstream drainage impacts would be primarily limited to Drainage District #19 facilities. The majority of drainage from the Port ownership discharges to a Drainage District #19 ditch crossing Higgins Airport Way, just north of SR 20. This ditch eventually discharges into Big Indian Slough and Padilla Bay.

The 1998 Port of Skagit County *Bayview Business and Industrial Park and Skagit Regional Airport Stormwater Management Plan* addresses existing and potential drainage problems within the Port ownership. The drainage system consists of roadside ditches, detention/retention ponds, culverts, and conveyance pipes. The *Stormwater Management Plan* includes a detailed storm drainage capital improvement program and to date, improvements have been constructed as proposed. Within the Bayview Business and Industrial Park, stormwater detention is provided on a regional basis, but water quality treatment is the responsibility of individual properties. Water treatment facilities are included in detention facilities for the Airport, however.

Runoff from privately held industrial lands (i.e., outside the Port ownership) would also be required to meet County surface water/drainage requirements contained in SCC 14.32, but it is assumed that both detention and water quality treatment would be provided on a lot-by-lot basis because the development will be approved on a "first-come, first-served" basis. Because the final pattern of development for Alternative 1 is unknown, the design of a comprehensive drainage plan, possibly including regional detention, is difficult.

Drainage from a small portion of the Alternative 1 UGA discharges to the Drainage District #8/Dike District 12 ditch along the Farm to Market Road at the intersection of Bayview and Ovenell Roads. This ditch discharges into Padilla Bay via No-Name Slough.

Within the remainder of the Subarea, outside the UGA, drainage impacts will be limited due to the low-density nature of development. The Rural Reserve and Rural Intermediate areas would be developed with low-density single-family dwellings (1 unit per 5 acres with the Rural Reserve/CaRD, and one unit per 2.5 acres with Rural Intermediate), and drainage would be handled on a project-by-project basis. Detention and water quality treatment would be required for projects exceeding 5,000 square feet of impervious area. This threshold is often triggered by land divisions where together, the building footprints, driveways, and access road exceed 5,000 square feet. Maintenance of these drainage/detention systems would be the responsibility of the property owner.

No change or improvements to the drainage systems within the existing residential subdivisions would likely occur. It is unknown whether maintenance of these facilities would be improved.

Current impacts to Drainage District # 14 from development in the eastern portion of the Subarea would continue unless stricter drainage controls were adopted and drainage facilities improved.

Alternative 2: CAC Recommendation – Community UGA

Alternative 2 would, over time, significantly increase impervious surfaces in the eastern and central portions of the Subarea, as well as within the western portion of the Subarea. The additional impervious surface would be located in the industrial, community center, and new urban residential areas north and south of Peterson Road. Buildings, roads, and driveways would be constructed throughout the entire Subarea. Approximately 1,043 acres of wetlands and associated buffers would still be retained as permanent open space within the Subarea, however.

Storm drainage from the developed portions of the Subarea would flow (after detention) primarily to Drainage District #19 ditches, although drainage from the northeastern portion of the Subarea would flow to District #14's South Spur Ditch. District #14 has expressed concern that this ditch cannot accommodate additional quantities of runoff, even with detention requirements. The proposed Bayview Ridge Residential zoning district limits maximum building coverage to 35 percent of the lot.

Within the residential portion of the UGA, drainage systems, including detention facilities, would likely be developed on a regional basis and would be maintained by Skagit County. Given that the County is undertaking a *Bayview Sub-basin Storm Drainage Management Plan*, comprehensive drainage plans would be developed and constructed concurrent with new development.

Impacts to water quality within the Subarea, or downstream, would not be significant assuming required water quality facilities are regularly maintained.

Alternative 3: Community UGA with Short-Term/Long-Term Planning Areas

Impacts from Alternative 3 would be similar to Alternative 2, but would likely occur over a longer period of time. A significant increase in flows to Districts #14's South Spur Ditch would be delayed to a later point in time.

Alternative 4: Proposed Bayview Ridge Subarea Plan – Community UGA (Proposed Action)

Generally, potential impacts from Alternative 4 would be similar to the potential impacts from Alternative 3. Assuming, however, that the 300 acres within the "Urban Reserve" designation remains outside the UGA, the additional storm water runoff generated from that area would not be as great.

3.1.1.3 Mitigating Measures

Proposed

• Complete the *Bayview Watershed Stormwater Management Plan* for the Bayview Subbasin. The Plan will identify existing and anticipated stormwater system constraints and constrictions based on existing conditions and future build out of the Bayview UGA and surrounding lands. The Plan will include a capital facilities program, and the groundwork for a financing plan which recognizes the interrelationship and overlap between the County Drainage Utility and Drainage Districts 8, 14, and 19.

- Develop agreements between the County Drainage Utility and Drainage Districts 8, 14, and 19 to coordinate discharge to the downstream drainage facilities.
- Project level mitigation will be provided by the design and construction of storm drainage and water quality facilities consistent with the standards and BMPs presented in the Department of Ecology *Stormwater Management manual for the Puget Sound Basin*.
- Stormwater controls including temporary erosion and sedimentation control would be established during future construction projects to maintain water quality consistent with current regulations.
- Maintain coordination between the recipient drainage districts and Skagit County Public Works
- Inspect existing detention facilities to ensure they are functioning as designed and approved.

Potential

- Include goals and policies related to storm drainage in the Subarea Plan.
- Establish limits on impervious surface coverage in the proposed Bayview Ridge industrial zones.
- Provide public education regarding water quality: Distribute information to businesses
 and residents within the Subarea regarding potential impacts to water quality from
 industrial and residential development.
- In especially sensitive areas, require mitigation for increases in the volume of runoff, as well as for the increase in peak rates.
- Utilize "Low Impact Development" techniques related to storm drainage to minimize storm drainage runoff.

3.1.1.4 Unavoidable Adverse Impacts

Development within the Subarea will increase the total amount of impervious surface, increasing the total volume of runoff and potentially impacting downstream water quality.

3.1.2 Wetlands, Sloughs, and Fish and Wildlife Habitat

3.1.2.1 Affected Environment

Wetlands

Skagit County defines wetlands to be "areas that are inundated or saturated with surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Wetlands generally include natural swamps, marshes, bogs, and similar areas; but

not man-made features like irrigation and drainage ditches, canals, detention facilities, farm ponds, and landscape amenities. Wetlands serve many important ecological and environmental functions and help to protect the health, safety, and welfare of a community. Public benefits and value include:

- Stormwater/floodwater storage.
- Flow moderation and erosion control.
- Recreation and aesthetics.
- Water quality protection and improvement.
- Groundwater recharge and discharge.
- Natural biological support (i.e., fish and/or wildlife habitat and production).
- Environmental education and scientific research.

A total of 1,043 acres of wetlands and associated buffers have been identified in the Bayview Ridge Subarea. Identified wetlands are scattered throughout the Subarea and are shown in Figure 9. Some wetlands in the Subarea have been fragmented or isolated by existing development; others have been hydrologically modified by uncontrolled or poorly controlled stormwater runoff, or support populations of primarily invasive or undesirable plants and animals.

The Port of Skagit County has identified 694 acres of wetlands/buffer/open space within their 1830-acre ownership as part of the Skagit County WIN Wetland Management Plan (Skagit County Wetlands and Industry Negotiation). Of the 694 acres, 250 acres have been delineated as high functioning wetlands and 200 acres are identified as buffers.

The WIN Program was a planning process begun in 1994 to identify and protect high functioning wetlands, and identify and impact, where necessary, lower functioning wetlands. This process has been completed for the Port ownership.

Within the remainder of the Subarea, wetland identification is based on the National Wetland Inventory and interpretations of aerial photography. Approximately 349 acres of wetlands and buffers have been identified in the Subarea outside of the Port ownership. The precise boundaries of these wetlands are not known and would be delineated by project proponents as specific development projects are proposed.

Sloughs

Higgins Slough flows adjacent to the southeastern tip of the Subarea, just north of SR 20 in the vicinity of Ovenell and Avon-Allen Roads. No-Name Slough and Joe Leary Slough lie outside of the study area to the west and north, respectively, but receive drainage water from the study area. As stated in Section 3.1.1.1, these freshwater sloughs do not meet water quality standards for fecal coliform, dissolved oxygen, and/or temperature.

No other streams are known to exist with the Subarea. The Washington State Department of Fish and Wildlife (WDFW) has determined that all ditches that exist on the Port of Skagit

Figure 9 – Bayview Ridge Subarea Plan: Wetlands

County ownership north of Ovenell Road (other than Higgins Slough) are "artificial watercourses." See Appendix C for Washington State Department of Fish and Wildlife letter. There are no Shorelines of Statewide Significance within the study area.

Fish and Wildlife Habitat

Skagit County classifies and regulates Fish and Wildlife Habitat Conservation Areas (HCA) under SCC 14.04 and SCC 14.24.500. Potential HCAs within the Subarea include:

- Areas with which endangered, threatened, and sensitive species have a primary association.
- Habitats and species of local importance that have been designated and adopted by the County at the time of application.
- Naturally occurring ponds under 20 acres with submerged aquatic beds that provide fish and wildlife habitat.
- Areas with which anadramous fish species have a primary association.

Known fish and wildlife habitat conservation areas delineated by the WDFW and adopted by Skagit County within the study area are shown in Figure 10. These habitat areas include wetlands, Higgins Slough, and areas associated with Bald Eagles.

The WDFW Priority Habitats and Species (PHS) database was reviewed for fish, wildlife, and habitat resources within the study area. Bald eagle nests and habitat have been identified in the vicinity of the Skagit Regional Airport and in the area generally north of Peterson Road. No other known state or federal sensitive, threatened or endangered species have been documented by WDFW within the Subarea. Several habitats were identified and described as "wetland." Coho salmon have been identified in sloughs west of study area.

Skagit County has no other designated Habitat Conservation areas within the study area.

Existing Regulations

Skagit County Critical Area and Wetland Regulations

All future land use development permits, land division requests, and other development approvals in the Subarea must conform to the County's Critical Areas Ordinance under Chapter 14.24 of the Skagit County Unified Development Code (UDC). Wetlands are considered a Critical Area by both Washington State (Department of Fish and Wildlife) and Skagit County.

Skagit County utilizes the definitions, methods and standards set forth in the *Washington State Wetland Identification and Delineation Manual*, Department of Ecology publication #96-94. Wetlands are rated/categorized from I to IV, with Category I having the highest value. Buffer requirements range from 25 to 150 feet depending on the wetland rating.

Figure 10 – Bayview Ridge Subarea Plan: WA Dept. Fish & Wildlife Priority Habitat and Species Wetlands are regulated based on the following thresholds:

Wetland Rating	Threshold	Required Buffer
Category I	No exemptions	150 feet
Category II	Exempt if less than 2,500 sq. ft.	100 feet
Category III	Exempt if less than 2,500 sq. ft.	50 feet
Category IV	Exempt if less than 10,000 sq. ft.	25 feet

Projects within 200 feet of wetlands require a delineation and assessment by a qualified wetlands professional. A regulated wetland, or its required buffer, can only be altered if the wetland site assessment shows that the proposed alteration does not degrade the quantitative and qualitative functioning of the wetland, or any degradation can be adequately mitigated to protect the wetland function. Provisions for increasing buffer width, averaging buffer width, and decreasing buffer width are included in UDC14.24. Stormwater discharges to wetlands must be controlled and treated to provide all known and reasonable methods of prevention, control, and treatment. Lowimpact uses such as pedestrian trials, viewing platforms, and stormwater management facilities may be allowed in certain cases within buffers.

The Skagit County WIN Wetland Management Plan, as approved for the Port ownership, is permitted as an alternative wetland planning process.

State and Federal Regulations

Construction in and adjacent to Higgins Slough is also regulated by WDFW through their Hydraulic Project Approval (HPA) process.

The Washington State Department of Ecology (DOE) regulates wetlands primarily through state water certifications issued pursuant to Sections 401 and 404 of the Federal Clean Water Act.

The U.S. Army Corps of Engineers regulates alterations to wetlands under Section 404 of the Federal Clean Water Act and requires that no discharge of dredged or fill material can be permitted if a practicable alternative exists that is less damaging to the aquatic environment, or if the nation's waters would be significantly degraded. Applicants must show that they have:

- Taken steps to avoid wetland impacts where practical.
- Minimized potential impacts to wetlands.
- Provided compensation for any remaining, unavoidable impacts through activities to restore or create wetlands.

3.1.2.2 Environmental Impacts

Wetlands

Although existing county, or state, and federal regulations prohibit alteration of significant wetlands, potential indirect impacts to wetlands from new industrial, commercial, and residential development could result from any of the Subarea Plan alternatives and include:

- Impacts to wetland hydrology.
- Temporary increases in erosion and sedimentation to wetlands receiving surface water runoff from clearing and construction areas.
- Decrease in water storage capacity.
- Wetland degradation from larger volumes of stormwater runoff and higher peak discharge as a result of increased impervious surfaces (see Surface Water and Stormwater, 3.1.1.2).
- Higher pollutant levels in surface water runoff resulting from new industrial, commercial, and residential operations.
- Fragmentation of wetland habitat, as the Subarea is developed.

Wetlands are sensitive to changes in the volumes, peak flow, and water quality of stormwater runoff. New development within the Subarea will increase the amount of disturbed, developed, and impervious surface due to clearing and construction of proposed buildings, parking lots, and roadways. These changes impact stormwater runoff and consequently impact wetlands.

The proposed Subarea Plan alternatives differ in the density of new development, and hence may differ in the amount of wetland degradation and loss. This assessment of impacts can only be broad until specific projects are identified. More detailed assessment of impacts will be made as development projects are proposed and permitted.

Alternative 1: Industrial UGA and Rural Residential Development (No Action)

Alternative 1 has the least amount of new impervious surface and, therefore, the least potential indirect impact to wetlands from stormwater runoff. Impacts to individual wetlands, including water quality, will be evaluated on a project-by-project basis, as development projects are proposed.

Alternative 1 has the greatest area designated for rural residential uses. Although the intensity of development will be low in these areas, the clearing and grading activities often associated with rural residential use are often less regulated than in urban/industrial settings and can significantly impact wetlands.

Alternative 2: CAC Recommendation – Community UGA

Alternative 2 would significantly increase the size of the UGA and hence, the amount of impervious surface within the Subarea. All but 92 acres of the Subarea would, over time, be developed to urban standards. This alternative will also increase the size of the residential population, and consequently, associated potential impacts from human disturbance and pets.

All indirect impacts to wetlands would be reviewed on a project-by-project basis.

Alternative 3: Community UGA with Short-Term/Long-Term Planning Areas

The potential impacts of Alternative 3 on wetlands would be similar to the impacts of Alternative 2, with the exception that impacts to wetlands in the northeastern portion of the Subarea (i.e., within the Long-Term Planning Area) would be delayed.

Alternative 4: Proposed Bayview Ridge Subarea Plan – Community UGA (Proposed Action)

Generally, potential impacts of Alternative 4 on wetlands would be similar to the impacts from Alternative 3. Assuming the 300-acre "Urban Reserve" area remains outside the UGA, impacts to wetlands in that area would be less, however.

Fish and Wildlife Habitat/Bald Eagles (and other PHS identified habitat or species)

Alternatives 1, 2, 3 and 4

Regulations pertaining to development in and adjacent to Fish and Wildlife Habitat Conservation Areas and wetlands are the same for all alternatives. As specific development activities are proposed, precise delineations and professional site assessment will be required for properties shown to have wetlands or fish and wildlife habitat critical areas, or located within 200 feet of these areas.

For purposes of comparison, generally, the larger the residential population, the greater the potential for fragmentation and human disturbance to significant habitats. Those Subarea Plan alternatives that propose development in the northeastern portion of the Subarea would potentially have the greatest impact on the existing Bald Eagle habitat. Rural residential development can, however, also significantly impact habitat a variety of habitat via land clearing, farming, and animal husbandry.

3.1.2.3 Mitigating Measures

Proposed

- The proposed Bayview Watershed Storm Drainage Management Plan will address individual and cumulative impacts to wetland hydrology and water quality.
- Measures to prevent, control, and reduce potential impact on wetlands and other fish and wildlife habitats are included in Skagit County, as well as state and federal regulations.
 These measures are usually defined in terms of a series of steps that should be taken in sequential order. They are:
 - 1. Avoid the impact altogether by not taking a certain action or parts of an action.
 - 2. Minimize the impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts.
 - 3. Rectify the impact by repairing, rehabilitating, or restoring the affected environment to the conditions existing at the time of the initiation of the project or activity.
 - 4. Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action.
 - 5. Compensate for the impact by replacing, enhancing, or providing substitute resources or environments.
 - 6. Monitoring the impacts and taking appropriate corrective measures.

If wetlands are altered, restoration or creation of new wetlands is required to compensate for wetland losses. Skagit County mitigation ratios for on-site wetland restoration are dependent upon the wetland size and type, but range from 4:1 (i.e., 4 acres to be restored or created for every 1 acre of wetland lost) for Category I wetlands, to 1.25:1 for Category IV wetlands as shown in Table 7.

Table 7
Skagit County Wetland Onsite Restoration/Creation Ratios

Wetland Type	Wetland Created: Wetland Lost	
Category I	4:1	
Category II or Category III		
Forested	3:1	
Scrub/Shrub	2:1	
Emergent	2:1	
Category IV	1.25:1	

In-kind (i.e., the same type of wetland) and on-site compensation is generally preferred over off-site, out-of-kind, or alternative compensation.

Similar reviews, buffers, and mitigation would be required for future development projects sited within 200 feet of identified Fish and Wildlife Habitat Conservation Areas. Wetland enhancement restoration activities, including plantings of native plant species and stormwater runoff filtering and flow control, can improve the functional value of these degraded wetlands.

Potential

- Impacts to wetlands and fish and wildlife habitats associated with clearing and grading by single-family residential property owners could be addressed through increased inspection and enforcement.
- Identify and protect any wildlife migration corridors.

