

CHAPTER 10

UTILITIES ELEMENT

INTRODUCTION

The Growth Management Act requires counties and cities to include a utilities element in their comprehensive plans. A requirement of the utility element is to include the general location, proposed location, and capacity of all existing and proposed utilities. The policies in this element include natural gas, telecommunications, electricity, solid waste, sewer, public water, water quality, drainage, flooding, and storm water runoff. Only those policies addressing natural gas, telecommunications and electricity underwent review by the Utility Element Citizen Advisory Committee.

The information relating to utility service providers contained in this Plan is a summary only. More detailed discussions of the topics covered in this chapter are found under separate cover in utility service provider capital facilities plans and in the following documents:

- *The Skagit County Comprehensive Plan supplemental Map Portfolio.* The portfolio includes maps illustrating the locations of major utility facilities, including water, sewer, electrical, natural gas, drainage and dike districts, telecommunications, and transit service areas.
- *Skagit County Coordinated Water System Plan - Regional Supplement, 2000.* This document provides information on existing water facilities, management and conservation strategies, a needs forecast through 2040, and the availability of water rights to meet those needs, all within the framework of growth management.
- *Anacortes-Fidalgo Island Coordinated Water System Plan*
- *The Capital Facilities Plan (CFP) 2000-2005 - Goals and Policies, Capital Improvements, and Implementation Programs.* This plan contains information and policies regarding financing, level of service and implementation of capital improvement projects.

- *Overall Economic Development Plan (OEDP) for Skagit County* (Updated 2000). The plan contains specific information regarding various sewer service and treatment projects, surface water projects, and utility corridor improvements, as well as estimated costs and potential funding sources.
- *Memorandum of Agreement Regarding Utilization of Skagit River Basin Water Resources for Instream and Out of Stream Purpose*. Intended to ensure the establishment and maintenance of instream flows, and to provide mechanisms for interlocal cooperation with respect to specific existing agreements and water utilization.
- *Skagit County Comprehensive Solid Waste Management Plan Update and Environmental Impact Statement*. April 1994. Summarizes actions to be taken regarding solid waste management and an implementation schedule showing recommendations and associated costs.
- *Skagit County Draft GMA Puget Power Electrical Facility Plan and map updates* (November 1992).

Development of this chapter was guided in particular by the following GMA Planning Goal: “Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards.”

This Goal, taken in the context of the totality of the thirteen GMA Planning Goals, led to the following CWPPs that provide specific guidance to the analysis and policies developed in this chapter:

- All communities within a region shall fairly share the burden of regional public facilities (The GMA defines public facilities to include domestic water systems, storm and sanitary systems...CWPP 12.2)
- Development shall be allowed only when and where all public facilities are adequate, and only when and where such development can be adequately served by regional public services without reducing levels of service elsewhere (CWPP 12.6)
- Public facilities and services needed to support development shall be available concurrent with the impacts of development (CWPP 12.7)

- Public water supply for new development shall conform to or exceed the Coordinated Water System Plan for public water systems (CWPP 12.10)

GOAL A

To assist in providing high quality, cost-effective and safe utility services at low environmental cost by: coordination and consistency among utility providers and comprehensive plans; integration of utility facility plans and capacity needs; joint use of transportation rights-of-way and utility corridors; environmentally sensitive siting of utility facilities; maintenance of facilities and utility corridors; underground installation of utility distribution lines where possible; encouraging conservation of water and energy, and encouraging research and implementation of alternative energy resources.

OBJECTIVE 1

Coordinate and encourage timely, safe, and cost-effective installations of utility systems through improved permit procedures, joint use of utility corridors, and inter-local agreements.

Policies

- 10A-1.1** Agreements shall be developed with private utility providers and public agencies as required to facilitate:
- (a) Joint use of utility corridors and public rights-of-way.

