CHAPTER 9

UTILITIES ELEMENT

INTRODUCTION

The GMA requires the utility element to describe locations, capacities, and need for utilities. The policies in this element cover private natural gas, telecommunications, electric utilities; and public solid waste, sewer, water, and surface water utilities . The information relating to utility service providers contained in this Plan is a summary only. More detailed discussions of the topics covered in this chapter are found under separate cover in utility service provider capital functional 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.

- *Comprehensive Economic Development Strategy (CEDS) for Skagit County* (Updated 2005). 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).

GMA Mandate

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 CPPs that provide specific guidance to the analysis and policies developed in this chapter:

- *Public facilities and services shall be integrated and consistent with locally adopted comprehensive plans and implementing regulations. (CPP 12.1)*

- *All communities within a region shall fairly share the burden of regional public facilities. (See the Capital Facilities Element for further information) CPP 12.2)*

- *Lands shall be identified for public purposes, such as: utility corridors, transportation corridors, landfill, sewage treatment facilities, recreation, schools, and other public uses. The County shall work with the state, cities, communities, and utility providers to identify areas of shared need for public facilities. (CPP12.4)*

- *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 (CPP 12.6)*

- *Public facilities and services needed to support development shall be available concurrent with the impacts of development (CPP 12.7)*

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

- *Public drainage facilities shall be designed to control both stormwater quantity and quality impacts. (CPP 12.14)*

GOAL A

Ensure the provision of high quality, cost effective and environmentally sensitive utility services in cooperation with public and private providers.

GOAL A1 SYSTEMS COORDINATION

Coordinate and encourage timely, safe, and cost-effective planning and design of utility systems with providers and state and federal agencies.

Policies

9A-1.1 **Utility Agreements** - Agreements between the county and utility system providers shall provide for the coordination between functional plans and capital facility plans; address the joint use of corridors, installations, and rights-of-way; ensure that development permit reviews address all affected utilities; and mitigate impacts of utility improvement projects.

9A-1.2 **Human Health and Power Facilities –** In reviewing proposals for new power facilities, the county shall consider whether the latest conclusions of

scientific research on extremely low frequency (ELF) electromagnetic fields (EMF) have been used to reduce exposure that might affect human health.

GOAL A2 CONSISTENCY OF PLANS AND STANDARDS

Ensure the consistency, compatibility, and concurrency of utility functional plans through periodic review.

Policies

9A-2.1 **Utility Facility Planning** – Utility system plans shall be reviewed for consistency with the County Comprehensive Plan.

9A-2.2 **Vegetation Management** – The county shall use standards for vegetation management in public rights-of-way in approving utility providers' proposals. Such standards shall be based on similar standards of the state Department of Transportation.

9A-2.3 **Critical Areas** – Any utility construction including maintenance and repair shall comply with county regulations including the Critical Areas Ordinance and vegetation management standards.

GOAL A3 UTILITY FACILITY SITING

Site facilities consistent with the policies of the Land Use Element.

Policies

9A-3.1 **Siting at Critical Areas** – The county shall ensure that utility facilities are not sited in designated critical areas unless feasible alternatives are unavailable, in which case suitable mitigation in accordance with the critical areas regulations shall be required.

9A-3.2 **Siting of Major Facilities** - Outdoor installations of transfer and distribution stations providing electrical power, communications, and natural gas, should, where practicable, be located in industrial or commercially zoned areas. Stations should be reasonably compatible with surrounding uses. Where system design or economics necessitate location of such installations in

residential or rural areas, installations shall be suitably screened or enclosed so as to eliminate or substantially reduce the visual impact. This may be achieved through appropriate setbacks and screening, such as, buildings, natural topography, landscaping, and vegetation.

9A-3.3 **Land Use -** Utility facilities may be permitted in all land use zones when and where utility franchises exist and if they are in compliance with this Comprehensive Plan and related codes and standards.

9A-3.4 **Wireless Communications** – Siting of wireless facilities shall minimize visual and noise impacts, through the utilization of existing sites and structures where possible, adequate setbacks, and appropriate landscape screening.

GOAL A4 UNDERGROUNDING

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

Policies

9A-4.1 **Planning -** Utility providers shall be encouraged to plan for underground installation of utility lines, and private developers shall be required to underground utilities as directed during permit review.

9A-4.2 **Implementation** - Existing overhead utilities shall utilize joint support structures at such time as the system is upgraded if the cost to place lines underground is not reasonable for the rate payer under the rate structure set by state and federal regulation. If a situation exists where underground existing overhead utilities is desired and is technically feasible, a Local Improvement District or some other financial arrangement will be used to have the beneficiaries bear the cost, rather than the general rate payer.

9A-4.3 **Design -** Provisions for future undergrounding of other utilities should be made in the design of initial utility undergrounding projects.