3.1.2.4 Unavoidable Adverse Impacts

Increased stormwater runoff, lowered water quality, removal of existing vegetation, and greater human activity will impact the Subarea wetlands and fish and wildlife habitats over time. However, because these areas are regulated under Skagit County's Critical Areas Ordinance, there are unlikely to be any significant unavoidable impacts to identified wetlands and/or priority habitats in the Subarea from any of the plan alternatives. Increased enforcement and inspection activities related to wetlands and habitats will increase the demands on County services.

3.2 Land Use And Zoning

3.2.1 Affected Environment

The Bayview Ridge Subarea, as proposed in the Bayview Ridge Subarea Plan, encompasses 4,011 acres with a mix of industrial, commercial, residential, and wetland/open space land uses, as well as vacant land. The Subarea is bounded on the west by Farm to Market Road, on the north by Josh Wilson Road and the base of the hillside, on the east by Avon-Allen Road, and on the south by Ovenell Road and SR 20. The boundaries of the Subarea were developed after a review of the existing development patterns, existing public sanitary sewer and water system service area boundaries, topography, and floodplain boundaries.

Existing Land Use

Existing land use within the Bayview Ridge Subarea is summarized in Table 8.

Table 8
Bayview Ridge Subarea Existing Land Use

Use	Total Acreage
Skagit Regional Airport	761
Industrial Development	601
Commercial Development	0
Residential Development	494
Wetlands/Open Space	1,023
Vacant, Developable Land	1,132 ¹
Total	4,011

Does not include 244 acres of wetlands and wetland buffers in residential areas. Wetlands and/or wetland buffers are protected by the County's Critical Area Regulations. However, allowed residential density from these areas can be transferred to other portions of the same ownership. For purposes of determining the potential number of housing units for each alternative, no deduction has been made for wetland and/or wetland buffer acreage in residential zones.

Development within the Bayview Ridge Subarea began with the Airport, originally built in 1933. The present runway and taxiway system was constructed in 1943 by the United States Navy. The airport was transferred to the Skagit Board of County Commissioners in 1958, later to the Port Districts of Anacortes and Skagit County, and in 1975, to the sole ownership of the Port of Skagit County. The Skagit Regional Airport is the largest airport in Skagit County and has been designated by the *Skagit County Comprehensive* Plan as an essential public facility. The airport meets numerous aviation needs for Skagit County, including airfreight shipping, and commercial passenger aircraft and operations. The airport is now surrounded by the Port's Bayview Business and Industrial Park.

Land use within the Bayview Ridge Subarea is influenced by the long-term needs of the airport. The Subarea lies within the Airport Environs Overlay (AEO) zoning district. Preserving the utility of the airport while assuring public safety is an important land use compatibility issue.

This issue is addressed in detail in the *Skagit Regional Airport Land Use Compatibility Study* (Reid Middleton, June 2000). The study resulted in the establishment of six Airport Safety Zones. Within each Safety Zone, limitations exist with regard to the type and intensity of permitted land uses, and the amount of open space required. Certain uses, including uses within which the occupants cannot move quickly out of harm's way (i.e., hospitals, nursing homes, and schools) and above-ground storage of flammable materials, are prohibited in all six Safety Zones. All new development within the AEO district is subject to an Avigation Easement required as part of the permitting process.

Within the Subarea, industrial/business development is now concentrated in the central and western portions of the Subarea, adjacent to the airport, while residential development is concentrated in the southeastern portion of the Subarea, between Peterson Road and Ovenell Road. Properties between the industrial and residential areas are largely undeveloped. Existing land use and the AEO overlay zone are shown in Figure 11.

The Port of Skagit County owns 1,817 acres within the western and central portions of the Subarea, including the Skagit Regional Airport. Of this 1,817-acre ownership, 761 acres are associated with the airport and are substantially developed with aviation-related facilities. The remaining 1,056 acres encompass the Port's Bayview Business and Industrial Park. Within the business park, 108 acres are currently developed, and 694 acres are designated as wetland/buffer/open space. The remaining 254 acres are undeveloped and planned for industrial development over the next 20 years.

Other industrial uses in the western portion of the Subarea include the Skagit County Solid Waste Transfer Station (an essential public facility), the approximate 200-acre Paccar Technical Center, the Puget Sound Energy Tank Farm, Lignotech, and Washington Alder. Most of these uses access Farm to Market Road or Ovenell Road/Higgins Airport Way, in the western portion of the Subarea.

Undeveloped parcels of various sizes and numerous wetlands also lie within the industrial portion of the Subarea.

Residential subdivisions and the Skagit Golf and County Club are located in the higher, eastern edge of the Subarea, above Avon-Allen Road. Approximately 402 acres are now devoted to small lot residential and golf course development. This residential development consists primarily of single-family homes. Clusters of condominiums are located adjacent to the Skagit Golf and Country Club, and one area of large-lot development is located north of Peterson Road. The existing residential subdivisions, including the Skagit Golf and Country Club, were developed primarily between 1950 and 1970. The Skagit Golf and County Club development is accessed by Avon-Allen Road, with a secondary access to Ovenell Road.

The current residential population is 1,701; 709 dwellings now lie within the Subarea. Undeveloped portions of the Subarea have a "rural" atmosphere. Figure 12 provides an aerial view of Bayview Ridge.

Figure 11 – Bayview Ridge Subarea Plan: Existing Development

The Subarea is now served by public water and both a sanitary sewer system and individual onsite septic systems (see Section 3.5, Public Services).

A small commercial area is located at the intersection of Avon-Allen Road and SR 20, adjacent to the southeast corner of the Subarea. This area is occupied by National Frozen Foods, United Horticulture Supply, Nutrena Feeds, and Transmart (commercial fueling). Because this commercial area is oriented to SR 20 and Skagit Valley farmlands, the *Draft Bayview Ridge Subarea Plan* does not include it within the Bayview Ridge Subarea.

Comprehensive Planning and Zoning

Zoning within the Bayview Ridge Subarea has changed over time in response to development of County Plans and most recently, in response to requirements of the Growth Management Act (GMA). Most of the existing development within the Subarea occurred prior to the GMA and current zoning.

This Subarea Plan, including designation of the UGA and associated urban zoning, are issues before the Western Growth Management Hearings Board. The history of planning and zoning in the Subarea is detailed below.

History of Suburban Zoning

Skagit County's first zoning ordinance was adopted in 1966, followed by an interim land use plan map. This map was replaced in 1968 by a Comprehensive Plan Land Use, Transportation, and Community Facilities map. For the area encompassing what is now the existing Bayview Ridge UGA, this later map prescribed mostly medium industrial uses surrounded by an open-space buffer. Areas immediately adjacent to the airport facility were given commercial-limited industrial designations. Most of the remaining areas comprising Bayview Ridge were mapped for single- and two-family residential uses at densities averaging 4 units/acre, with smaller areas set aside for parks, schools, and other community uses.

In the 1970s, Skagit County adopted regional district comprehensive plans. Bayview Ridge was included in the *Northwest District Comprehensive Plan*, adopted in January of 1975. At that time, Port properties, and areas to the south above the 100-year flood plain, were designated as suitable for heavy industrial activities. Industrial lands in the Northwest Plan were allocated proportionate to demand, with 83 percent of that demand being projected in areas owned by the Port of Skagit County and/or the Port of Anacortes.¹

The remainder of Bayview Ridge, under the *Northwest District Comprehensive Plan*, was designated for residential use at a density of one dwelling unit per acre. In the 1980s, new rural residential designations were established and several areas on Bayview Ridge that were formerly Residential were rezoned to Residential Reserve, Rural Intermediate, or Rural, with residential

Residential were rezoned to Residential Reserve, Rural Intermediate, or Rural, with residential densities of 1, 2.5, and 5 units per acre, respectively.

¹ Policy 6.3.3, Comprehensive Plan for the Northwest District of Skagit County, September 1974.

Figure 12 – Bayview Ridge Subarea Plan: Aerial Photo

In November 1985, the new zoning classification Aviation-Related was added to the Skagit County Code to provide for uses, which require proximity, and/or access to established air fields.² As an adjunct to the creation of this new zoning district, two Port of Skagit County properties were rezoned from Industrial to Aviation-Related. At the same time, two other Port properties were rezoned from Industrial to Commercial/Limited Industrial to allow for uses that are compatible; largely devoid of nuisance factors, hazards or exceptional demands upon public facilities or services; and, which require no special site conditions.³

Master plans for the Skagit Regional Airport were completed in 1968, 1989, and 1995.

In June 1997, Skagit County adopted a new Comprehensive Plan and Land Use Map under the requirements of the 1990 Growth Management Act (GMA). As part of the Plan, Skagit County established an unincorporated, 3,900-acre Urban Growth Area on Bayview Ridge. In July, 2000, Skagit County adopted amendments to the Comprehensive Plan and created a Unified Development Code.

Western Washington Growth Management Hearings Board Decision

Under an appeal of the *Skagit County Comprehensive Plan* (1997), the Western Washington Growth Management Hearings Board (WWGMHB) found that the Bayview Ridge UGA, outside of the Port's property, substantially interfered with GMA and declared it invalid. The WWGMHB found that, although the Port of Skagit County's master plan had adequately planned for the Port's property, Skagit County had not demonstrated that the remaining portions of the UGA were appropriately sized and that measures were in place to ensure development at urban standards and prevent residential sprawl, among other things. A subsequent request to remove invalidity was refused by the WWGMHB because of ongoing concerns regarding potential non-industrial uses, appropriate uses within the airport runway overlay areas, the necessary phasing of development within the industrial areas, and sufficient capital facilities planning for the UGA.

In December 1998, the WWGMHB lifted invalidity on a portion of the Bayview Ridge UGA based on a settlement agreement between a private property owner and Friends of Skagit County. ⁵ In April 1999, Skagit County and Friends of Skagit County entered into a settlement agreement recognizing that there were significant public benefits to allowing the Commercial/Industrial portions of the Bayview Ridge UGA to be removed from invalidity, provided that Skagit County impose certain development and phasing requirements on an interim basis. ⁶ In September 1999, the WWGMHB rescinded its January 1998 order of invalidity for all portions of the Bayview Ridge UGA and for associated development standards, provided (in part) that the development and phasing requirements established by the County remain in place until a Subarea plan for the Bayview Ridge UGA was completed.

Current Zoning Regulations

Development in the Bayview Ridge UGA continued under interim development standards until July 2000, when Skagit County permanently adopted the industrial portion of the Bayview Ridge

² Skagit County Resolution No. 10648.

³ Skagit County Resolution No. 10649, Staff finding No. 4.

⁴ Abenroth et al., v. Skagit County, WWGMHB Case No. 97-2-0060c (Final Decision and Order, January 23, 1998).

⁵ A petitioner in WWGMHB Case No. 97-2-0060c.

⁶ Skagit County Ordinance No. 17568.

UGA and development standards for the Bayview Ridge Industrial (BR-I), Bayview Ridge Heavy Industrial (BR-HI), Aviation Related (AVR), and Airport Environs Overlay (AEO) zoning districts. On June 5, 2001, Skagit County adopted certain urban development standards and limitations on development pending completion of a Subarea Plan. 8

Existing residential subdivisions within the Subarea, but outside the UGA, are now zoned Rural Intermediate (RI), permitting one dwelling per 2.5 acres.

The undeveloped residential areas within the Subarea are zoned Rural Reserve (RRv), permitting one home per 10 acres or one home per 5 acres with CaRD.

Existing Comprehensive Plan and zoning designations are shown in Figure 13.

3.2.2 Environmental Impacts

The Bayview Ridge Subarea Plan is intended to establish a vision of how the Subarea should grow and develop, while protecting a high quality of life and equitably sharing the public and private costs and benefits of growth. The concept of the Plan is intended to recognize the extraordinary opportunities within the Subarea, support the existing urban land use patterns, take into consideration the public benefits and provisions of the Skagit Regional Airport along with the unique natural features of the Subarea, and establish the framework and standards of urban governmental services and facilities.

The four alternative plan scenarios presented in this EIS differ most significantly in terms of the size of the proposed UGA, whether or not the UGA includes a residential component, and if it does include a residential component, the timing of the urban residential development.

Certain assumptions are common to all alternatives:

- Continued development of the Skagit Regional Airport, the Bayview Business and Industrial Park, and the surrounding industrial area will occur within an UGA. Employment within this area is projected to increase from 1,456 in 1998 to 3.301 in 2015 and to 4,305 in 2025.
- Urban levels of services will be provided within the UGA. A new fire station is being built on Peterson Road to provide an urban level of fire protection service to the existing industrial UGA.

Wetlands and/or wetland buffers are protected by the County's Critical Area Regulations, however allowed residential density from these areas can be transferred to other portions of the same ownership. For purposes of determining the potential number of housing units for each alternative, no deduction has been made for wetland and/or buffer acreage. This likely results in an overstatement of the potential for residential development, as it is unlikely 100% of this density can or will be transferred in every case.

⁷ Skagit County Ordinance No. 17938.

⁸ Skagit County Ordinance No. 18264.

Figure 13 – Bayview Ridge Subarea Plan: Comprehensive Plan and Zoning Designations

- The amount of residential land needed to accommodate the residential population currently allocated to the Bayview Ridge UGA includes a 25% market factor. The market factor is intended to allocate land above that needed for saturation/build-out to assure some choice and variety of building sites at acceptable land prices. A market factor allows for inefficiencies in the marketplace and minimizes the pressure to increase land prices due to a constricted supply of land.
- All residential land development outside the UGA would be required to develop as a Skagit County CaRD Conservation and Reserve Development. The CaRD regulations require clustering of residential development to provide open space for agriculture, forestry, continuity of ecological functions, preservation of rural character, and reservation of lands that may be appropriate for future urban growth areas. With CaRD, the maximum density within the Rural Reserve District is one unit per five acres. The maximum density within the Rural Intermediate District is one unit per 2.5 acres.

The impacts of the four Subarea Plan alternatives are addressed below:

Alternative 1: Industrial UGA and Rural Residential Development (No Action)

Alternative 1 would retain the existing Bayview Ridge UGA boundary as adopted under Interim Ordinance #17893 and as permanently adopted pursuant to Ordinance #17938. A 2,806-acre industrial UGA would encompass the Port of Skagit County ownership and privately-owned industrial properties in and around the Skagit Regional Airport. Within the UGA, land use would be limited to industrial and aviation-related uses. The remaining 1,205 acres within the Subarea would remain primarily in rural residential use and be located outside the UGA.

Acreages for each of Alternative 1's land use designations and the potential residential impacts are shown in Table 9.

Table 9
Alternative 1 - Land Use

Land Use Designation/Zoning	Total Acres	Developed Acres ¹	Developable Acres	Potential Total Homes	Potential Total Population
Aviation – Related (AVR)	761	761	0	0	0
Heavy Industrial (BR-HI)	651	354	297	0	0
Industrial (BR-I)	1,394	1,004	390	0	0
UGA Subtotal	2,806	2,119	687	0	0
Residential – Rural Intermediate (RI)	403	379	24	676	1,623
Residential – Rural Reserve (RRv)	802	130	672	178	427
SUBAREA TOTAL	4,011	2,628	1,383	854	2,050

Developed Acres includes developed parcels, roads, utilities and wetlands/buffers, where appropriate. Wetlands in residential areas (Rural Intermediate and Rural Reserve) are not considered developed as the Skagit County Critical Areas Ordinance grants development credits for wetlands to be used on non-wetland properties.

Existing development standards for each of the urban land use designations/zoning, (i.e. Industrial, Heavy Industrial and Aviation-Related, and the Airport Environs Overlay zone) which is applicable to the entire Subarea, would be modified to insure compatibility with continued utility of the airport while allowing for continued economic development and minimal disturbance to adjacent properties. No more than 235 acres of privately owned, industrial designated land are now proposed to be developed prior to 2015. Employment within the UGA would increase by approximately 1,845 jobs by 2015. With Alternative 1, the UGA would not include any commercial or residential lands.

Development standards for urban public facility and services would be adopted for roads, water, storm drainage, and sanitary sewer services within the UGA. Urban levels of service would be provided throughout the UGA, and within portions of the remainder of the Subarea. As with all alternatives, a new fire station would be constructed on Peterson Road in order to meet urban LOS standards for the industrial UGA. This fire station will also serve the remainder of the Subarea.

Outside the UGA, 1,205 acres within the Bayview Ridge Subarea would retain the current Rural Reserve, Rural Intermediate zoning. The majority of the existing undeveloped properties in the eastern portion of the Subarea are located within the Rural Reserve district, with an allowed density of 1 dwelling per 5 acres with CaRD standards. At build-out, it is anticipated that up to approximately 143 new single-family dwellings could be constructed within the Subarea, outside the UGA. The long-term residential population would thus increase only slightly over the current population of 1,706. Over time, existing vacant land would be converted to rural residential use and/or small pastures. Development under CaRD requirements would result in clustered rural residential development, and the preservation of significant open space. The open space could either be permanent, or reserved for future urban development at a later date. Impacts associated with an increased residential population and associated residential traffic would be the least for all the alternatives. Impacts associated with increased employment population within the industrial UGA would generally be confined to the industrial area, with the exception of increased vehicular and truck traffic on Peterson Road.

With Alternative 1, the 2015 residential population currently allocated to the Bayview Ridge UGA (i.e., 3,420 people) would have to be re-allocated to other UGAs within Skagit County.

Alternative 2: CAC Recommendation – Community UGA

Alternative 2 is adoption of the Bayview Ridge Subarea Plan and associated development standards as recommended by the Bayview Ridge Subarea Plan Citizens Advisory Committee. The Subarea Plan would encompass a 3,799-acre UGA including airport, industrial, commercial, and residential development with the intent of creating a cohesive and self-sufficient urban community that takes advantage of the unique qualities of this Subarea. Urban levels of service would be provided throughout the Subarea. The 84-acre residential area south of Josh Wilson Road, west of Higgins Airport Way, would remain outside the UGA and retain its Rural Reserve designation. The land use distribution is shown in Table 10.