- (i) Standards shall be maintained for the location of all utilities in public rights-of-way.
 - (ii) To the extent feasible, utility extensions and substantial utility upgrades shall be located so they will not need to be moved to accommodate anticipated future expansion of public rights-of-way.
 - (b) Coordination between the land use comprehensive plan and utility capital facility plans.
 - (c) Timely notices of new road construction and maintenance of existing roads with utility construction activities.
 - (d) Coordinated permit applications and meetings to include all necessary utilities affected by related projects.
 - (e) Public and private utilities to work together on installations of utility facilities to reduce time delays and protect existing utility transmission systems from adverse impacts of new installations.
 - (f) Coordination of land acquisition, land use, and enhancement of utility corridors where appropriate, for pedestrian, bicycle and equestrian trails, and wildlife corridors.
- 10A-1.2** New utility facility designs shall include joint usage where possible.
- 10A-1.3** Antennas shall be placed on existing towers, buildings, or other structures, where possible.
- 10A-1.4** In cases where the utility facilities are to be accessed by, or located on, private roads, appropriate easements and agreements shall be negotiated as part of the permitting process.
- (a) The same standards shall be used for the location of all utilities in private roads, as on public rights-of-way.
- 10A-1.5** Processing of utility permits shall be done in a timely and cost-effective manner.
- 10A-1.6** There shall be communication among the city/county, Washington Utilities Transportation Commission (WUTC), and utilities regulated by the WUTC.

OBJECTIVE 2

Encourage safe, reliable, and quality utility systems.

Policies

- 10A-2.1** Utility providers shall build and manage utility systems to provide reliable service and to meet the needs of future growth.
- 10A-2.2** Utilize construction and design standards that are environmentally sensitive, safe, and cost-effective.
- 10A-2.3** Noise generated by transformer and distribution stations shall not exceed the allowable levels as set by the state.
- 10A-2.4** Scientific research on potential human health effects of extremely low frequency (ELF) electric and magnetic fields (EMF) shall be monitored annually by the County. The citizens of Skagit County shall continue to be informed of any new information the County receives concerning this research. Electric utility providers should evaluate and consider low-cost methods to reduce EMF exposure from their facilities.

OBJECTIVE 3

Maintain consistency, compatibility, and concurrency between utility providers, local, state, and federal plans.

Policies

- 10A-3.1** The extension and sizing of distribution system components shall be consistent with the comprehensive plan.
- 10A-3.2** An ordinance shall be developed which addresses coordination between plat approvals, building permit approvals and availability of utilities necessary to fulfill the request of the permittee.

- 10A-3.3** Emergency planning should be coordinated among all necessary utilities and Skagit County Emergency Services to ensure timely access to shut-off valves in natural gas systems during disasters.

OBJECTIVE 4

Provide environmentally sensitive maintenance procedures for utility corridors.

Policies

- 10A-4.1** Agreements shall be developed for vegetation management in public rights-of-way, which incorporate Integrated Vegetation Management (IVM) approaches. All available control actions such as biological and mechanical means should be considered.
- (a) Agreements shall be established that reduce redundancy of rights-of-way maintenance between the utility provider and Skagit County Public Works Department.
- 10A-4.2** Where pesticides need to be used on county road easements and county road rights-of-way, that use shall be restricted to scientifically tested pesticides proven to be non-leachers into ground water. Pesticide applicators shall follow all recommendations and restrictions issued by Washington State Department of Agriculture.
- 10A-4.3** Encourage utility providers to do only the work that is required to maintain rights-of-way.
- 10A-4.4** Normal and routine maintenance or repair of existing utilities shall use reasonable methods with the least amount of potential impact to environmentally sensitive or critical areas and any impact to these areas or its buffer shall be restored after the maintenance to the maximum extent possible (SCC 14.060.90). New construction or expansion of existing facilities must comply with the County's Critical Areas Ordinance. An Integrated Vegetation Management program may be developed and implemented consistent with the Critical Areas Ordinance.

OBJECTIVE 5

To site utility facilities to be consistent with the Land Use Element.