GOAL A5 ENERGY CONSERVATION

Encourage conservation of energy resources, including the reduction of energy consumption in county facilities.

Policies

9A-5.1 **Non-renewable Resources** - Generating energy from non-renewable resources may be acceptable if proven to be economically feasible and environmentally sound.

9A-5.2 **Conservation Methods** - Energy conservation should 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 systems.

9A-5.3 **Technology Solutions** - Residential, commercial, and industrial development shall be encouraged to use energy-efficient, cost-effective, and environmentally sensitive technologies and resources in new construction.

9A-5.4 **Alternative Energy Resources** - The county shall encourage the use of alternative energy resources in the design and construction of new development..

9A-5.5 **Co-generation** - Commercial and industrial facilities shall be encouraged to incorporate co-generation whenever possible, if economically feasible and environmentally sound.

9A-5.6 **Solar Energy** - The use of solar energy for water and space heating should be encouraged and ordinances shall be developed to protect solar access.

9A-5.7 **Design** – The county should work with builders and developers through incentive programs to seek and implement alternative energy resources in building and site design, and land use.

SOLID WASTE

GOAL A6 SOLID WASTE MANAGEMENT

Protect environmental quality and public health in Skagit County through effective practices, education, regulations, and economic incentives.

Policies

9A-6.1 **Waste Reduction** - The county shall endeavor to reduce per capita waste production by changing consumer and industrial practices.

9A-6.2 **Recycling** - The county shall encourage recycling.

SEWER

GOAL A7 SANITARY SEWER

Encourage public sewer services in Urban Growth Areas and limit them in the rural area.

Policies

9A-7.1 **Rural Community Systems** – Community-, and other innovative sewage treatment systems in Conservation and Reserve Development (CaRD) land developments and limited areas of more intensive rural developments (LAMIRDS) - or to address rural public health problems - should be considered on a case by case basis.

PUBLIC WATER

GOAL A8 PUBLIC WATER

Use Skagit County's water resources wisely.

Policies

9A-8.1 **Water Supply Planning** - The county shall coordinate water supply plans of all jurisdictions through the Coordinated Water Systems Plan.

9A-8.2 **System Expansions** - Water supply infrastructure expansions shall be designed to meet local needs and urban or rural levels of service standards, and comply with the Comprehensive Plan's land use densities.

9A-8.3 **System Criteria** - The Capital Facilities Element shall establish planning criteria and timing of water system expansions.

9A-8.4 **Enforcement** - Skagit County shall enforce all county, state and federal laws regarding potable water, well head protection and the installation of water systems.

9A-8.5 **Low Flow Streams** - Connection to a public water system should be encouraged in those areas of low flow streams. Limitations on uses and densities should be considered within designated low flow stream corridors where necessary to limit individual wells and protect base flows.

9A-8.6 **Coordinated Water Systems Plan** - The Coordinated Water Systems Plan shall be reviewed and amended regularly to ensure consistency with the Comprehensive Plan.

9A-8.7 **Conservation** - 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.

GOAL B1 RISK AVOIDANCE

Reduce risks t to public health and safety and the loss of, or damage to public and private property.

Policies

9B-1.1 **Solutions** - Nonstructural storm water measures should be preferred over structural measures.

9B-1.2 **Priority** Protection of existing development should take preference over the protection of undeveloped lands.

9B-1.3 **Planning** - Strategies for surface water management should balance engineering, economic, environmental and social factors in relationship to stated comprehensive planning goals and policies.

9B-1.4 **Community Awareness** – The county shall promote community awareness of the importance of water quality and flood hazard protection through education and outreach in conjunction with planning for water programs.

9B-1.5 **Surface Water Management Plan** – The county shall implement a surface water management plan using master drainage plans, subarea plans, and UGA plans by 2012.

9B-1.6 **Structural Flood Protection** - Dikes, levees, and other structural flood protection facilities should be designed to allow fish passage, protect flows in riparian zones, and complement or enhance the surrounding landscape.

9B-1.7 **Habitat** - Flood protection measures should not result in a long-term net loss of-, or damage to, fish and wildlife resources, and wherever possible, should result in increased diversity of habitat.

9B-1.8 **Natural Drainage** - Natural drainage shall be preferred over the use of pipelines or enclosed detention systems, where possible.

9B-1.9 **Best Management Practices -** Storm water runoff from impervious surfaces should be treated by utilizing best management practices (treatment BMPs) before the storm water is allowed to enter the natural drainage system, infiltrate into the ground or enter Puget Sound. Examples of treatment BMPs are, but not limited to: detention ponds, oil/water separators, biofiltration swales and constructed wetlands.

9B-1.10 **Coordination of Regulations** - The county shall work with other jurisdictions and agencies toward standardization and monitoring of regulations that affect storm water management.