Table 10 Alternative 2 - Land Use

Land Use Designation/Zoning	Total Acres	Developed Acres ¹	Developable Acres	Potential Total Homes	Potential Total Population
Aviation – Related (AVR)	761	761	0	0	0
Community Center (BR-CC)	15	7	8	0	0
Industrial (BR-I)	1,501	1,019	482	0	0
Heavy Industrial (BR-HI)	651	355	296	0	0
Limited Commercial (BR-LC)	8	8	0	0	0
Residential (BR-R)	863	426	437	2,424	5,817
UGA TOTAL	3,799	2,576	1,223	2,424	5,817
Natural Resource Commercial (CI)	8	8	0	0	0
Residential – Rural Reserve (RRv)	84	33	51	17	41
SUBAREA TOTAL	3,891	2,617	1,274	2,441	5,858

Developed Acres includes developed parcels, roads, utilities and wetlands/buffers, where appropriate. Wetlands in residential areas (Rural Intermediate and Rural Reserve) are not considered developed as the Skagit County Critical Areas Ordinance grants development credits for wetlands to be used on non-wetland properties.

The industrial component of this alternative is similar to Alternative 1, with the exception of an additional 107 acres of industrial property in the central portion of the Subarea, within Airport Safety Zones 2 and 3L. In total, Alternative 2 includes 2,913 acres of industrial designated land, 1,817 acres of which are owned by the Port of Skagit County, and 1,096 acres of which are privately owned. Similar to all alternatives however, the presence of extensive wetlands would result in only 778 additional acres of industrial and commercial designated properties being developed. Employment growth within the industrial area would be similar to Alternative 1.

As part of the Community UGA, Alternative 2 adds the eastern, residential portion of the Subarea to the UGA. This urban residential component encompasses 863 acres, lying both north and south of Peterson Road, between the existing industrial area and Avon-Allen Road. The allowed residential density would be four units per acre. A mix of housing types would be permitted, as would Planned Residential Developments. The intent of the residential regulations is to provide opportunities for innovative and flexible design, within the over-all density of four units per acre, consistent with the Airport Safety Zone requirements. A 25-acre community park would be located within the residential area. With Alternative 2, the urban residential area could accommodate a population of 4,641 by year 2015; this exceeds the present Bayview Ridge UGA 2015 allocation of 3,420.

Alternative 2 includes a 15-acre community center located adjacent to and south of Peterson Road, immediately east of the industrial area. This community center will serve as a community

focal point and will encompass the new fire station, limited neighborhood commercial services, and community meeting space. Eight acres of commercial designated land at the northwest quadrant of the intersection of SR 20/Avon-Allen Road also lie within the UGA.

Similar to all alternatives, existing development standards for the urban industrial land use designations/zoning, including the Airport Environs Overlay zone (applicable to a majority of the study area) would be modified. Similar to alternatives 3 and 4, new land use regulations would be adopted for the new commercial and residential lands within the UGA. The new community center zoning would require approval of a Site Plan prior to approval of any individual commercial projects. The development standards for public facility and services (roads, water, storm drainage, and sanitary sewer) would be similar to Alternatives 3 and 4.

With development of a community UGA, existing residents within the Subarea will experience an increase in the density and intensity of development. Existing vacant land will be converted to industrial development and residential development at a density of four units per acre with associated open space. The western edge of the new residential areas may experience an increase in industrial noise levels as the eastern edge of the industrial area is developed.

With Alternative 2, local residential and employment populations will increase significantly by 2015, as will associated traffic volumes, the population of school children, the demand on public services, etc. Impacts to traffic are addressed in Section 3.4 and impacts to Public Services and Utilities are addressed in Sections 3.5 and 3.6.

Alternative 3: Community UGA with Short-Term/Long-Term Planning Areas Impacts associated with Alternative 3 would be similar to Alternative 2, with the exception of the timing of the urban residential development. Under Alternative 3, the urban residential component would be divided into short-term and long-term development areas, both within the UGA.

The short-term planning area encompasses a 654-acre area including the existing residential subdivisions and additional vacant land. This area extends north from Ovenell Road to a point approximately 2,000 feet north of Peterson Road. Properties within the short-term planning area would be zoned to allow urban residential development within the current 20 year planning period. The northeastern portion of the Subarea (351 acres) would be designated a long-term planning area. Properties within this area would not be allowed to develop at urban densities (i.e. four dwelling units per acre) while they are located within the Long-Term Planning Area. A formal conversion process would be required to move properties from the long-term to short-term planning area. It is anticipated that properties within the Long-Term Planning Area would be converted to the Short-Term Planning Area sometime beyond the current 20-year planning period. Properties within the long-term planning area would be subject to land use regulations that prohibit any further division of land prior to the formal conversion.

Alternative 3 land uses are shown in Table 11.

Table 11
Alternative 3 Land Use

Land Use Designation/Zoning	Total Acres	Developed Acres ¹	Developable Acres	Potential Total Homes	Potential Total Population
Aviation – Related (AVR)	761	761	0	0	0
Community Center (BR-CC)	15	7	8	0	0
Heavy Industrial (BR-HI)	411	261	150	0	0
Light Industrial (BR-LI)	1,741	1,112	629	0	0
Residential – Long-Term Planning Area (BR-R)	351	33	318	973	2,335
Residential – Short-Term Planning Area (BR-R)	654	402	252	1,361	3,266
UGA TOTAL	3,933	2,576	1,357	2,334	5,601
Residential – Rural Reserve (RRv)	78	30	48	16	39
SUBAREA TOTAL	4,011	2,606	1,405	2,350	5,640

Developed Acres includes developed parcels, roads, utilities and wetlands/buffers, where appropriate. Wetlands in residential areas (Rural Intermediate and Rural Reserve) are not considered developed as the Skagit County Critical Areas Ordinance grants development credits for wetlands to be used on non-wetland properties.

With Alternative 3, the urban residential area could accommodate a population of 5,601 at build-out; this exceeds the present Bayview Ridge UGA 2015 allocation of 3,420.

Alternative 4: Proposed Bayview Ridge Subarea Plan – Community UGA (Proposed Action)

Alternative 4 is very similar to Alternative 3, except that the residential area designated as "Long-Term Planning Area" would be designated "Urban Reserve" and would be located outside the UGA. The land uses under Alternative 4 are shown in Table 12.

With Alternative 4, the urban residential area could accommodate a population of 3,631 at build-out; this exceeds the present Bayview Ridge UGA 2015 allocation of 3,420.

Table 12 Alternative 4 - Land Use

Land Use Designation/Zoning	Total Acres	Developed Acres ¹	Developable Acres	Potential Total Homes	Potential Total Population
Aviation – Related (AVR)	761	761	0	0	0
Community Center (BR-CC)	15	7	8	0	0
Heavy Industrial (BR-HI)	411	261	150	0	0
Light Industrial (BR-LI)	1,741	1,112	629	0	0
Residential (BR-R)	705	402	303	1,513	3,631
UGA TOTAL	3,633	2,543	1,090	1,513	3,631
Residential – Rural Reserve (RRv)	78	30	48	16	39
Residential – Urban Reserve (URv)	300	62	238	68	163
SUBAREA TOTAL	4,011	2,620	1,376	1,597	3,833

Developed Acres includes developed parcels, roads, utilities and wetlands/buffers, where appropriate. Wetlands in residential areas (Rural Intermediate and Rural Reserve) are not considered developed as the Skagit County Critical Areas Ordinance grants development credits for wetlands to be used on non-wetland properties.

3.2.3 Mitigating Measures

Proposed

- All proposed land uses and associated development standards are consistent with continued utility of the Skagit Regional Airport, a designated essential public facility.
- Skagit County will continue to require an Avigation Easement for all new development
 within the AEO District; the language of this easement is being reviewed as part of the
 Subarea planning process.
- Urban levels of service will be provided throughout the UGA.
- Industrial development adjacent to residential areas will be required to provide a sightobscuring buffer.
- Minimize potential future conflicts between the Skagit Regional Airport (an essential public facility) and non-airport uses by:
 - Amending the Avigation Easement language to clearly require avigation easement dedications, and strengthening easement language.
 - Incorporating airport safety zone and noise contour maps, and federally mandated building height limitations into the UDC.
 - Strengthening the Airport Environs disclosure "Notice to Purchasers".

 Recognizing the Port of Skagit County's prescriptive easements in the Comprehensive Plan and UDC.

Potential

 Performance standards addressing noise, visual impacts, and other areas of potential impact to residential neighbors could be developed for new development within the industrial zoning districts.

3.2.4 Unavoidable Adverse Impacts

All alternatives include at least some continued development within the Bayview Ridge Subarea. Continued development will result in increased density and intensity of uses, the incremental loss of open space, increased vehicular traffic, and increased demands for public services and utilities.

3.3 Consistency With Plans And Policies

The following section addresses consistency of the Bayview Ridge Subarea Plan and the:

- Skagit County Comprehensive Plan (2000)
- Skagit County Countywide Planning Policies (2000)
- Skagit County Overall Economic Development Plan (OEDP) (2000)
- Skagit Regional Airport Land Use Compatibility Study (2000)

Consistency with functional plans such as the *Skagit County Comprehensive Park and Recreation Plan, Skagit County Coordinated Water System Plan,* the *City of Burlington Comprehensive Wastewater Plan,* etc. are addressed in their respective elements of this DEIS.

3.3.1 Affected Environment

Skagit County Comprehensive Plan (2000)

Subarea planning may be considered under the provisions of the Growth Management Act (GMA), provided the Subarea Plan is consistent with the overall Comprehensive Plan.

Chapter 14 of the *Skagit County Comprehensive Plan* (2000) specifically addresses preparation of "Community Development" or "Subarea" Plans. Chapter 14 states that Subarea Plans coordinate and provide consistency with the Comprehensive Plan at a scale and level of detail that cannot be attained under the broad guidelines of the Comprehensive Plan because of the diversity in the character of various parts of the County. The Comprehensive Plan serves as an "umbrella" document and provides a foundation from which Subarea plans are developed. Subarea Plans, or Community Development Plans, then implement and enhance the Comprehensive Plan. The Bayview Ridge Subarea plan is the first plan to be prepared under

Chapter 14 of the *Skagit County Comprehensive Plan*, the Community Development Plans Element.

Skagit County Countywide Planning Policies (2000)

The Countywide Planning Policies are the foundation of the *Skagit County Comprehensive Plan*. The Countywide Planning Policies address: Urban Growth (including the allocations of population and commercial/industrial land); Reduction of Sprawl; Transportation; Housing; Economic Development; Property Rights; Permits; Natural Resource Industries; Open Space and Recreation; Environment; Citizen Participation; Public Facilities and Services; and Historic Preservation.

Skagit County Countywide Planning Policies support Subarea planning as an approach to addressing homogeneous natural features and communities in the County.

Pertinent Countywide Planning Policies identified in the Bayview Ridge Subarea Plan are identified below:

Urban Growth. Countywide Planning Policy 1.1 (GMA Goal 1) encourages development in urban areas where adequate public facilities exist or can be provided in an efficient manner. Pertinent specific policies include:

1.1 Urban growth shall be allowed only within cities and towns, their designated UGAs, and within any non-municipal urban growth areas already characterized by urban growth, identified in the County Comprehensive Plan with a Capital Facilities Plan meeting urban standards. Population and commercial/industrial land allocations for each UGA shall be consistent with those allocations shown in the following table:

Table 13 UGA Population and Commercial/Industrial Land Allocations

Urban Growth Areas	Residential Population (2015)	Commercial/Industrial Land Allocations (New)	
Bayview Ridge	3,420	750	

- 1.2 Cities and towns and their urban growth areas, and non-municipal urban growth areas designated pursuant to CPP 1.1 shall include areas and densities sufficient to accommodate, as a target, 80 percent of the county's 20-year population projection.
- 1.3 Urban growth areas shall provide for urban densities of mixed uses and shall direct development of neighborhoods, which provide adequate and accessible urban governmental services concurrent with development. The GMA defines urban governmental services as those governmental services historically and typically delivered by cities, and includes 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 nonurban areas.
- 1.4 Urban growth areas shall include greenbelt, open space, and encourage the preservation of wildlife habitat areas.
- 1.79 Development within established urban growth boundaries shall, as a minimum, conform to those urban development standards in effect within the respective municipality as of April 1, 1999. Bayview Ridge UGA urban standards for roads, sewer, and stormwater shall meet or exceed those in effect in the City of Burlington on April 1, 1999. UGAs with populations of over 1,500 or a Commercial/Industrial land allocation (new) over 100 acres shall have, as a minimum, the following levels of urban law enforcement and fire service levels:

Law Enforcement

One commissioned law enforcement officer per 1,000 population served or per 100 acres of developed commercial or industrial property, whichever is the higher number.

Fire

Urban fire level of service standard for Urban Growth Areas are as follows:

- 1. For Cities and their adjacent Urban Growth Areas, an ISO grading of five or better shall be maintained; otherwise
- 2. Within five minutes of being dispatched, the Fire Department shall arrive and be able to deliver up to 200 gallons per minute fire flow in an offensive (interior) attack, with a minimum of four firefighters, for responses to: structural fires, vehicle fires, other outside fires, motor vehicle accidents, activated fire alarm systems, or other hazardous conditions. The Fire Department shall also be capable of delivering a minimum of Basic Life Support including defibrillation, with a minimum of one First Responder or Emergency Medical Technician for medical responses.

Within 10 minutes of being dispatched, the Fire Department shall be able to support the interior structural fire attack with teams which may include: a ventilation team, a search & rescue team, a team for a backup line, and standby firefighters, totaling between 8 and 12 firefighters on-scene. The Fire Department shall also be capable of providing Heavy Rescue capability, including heavy hydraulics, at Motor Vehicle Accidents.

⁹ Amendments to the Countywide Planning Policies (2000) were found to be non-compliant with the Growth Management Act due to alleged violations of the Framework Agreement by the Western Washington Growth Management Hearings Board in Case No. 00-2-0049c. This order is under appeal to Superior Court.

Within 20 minutes of being dispatched, the Fire Department shall be capable of delivering 1,500 gallons per minute fire flow in a sustained defensive attack mode for structural fire responses. For buildings larger than 10,000 square feet, the Fire Department shall be capable of delivering 2,000 gallons per minute, and shall have an elevated master stream capability. These requirements shall be met for 90 percent of all incidents.

Mutual aid requested under the Mutual Aid Contract may be used to provide relief to the initial operating crews, but shall not be used to provide initial attack capability, support functions, or sustained attack capability. This does not preclude automatic aid agreements under separate contract, which does provide these capabilities or functions from other agencies.

Times are considered to be "Response Time," which shall be measured by the sum of turnout time (the time from dispatch until the first arriving unit is enroute to the incident), plus travel time. Dispatch time shall be allocated a maximum of one additional minute, which is measured from the time the 9-1-1 call is received until the fire department is dispatched.

All operations shall be conducted in compliance with state and federal regulations, including training requirements for firefighters and maintenance requirements for equipment and apparatus.

All commercial and industrial facilities shall be inspected for compliance with the Uniform Fire Code at least annually. Water systems shall be installed in accordance with the Skagit County Coordinated Water System Supply Plan, with a fire flow meeting the requirements of the Uniform Fire Code.

Reduction of Sprawl. Countywide Planning Policy 2 (GMA Goal 2) addresses the following:

Reducing the inappropriate conversion of undeveloped land into sprawling, low-density development.

Pertinent policies include:

- 2.1 Contiguous and orderly development and provision of urban services to such development within urban growth boundaries shall be required.
- 2.5 Commercial areas should be aggregated in cluster form, be pedestrian oriented, provide adequate parking and be designed to accommodate public transit. Strip commercial development shall be prohibited.
- 2.6 Urban commercial and urban industrial development, except development directly dependent on local agriculture, forestry, mining, aquatic and resource operations, and major industrial development which meets the

criteria contained in RCW 36.70A.365, should be restricted to urban or urban growth areas where adequate transportation networks and appropriate utility services are available.

Economic Development. Countywide Planning Policy 5 (GMA Goal 5) encourages economic development that is consistent with the adopted Comprehensive Plan, promotes economic opportunity, and encourages growth in areas experiencing insufficient economic growth, within the capabilities of natural resources, public services, and public facilities.

Pertinent policies include:

- 5.1 The development of environmentally sensitive industries shall be encouraged.
- 5.2 Home occupations that do not significantly change or impact neighborhood character shall be permitted.
- 5.5 A diversified economic base shall be encouraged to minimize the vulnerability of the local economy to economic fluctuations.
- 5.6 Commercial, industrial, and residential acreage shall be designated to meet future needs without adversely affecting natural resource lands, critical areas, and rural character and life styles.
- 5.13 Skagit County shall increase the availability of renewable resources and encourage the maximum attainable recycling of non-renewable resources.
- 5.15 The Comprehensive Plan shall support and encourage economic development and employment to provide opportunities for prosperity.

Housing. Countywide Planning Policy 4 (GMA Goal 4) encourages the availability of affordable housing to all economic segments of the population, promotes a variety of residential densities and housing types, and encourages preservation of the existing housing stock.

- 4.1 Local governments shall allow for an adequate supply of land use options to provide housing for a wide range of incomes, housing types, and densities.
- 4.3 The Comprehensive Plan should support innovative land use management techniques, including, but not limited to, density bonuses, cluster housing, planned unit developments, and the transfer of development rights.
- 4.4 The existing affordable housing stock should be maintained, and efforts to rehabilitate older and substandard housing, which are otherwise consistent with comprehensive plan policies, should be encouraged.

- 4.5 The construction of housing that promotes innovative, energy-efficient, and less expensive building technologies shall be encouraged.
- 4.6 Comprehensive Plan provisions for the location of residential development shall be made in a manner consistent with protecting natural resource lands, aquatic resources, and critical areas.
- 4.7 Manufactured home parks shall be allowed only within urban or urban growth boundary areas.

Skagit County Overall Economic Development Plan (OEDP)

The *OEDP* recommends goals, objectives, and policies for economic development in Skagit County. Goal statements are summarized as follows:

Employment: Create and maintain diverse employment opportunities that meet the changing income needs of Skagit County residents.

Business Development: Sustain and enhance (value-added) the economic utilization of Skagit County's natural resources and attract a more diversified base of non-resource industries consistent with local quality of life and environmental values, including high-tech industries.