Policies

- 10A-5.1** Utility providers should avoid placement of facilities in areas defined as environmentally sensitive or critical areas unless there are no feasible alternatives and only after a site assessment and mitigation plan has been approved under the provisions of the Critical Areas Ordinance.
- 10A-5.2** Outdoor installations of transfer and distribution stations providing electrical power, communications, and natural gas, should, where practicable, be located in industrial or commercially zoned areas. Stations should be reasonably compatible with surrounding uses. Where system design or economics necessitate location of such installations in residential or rural areas, installations shall be suitably screened or enclosed so as to eliminate or substantially reduce the visual impact. This may be achieved through appropriate setbacks and screening, such as, buildings, natural topography, landscaping, and vegetation.
- 10A-5.3** Utility facilities should be permitted in all land use zones as necessary when and where utility franchises exist and if they are in compliance with this Comprehensive Plan.
- 10A-5.4** Use of wireless technologies shall be recognized as a growing service. This technology has unique visual and noise impacts. Siting requirements shall attempt to minimize the unique visual and noise impacts and shall be consistent with the Comprehensive Plan. Siting requirements shall include utilizing existing sites and structures where possible, adequate setbacks, and appropriate landscaping.

OBJECTIVE 6

Encourage underground utility distribution lines to reduce visual and safety impacts of overhead lines where economically feasible.

Policies

- 10A-6.1** Utility providers shall be encouraged to provide underground installation of utility lines.
- 10A-6.2** Existing overhead utilities shall utilize joint support structures at such time as the system is upgraded if the cost to place lines underground is not reasonable for the rate payer under the rate structure set by state and federal regulation. If a situation exists where underground existing overhead utilities is desired and is technically feasible, a Local Improvement District or some other financial arrangement will be used to have the beneficiaries bear the cost, rather than the general rate payer.
- 10A-6.3** When new or converted underground utilities are requested, provisions should be made for all utilities that may request access at a later time.

OBJECTIVE 7

Encourage research and implementation of alternative energy resources and encourage conservation of energy resources.

Policies

- 10A-7.1** Generating energy from non-renewable resources shall be acceptable if it is economically feasible and environmentally sound.
- 10A-7.2** Energy conservation shall be encouraged in order to conserve energy resources, minimize air pollution, and delay the need for additional electrical power generating facilities. This may be achieved through methods including, but not limited to: education of the public; insulation and weatherization as specified by building codes; and use of, energy-efficient applications.
- 10A-7.3** Residential, commercial, and industrial development shall be encouraged to use energy-efficient, cost-effective, and environmentally sensitive technologies and resources in new construction.

- 10A-7.4** Skagit County shall be a leader and an example to the public in the energy conservation process by making every effort to reduce energy consumption in government facilities.
- 10A-7.5** The research and use of alternative energy resources should be actively encouraged.
- 10A-7.6** Commercial and industrial facilities shall be encouraged to incorporate co-generation whenever possible, if economically feasible and environmentally sound.
- 10A-7.7** The use of solar energy for water and space heating should be encouraged and ordinances shall be developed to protect solar access.
- 10A-7.8** A program should be developed whereby builders and developers are encouraged through incentive programs to seek and implement alternative energy resources through building designs, layout designs, and land use issues.

SOLID WASTE

OBJECTIVE 8

To practice integrated and efficient management of solid waste in accordance with Washington State waste management priorities to protect and enhance the present and future environmental quality and public health in Skagit County through education, regulations, and economic incentives.

Policies

- 10A-8.1** Solid waste management should be provided with adequate resources to manage solid wastes safely, efficiently, and equitably, and should be consistent with State priorities while recognizing local conditions.

- 10A-8.2** Reducing per capita waste consumption should be supported through educational and legislative efforts that are directed towards changing consumer and industrial practices.
- 10A-8.3** Recycling efforts and opportunities in Skagit County should be maintained at a high level to increase the recycling rate annually.
- 10A-8.4** Environmental and economic impacts shall be considered and balanced when determining disposal practices.
- 10A-8.5** Individuals should be encouraged to take personal and financial responsibility for the proper management of the wastes he/she generates.

SEWER

OBJECTIVE 9

To recognize the Urban Growth Area policies by encouraging the extension of public sewer service to designated Urban Growth Areas and limiting the development of such systems in Rural Areas.