Commercial Activity: Provide a range of commercial retail and service businesses to meet local resident needs and serve visitors to Skagit County at appropriate locations.

Visitor Services: Establish Skagit County as a visitor destination by preserving and enhancing the unique qualities of both rural areas and urban communities.

Human Services: Provide a full range of human and social services necessary to encourage a strong local economy.

Conservation & Economic Development: Encourage economic development that conserves natural resources and open spaces, protects environmental quality, and enhances Skagit County's overall quality of life.

Transportation & Economic Development: Provide, maintain, and encourage a transportation system that is adequate to attract and accommodate economic growth.

Business & Investment Climate: Foster a public-private cooperative partnership involving Skagit County, local cities, tribal governments, and state and federal agencies that is supportive of diverse business operations and investments throughout Skagit County.

The Skagit County Overall Economic Development Plan (OEDP) (2000) and Skagit County Comprehensive Plan (2000) recognize the importance of the Bayview business/industrial area. The OEDP states: "The dominant player in the industrial property market in recent years has been the Port of Skagit County's Bayview Business and Industrial Park."

While the Port of Skagit County business and industrial park continues to provide for expanded employment opportunities in the area, there has been increased development activity, capital investments and marketing by landowners with private holdings in close proximity to the Port's Bayview properties. The Bayview Ridge area capitalizes on convenient access to SR 20 and easy access to I-5, midway between Seattle/Bellevue and Vancouver, B.C.; a mixture of construction-ready industrial sites, both small and large; immediate access to Skagit Regional Airport and rail service; and, the supporting infrastructure (public water, sanitary sewer, storm drainage, natural gas, electricity, and telecommunication services).

The OEDP used an employment-driven forecast methodology for estimating the total demand for County-wide industrial and commercial properties through 2015. For urban areas (UGAs), approximate 2,750 acres of industrial and commercial acreage will be needed for future development. To meet this forecasted demand, 750 acres (or 27% of the total) is to be allocated to the Bayview Ridge UGA for industrial and commercial development.

This is a top priority area for economic development located outside of a municipality or a natural resource area.

Airport Land Use Compatibility Study

The *Skagit Regional Airport Land Use Compatibility Study* (Reid Middleton) was prepared in April 2000. The intent of the study was to offer guidance regarding compatible land use development and the preservation of the utility of the Skagit Regional Airport. The three issues of concern and the objectives were:

- Height Hazards To avoid development of land use conditions, which, by posing hazards to navigation, can increase the risk of an accident.
- Noise To minimize the number of people exposed to frequent and/or high levels of airport noise.
- Safety To minimize the risks associated with potential aircraft accidents to both people and property on the ground and enhance the survival of aircraft occupants.

The *Skagit Regional Airport Master Plan Update* (1995) addresses the height and noise compatibility issues and makes recommendations for height and noise compatibility that are consistent with the guidelines provided by the Federal Aviation Administration (FAA). Skagit County has adopted development ordinances related to height and noise.

The third issue of safety is more problematic. The question raised is what constitutes an acceptable level of risk. For the areas where the aircraft accident potential is greatest, certain types of land uses are considered unwise. The approach zones off the ends of the runway are the

areas where an accident is most likely to occur and residential subdivision densities should be avoided. The runway safety zone has been enlarged to accommodate future precision approaches.

Three strategies are employed in minimizing the risks associated with potential aircraft accidents, including:

- Density limitations on the maximum number of dwellings or size of dwellings or structures in areas close to the airport.
- Open space requirements to enhance safety for the occupants of an aircraft forced to make an emergency landing away from a runway.
- Avoiding certain critical types of land uses, particularly schools, hospitals, and other uses
 as identified in the development standards in which the mobility of occupants is
 effectively limited.

The *Skagit County Airport Land Use Compatibility Study* identifies and graphically illustrates five airport safety zones where uses are strictly limited and a sixth zone known as the traffic pattern zone where residential development at approximately four to six units per acre is permitted. All of the Bayview Ridge Subarea, except the northeastern and southwestern edges, is within one of these zones. The safety zones are shown in Figure 14.

Currently, the vast majority of compatibility impacts are contained within Port of Skagit County property. In response to the five safety zones, some additional land is proposed for acquisition by the Port, and some land that is now zoned for residential development is proposed to be rezoned to industrial. All new development projects will be reviewed for potential open space.

The majority of the land outside the Port ownership lies within the sixth zone (i.e., the traffic pattern zone). Within this zone, it is recommended that residential uses be allowed at an average of 4 dwelling units per acre, and when residential land divisions creating five (5) or more lots are proposed, a planned residential development process will be used to insure the provision of 15 percent open space for emergency aircraft landings. Non-residential uses are limited to 100 – 150 people per acre. This is accommodated by the limitations of the requirement for parking, the occupant load factors of the Uniform Building Code, and the limits on assembly occupancies in the industrial zoning districts. For example, it takes one acre of land to park 120 cars. If those parking on the site work in a nearby building, the occupancy is limited to 120 employees, assuming they come by car. This results in about 60 employees per acre, maximum.

3.3.2 Environmental Impacts

Alternative 1: Industrial UGA and Rural Residential Development (No Action)

Alternative 1 is inconsistent with Countywide Planning Policies related to Urban Growth, as it makes no provision for a residential component within the Bayview Ridge UGA. The 2015 population allocated to the Bayview Ridge UGA (i.e., 3,420) would have to be re-allocated to other municipal UGAs within the County. Given that the expected pattern of growth is along the Interstate 5 corridor, the population would likely go to either the City of Burlington or the City of Mount Vernon.

Figure 14 – Bayview Ridge Subarea Plan: Airport Environs Overlay and Safety Zones

Alternative 1 is consistent with Countywide Planning Policies related to Economic Development, and Reduction of Sprawl. This alternative does not provide significant opportunities for new housing.

Alternative 1 is consistent with the *Skagit County Airport Land Use Compatibility Study* assuming the revisions to the AEO overlay zone and Industrial and Heavy Industrial zones are implemented.

Alternative 2: CAC Recommendation – Community UGA

Alternative 2 is, in part, consistent with Countywide Planning Policies related to Urban Growth, as it provides for a residential component within the Bayview Ridge UGA. However, the potential UGA population at build-out (i.e., 4,641), exceeds the 2015 Bayview Ridge UGA population of 3,420.

Alternative 2 provides for open space in response to requirements of the *Skagit County Airport Land Use Compatibility Study*, but does not include an overall Open Space Plan.

Alternative 2 is consistent with Countywide Planning Policies related to Economic Development, Reduction of Sprawl, and Housing.

Alternative 2 is consistent with the *Skagit County Airport Land Use Compatibility Study* assuming the revisions to the AEO overlay zone are implemented and the proposed zoning regulations are adopted.

Service providers within the proposed Community UGA have stated that urban levels of service can be provided throughout the UGA within a defined period of time. Funding for all of the required improvements has not yet been identified, however (see Section 3.5, Public Services).

Alternative 3: Community UGA with Short-Term/Long-Term Planning Areas

Alternative 3 is, in part, consistent with Countywide Planning Policies related to Urban Growth, as it provides for a residential component within the Bayview Ridge UGA. However, the potential UGA population at build-out (i.e., 5,601), exceeds the 2015 Bayview Ridge UGA population allocation of 3,420. Within the short –term planning area (i.e., the area that could be developed in the immediate future), the potential population is estimated to be 3,266. Limited rural residential development could occur in the Long-Term Planning Area prior to conversion.

Alternative 3 provides for open space in response to requirements of the *Skagit County Airport Land Use Compatibility Study*, but does not include an overall Open Space Plan.

Alternative 3 is consistent with Countywide Planning Policies related to Economic Development, Reduction of Sprawl, and Housing.

Alternative 3 is consistent with the *Skagit County Airport Land Use Compatibility Study* assuming the revisions to the AEO overlay zone are implemented and the proposed new zoning regulations are adopted.

Alternative 4: Proposed Bayview Ridge Subarea Plan – Community UGA (Proposed Action)

Of the alternatives considered, Alternative 4 is the most consistent with Countywide Planning Policies related to Urban Growth. Alternative 4 provides for a residential component within the Bayview Ridge UGA that is the most consistent with the 2015 population allocation. At buildout, it is estimated that Alternative 4 could accommodate a population of 3,631 within the UGA (vs. the year 2015 allocation of 3,420).

Alternative 4 provides for open space in response to requirements of the Skagit County Airport Land Use Compatibility Study, but does not include an overall Open Space Plan.

Alternative 4 is consistent with Countywide Planning Policies related to Economic Development, Reduction of Sprawl, and Housing.

Alternative 4 is consistent with the Skagit County Airport Land Use Compatibility Study assuming the revisions to the AEO overlay zone are implemented and the proposed zoning regulations are adopted.

Service providers have stated that urban levels of service can be provided throughout the UGA within a defined period of time. Funding for all of the required improvements has not yet been identified, however (see Section 3.5, Public Services).

3.3.3 Mitigating Measures

Proposed

- The new development standards associated with the zoning districts within the UGA will ensure consistency with the Skagit County Comprehensive Plan (2000) and Countywide Planning Policies (2000)¹⁰. Skagit County has completed a review of its existing *Capitol* Facilities Plan and is in the process of adopting a revised Plan with new LOS standards for certain facilities.
- The Subarea Plan includes a Capital Facilities Plan identifying projects necessary to ensure an urban level of service within the UGA.

Potential

Skagit County should work with the City of Burlington and all special districts serving the Subarea to develop a Capital Facility Plan for the Bayview Ridge Subarea.

3.3.4 Unavoidable Adverse Impacts

No unavoidable adverse impacts to adopted Plans and Policies are anticipated.

¹⁰ Amendments to the Countywide Planning Policies (2000) were found to be non-compliant with the Growth Management Act due to alleged violations of the Framework Agreement by the Western Washington Growth Management Hearings Board in Case No. 00-2-0049c. This order is under appeal to Superior Court.

3.4 Transportation

A number of regional, county, and local documents have been prepared that are relevant to the Bayview Ridge transportation system. The Subarea Plan incorporates relevant information contained in the following plans:

- *Skagit County Comprehensive Plan* (2000).
- Skagit County Capital Facilities Plan for 2001-2006.
- Skagit County Transportation Improvement Program 2001-2006.
- Skagit County Transportation Systems Plan (March 1997)
- *Six-Year Transportation Improvement Plan* (TIP) (2001-2007). The Transportation Systems Plan is updated annually by the adoption of a new Six-Year TIP.
- Skagit/Island Regional Transportation Plan (1996).
- Skagit Regional Airport Master Plan Update (1995).
- Countywide Air, Rail, Water, and Port Transportation System Study (1996).
- *Skagit Non-Motorized Transportation Plan* (draft August 2000).
- Skagit County Comprehensive Transit Plan
- WSDOT SR 20 Fredonia to I-5 Interchange Traffic Report, Accident Analysis (2003)

3.4.1 Affected Environment

Transportation facilities serving the Bayview Ridge Subarea include a State highway, County roads, Skagit Regional Airport (an essential public facility), Skagit Transit (SKAT) and the Burlington Northern Santa Fe Railroad.

The Bayview Ridge Subarea is located about two miles west of Interstate 5 (I-5), immediately north of State Route 20 (SR 20). I-5 is the major north and south corridor through Skagit County, connecting Mount Vernon and Burlington to Vancouver, B.C. Canada and Seattle.

SR 20 is a partially controlled, limited access east-west facility that connects the eastern and western portions of Skagit County. SR 20 is a designated "transportation facility of statewide significance." From Bayview Ridge, SR 20 provides access to Anacortes, Oak Harbor, and the San Juan Islands to the west and to I-5 and Okanogan via the North Cascades Highway on the east. The intersections with Farm to Market Road and Avon-Allen Road are signalized. The intersection with Higgins Airport Way is stop-sign controlled. A major widening project ("SR-20, Fredonia to Interstate 5) for this facility has recently been funded and is scheduled to be advertised for bid in 2006.

Figure 15 - Bayview Ridge Subarea Plan: Road System

Skagit County Roads

The Skagit County road system within Bayview Ridge is comprised of approximately 20 miles of an irregular pattern of arterials, collectors and local streets. Figure 15 shows the Bayview Ridge Roadway System.

The Josh Wilson Road, along the northern boundary of the Subarea, connects the community of Bayview (to the west) to SR 11 and the City of Burlington. Peterson Road, an east-west major collector in the central portion of the Subarea, connects the Bayview Ridge area to the City of Burlington's northwest precinct, a residential neighborhood. The Farm to Market and Avon-Allen Roads on the west and east, respectively, connect the Subarea to SR 20 and communities to the north and south. Ovenell Road provides an east-west connection between Farm to Market Road and Avon-Allen Road. Higgins Airport Way, in the central portion of the Subarea, provides direct access to the airport and the Port of Skagit County's Bayview Business and Industrial Park from both SR 20 and Josh Wilson Road. Local access streets within the Subarea serve the developed industrial and residential areas.

In March 1995, the State Transportation Commission designated various streets and highways within Washington as the State's Freight and Goods Transportation System (FGTS). The FGTS designations are based on estimates of annual gross tonnage hauled. Ovenell Road, west of Higgins Airport Way received a FGTS classification of 300,000 to 5 million tons per year. SR 20 received a FGTS classification of more than 10 million tons per year.

Functional Classifications

The Bayview Ridge roadway system is divided into classes according to the function of each roadway segment as defined by the Federal Functional Classification System. A classification defines the major role of a road within the complete existing and future roadway network. The Federal Functional Classification System includes the following urban road classifications: Principal Arterial, Minor Arterial, Collector, and Local Access. Roads within the Bayview Ridge Subarea will be classified by the Skagit County Public Works Department consistent with federal standards for roadway systems.

Non-Motorized Transportation

Skagit County drafted a *Non-Motorized Transportation Plan* (NMTP) in August 2000, which is currently undergoing further revisions. The NMTP focuses on non-motorized travel alternatives for Skagit County. These alternatives generally include bicycle, pedestrian and equestrian facilities. Existing non-motorized facilities within the Bayview Ridge Subarea consist of limited sidewalks and the Port of Skagit County's trail system through the Port area.

Non-County Public Transportation Systems

Other service providers within the Bayview Ridge Subarea include WSDOT, the Port of Skagit County, and the Skagit County Transit Authority. A brief description of these providers and their facilities follows.

State Highways

The Bayview Ridge Subarea is bordered on the south by State Route 20 (SR 20). SR 20 is the major east-west travel route for the County. It provides direct access from Interstate 5 to Anacortes.

Public Transportation Providers

In November 1992, a Skagit County Public Transportation Benefit Area (PTBA) was established serving the cities of Mount Vernon and Burlington, and transit operations began November 1993. In subsequent elections, the remaining majority of Skagit County was annexed into the PTBA. Skagit Transit (SKAT) services include 12 fixed routes and demand responsive service seven days per week. Until recent funding cuts, Route 513 served the Bayview Ridge Subarea. Currently, Route 140 (WA State Ferry Anacortes to Burlington/Cascade Mall) serves the eastern and southern perimeters of the Subarea (i.e., along SR 20 and Peterson Road via Avon-Allen Road). The transit system is collecting fares to offset costs to assist in restoring service.

A new multi-modal station is planned for Mount Vernon. When that station is operational, Route 513 will be restored, providing service along Peterson Road and Higgins Airport Way, and connecting to SR 20.

Airport Facilities

Skagit Regional, also called Bayview Airport, is the largest and most significant of the three public airports in Skagit County. Built in 1933, the original facility was developed as a single-runway facility serving light aircraft. In 1943, the United States Navy constructed the present runway and taxiway as an alternate airfield for the Whidbey Island Naval Air Station. After World War II, the federal government continued to operate the airport until 1958 when the airport was transferred to Skagit County under the Surplus Property Act of 1944. In 1965, ownership of the airport was transferred to joint ownership between the Port Districts of Anacortes and Skagit County. In 1975, ownership was transferred solely to the Port of Skagit County.

The airport includes two runways:

- 10-28 5,475 feet long with one instrument approach, long-term plan for precision approach at both ends;
- 4-22 (crosswind) 3,000 feet long with visual approaches, planned to host general aviation development.

Airside facilities also include parallel taxiways, aircraft apron, tiedowns, hangars, and a fuel distribution and storage system. Landside supporting facilities include the 7,000-square foot terminal and Port office building, maintenance and fire equipment buildings, an air cargo facility, and several fixed base operator (FBO) buildings. Over 70 persons are employed at the airport in both aviation and non-aviation businesses.

The *Skagit Regional Airport Master Plan Update* (1995) includes a determination of the anticipated growth to be experienced at Skagit Regional Airport and an evaluation of the ability of the existing facilities to accommodate this demand. The master plan uses a 20-year planning

period that extends through 2013 and provides a recommended development plan showing the future needs of the airport.

The forecasts of future aviation activity show that the types of activity at the airport are not expected to change dramatically in the 20-year planning period. The airport will continue to function as the key aviation facility serving Skagit County. Aircraft operations are forecast to increase, however, with general aviation aircraft operations increasing by 90 percent, from 55,230 annual take-offs and landings in 1992 to 100,100 operations by 2013. The composition of the fleet that is flying these operations is expected to continue to reflect national general aviation trends. Future general aviation operations will continue to be dominated by business oriented flight, private transportation, flight training, or other forms of noncommercial activity using single- and multi-engine piston aircraft.

Air cargo operations are also forecast to increase from 4,300 operations in 1992 to 7,300 operations in 2013. Commercial passenger service is forecast to be feasible during the planning period with airlines expected to offer about 13 flights per day to and from the Seattle-Tacoma International Airport by the year 2013.

Railway Facilities

Rail service within Skagit County is provided by Burlington Northern Santa Fe Railroad (BNSF). The BNSF main line generally parallels I-5. A secondary line from Sedro-Woolley to Sumas in Whatcom County, as well as two branch lines originating in the City of Burlington, one traveling west to Anacortes and one traveling east to Sedro-Woolley also provide rail service. The Burlington Anacortes branch line travels through the southern edge of the Bayview Ridge Subarea, adjacent to SR 20. Rail service passing through Bayview is limited to freight hauling operations. Approximately 12 freight trains per day operate on the east-west Burlington branch lines.

Existing Levels of Service and Capacity

Skagit County

The Skagit County Transportation Systems Plan - Review Final, (June 28, 2001) addresses Level of Service (LOS) and capacity issues within Skagit County through the year 2015. The Plan includes traffic forecasts through 2015, based on a county-wide modeling effort.

As stated in the Plan, traffic volumes on County roads are low and maintenance of the existing road system takes precedence over road construction. Because of this, road improvements rely more on the Priority Array than on level of service deficiencies. The Priority Array refers to a calculation that provides information on the safety and physical characteristics/deficiencies in individual roadway segments. The calculation combines and weighs factors such as pavement condition, road geometrics, traffic levels and accident rates.

In addition to the Priority Array, Skagit County also uses a LOS methodology based on the Transportation Research Board's *Highway Capacity Manual* (2000-Edition). Prior to the 2001 *Skagit County Transportation Systems Plan*, the County used an unique methodology known as the "Birdsall Method", but it was determined that the Birdsall methodology was not as appropriate as that contained in the 2000 *Highway Capacity Manual* (HCM). Further, the

Birdsall methodology was inconsistent with the HCM methodology used by all other local jurisdictions.

LOS ratings are a measure of the quality of service and efficiency provided by an area's roadways. Traditionally, LOS ratings for roadways have been based on an A through F, quantitative measures of roadway capacity, as defined in the Highway Capacity Manual. These alphabetical ratings describe the quality of service provided at peak hours and average daily conditions. The standard is based on the ratio of volume (V) to capacity (C). In general, LOS A indicates free flow with no delays, while LOS F signifies very severe congestion with slow travel speeds. LOS C represents a condition of stable flow with slightly reduced speeds and reduced maneuverability.

Based on the Highway Capacity Manual method, the proposed LOS for Skagit County Roads and Intersections is level D and E, respectively. The Skagit County Department of Public Works monitors the LOS on County roads. When traffic volumes exceed the threshold of 7,000 Average Annualized Daily Traffic (AADT) on a road segment, the Department initiates further study of the roadway. This threshold is an indicator that a road segment may be approaching the LOS D limitations and should be studied in depth for potential improvements.

LOS ratings have also been developed for intersections. These alphabetical ratings describe the quality of service provided at peak hours and average daily conditions. The standard is based on seconds of delay for signalized intersections or reserve capacity for unsignalized intersections as shown in Table 14.

Table 14
Level of Service Ratings for Intersections

	Type of Intersection		
LOS	Signalized	Unsignalized	
	Control Delay per Vehicle (Sec/Veh)	Average Control Delay (Sec/Veh)	
A	< 10	0 10	
В	> 10 – 20	> 10 – 15	
C	> 20 – 35	> 15 – 25	
D	> 35 – 55	> 25 – 35	
E	> 55 – 80	> 35 – 50	
F	> 80	>50	

Source: Highway Capacity Manual, 2000 Edition

The proposed LOS standard for intersections in Skagit County, based on the Highway Capacity Manual, is LOS E. LOS analyses for intersections within the Bayview Ridge Subarea were conducted in 2000; all intersections were at LOS A or B, with the exception of the intersections with SR 20 (SR 20/Avon Allen was at LOS E).

State Highways

LOS standards for most State Highways are set through the Regional Transportation Planning Organizations (RTPOs). The Skagit-Island RTPO has established LOS C as the standard for all rural highways and LOS D the standard for all urban highways, with SR 20 through Anacortes designated as LOS C. All designations are based on the HCM methodology.

The LOS for state highways of statewide significance (i.e., SR 20) is established by the Washington State Department of Transportation (WSDOT). The standard set for SR 20 is LOS C for rural areas and LOS D for urban areas.

The 2003 *SR* 20 – *Fredonia to I-5 Interchange Traffic Report* prepared for WSDOT projects SR 20 traffic volumes and intersection levels of service for the years 2006 and 2026. With the upcoming SR 20 widening project, these forecasts show that the mainline SR 20 level of service will be at LOS "C" or better through 2026. With the recommended intersection design modifications presented in this report, all intersections from Fredonia to I-5 (including SR 20/Higgins Airport Way, SR20/ Avon-Allen Road, and SR20/Pulver Road) will result in these intersections also operating at LOS "C" or better through 2026.

High traffic volumes on state routes can cause delay on intersecting county roads. Skagit County and WSDOT coordinate regarding SR 20, although they are not in total agreement regarding the SR 20 intersection needs. The County believes further corridor studies are necessary to properly plan for short and long term intersection improvements.

Transit

SKAT does not have level of service standards, but rather focuses on providing basic service and expanding the areas receiving basic service.

Subarea Capacity and Level of Service

The LOS standards that are adopted in the Subarea Plan must be maintained through upkeep of the existing circulation system and expansion of transportation services where needed. For this Plan, Bayview Ridge adopts the LOS standards for streets and intersections as adopted in the *Skagit County Comprehensive Plan*. These standards currently are LOS C for streets and LOS D for intersections.

All Bayview Ridge arterials currently demonstrate adequate capacity, although the public may consider some deficient based on their physical condition.

Average weekday traffic (AWDT) and PM peak hour counts were collected for the Skagit County arterial network, including Bayview Ridge, during 1998, 1999, 2000, 2001, and 2002. The counts were provided by the Washington State Department of Transportation, Skagit County Public Works, and Skagit Council of Governments. Where AWDT counts were not available, peak hour counts were factored to estimate AWDT volumes using area specific relationships between daily and peak hour volumes.

Table 15 illustrates the traffic counts for some of the most highly traveled segments of county and state facilities within Bayview Ridge.

The present roadway system operates reasonably well. Congestion and delay measured at primary roadway and intersections indicate levels of service are acceptable throughout the regional system.

Proposed Improvement Projects

Proposed Skagit County road improvement projects are identified in the County's *Six-Year Transportation Improvement Program (TIP)*. The 2002-2007 *TIP* identifies the following projects within the Bayview Ridge Subarea:

- Farm to Market Road #2 (Ovenell Road to Josh Wilson Road) Grading, widening and resurfacing, 2002 2007
- Peterson Road (EZ Road to Higgins Airport Way) Grading, widening, paving and sidewalks, 2003
- Josh Wilson Road (Higgins Airport Way to Farm to Market Road) Grading, drainage, widening, and resurfacing, 2005

Table 15
Base Line Traffic Counts

Roadway	Year Counted	Average Wee Traffic (AWI		PM Peak
		Directional	Total	
Pulver N/O SR 20 @ MP 3.30	1999	582N/518S	1100	181
Pulver S/O SR 20 @ MP 3.43	1998	223N/111S	334	38
Avon Allen Road @ MP 6.32 S/O Cook	1998	921N/843S	1764	250
Avon Allen Road @ MP 6.49 N/O Cook	1998	324N/218S	542	77
Farm to Market @ MP 0.5 N/O SR 20	1999	1343N/1256S	2599	295
Farm to Market @ MP 1.24 N/O Ovenell	2000	1208N/1087S	2295	224
Farm to Market @ MP 2.0 N/O Bayview	2000	1248N/1125S	2373	249
Farm to Market N/O Marihugh S/O Josh Wilson	1998	1258N/1186S	2444	288
Farm to Market N/O Josh Wilson	2000	752N/760S	1512	157
Higgins Airport Way N/O SR 20	1998	845N/742S	1587	251
Avon Allen Road N/O SR 20	1998	1156N/1053S	2209	203
Avon Allen Road N/O Ovenell	1998	1051N/1020S	2071	169
Avon Allen S/O Peterson	2000	1032N/965S	1997	201
Peterson Road E/O Pulver Road	1998	2386W/2487E	4873	487
Peterson Road E/O Avon Allen	1998	1890W/1960E	3850	418
Peterson Road W/O Avon Allen	1999	1286W/1586E	2872	331
Peterson Road E/O Higgins Airport Way	2000	703W/867E	1570	253
Josh Wilson W/O SR 11	1999	1574W/1655E	3229	387
Josh Wilson E/O Farm to Market	2000	1249W/1299E	2548	283
Josh Wilson W/O Farm to Market	2000	493W/440E	933	93
Ovenell Road E/O Higgins Airport Way	2000	84W/113E	197	26
Ovenell Road W/O Avon Allen	2000	536W/548E	1084	106
Ovenell Road E/O Farm to Market	2000	323W/353E	676	58

In addition, a new major collector connecting Ovenell Road to the Farm to Market Road at the SR 20 intersection is proposed within the southwest portion of the industrial area. This collector will be developer-funded; construction timing will coincide with the timing of development.

The WSDOT State Highways System Plan has two improvement projects planned for SR 20:

- Resurfacing from the Spur to the "Y", February 2003.
- SR 20 Fredonia to Interstate 5 Interchange Project Widening (adding one lane in each direction), from the intersection with SR 536 to Interstate 5, intersection improvements, and intersection modifications at Interstate 5 to increase safety and reduce congestion. The project is funded for \$76.5 million and is scheduled to be advertised for bid in 2006.

3.4.2 Environmental Impacts

Changes in traffic volume are primarily dependent on changes in population and employment, which in turn are dependent upon growth in the housing market and in regional industries. As described in previous sections, the residential population and employment sector of Bayview Ridge are predicted to steadily increase over their current levels. The amount of new residential development will depend on how much residential area is located within the Bayview Ridge UGA. Employment within the industrial area is projected to increase from 1,456 in 1998 to 3,301 in 2015 and to 4,305 in 2025 (*SR 20: Sharpes Corner to SR 536 NEPA Pilot Project Dwelling Unit and Employment Forecasts for Transportation Analysis Zones*, CH2Mhill, December 2001). Increased development within the industrial area will also result in increased truck traffic as many businesses in this area generate freight.

For all alternatives, there will be an increase in travel to, from, and within the Subarea. Those alternatives with the greatest amount of residential development will generate the greatest amount of total traffic.

As development occurs and traffic volumes increase, an internal roadway network will be developed. Traffic will access the arterials at various points. Because of this, it is anticipated that intersection capacity will be an issue earlier than road segment capacity.

There will also be an increase in travel on SR 20 by vehicles traveling from I-5, irrespective of development within the Bayview Ridge Subarea. Because of this, the most significant issue for traffic from Bayview Ridge through 2015 will continue to be the safety and capacity of the Farm to Market Road, Higgins Airport Way, and Avon-Allen Road intersections with SR 20. SR 20 itself will be widened to four lanes from the intersection with SR 536 (Fredonia), east to I-5. Intersection improvements at Higgins Airport Way and Avon-Allen Road are also included in the project. The improvements are designed to maintain an LOS of "C" or better along the corridor and at intersections, through the year 2026. This project is funded and scheduled to go to bid in 2006.

As individual development projects within Bayview Ridge are proposed, a determination will be made on a case by case basis as to whether a detailed traffic study will be required as part of the SEPA project-level review. Projected levels of service within the Subarea itself are not anticipated to fall below adopted LOS standards, assuming necessary improvements outlined in the required traffic studies are implemented.

Alternative 1: Industrial UGA and Rural Residential Development

Alternative 1 would result in the least population growth, and hence the least total growth in motorized and non-motorized traffic within the Subarea.

The 687 acres of new industrial development and the associated growth in employment would generate both vehicular and truck trips, most of which would be oriented to SR 20. Employee-generated trips would occur during the weekday peak commute hours, while truck trips from new businesses generating freight may be distributed throughout the day. Although most of these employee and truck trips would be oriented to SR-20, it is assumed that until all existing intersections with SR 20 are signalized, some traffic from the industrial area will continue to use Peterson Road, traveling through the residential portion of the Subarea. The recent signalization of the Farm to Market Road/SR 20 intersection is diverting some truck traffic from both Higgins and Peterson Roads. Truck traffic headed north toward Bellingham may continue to use Josh Wilson Road until the SR 20 improvement project is complete.

The residential growth associated with Alternative 1 (143 new homes) will generate only a small number of additional trips. Most of these trips would be oriented to Peterson Road and Avon-Allen Road.

The increased vehicular and truck traffic will increase County road maintenance requirements. It is not anticipated LOS standards for streets and intersections within the Subarea would be exceeded under this alternative.

Independent of development within the Bayview Ridge Subarea, traffic on SR 20 will also continue to increase. The proposed SR 20 Fredonia to I-5 Interchange improvement project is forecast to result in a LOS "C" or better for this corridor through the year 2026.

Regarding non-motorized circulation, the limited amount of residential growth associated with Alternative 1 it is not anticipated to result in significant demands for new facilities for pedestrian/bicycle circulation outside of the Port's proposed trail system within its industrial park. Widening and paving of road shoulders may also occur in certain areas as part of on-going street improvement projects.

No impacts to the Skagit Regional Airport or the BNSF railroad lines would be anticipated.

Alternative 2: CAC Recommendation – Community UGA

Alternative 2 would result in the most significant growth of both industrial and residential vehicular traffic at build-out. It is anticipated that the majority of new trips would be oriented to the east, to the City of Burlington, the City of Mount Vernon, and Interstate 5. Some employment-related trips may be oriented to residential areas to the west of the Subarea.

Impacts from the increased industrial traffic would be similar to Alternative 1. Impacts from increased residential traffic (1,236 new homes) will be greatest during the weekday morning and evening commute hours. Because traffic volumes will increase three-fold over time, the additional traffic on arterials such as Peterson Road and Avon-Allen Road will be very noticeable to local residents. An internal roadway network will be developed, but the basic arterial framework will remain. Total vehicle trips will increase, congestion at intersections will be more frequent, and the potential for traffic accidents will increase. It is not anticipated, however, that current LOS standards for streets and intersections within the Subarea will be exceeded, assuming intersection improvements identified in the required traffic studies, are constructed.

The concept of a cohesive, urban community that provides employment, housing and limited commercial services also provides the potential for the "internalization" of trips within the Subarea. Potentially, residents could work and reside within Bayview Ridge, thus reducing the total number of vehicular trips on arterials outside the Subarea. The actual rate of internalization is difficult to quantify, however.

With Alternative 2, the greatest demand for major transportation system improvements within the Subarea will be for the new north-south collector arterial planned to connect Ovenell Road with Peterson Road and Jensen Lane (to be funded by developers at the time of development). It is assumed that the SR 20 intersections (i.e., Higgins Airport Way and Avon Allen Road) will be improved per the proposed WSDOT improvement project beginning in 2006.

The new north-south collector is needed to provide for internal circulation (including access to the new Peterson Road community center/new District No. 6 Fire Station, and from the existing Skagit Golf and Country Club residential development) and to provide alternate access to Josh Wilson Road and Ovenell Road. The new arterial will also provide new industrial development with access to Ovenell Road, thus reducing the potential for increased truck traffic on Peterson Road.

New local access streets will also needed to accommodate the new residential, community center, and industrial development. These streets will be constructed concurrent with development and funded by development.

The proposed 2015 road system (i.e., major collectors) is shown on Figure 14 (p. 3-38). The draft Subarea Plan goals and policies address concurrency, level of service, public transit, and street improvements.

It is recognized that although the roadway system may meet adopted LOS standards, existing area residents will experience increased traffic congestion and noise, and may see this as affecting their quality of life. Also, street improvement projects associated with the new development will result in a short-term disruption of traffic patterns and noise and dust emissions.

Regarding non-motorized circulation, the residential growth associated with Alternative 2 will result in demands for new pedestrian and bicycle facilities within the residential area. New

streets within the residential area will/will not be required to include sidewalks. Widening and paving of road shoulders may also occur in certain areas as part of on-going street improvement projects.

No impacts to the Skagit Regional Airport or the BNSF railroad lines would be anticipated.

Alternative 3: Community UGA with Short-Term/Long-Term Planning Areas

At build-out, the impacts of Alternative 3 on traffic would be somewhat greater than the impacts of Alternative 2, due to the greater number of new residential units (1,632). However, residential traffic from the 351-acre long-term planning area (952 units) would likely be delayed. As conversion of this area to development status would be subject to a public review procedure, traffic issues could be re-visited prior to conversion.

Alternative 4: Proposed Bayview Ridge Subarea Plan – Community UGA (Proposed Project)

The impacts of Alternative 4 on traffic would be similar to the impacts of Alternatives 2 and 3, but reduced because only 832 new residential units could be accommodated. Consequently, Alternative 4 could accommodate a total of 1,513 homes while Alternative 2 can accommodate a total of 1,934 homes and Alternative 3 can accommodate a total of 2,334 homes within their respective UGAs.

3.4.3 Mitigating Measures

Proposed

- Revise the *Skagit County Capital Facilities Plan* to include all Bayview Ridge Subarea street improvement projects.
- Continue to work with WDOT regarding improvements to SR 20.
- Establish a program for payment of traffic mitigation fees to Skagit County.
- Development of housing, a major employment center and a small community commercial center within the Subarea will result in the internalization of some trips.
- New road standards will ensure that all new roads and improvements to existing roads meet urban standards.
- Coordinate on-going planning efforts with SKAT to identify needed route changes and street improvements related to transit (i.e., bus turn-outs).

Potential

- Prepare a Pedestrian/Bicycle Circulation Plan for the Subarea.
- Require bicycle lanes on new collector and arterial streets within the Subarea.

3.4.4 Unavoidable Adverse Impacts

From the standpoint of design capacity, the proposed improvement projects would effectively mitigate traffic impacts. The increase in traffic volumes may, however, be perceived by area residents as detracting from their existing quality of life. The increased vehicular traffic will be especially noticeable along Petersen Road and the new north-south collector. Increased use of existing roadways and construction of new roadways will increase County maintenance responsibilities.

3.5 Public Services

3.5.1 Law Enforcement Services

3.5.1.1 Affected Environment

The Skagit County Sheriff's Office is responsible for law enforcement within the Subarea and throughout the unincorporated portions of Skagit County. This office provides for confinement of prisoners, serving of civil and legal processes, emergency response services, traffic control on County roads, search and rescue, and watercraft patrol. These capital facilities and services are addressed on a countywide basis in the *Skagit County Comprehensive Plan*.