Policies

- 10A-9.1** Development of community septic systems should be allowed when it is necessary to remedy ground water contamination and related health problems.
- 10A-9.2** Community septic and other innovative sewage treatment systems proposing to further the goals and policies of the Comprehensive Plan, such as in Conservation and Reserve Development (CaRD) land developments and limited areas of more intensive rural developments (LAMIRDS), should be considered on a case by case basis.
- 10A-9.3** Urban governmental services should not be extended to or expanded in rural areas except in those limited circumstances shown to be necessary to protect basic public health and safety and the environment, and when such services

are financially supportable at rural densities and do not permit urban development.

PUBLIC WATER

Skagit County Coordinated Water System Plan Summary

The Skagit County CWSP represents a significant element of the County's Comprehensive Plan. The CWSP was jointly developed by all of the major Skagit County water utilities, in cooperation with the County and State agencies consistent with the Public Water System Coordination Act (RCW 70.116).

The CWSP is incorporated by reference by the Department of Ecology into the recently developed "Memorandum of Agreement Regarding Utilization of Skagit River Basin Water Resources for Instream and Out of Stream Purposes." (Skagit River MOA). The Skagit River MOA further links the CWSP and GMA together by cross-referencing the GMA Urban Growth Areas and the Place of Use definitions for water rights as defined in the CWSP.

The Urban Service Areas for the Skagit County water purveyors are defined, as well as the rural service areas. The CWSP incorporates a level of service standard for rural public water service and related fire protection. An agreement on level of service between the County, water purveyors, cities, and County Fire Marshal is also incorporated in the CWSP.

The water demand projections incorporated in the CWSP were based on OFM population projections and further adjusted to reflect OFM and land use criteria to help ensure consistency with the GMA planning procedure.

The evolving land use and water resource management planning programs of Skagit County are reflected in the CWSP's Joint Operating Agreement (JOA) between the City of Anacortes and Skagit PUD. This JOA establishes the CWSP (and GMA) document as the framework for regional water supply and transmission development. It ensures that the two major water supply providers in Skagit County will work cooperatively to ensure that water supply will be available where and when required, in accordance with the County's Comprehensive Plan.

The CWSP, Skagit River MOA, and JOA, all combine to provide a comprehensive water supply and capital improvement plan for this Comprehensive Plan. The individual Water System Plans are incorporated by reference and by law in the CWSP.

Water Rights Agreement Summary

The “Memorandum of Agreement Regarding Utilization of Skagit River Basin Water Resources for Instream and Out-of-Stream Purposes” (Skagit River MOA), provides an in-depth analysis of water rights for public water service in Skagit County. The Skagit River MOA was developed and signed by the City of Anacortes, Skagit PUD, Skagit County, Swinomish Tribe, Upper Skagit Tribe, Sauk-Suiattle Tribe, and the Departments of Ecology and Fish and Wildlife.

The Skagit River MOA incorporates both instream and out-of-stream water resource management objectives, water rights adequate to meet projected public water supply needs until at least the year 2046, and provisions for extending water supply to rural areas to protect public health, minimize impact on instream resources, and to support the States objectives for both the GMA and the management of the State’s water resources.

The Skagit River MOA also recognizes the continuing need to collect data and to undertake a comprehensive watershed management program. The first phase of the joint plan in the Skagit River MOA includes the Lower Skagit River area, including Cultus Mountain streams. The second phase will include the Upper Skagit River watershed.

Instream flow monitoring and management will help establish where rural public water systems will be required to achieve the local, State, and Tribal government’s water resource management objectives.

Countywide Planning Policies Regarding Water

All growth outside the urban growth boundary shall be rural in nature as defined in the Rural Element, not requiring urban government services except in those limited circumstances shown to be necessary to the satisfaction of both the County and the affected city (with regard to water the City of Anacortes is the only municipal water purveyor) to protect basic public health, safety and the environment, and when such services are financially supportable at rural densities and do not permit urban development.

County Comprehensive Plan Policies Regarding Water

This Comprehensive Plan recognizes that the need for the provision of piped water in rural areas may occur under limited circumstances such as: the transmission pipeline routing between Urban Growth Areas; where existing developments are providing rural public water service and fire protection in accordance with the CWSP; where groundwater does not meet Safe Drinking Water Act and State Health Department criteria for potable water use; where water quantity issues related to actual yield or where groundwater withdrawal will cause a conflict with instream resources as defined by the Skagit River MOA; and properties that are rural in nature and density and are adjacent to a piped water system.

The provision of piped water service in rural areas shall support the combined objectives of the Growth Management Act and the Skagit River MOA. The implementation of the Skagit River MOA and the update of the CWSP will better define the refinements to, and application of, the level of service criteria where there is a transition between urban and rural service zones, existing development in rural areas, and agricultural demands for piped water (i.e., dairies and container farming).

OBJECTIVE 10

To influence the development and use of the water resources of Skagit County in a manner that is consistent with the Countywide Planning Policies and the Comprehensive Plan.

Policies

- 10A-10.1** Cooperation with water districts and other water providers shall be extended to support them in their responsibility to provide a reliable service to assure an adequate quality and quantity of potable water and high quality water supply within their service areas.
- 10A-10.2** Water supply infrastructure expansion shall be designed to meet local needs and urban or rural levels of service standards, and comply with this Comprehensive Plan's land use densities.
- (a) Urban Water Service shall mean service provided by a water system(s) that has been designed to provide service throughout the designated urban growth area. The water service shall be designed to

meet the water supply needs of the residential, commercial, industrial, and other water needs as defined by the Skagit County or City Comprehensive Plan, the Coordinated Water System Plan, and the designated water utility's Water System Plan.

- (i) The Utility's Water System Plan shall document a plan to meet urban water service using the design criteria outlined in Section 4 and on Table 4-1 of the Coordinated Water System Plan and in accordance with the schedule required by this Comprehensive Plan.
- (b) Rural Water Service shall mean water service provided by an individual well, a stand alone public water system, or extension of a water system from within an urban growth area that is designed to provide rural water service. The water service shall be designed to meet the rural water supply needs of the rural area users as defined by this Comprehensive Plan, the Coordinated Water System Plan, and the criteria established for the water service in Section 4 and on Table 4-1 of the Coordinated Water System Plan.
 - (i) The design shall be guided by the projected rural area water supply and fire protection associated with the requirements of this Comprehensive Plan, and based on the physical or hydraulic capacity requirements as outlined in the Coordinated Water System Plan and the designated water utility's water system plan.

10A-10.3 Interlocal agreements shall be developed with the cities, towns, and water suppliers in the coordination of water service to urban growth areas.

- (a) The Skagit County Public Utility District #1, the cities, the Swinomish Tribal Community, and the County shall meet and enter into an interlocal agreement that provides for an increasing local and/or tribal government role in the provision of public water within their designated jurisdictional urban growth areas.

10A-10.4 Water supply development and service shall be consistent with all related plans, including but not limited to, the Coordinated Water Systems Plan, the Anacortes-Fidalgo Island Coordinated Water System Plan, this Comprehensive Plan, and related purveyor plans as they are developed.

10A-10.5 New capital facilities for water-system compliance with state and federal safe-drinking-water rules, and water treatment standards shall be based on rural

area densities and a level of service that is consistent with the existing character of the environment.

- 10A-10.6** Skagit County shall enforce all county, state and federal laws regarding potable water, well head protection and the installation of water systems.
- 10A-10.7** Connection to a public water system should be encouraged in those areas of low flow streams.
- 10A-10.8** Limitations on uses and densities should be considered within designated low flow stream corridors where necessary to limit individual wells and protect base flows.
- 10A-10.9** The Coordinated Water Systems Plan should be reviewed to assure consistency with the adopted Comp Plan.
- 10A-10.10** Necessary expansion of existing public facilities may require urban level of water service due to existing development regulations.
- 10A-10.11** Water conservation measures shall be incorporated into water supply development and service plans as a method of addressing future water needs.

STORM WATER

GOAL B

Protect and enhance natural hydrologic features and functions by: maintaining water quality and fish and wildlife habitat; incorporating natural drainage patterns into measures to protect the public from health and safety hazards and property damage; maintaining a sustainable groundwater discharge/recharge budget; and by promoting beneficial uses as well as water resource education and planning efforts.

OBJECTIVE 1

Prevent the loss of life, the creation of public health or safety problems and the loss or damage of public and private property.