In 2001, the Sheriff's Office staff consisted of 105 total full-time employees, including the following:

Administrative:	13
Investigations:	7
Corrections:	39
Patrolmen:	39
Traffic Officers:	7
Total	105

In addition, the department utilizes a volunteer force for search and rescue operations.

The 39 patrolmen and, to a lesser extent, the 7 traffic officers are available to respond to calls within unincorporated Skagit County. Typically, retail commercial businesses generate more calls for service than office, light industrial or residential uses.

Level of Service

Countywide Planning Policy No. 1.7¹¹ specifies the level of service requirements for law enforcement officers within urban growth areas:

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¹¹ Amendments to the Countywide Planning Policies (2000) were found to be non-compliant with the Growth Management Act due to alleged violations of the Framework Agreement by the Western Washington Growth Management Hearings Board in Case No. 00-2-0049c. This order is under appeal to Superior Court.

Law Enforcement

One commissioned law enforcement officer per 1,000 population served or per 100 acres of developed commercial or industrial property, whichever is the higher number.

For rural areas, the LOS standard is one deputy per 2,000 rural population. Using this LOS, 24 officers are now required to serve unincorporated Skagit County. Based on the *Skagit County Capital Facilities Plan for 2001-2006*, which contains adopted LOS standards, there are no projected deficiencies during the 2001-2006 planning period due to the current surplus of officers. In 2015, the County's projected rural residential population (i.e., 48,355) would require 24.2 total officers, and assuming the existing Bayview Ridge industrial area were built-out, another 12.2 officers, for a total of 36.4 officers.

Using the above standard, the number of law enforcement officers currently required to serve the Bayview Ridge Subarea is 6.9, based on 601 acres of developed commercial/industrial acreage within the UGA (6 officers), and 1,706 residents within the rural portion of the Subarea (0.9 officers).

3.5.1.2 Environmental Impacts

The required number of officers within the Bayview Ridge Subarea UGA will be based on the acreage of developed industrial/commercial property as in all alternatives, this standard results in a higher number of officers than the residential standard. New officers also generate the need for additional equipment, including patrol cars, and training.

Alternative 1: Industrial UGA and Rural Residential Development (No Action)

Alternative 1 would result in approximately 1,217 acres of developed industrial land (i.e., wetlands and streets are excluded) within the UGA which would require 12.2 law enforcement officers at build-out (versus the current 5.3 officers).

The rural residential portion of the Subarea would require 1 officer at build-out (versus the current 0.9 officers). No new commercial land is included in this alternative. The new law enforcement officers for the UGA would also be available to serve the adjacent rural residential area. Given the current supply of commissioned officers, no significant impacts to law enforcement services are anticipated.

Alternative 2: CAC Recommendation – Community UGA

Alternative 2 would result in approximately 1,326 acres of developed industrial/commercial land within the UGA and which would require 13.3 law enforcement officers at build-out. Because the residential portion of the Subarea would lie within the UGA, no additional officers would be required.

It should be noted that the Bayview Ridge UGA industrial area is expected to grow at a much slower rate over the year 2015 planning period, and the need for law enforcement officers may be reduced significantly.

The *Skagit County Capital Facilities Plan 2001–2006*, Sheriff's Office, includes providing deputies with cars, weapons, and uniforms (Table 16).

Table 16
Planned Law Enforcement Projects 2001 – 2006¹

Project Date	Project	Cost (x\$1,000)	Source of Funds ²
2001-06	Deputies with cars, weapons and uniforms	\$1,468	COP/CRF

¹ Source: Draft Capital Facilities Plan 2001 - 2006, Skagit County Comprehensive Plan. Estimated cost in 2000.

Alternative 3: Community UGA with Short-Term/Long-Term Planning Areas, and Alternative 4: Proposed Bayview Ridge Subarea Plan – Community UGA (Proposed Action)

The impacts of Alternatives 3 and 4 would be similar to the impacts of Alternative 2, as these alternatives propose 1,320 acres of industrial/commercial land, and residential development would lie substantially within the UGA.

3.5.1.3 Mitigating Measures

Proposed

- Security measures such as good access, safe street design, visible addresses, over-all visibility, and lighting will be incorporated into the site design.
- Increased property taxes from new development will provide additional tax revenues that can be used to offset the increased demand for law enforcement services.
- Private on-site security services provided by the Port of Skagit County and/or individual industrial users will provide an additional law enforcement resource within the industrial portion of the Subarea.
- Organized block-watch programs could be created within the residential area.
- A satellite Sheriff's office could be located with the fire station in the new community center.

3.5.1.4 Unavoidable Adverse Impacts

New development would create a demand for additional law enforcement services.

² See Table 7-18 for funding legend.

3.5.2 Fire and Emergency Medical Services

3.5.2.1 Affected Environment

Three fire protection districts operating out of three fire stations now serve the Bayview Ridge Subarea. District boundaries are shown in Figure 16. The extent of development within the Subarea and the designation of the Port of Skagit County property as a UGA have prompted ongoing planning efforts between the fire districts to determine how to best serve the area. Currently, fire protection services are provided as follows:

- Fire Protection District No. 2 is a volunteer district serving the area south of SR 20 and a small area of the Bayview Ridge Heavy Industrial area. The District No. 2 station is located south of SR 20 and has recently been expanded by the addition of one more bay in anticipation of meeting future demand. The majority of District No. 2's protection area lies outside the Bayview Ridge Subarea.
- Fire Protection District No. 12, also a volunteer district, provides fire protection services to the area north of Josh Wilson Road and west of Farm to Market Road, as well as the Paccar Technical Center (within the Bayview Ridge Subarea). The District 12 station is located in the community of Bayview, north and west of the Bayview Ridge Subarea. Until recently, District 12 also provided fire protection services to the Port of Skagit County properties within Bayview Ridge, but those properties have now been annexed to Fire District No. 6.
- Fire Protection District No. 6, serving the majority of the Subarea, is co-located with the Burlington Fire Department, and serves an area extending east from Burlington to include the Bayview Ridge residential area and Country Club, the 1,830 acre Port of Skagit County ownership, and all private acreage previously within Fire District #12 north of Ovenell Road (excluding the Paccar Technical Center).

Fire District No. 6 serves an approximate 29 square mile area. The District contracts with the City of Burlington Fire Department and the two entities essentially operate as one department. The District's service area population is approximately 8,500. In 2000, there were a total of 1,173 calls to Fire District No. 6. Of these, 885 fire calls were from within the City of Burlington and 288 calls were from the outlying Fire District. This represents a 7.5% increase in total calls from 1999.

The City of Burlington Fire Department/District No. 6 staff consists of six paid personnel and is supplemented by 37 volunteers. The paid personnel are on duty at the Burlington station from Monday through Friday, 6 a.m. to 6 p.m. Response time to the Bayview Ridge Subarea varies from 6 to 8 minutes during the times the station is staffed by on-duty personnel, to about 10 minutes when volunteers man the station.

Figure 16 – Bayview Ridge Subarea Plan: Fire Districts

District No. 6 is now planning to construct a new fire station (Station No. 2) on a donated 60,000 square foot parcel on Peterson Road within the Bayview Ridge Subarea (Projects #FD6-101, 102, and 105 on the Capital Facilities Plan). A commitment for donation of the property has been secured, and building construction is scheduled for spring 2004. Construction will be funded out of the District's operating budget. Staffing is scheduled for 2005 – 2006. It is anticipated that Station No. 2 initially will be manned under a resident fire-fighter program, supplemented by volunteers. The Fire District has acquired one new fire engine. One engine, a salvage truck, and either a tender or second fire engine will eventually be housed in the new station.

Level of Service

Countywide Planning Policy No. 1.7¹² addresses development standards for urban growth areas. The Fire standards are detailed as follows:

- 1. For Cities and their adjacent Urban Growth Areas, an ISO grading of five or better¹ shall be maintained; otherwise,
- 2. Within five minutes of being dispatched, the Fire Department shall arrive and be able to deliver up to 200 gallons per minute fire flow in an offensive (interior) attack, with a minimum of four firefighters, for responses to: structural fires, vehicle fires, other outside fires, motor vehicle accidents, activated fire alarm systems, or other hazardous conditions. The Fire Department shall also be capable of delivering a minimum of Basic Life Support including defibrillation, with a minimum of one First Responder or Emergency Medical Technician for medical responses.

Within 10 minutes of being dispatched, the Fire Department shall be able to support the interior structural fire attack with teams which may include: a ventilation team, a search & rescue team, a team for a backup line, and standby firefighters, totaling between 8 and 12 firefighters on-scene. The Fire Department shall also be capable of providing Heavy Rescue capability, including heavy hydraulics, at Motor Vehicle Accidents.

Within 20 minutes of being dispatched, the Fire Department shall be capable of delivering 1,500 gallons per minute fire flow in a sustained defensive attack mode for structural fire responses. For buildings larger than 10,000 square feet, the Fire Department shall be capable of delivering 2,000 gallons per minute, and shall have an elevated master stream capability.

These requirements shall be met for 90 percent of all incidents.

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¹² Amendments to the Countywide Planning Policies (2000) were found to be non-compliant with the Growth Management Act due to alleged violations of the Framework Agreement by the Western Washington Growth Management Hearings Board in Case No. 00-2-0049c. This order is under appeal to Superior Court.

Mutual aid requested under the Mutual Aid Contract may be used to provide relief to the initial operating crews, but shall not be used to provide initial attack capability, support functions, or sustained attack capability. This does not preclude automatic aid agreements under separate contract, which does provide these capabilities or functions from other agencies.

Times are considered to be "Response Time," which shall be measured by the sum of turnout time (the time from dispatch until the first arriving unit is enroute to the incident), plus travel time. Dispatch time shall be allocated a maximum of one additional minute, which is measured from the time the 9-1-1 call is received until the fire department is dispatched.

All operations shall be conducted in compliance with state and federal regulations, including training requirements for firefighters and maintenance requirements for equipment and apparatus.

All commercial and industrial facilities shall be inspected for compliance with the Uniform Fire Code at least annually. Water systems shall be installed in accordance with the Skagit County Coordinated Water System Supply Plan, with a fire flow meeting the requirements of the Uniform Fire Code.

¹ ISO ratings are a measure of the level of fire service protection available within a fire district. The ratings are based on a number of factors, including training, equipment, water availability, and response capability. Ratings fall within a scale of one to ten, with the lower number being better. An "A" next to a rating stands for tanker credit, which means that the district can provide a certain amount of water in a continuous flow for a specified time.

Due to the location of the industrial portion of the Subarea with respect to existing fire stations, urban level of service response times have been an issue. Some industrial developments such as the PACCAR Technical Center include private, internal fire protection and suppression systems.

3.5.2.2 Environmental Impacts

Long-range fire protection needs will require increases in equipment, training, and manpower to maintain an effective level of protection. With increased urbanization of the Bayview Ridge UGA, the use of paid personnel may be required.

That portion of the Bayview Ridge Subarea within the UGA must meet the adopted LOS requirements for urban level fire protection service. All alternatives will incrementally increase the need for additional fire personnel and equipment, and will include construction of the new Fire District No. 6 fire station on Peterson Road. Once the new Station No. 2 is in service (anticipated for 2005, an urban level of fire service will be provided to the entire Subarea, whether inside or outside the UGA. Negotiations are on going among the fire districts to ensure a coordinated approach to delivery of fire protection services.

Fire District No. 6 has prepared a *Risk Analysis Factors for Residential versus*Commercial/Industrial Development – A Formula for Funding Fire Service Improvements in the Bayview Ridge Urban Growth Area (April 2001) in conjunction with the Subarea planning process. This analysis compares proposed development within the Subarea with experience within the City of Burlington and addresses three elements of risk – frequency, severity, and probability. The analysis is being used to determine needed capital improvements and how costs should be distributed between future residential land commercial development. The major conclusions of the report with regard to risk factors are shown in Table 17.

Table 17
Fire Service Risk Factors

Risk Factor	Residential	Commercial/Industrial
Frequency of Occurrence	43%	57%
Severity		
Response Force Size	6%	94%
Pumping Capacity	25%	75%
Specialized Apparatus	15%	85%
Probability of Severe Event	20%	80%
Risk Average	26.1%	73.9%

In summary, residential areas experience less frequent fire occurrences (although nearly twice the rate of medical responses), and consume the least amount of time and require the fewest resources. Significant incidents in commercial/industrial buildings require a larger, longer duration response with specialized apparatus, require significantly more pumping capacity, and have a much higher probability of having a severe outcome.

Alternative 1: Industrial UGA and Rural Residential Development (No Action)

Alternative 1 would result in new industrial development and only limited, scattered single-family residential development. Approximately 686 acres of new industrial development would be located in the UGA, and 143 new residential units would be located in the remainder of the Subarea. District No. 6's new Station No. 2 would be required to meet urban LOS standards for the industrial UGA. Current plans call for this station to be constructed beginning in spring 2004. To date, funding for this station has assumed urban development of the full Subarea. The station may be reduced in size, or equipment reduced, if rural development occurs in the eastern portions of the Subarea. Although not required to meet County standards for rural areas, the urban LOS would still be provided throughout much of the Subarea once the new station is operational.

Alternative 2: CAC Recommendation - Community UGA

Alternative 2 would generate the greatest demand for fire protection and emergency medical services as 778 acres of industrial development, 15 acres of community center development, and approximately 1,246 new residential units could be developed within the UGA. Although Alternative 2 would generate the need for additional fire protection services for new residential development, it would in turn, general additional property tax revenues from this new development. With construction and operation of Station No. 2 in 2004, an urban LOS would be provided within both the urban and rural portions of the Subarea.

Alternative 3: Community UGA with Short-Term/Long-Term Planning Areas. and Alternative 4: Proposed Bayview Ridge Subarea Plan – Community UGA (Proposed Action)

The impacts of Alternatives 3 and 4 would be similar to Alternative 2, except that increased demand for services from the residential portion of the Subarea would be somewhat more geographically concentrated, and may arise over a longer period of time. Over the long-term, Alternative 3 would generate the greatest demand for fire protection services, and would generate the greatest property tax revenue to support those services.

3.5.2.3 Mitigating Measures

Proposed:

- Negotiations to ensure a coordinated approach to delivery of fire protection services
 within the Subarea are on-going. To date, these negotiations have resulted in fire district
 annexations and development of a financing plan for a new fire station on Peterson Road.
- A new Fire District No. 6 station is proposed for construction on Peterson Road beginning in spring 2004, with staffing in 2005-2006.
- Fire hydrant placement in urban developments will be adequate to provide sufficient volume and pressure for fire fighting needs. These needs can be met through adoption and enforcement of development standards.
- Proposed improvements of the fire districts are summarized below and included in Table 18.

- Increases in the District's assessed valuation resulting from new development will generate additional tax revenues to support the District.
- Streets will be constructed to Skagit County standards and will be designed to allow quick access to all potential sites of fire or medical emergency.
- Adequate fire flow will be provided.
- All new construction shall comply with the Uniform Building Code and the Uniform Fire Code.

Table 18
Planned Fire Protection Projects 2001 to 2006

Project Date	Project	Cost	Source of Funds ³
Fire District #2 ¹			
2001	Replace Aid Unit	\$100,000	FR
Fire District #6 ²			
<mark>2004</mark>	Building Construction – Fire Station 2	750,000	GO
2001	Engine 613 Replacement	280,000	FR
2003	Tanker 616 Replacement	230,000	FR
2001-06	Equipment Purchase/Replacement	58,000	FR
Total		\$1,418,000	

Source: Bayview Ridge UGA Capital Facilities Plan, March 10, 1997. Estimated cost in 1997 dollars.

3.5.2.4 Unavoidable Adverse Impacts

Any new development will increase the demand for fire protection and emergency medical services, resulting in the need for increased fire district personnel, equipment and facilities to some degree.

3.5.3 Parks, Recreation and Open Space

3.5.3.1 Affected Environment

There are currently no public park or recreational lands within the Bayview Ridge Subarea. The Skagit Golf and Country Club, located in the southeastern portion of the Subarea, is a privately owned 18-hole golf course open only to members and their guests.

Trail systems within the Bayview Ridge Subarea include the Port of Skagit County 9.3 mile non-motorized trail system connecting its north and south leaseholds. The trails are surfaced with

² Source: Fire District #6 CIP FY 2000 through FY 2006. Estimated cost in 1999 dollars.

³ See Table 7-18 for funding legend.

gravel and are approximately 8 feet in width. It is anticipated that the trails will ultimately provide connections to Josh Wilson and Farm to Market Roads, as well as to SR 20.

With respect to open space, much of the land within the Bayview Ridge Subarea is undeveloped. Sensitive natural areas such as wetlands and steep slopes are protected from development by County regulations.

Parks in the vicinity of Bayview Ridge include:

- Bayview State Park 25 acres with camping, and a day use area fronting on Padilla Bay.
- Padilla Bay Nature Trail 15-acre trail along the east shore of Padilla Bay.
- Padilla Bay National Estuarine Research Reserve 2,600 acres with interpretive center, library, theater, observation decks, boat launch, school and public programs.
- Bayview Elementary School Half gym and one soccer field.

Additional park/recreational facilities, including the Burlington-Edison Regional Park and the Riverfront soccer facility are located to the east, within the City of Burlington. Additional playfield facilities are available in the City of Mount Vernon, to the southeast. Numerous opportunities for hiking and camping are found in the Cascade foothills to the east.

Level of Service

Skagit County level of service standards for recreation and open space lands were established in the *Skagit County Comprehensive Park and Recreational Plan* (1998) and are summarized in Table 19. Recreation/park standards do not apply to the County's concurrency management system, but are implemented through the County's annual budget and payment of impact fees from new development. It should be noted that the 1997 *Skagit County Comprehensive Plan* identifies a standard of 13.2 acres of park land/1000 population (versus 17.3 acres/1000 population).