Policies

- 10B-1.1** Nonstructural storm water measures should be preferred over structural measures.
- 10B-1.2** Protection of existing facilities should take preference over the protection of undeveloped lands.
- 10B-1.3** Land use and related regulations should reflect the natural constraints of floodplains, meander zones, riparian habitat zones, wetlands, geologically hazardous areas and other critical areas.

OBJECTIVE 2

Establish and adopt a systematic and comprehensive approach to solving existing surface water and storm water problems and prevent future problems.

Policies

- 10B-2.1** Strategies for surface water management should balance engineering, economic, environmental and social factors in relationship to stated comprehensive planning goals and policies.
- (a) Watershed plans, including interagency plans, shall be consistent with and integrated into the Comprehensive Plan.
- (b) Agencies and jurisdictions should coordinate efforts in identifying priority watersheds and in developing and implementing non-point pollution watershed action plans.

- 10B-2.2** Public and governmental understanding of the various capabilities and limitations associated with storm water management should be improved through a variety of educational efforts.
- (a) Work toward achieving community awareness of the importance of water quality protection and public involvement in water quality planning and implementation strategies shall be encouraged.
 - (b) The community shall be educated and informed about flood hazards and the potential adverse impacts of urban and rural land uses, and resource management practices to the flood plain.
- 10B-2.3** A surface water management plan should be developed and evaluated at regular intervals to maintain consistency with the Comprehensive Plan and other related programs affecting the environment.
- 10B-2.4** Ordinances controlling runoff from new development and re-development shall be adopted and enforced.
- 10B-2.5** Water quality and quantity degradation from storm water pollutant discharges shall be minimized. On-site best management practices; control of development density and location; preservation of stream corridors and buffers; and, development and maintenance of a system of storm water retention and detention facilities should be engineered, constructed, maintained, and monitored to address water quality impacts.
- 10B-2.6** Surface water runoff and drainage facilities shall be designed and utilized in a manner that protects private property and the degradation of water quality.

OBJECTIVE 3

Address storm water management in the context of the varied uses associated with the natural drainage systems.

Policies

- 10B-3.1** Storm water management measures should preserve to the fullest extent possible opportunities for other uses.
- 10B-3.2** Structural flood protection measures should not obstruct fish passage.
- 10B-3.3** Structural flood protection measures should preserve or enhance existing flow characteristics for fisheries and other uses of the riparian zone.
- 10B-3.4** Structural flood protection structures should be designed, constructed, and maintained in a manner, to the fullest extent possible, that is harmonious and complimentary to the surrounding landscape.
- 10B-3.5** Flood protection measures should not result in a long-term net loss of, or damage to fish and wildlife resources, but wherever possible develop or improve the diversity of habitat.
- 10B-3.6** Lands disturbed during the development of storm water management measures should be restored to as natural state as possible in accordance with the provisions of the Critical Areas Ordinance.
- 10B-3.7** Future urban style development should be directed to urban growth areas to prevent sprawling development which would negatively impact water quality and quantity on natural resource lands and in rural areas.

OBJECTIVE 4

Prevent the degradation of the quality of both surface water and the water entering the region's aquifers.

Policies

- 10B-4.1** The use of the natural drainage system, where applicable, shall be preferred over the use of pipelines or enclosed detention systems.
- 10B-4.2** The preservation of natural wetlands, and the protection of floodplain and streams shall be actively pursued.

- 10B-4.3** Storm water runoff from impervious surfaces should be treated by utilizing best management practices (treatment BMPs) before the storm water is allowed to enter the natural drainage system, infiltrate into the ground or enter Puget Sound. Examples of treatment BMPs are, but not limited to: detention ponds, oil/water separators, biofiltration swales and constructed wetlands.

OBJECTIVE 5

Coordinate among public and private sectors to ensure compatibility of storm water management measures.

Policies

- 10B-5.1** Where land use decisions require public review, planning, design and construction of storm water management measures should include opportunity for comment by the general public and interested agencies.
- 10B-5.2** Efforts should be made to work with jurisdictions and agencies toward standardization and monitoring of regulations that impact storm water management.