Table 19
Skagit County Level of Service Standards
Recreation and Open Space Lands

Recreation Lands	Level of Service Standard (LOS)	
Regional Parks	1.5 acres/1000 population	
Community Parks	0.4 acres/1000 population	
Special Use Areas	7.5 acres/1000 population	
Natural Open Space	7.9 acres/1000 population	
TOTAL	17.3 acres/1000 population	

Source: Skagit County Comprehensive Park and Recreation Plan (May, 1998)

As shown in the above table, the *Skagit County Comprehensive Park and Recreational Plan* has established the level of service for park/recreation and open space lands at 17.3 acres per 1,000

population. With a current population of 1,687 people, the Bayview Ridge Subarea requires 29 acres of park and recreation lands in total.

The 17.3-acres/1,000 population standard is divided into standards for Regional Parks, Community Parks, Special Use Areas, and Natural Open Space. The 1998 *Skagit County Comprehensive Park and Recreation Plan* states that there are no regional county park sites in the County that serve regional park needs. The Plan recommends that the Howard Miller Steelhead Park be converted to a regional riverfront park and that a new lakefront park be developed. Washington Park in Anacortes is seen as satisfying shoreline regional park needs. For Bayview Ridge, facilities in the Padilla Bay area may serve certain of the regional park needs, but these facilities are not County facilities.

The standard for Community Parks and Special Use areas are not met as there are no public community parks or special use areas within the Subarea (the golf course is not counted toward the standard as it is a private facility). The Parks and Recreation Department has stated that an Indoor Recreation Center is the highest priority and most needed recreational facility in the County. The current *Comprehensive Park and Recreation Plan* suggests that this facility be located along the I-5 corridor in Burlington. The Parks and Recreation Department has suggested that, alternatively, this facility could be located within the Bayview Ridge Subarea.

The standards for natural open space within the Subarea have been met, and open space preservation will continue. To date, the Port of Skagit County has permanently set aside 694 acres of wetlands/buffers/open space within their ownership. Further, Skagit County regulations require preservation of wetlands and their associated buffers for all new development, so additional permanent open space will be identified as development progresses.

Excluding natural open space, the Bayview Ridge Subarea has a current unmet need for 15.8 acres of regional parks, community parks, and special use areas for the existing population.

The County has recognized Bayview Ridge as a growing urban area that needs adequate parks and recreation facilities. The 1998 *Comprehensive Park and Recreation Plan* calls for construction of a 25-acre Bayview Community Park in 2001 through 2003. No funding is committed in the *Skagit County Capital Facilities Plan* (2001-2006), however, and the schedule for construction is uncertain.

The 1998 Skagit County Comprehensive Park and Recreation Plan recommends that the proposed Bayview Community Park site be located south of Peterson Road and west of the Bayhill residential development. The proposed Bayview Ridge Subarea Plan recommends that this location be reconsidered in light of its new Plan. The planned facility will include baseball and soccer fields, children's play structure, picnic area, trails and viewpoints, public restrooms, and auto parking. A summary of proposed park projects within the Subarea is provided in Table 20.

Table 20 Planned Park Projects 2001 – 2006

Project Date	Project ¹	Cost	Source of Funds ²
2001	Bayview Ridge Playfield	\$200,000	Interagency Committee for
			Outdoor Recreation (IAC)/
			Voluntary Mitigation Fees
			(VMF)
2002	Bayview Ridge Park Ph. I	600,000	GO (General Obligation
			Bonds)/VMF
2003	Bayview Ridge Playfield	800,000	GO
Total		\$1,600,000	

Source: Skagit County Comprehensive Park and Recreation Plan. Estimated cost in 1998 dollars.

The 1998 *Comprehensive Park and Recreational Plan* also recommends no future development of small community parks because of the strain on maintenance created by small facilities.

Regarding regional trails, the Fishtown Loop Trail, connecting Mount Vernon and La Conner, will border the southeastern edge of the Subarea along SR 20.

3.5.3.2 Environmental Impacts

Increased residential development within the Bayview Ridge Subarea will increase the demand for park and recreation lands and services. Impacts include the increased maintenance costs of existing and any new facilities, as well as the cost of acquisition and construction of the new facilities. For all alternatives, it is assumed that the standard for natural open space will be met without further County actions. If funding for regional county parks or an indoor recreation center becomes available, the standards for these facilities will be met by facilities located outside the Subarea (i.e., consistent with the 1998 *Comprehensive Park and Recreation Plan*). Given that the Airport Environs Overlay Zone covers most of the Subarea, the only suitable location for an indoor recreational facility within the Subarea would be along SR 20, in the vicinity of Farm to Market Road, and outside of the Overlay Zone. This area is proposed as Heavy Industrial.

Alternative 1: Industrial UGA and Rural Residential Development (No Action)

The 2,050 future residential population associated with development under Alternative 1 would require approximately 35.5 acres of parks. Of this total, 3.1 acres of regional parks and 16.2 acres of community parks and special use areas would be required to meet County standards. It is unknown what funding priority the proposed Bayview Community Park would have if no additional residential growth is planned for the Subarea.

² Projects/funding not included in Draft Skagit County Capital Facilities Plan 2001-2006.

Alternative 2: CAC Recommendation – Community UGA

The 4,684 future residential population associated with development under Alternative 2 would require approximately 81 acres of parks, 7.0 acres of which would be required for regional parks, and 37 acres of which would be required for community parks and special use areas. The proposed 25-acre community park would satisfy a portion of this need.

Alternative 3: Community UGA with Short-Term/Long-Term Planning Areas, and Alternative 4: Proposed Bayview Ridge Subarea Plan – Community UGA (Proposed Action)

The impacts of Alternatives 3 and 4 would be similar to the impacts of Alternative 2, although the potential residential populations at build-out (and associated demand for park facilities) would vary. Alternative 3 is projected to encompass a potential population of 5, 640; this population would require 8.5 acres of regional parks and 44.6 acres of community parks and special use areas. Alternative 4 is projected to accommodate 3,833 residents at build-out; this would require 5.7 acres of regional parks and 30.3 acres of community parks and special use areas. It should be noted that with Alternatives 2, 3, and 4, the increase in residential population will occur over an extended period of time.

3.5.3.3 Mitigating Measures

Proposed

- Sensitive natural areas such as wetlands and their buffers, and steep slopes will remain as permanent open space.
- The existing Skagit Golf and Country Club, a private facility, does provide recreational opportunities for many Subarea residents.
- Skagit County Code Chapter 14.18 (5)(f) Land Divisions, General Requirements, Parkland and Facilities requires that for new divisions of land, "The developer shall either provide parkland and facilities within the land division in accordance with the standards in the Skagit County Comprehensive Park and Recreation Plan or a fee in lieu of required land and/or facilities."

Potential

- Skagit County could consider collecting fees for new residential development as mitigation fees for park and recreation facilities.
- Develop an Open Space and Non-motorized Trail Plan for the Subarea.
- Revise the zoning and/or subdivision regulations to require new residential development to provide park/recreation amenities.

3.5.3.4 Unavoidable Adverse Impacts

Cumulative impacts from development within the Subarea will increase demands for park and recreation facilities and services.

3.5.4 Schools

3.5.4.1 Affected Environment

The majority of the Bayview Ridge Subarea lies within the Burlington-Edison School District No. 100. The southwestern portion of the Subarea, an area proposed for industrial development, lies within the Mount Vernon School District No. 320. Because no impacts to the Mount Vernon School District are anticipated, the following discussion addresses only the Burlington-Edison School District.

The boundaries of the Burlington-Edison School District encompass an area extending from Padilla Bay to the City of Burlington, and from Bayview Ridge north to the Skagit/Whatcom County line. The District's service area is centered in Burlington where the District's offices, high school, and two elementary schools are located. In total, the Burlington-Edison District has five elementary schools and one high school. School-age children from the Bayview Ridge Subarea currently attend Bayview Elementary School (located just outside the Subarea along the north side of Josh Wilson Road), and Burlington-Edison High School.

The Burlington-Edison School District's principal planning document is the *Six-Year Capital Facilities Plan* initially adopted in 1997 and most recently amended in 2002. Data from this Plan shows that enrollment within the district has increased 21 percent since the 1992-1993 school year. Enrollment is anticipated to increase another 336 students (9 percent) over the next six years. In the short-term, the most rapid growth within the District is anticipated to be in the City of Burlington. In the longer term, significant growth is anticipated in the western and northern parts of the District. Enrollment for September 1998 was 3,500. September 2001 enrollment was 3,526, and October 2002 enrollment was 3,599. The District's 2002-2003 permanent capacity is 3,200. To accommodate the additional students, the District is using relocatable facilities until new permanent facilities become available.

The *Six-Year Capital Facilities Plan* notes that: "Adjustments in school boundaries are periodically required to alleviate the capacity problems at individual elementary schools. The District also proposes to add bus routes in order to distribute students between elementary schools more efficiently.

For the District as a whole, there is not sufficient capacity to house students until additional capacity at the elementary school level is provided. Portable classrooms are used within the District and will continue to serve as interim facilities, but are not included in the calculation of the District's permanent capacity. The Burlington-Edison School District has established a class size standard of 25 students per classroom.

A \$20 million District bond issue was approved in 2001. Money from this bond issue is being used to replace and enlarge the Lucille Umbarger Elementary School in Burlington, and to renovate Allen Elementary in Bow. Until the new construction is complete, the District is using portable facilities and boundary changes to address the overcrowding issue. Capacity at Lucille Umbarger Elementary will increase from 425 to 650 students.

The permanent capacity and October 2002 enrollment of the facilities projected to serve the Bayview Subarea are shown in Table 21:

Table 21
Burlington-Edison School District, Selected Facilities

School	Permanent Capacity	October 2002 Enrollment
Bay View Elementary	459 ¹	487
Burlington-Edison High School	1,075	1,022

¹ Including one portable, the current capacity is 484p.

In addition to the above schools, the District operates Allen Elementary, Edison Elementary, Lucille Umbarger Elementary and Westview Elementary.

Construction of another elementary school, additions to existing elementary schools, or the acquisition of additional school sites would require voter approval of another bond issue.

3.5.4.2 Environmental Impacts

Development within the Subarea will result in impacts to the Burlington-Edison School District. Increased residential growth will increase local school enrollment and the associated demands for facilities, programs, and transportation. For all alternatives, the impacts will occur over a 20-year time period. The primary impacts will be at the elementary school level, where existing capacity is already an issue. The payment of mitigation fees is now required for all new residential development. New industrial and residential development will also increase annual tax revenues collected by the District.

The proposed development standards associated with the Subarea Plan would also impact the District's facility planning. Proposed amendments to the Airport Environs Overlay (AEO) zone would preclude construction of "K-12 schools (replacement and expansion at Bayview Elementary school is allowed); hospitals; nursing homes; churches; and, other similar land uses ... for which the significant common element is the relative inability of the people occupying the space to move out of harm's way in a safe and rapid manner," within the Subarea or the larger area subject to the overlay (see Figure 13, p. 3-32). Any new school facilities needed to serve the Subarea must be located outside the AEO zone. New schools located outside of the AEO zone will require busing students further from home and will increase the School Districts transportation costs.

To project facility needs, the Burlington-Edison School District projects the number of schoolage children based on the number and type of new residential dwellings. The student generation rates are shown in Table 22.

Table 22 Student Generation Rates

Students per Unit	Single-Family	Multi-Family
Elementary	0.347	0.249
High School	0.120	0.071
Total	0.467	0.320

For all new residential development, the District experiences a shortfall of tax revenue against operating expenses during the first years of development when tax assessment lags home occupancy and the concomitant school enrollment and capital costs associated with needed new facilities and transportation. To compensate for this lag, the District charges "impact fees" to offset part of the costs of the school facilities and buses needed to serve the new growth. The current fee for each single-family dwelling unit is \$2,390, and the current fee for each multifamily dwelling unit is \$1,986. The District emphasizes that by themselves, the impact fees do not cover the entire financial impacts of growth.

The impacts of each of the proposed alternatives are addressed below. For purposes of analysis, it is assumed all new residential development will be single-family dwellings; this results in the highest number of new students.

Alternative 1: Industrial UGA and Rural Residential Development (No Action)

Alternative 1 would result in incremental, rural residential development within the eastern portion of the Subarea and industrial development in the western portion of the Subarea. Assuming a density of one single-family dwelling per 10 acres, the Bayview Ridge Rural Reserve area could accommodate approximately 143 new single-family dwellings at build-out. This would result in approximately 67 school-age children, 50 of whom would attend elementary school. Assuming no change in impact fees, the 143 new homes would generate \$341,770 in mitigation fees.

Alternative 1 would have the least impact on school enrollment in this portion of the District and on Bayview Ridge Elementary School in particular. It is assumed that Year 2015 growth currently allocated to the Subarea would be re-allocated to other areas not served by Bayview Ridge Elementary School.

This alternative would generate additional tax revenues from the industrial portion of the Subarea, but the least tax revenues from residential development. It is not known to what extent employment growth within the industrial UGA would result in increased residential development, and an increased demand for schools elsewhere in the Burlington-Edison School District.

Alternative 2: CAC Recommendation – Community UGA

Alternative 2 would result in approximately 1,246 new dwelling units and a total residential population of 4,684. Alternative 2 would generate approximately 582 school-age children, 432 of which would attend elementary school, and 150 of which would attend high school. The 1,246 new dwellings would generate \$2,977,940 in impact fees.

Both the industrial and residential development would generate property tax revenue for the District.

Alternative 3: Community UGA with Short Term/Long Term Planning Areas

Alternative 3 would result in approximately 1,641 new dwellings that would generate 766 school-age children at full build-out. Approximately 569 of the children would attend elementary school, and 197 would attend high school. The 1,641 new dwellings would generate \$3,921,990 in impact fees. Only 680 of the new units would be located in the Short-Term Planning Area; these units would generate 318 school-age children, 236 of whom would attend elementary school.

Alternative 4: Proposed Bayview Ridge Subarea Plan – Community UGA (Proposed Action)

Alternative 4 would result in approximately 888 new dwellings that would generate 415 schoolage children at build-out. Approximately 308 of the children would attend elementary school, and 107 would attend high school. The 888 dwellings would generate \$2,122,320 in impact fees.

3.5.4.3 Mitigating Measures

Proposed

- Residential developers will pay school mitigation fees as determined by the District. The
 exact amount of the mitigation fees will be determined and paid at time of building
 permit issuance.
- The School District will use relocatable facilities to provide interim capacity until new facilities are constructed.
- Educational restructuring can be used to address overcrowding and under-utilization of facilities.
- The School District will shift attendance boundaries as necessary to maintain appropriate capacities in the schools.
- Development of the Subarea will generate property taxes, a portion of which are collected by the School District to mitigate the increased demand for school services.
- The County will keep the District informed of proposed development projects within the Subarea.

3.5.4.4 Unavoidable Adverse Impacts

Development within the Bayview Ridge Subarea will incrementally increase demands on existing school district facilities and programs. Existing elementary schools in the District are currently above their intended capacities. In the short-term, elementary school capacities may continue to be exceeded and attendance boundaries may have to be modified.

3.5.5 Water Service

3.5.5.1 Affected Environment

Water System Overview

Public water service within the Bayview Ridge Subarea is provided by the Public Utility District of Skagit County (PUD No. 1). The majority of the Subarea is served by public water, although a few single-family homes are still served by private wells.

PUD No. 1 has certificated water rights to 23,417 acre-feet of source water per year. The PUD provides water service to new developments and, together with the City of Anacortes, serves the urban areas. District infrastructure is recorded on maps and in individual project files in the District's Office.

Water Supply. The District obtains its primary water supply from the Cultus Mountain watershed. A portion of the waters of Gilligan, Salmon, Mundt, and Turner Creeks are diverted to Judy Reservoir. This reservoir is created by two dams and currently stores 1,450 million gallons at water surface elevation 465 feet. A large portion of the unincorporated County population is served by the Judy Reservoir system. The Bayview Ridge area is currently served by an intertie with the City of Anacortes. The District has long-term plans to provide service to Bayview Ridge from the Judy Reservoir through a series of projects scheduled to be completed by the year 2020. With its new Skagit River Memorandum of Agreement (MOA), PUD No. 1 does not anticipate any shortage of supply before 2050.

Treatment and Storage. Water is pumped from Judy Reservoir to the water treatment plant, which has a nominal design capacity of 12 million gallons per day (MGD), and a hydraulic peak capacity of 18 MGD. The treatment plant is designed for future expansion to 30 MGD peak flow, and oversizing of pumps and piping took place during construction. Treated water flows from the treatment plant to two 1.2 million gallon storage tanks, which supply the transmission system by gravity.

Transmission and Distribution. The transmission and distribution pipelines of the Judy Reservoir system consist of over 450 miles of water mains ranging from 3 inches to 30 inches in diameter, over 70 miles of service pipelines under 3 inch diameter, over 19,000 metered water services, and over 27 million gallons of potable water storage capacity.

Level of Service

The *Skagit County Coordinated Water System Plan* (2000) has adopted levels of service shown in Table 23. The adopted 2000 standards represent a decrease from previous years due to public awareness and water conservation methods.

Table 23 Water Demand Standards

Per Capita Consumption	LOS	
Gallons per Day	1999	2000
Urban	150	135
Rural	100	90
Urban Peak Day to Avg Day	2:1	2:1
Rural Peak Day to Avg Day	2.6:1	2.6:1

Water demand projections for the years 2000, 2010, 2020, 2030, 2040 and 2050 have been made using the water demand standards along with the population, commercial, and industrial growth projections for the PUD No. 1 water service area. Year 2050 peak day demand for the District's service area is forecasted in the *Skagit County Coordinated Water System Plan* (2000) to be 70.2 MGD.

Bayview Ridge Subarea

Water system improvements in the Bayview Ridge Subarea have responded to the needs of the Skagit Regional Airport, industrial development, and the residential subdivisions located in the eastern portion of the Subarea. The Subarea is currently served by PUD No. 1 through an intertie with the City of Anacortes. Distribution lines in Bayview Ridge range from 3 inches to 18 inches in diameter. There were 586 residential and commercial meters in 1994, and approximately 726 meters in 2000. One of the PUD's top 20 high demand customers is now served within the industrial area.

The PUD's capital improvement plan anticipates urban development of the full Subarea and includes a series of projects that will provide service to the UGA from the Judy Reservoir system by the year 2020. A new 2.9 million gallon storage reservoir for the Bayview Ridge area was constructed in 1999. This reservoir was sized to accommodate increased storage and to reduce constant reliance on the intertie with the Anacortes system. The PUD estimates that, with this reservoir, the existing water system can serve an additional 1,519 single-family dwellings without significant improvements. Planned water system improvement projects specific to the Bayview Ridge area are summarized in Table 24.

In addition, the District's capital improvement plan includes projects addressing the following:

- Increase the District's water service capacity.
- Water treatment improvements (quantity and quality) at the Judy Reservoir water treatment plant.
- Replacement of aging transmission lines.
- Enactment of a new gridding plan for the water distribution system.
- Expansion of water storage capacity.

Project Date	Project ¹	Cost	Source of Funds ²
2003	Marlee, Hilynn - Discovery	35,000	PUD System Revenue (PUDSR)
2003	Farm to Mkt, Wilson - Marihugh Pipeline Ph 2	60,000	PUDSR/Impact Fees (IF)
2004	Gailee, Marlee - Maple Crest	71,000	PUDSR
2004	Hilynn Dr, Peterson Rd-Gull Dr. Pipeline	97,000	PUDSR
2004	Discovery, Peterson - Gailee	40,000	PUDSR
2004	Marihugh, Walker E Pipeline Ph 1	40,000	PUDSR
2005	Peterson Road Pump Station	100,000	PUDSR
2005	Marihugh, Walker E Pipeline Ph 2	42,000	PUDSR
2006	Higgins, Wilson - Steele	175,000	PUDSR/IF
2006	Marihugh, Walker E Ph 3	46,000	PUDSR
Total		650,000	

Table 24
Planned Water Projects - PUD No. 1 2001 – 2006¹

3.5.5.2 Environmental Impacts

Alternative 1: Industrial UGA and Rural Residential Development (No Action)

Alternative 1 would result in 687 acres of new industrial development and construction of approximately 143 single-family dwellings by 2015. New single-family development within the rural area likely would be served by PUD No. 1, as public water is available to the area. Water service to the rural area would be provided at a Rural Level of Service. Based on PUD No. 1 estimates, this alternative would require an additional 57,200 gallons per peak day. The water system capacity planned for the Subarea is considered adequate to accommodate this development; significant improvements to the water system beyond those already scheduled should not be required to accommodate this growth.

Alternative 2: CAC Recommendation – Community UGA

Alternative 2 would result in 778 acres of new industrial development and construction of approximately 1,246 new single-family dwellings by 2015. Based on PUD No. 1 estimates, this alternative would require an additional 498,400 gallons per peak day. The water system planned for the Subarea has adequate capacity to accommodate this development.

Alternative 3: Community UGA with Short-term/Long-Term planning Areas

Alternative 3 would result in 779 acres of new industrial development and construction of approximately 1,641 new single-family dwellings by 2015. Based on PUD No. 1 estimates, this alternative would require an additional 656,400 gallons per peak day. The water system planned for the Subarea does not have adequate capacity to accommodate this development; significant improvements to the water system would be required to accommodate this growth.

Budget constraints and unforeseen response to municipal-driven projects throughout the PUD No. 1 service area may change the dates these projects are scheduled.

² Source: PUD No. 1 CIP 2001 through 2020. Estimated cost in 2001 dollars.

Alternative 4: Proposed Bayview Ridge Subarea Plan – Community UGA (Proposed Action)

Alternative 4 would result in 779 acres of new industrial development and construction of approximately 888 single-family dwellings by 2015. Based on PUD No. 1 estimates, this alternative would require an additional 355,200 gallons per peak day. The water system capacity planned for the Subarea is considered adequate to accommodate this development; significant improvements to the water system beyond those already scheduled should not be required to accommodate this growth. However, if the 238-acre Urban Reserve area were to be developed at urban densities, the existing water system could not accommodate that additional growth.

3.5.5.3 Mitigating Measures

Proposed

- Urban development of the Subarea is consistent with the Skagit County Coordinated Water System Plan and PUD No. 1 Water System Plan.
- The cost and construction of water line extensions will be the responsibility of individual development projects.
- Developing properties will be subject to a System Development Fee established by the PUD. These fees are collected to offset system-wide improvements such as reservoirs, pump stations, etc.
- The PUD has anticipated urban development of the Subarea and has planned for future water service.

Potential

• Promote water conservation programs within both the industrial and residential areas.

3.5.5.4 Unavoidable Adverse Impacts

Development within the Subarea will increase demands on water supply within Skagit County. Assuming that the population allocated to the Bayview Ridge UGA must be accommodated in some Skagit County UGA by 2015, the incremental increase in demand for water will occur whether or not the demand is from the Bayview Ridge UGA.

3.5.6 Sanitary Sewer Service

3.5.6.1 Affected Environment

Sanitary sewer service to the industrial area and existing residential subdivisions within the Bayview Ridge Subarea is provided by the City of Burlington. The City of Burlington sanitary sewer system consists of a wastewater treatment plant and numerous collection system facilities and sewer mains.

The City of Burlington's sewer system service area includes the area within the City limits, as well as surrounding unincorporated areas. The service area is divided into the western and eastern service areas. In response to the Growth Management Act, the service area boundary has been revised since the 1991 Comprehensive Wastewater Plan to reflect Urban Growth Area boundaries. Bayview Ridge, including the residential area and the Port of Skagit County, is situated within the western service area. The service area includes only the northwest corner of the intersection of SR 20 and Avon-Allen Road, however. The other corners of the intersection (with the Bayview Ridge Subarea) lie outside the service area. Service to the western area was first provided by the West Interceptor, constructed in the mid 1970s. A series of pump stations pump the flow east to the 21-inch gravity sewer and into the existing waste water treatment plant on the Skagit River. The western service area is shown in Figure 17.

The sanitary sewer collection system at the Port of Skagit County was purchased by the City of Burlington in 2000, after expiration of the original Interlocal Agreement for service. Port tenants are now city sewer customers.

Level of Service

Adequate design of wastewater treatment and conveyance facilities requires the determination of the quantity and quality of wastewater generated from each of the contributing sources. Increases in wastewater flows can be attributed to a variety of sources: population and commercial growth in sewered areas, extension of sewer service to areas previously on septic systems, and increases in infiltration and inflow. The majority of flow increases to the western service area will be generated by extension of sewer service into the Bayview Ridge residential area and general growth within the UGA. The flow design standards established in the *City of Burlington Wastewater Facilities Plan* (1996) are summarized in Table 25.

Table 25 Wastewater Flow Design Standards

Average Dry Weather Flow	LOS
Residential (gpcd)	70
Commercial (gpad)	1,200
Industrial – West Service Area (gpad)	500
Industrial – East Service Area (gpad)	1,200

Table 26 shows the Burlington wastewater flow projections for the years 2005 and 2015. Projections were made using the flow design standards along with the population, commercial, and industrial growth projections for the Burlington sewer service area.

Figure 17 – Bayview Ridge Subarea Plan: Sewer Lines

Table 26
Wastewater Flow Projections¹

Flow (MGD)	2005	2015
Avg. Dry Weather Flow	2.90	3.73
Avg. Annual Flow	3.48	4.48
Max. Monthly Flow	3.79	5.05
Peak Daily flow	6.64	8.84
Peak Hourly Flow	9.48	12.64

Source: Bayview Ridge Urban Growth Area, Capital Facilities Plan 1997-2002.

Deficiencies and Proposed Improvements

The Burlington Wastewater Treatment Plant is undergoing a two-phase expansion project. Phase I, completed in 2001, provides capacity to treat wastewater flows through 2005. Phase II will be brought on line in 2005 and will provide sufficient capacity to treat projected flows through 2015. Bayview Ridge related projects are summarized in Table 27.

Table 27
Planned Wastewater Projects
City of Burlington Sanitary Sewer System 2001 – 2006

Project Date	Project	Cost (x\$1,000)	Source of Funds
2001-06	Collection System Improvements	\$6,586	General Obligation Bonds (GO)/Public Works Trust Fund (PWTF)
Total		\$6,586	

3.5.6.2 Environmental Impacts

Alternative 1: Industrial UGA and Rural Residential Development (No Action)

Alternative 1 would result in 687 acres of new industrial development and construction of approximately 143 single-family dwellings by 2015. Based on past City of Burlington studies, the sewer system has the capacity to accommodate this development assuming no unusual demand for process water.

New residential development within the rural area would be served by individual on-site septic systems. To the extent that the City of Burlington has already allocated sewer capacity for the Bayview Ridge area, that demand for that capacity could be reduced. Whether or not other areas within the City of Burlington would benefit (or need) this additional capacity is not known.

Alternative 2: CAC Recommendation - Community UGA

Alternative 2 would result in 778 acres of new industrial development, 15 acres of new commercial development, and construction of approximately 1,246 new dwellings. The demand for sanitary sewer service would be increased significantly over time to serve the new industrial development and the new residential development, all of which would lie within the UGA and

would be served by public sewer. The City of Burlington has anticipated this level of development in the existing wastewater plan (assuming no unusual use of process water).

Alternative 2 would require that the Burlington sewer service area be expanded to include the existing commercial area at SR 20, east of Avon-Allen Road.

Alternative 3: Community UGA with Short-Term/Long-Term Planning Areas
Alternative 3 would result in 779 acres of new industrial\commercial development and
construction of approximately 1,641 new dwellings at full build-out. 680 of these dwellings
would be located in the Short-Term planning area and would be served by public sewer. Until
formally converted, new residential development within the Long-Term Planning area would be

served by on-site septic systems. The City of Burlington Comprehensive Wastewater Plan anticipates and provides improvements to serve this demand.

Alternative 4: Proposed Bayview Ridge Subarea Plan – Community UGA (Proposed Action)

Alternative 4 would result in 779 acres of new industrial\commercial development and construction of approximately 888 new dwellings at full build-out. All new dwellings within the UGA (932 units) would be served by public sewer, and all new dwellings within the Reserve area (i.e., 56 units) would be served by on-site septic systems. The City of Burlington Comprehensive Wastewater Plan anticipates and provides improvements to serve the demand for public sewer generated by this alternative.

3.5.6.3 Mitigating Measures

Proposed

- Urban development of the Subarea is anticipated by the *City of Burlington Wastewater Facilities Plan* and the major trunk lines are already in place.
- The cost and construction of sewer line extensions will be the responsibility of individual development projects.
- Developing properties will be subject to the General Facility Charges established by the City of Burlington. These fees are collected to offset system-wide improvements such as reservoirs, pump stations, etc.

3.5.6.4 Unavoidable Adverse Impacts

Development within the Subarea will increase demands on the City of Burlington sewer system. If the year 2015 population allocated to the Bayview Ridge UGA is accommodated elsewhere, impacts to other sewer service areas may or may not be significant.

3.6. Utilities

The provision and siting of utility facilities requires coordination with Skagit County's land use plan and the Subarea Plan so that they can accommodate proposed growth and will be sited in a manner reasonably compatible with adjacent land uses, including the Skagit Regional Airport.

3.6.1 Affected Environment

Regulatory Setting

Washington Utilities and Transportation Commission

The Washington Utilities and Transportation Commission (WUTC) is responsible for regulating privately owned utility and transportation businesses in the state. The WUTC is a three-member board appointed by the governor and confirmed by the state senate. It is the WUTC's responsibility to see that companies provide safe and reliable service to their customers at reasonable rates. The WUTC regulates private utilities only (including but not limited to: electric, gas, telecommunication, and water companies).

Publicly owned utilities (such as municipal utilities and public utility districts) are regulated by their respective legislative bodies.

WUTC mandates that utility facilities and services must be provided on a uniform or nondiscriminatory basis to all customers and that cost of service must be equitable. State law regulates the rates and charges, services, facilities, and practices of utilities. Any change in customer charges or service provision policy requires WUTC approval.

In accordance with state law, private utilities have an obligation to provide service upon demand. In other words, the utility companies must provide service to customers within their service territory as it is requested. This is known as a utility's "duty to serve." Consistent with this duty, the utility providers follow growth and will provide service to development in accordance with service territories.

Other federal and state agencies also impose requirements on utilities. The Washington State Department of Health (WDOH) has jurisdiction over water purveyors; the Federal Energy Regulatory Commission and Department of Energy have jurisdiction over electric power service; and the Federal Communications Commission (FCC) has jurisdiction over the telecommunications industry.

Federal Energy Regulatory Commission

The Federal Energy Regulatory Commission (FERC) is an independent five-member commission with the U.S. Department of Energy. FERC establishes rates and charges for the interstate transport and sale of natural gas, for the transmission and sale of electrical power, and for the licensing of hydroelectric power projects. In addition, the commission establishes rates and charges for the interstate transport of oil via pipeline.

Public Utilities

Electricity

Electricity within the Bayview Ridge Subarea is provided by Puget Sound Energy (PSE). PSE maintains both 230KV and 115 KV transmission lines, to both the City of Anacortes and the refineries. These lines traverse the south and east borders of Bayview Ridge. These facilities are available to provide power to Bayview Ridge. PSE also maintains a gas generation station at the intersection of Farm to Market Road and SR 20 that is used to boost system wide power during peak demand times. PSE reports no current capacity issues.

Private Utilities

Natural Gas

Cascade Natural Gas (CNG) provides natural gas service within the Bayview Ridge Subarea. CNG maintains both an 8-inch and a 16-inch distribution main that traverses the southern boundary of the UGA. These major supply lines serve both the City of Anacortes and the refineries and have adequate capacity to meet the Bayview Ridge needs throughout the 2015 planning period.

Telecommunications

Telecommunications is the transmission of data or information by wire, radio, optical cable, electromagnetic, or other similar means. In Skagit County, telecommunication utilities include telephone, cellular telephone, and cable television. In 1996, the federal government passed the Telecommunications Act, which, among other things, deregulated the provision of data and information. The Telecommunications Act was intended to promote competition in this vastly changing and expanding industry.

Considerable expansion of the telecommunications industry is expected as a result of expanded licensing by the FCC and technological innovation, such as digital TV signals that can be linked to personal computers and the Internet.

Internet Service Providers

Currently there are 12 Internet service providers (ISPs) operating in the Bayview Ridge Subarea. ISP ownership frequently undergoes change in the current environment of deregulation, and new service providers continuously enter the market. Current and future needs of the Bayview Ridge UGA appear to be adequately met.

Telephone

Telephone service for Bayview Ridge is provided by Verizon (previously GTE Northwest). Telephone service is initiated by customer demand and requests and service providers are required to provide adequate telecommunications service on demand (RCW 80.36.090).

Cellular Telephone

Cellular telecommunication allows people to have mobile telephone communication via radios that send and receive signals from a network of receivers placed at several cellular communication (cell) sites.

Cell sites are placed on tall poles, lattice-type towers, or on existing buildings. Each cell site has a coverage area of several miles, depending on topography and number of customers. As the cellular telephone user moves from one cell to the next, the call is passed to an open channel at an adjacent cell site. Transmission quality and dialing of cellular telephones are comparable to that of conventional wireline telephones.

Bayview Ridge is currently served by several cellular telephone companies including but not limited to:

- Nextel
- AT&T Wireless
- Verizon Wireless
- Sprint
- Voice Stream

They are licensed to operate in the County and throughout the region within guidelines set by the Federal Communications Commission (FCC). Siting and design of towers is regulated by the FAA and Skagit County, the local zoning authority.

Cable Television

Cable television service in Bayview Ridge is provided by AT&T Broadband.

3.6.2 Environmental Impacts

Alternatives 1, 2, 3 and 4

Electricity. Puget Sound Energy plans to continue to improve and extend its facilities as necessary to serve the growing loads in its service area. PSE is continually researching means to expand, supply, and upgrade equipment. System planners design and build their systems to follow population and employment growth projections based on county and city plans. The electricity load is determined from these plans and projections. An electric system plan is then developed to serve those loads at prescribed reliability levels, taking into account environmental, economic, financial, and operational factors. Utility construction is coordinated with the appropriate jurisdictions and agencies and is typically phased in as actual growth occurs.

Future electrical service plans are not only designed to provide for future growth and accommodate new and increased load. They also include changes to the existing systems to improve reliability, power quality, and looping of the system for redundancy backup service.

Natural Gas. CNG does not plan in advance for individual connections. Rather, connections are initiated by customer requests for new construction or conversion from electricity to gas. CNG expects to continue developing distribution systems and services in accordance with the Integrated Resource Plan Guidelines set forth by the State. CNG will identify necessary

reinforcement and continue to meet growth at lowest possible cost by maximizing capacity of the existing distribution system.

The location, capacity, and timing of system improvements depend greatly on opportunities for expansion and on how quickly the Bayview Ridge area grows. The possible routes to connect different parts of the system will depend on right-of-way permitting, environmental impact, and opportunities to install gas mains along with new development or other utilities. At this time, CNG does not have any planned improvement projects in Bayview Ridge. However, CNG has an active policy of expanding its supply system to serve additional natural gas customers. CNG's engineering department continually performs load studies to determine CNG's capacity to serve its customers.

Telecommunications. Telephone service providers will provide facilities to accommodate whatever growth patterns occur. Since telephone service providers do not generally conduct detailed, long-range planning activities, no specific projects have been identified by Verizon at this time. General improvements to expand service to meet the projected future demand include constructing additional fiber optic cable, copper cable, and switching stations.

The cellular system will expand in response to several factors: customer growth within a designated area, shift in distribution patterns, and/or a decrease in service quality or reliability (measured by the record of dropped calls or complaints of poor sound quality). In general, cellular system growth follows trends in population density along the higher volume transportation corridors.

Cable Television. At present, no new programming or major extension of cables is planned. Any future expansion that does occur will be completed as technology, market demand, and return on investment allows.

3.6.3 Mitigating Measures

Proposed:

- Section 14.16.720 of the UDC regulates the placement of wireless facilities.
- The Port of Skagit County requires undergrounding of utility lines wherever feasible.
- The FAA regulates electrical interference near the Skagit Regional Airport.

Potential:

Adopt requirements and standards for undergrounding of utilities.

3.6.4 Unavoidable Adverse Impacts

No unavoidable adverse impacts to Utilities are anticipated.

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