

## CHAPTER 11 UTILITIES

### 11.1 Introduction

The Utilities Element of the City of Woodinville Comprehensive Plan is intended to provide a framework for the efficient and predictable provision and siting of utility facilities and services within the City of Woodinville. The Utilities Element must be consistent with the other elements of the Comprehensive Plan, as well as with countywide planning policies.

The Utilities Element is required to include an inventory of all existing and proposed service lines and facilities. The plan must include an analysis of capacity and the potential impacts of expected growth in the City and any areas where annexation is anticipated. All utilities are considered important because they are necessary to preserve the health, safety, and welfare of the community, as well as to ensure a desirable level of quality of life.

The City of Woodinville is currently served by a combination of City owned and non-City owned utilities. Both types of utility providers are discussed in this element, since issues regarding the provision of utilities are pertinent regardless of who provides the service.

The following is a list of the City's utility providers.

#### City of Woodinville Providers

##### City Owned

Stormwater

##### Non-City Owned

**Water:** Woodinville Water District

**Sewer:** Woodinville Water District, Northshore Utility District, Alderwood Water and Wastewater District and Metro

**Solid Waste:** Waste Management

**Electricity:** Puget Sound Energy

**Natural Gas:** Puget Sound Energy

**Telecommunications:** Verizon, various cellular and fiberoptic providers

**Cable Service:** AT&T Broadband

### 11.2 Goals and Policies

This element and its appendix discuss the current availability and provision of utility services in Woodinville, analyze the anticipated expansion and improvement of services to accommodate growth, present goals and policies addressing the provision of utility services, and provide an implementation strategy so that the City can meet its future utility needs while maintaining community character and protecting the natural environment.

**GOAL U-1: To enhance the efficiency and quality of service from public and private utility providers through the coordination of utility, land use, and transportation planning so that utilities including water, sewer, storm water, solid waste, electricity, natural gas, telecommunications, cable television, and satellite transmission are available or can be provided to serve in a manner which is fiscally and environmentally responsible, aesthetically acceptable to the community, and safe for nearby inhabitants.**

#### Policies

**U-1.1** Facility plans for non-City-owned utilities should reflect and support Woodinville's land use plan.

- U-1.2** Notify utility providers of potential inconsistencies between their system plans and the Comprehensive Plan, and work with them to find acceptable solutions when inconsistencies exist.
- U-1.3** Work with utility providers to ensure that resources are available to support the land uses, including consideration of alternatives to new facilities and alternative locations for the new facilities.
- U-1.4** Keep on file resource maps that indicate the general location of existing and proposed major components of utility systems serving the City.
- U-1.5** Allow utility facilities as a permitted use where appropriate to ensure that land is available for the siting of such facilities.
- U-1.6** Base the extension and sizing of public facilities upon the Land Use Plan. In those cases where engineering standards are in excess of available capacity for the requirements for the immediate development, the excess capacity shall not be a reason to allow growth out of sequence with the land use plan.
- U-1.7** Coordinate with other jurisdictions when transmission facility additions or improvements cross jurisdictional boundaries.
- U-1.8** Regulate construction of utilities within sensitive areas in accordance with the Sensitive Areas Regulations.
- U-1.9** Encourage the joint use of utility corridors consistent with non-motorized and recreational uses.
- U-1.10** Coordinate public road construction and maintenance projects with utility construction and maintenance.
- U-1.11** Require utility providers to design, locate, and construct facilities within City-owned properties and rights-of-way to reasonably minimize significant, individual, and cumulative adverse impacts to the environment and to protect environmentally sensitive areas. Requirements should include the following:
1. Locate sewer lines and use construction methods and materials to prevent or minimize the risk of spillage into watercourses and water bodies,
  2. Locate utility corridors in existing cleared areas, when possible,
  3. Locate utility facilities and corridors outside of wetlands, when possible,
  4. Minimize sewer and water line crossings of fish-bearing watercourses, when possible,
  5. Use bio-stabilization, riprap, or other innovative engineering techniques to prevent erosion where lines may need to follow steep slopes, and
  6. Minimize corridor width.
- U-1.12** Recognize the electrical facilities document known as the Northshore Electrical Subarea chapter of Puget Sound Power and Light Company's "King County Growth Management Act Electrical Facilities Plan," February 1993 including maps of existing, in-progress, and proposed facilities with the August 1995 amended Woodinville/Bothell area map, recognizing:
1. Electric utilities have state-regulated "public service obligations,"
  2. The state's Procedural Criteria for utilities elements of comprehensive

plans,

3. The Growth Management Act requirements for including the location and capacity of existing and proposed electrical lines in utilities elements, and
4. The need for timely inter-jurisdictional coordination in the planning and provision of electrical service.

**GOAL U-2: Review new projects requiring land use or construction permit approval for the availability of an adequate water supply.**

**Policies**

- U-2.1** Require connection to the municipal water system for all new development permitted by the City.
- U-2.2** Encourage the hookup to the municipal water system for those properties on existing private well systems.
- U-2.3** Maintain building codes and plumbing codes to require water conservation devices for new construction.
- U-2.4** Encourage and support conservation strategies aimed at reducing average annual and peak day water use. These can include such strategies as:
1. Billing rate structures, which encourage conservation,
  2. Water restrictions at appropriate times, and
  3. Public education and the use of appropriate signage where beneficial.
- U-2.5** Recognize the water facilities document known as the Woodinville Water District 2000 Comprehensive Water Plan as part of this Comprehensive Plan.
- U-2.6** Recognize the sewer facilities document known as the Woodinville Water District 1993 Comprehensive Sewer Plan (or most current update) as part of this Comprehensive Plan.

**GOAL U-3: Require connection to the wastewater system when development or subdivision of land occurs, only for land that has a density greater than one unit per acre, except when the City determines that the connection is not technically feasible.**

**Policies**

- U-3.1** Encourage conversion from on-site wastewater disposal systems as sewer lines become available.
- U-3.2** Limit the use of on-site wastewater disposal systems to areas where the zoned density is one unit per acre and only if soil conditions are suitable and groundwater would not be negatively impacted.
- U-3.3** Support a regional approach to wastewater treatment for transmission and treatment of Woodinville's wastewater.
- U-3.4** If on-site waste water disposal system failures occur in low-density areas of one dwelling unit per acre, septic tank management and/or alternative methods of sewage disposal should first be considered. If these alternatives are not feasible

and a sewer must be placed through low density areas of one dwelling unit per acre, sewer service should be extended to only the specific problem area that has experienced failures and may be sized to serve future areas where failure might occur. Excess capacity shall not be a reason to allow growth out of sequence with the land use plan.

**GOAL U-4: A regional approach should be taken to surface water management, with responsibility shared among the counties and affected jurisdictions. This approach should emphasize prevention of water quality degradation through education programs and implementation of Best Management Practices to reduce pollution entering surface waters.**

#### Policies

- U-4.1** Work with the other agencies to undertake joint planning, financing and development of regional storm water detention and flood control projects to mitigate run-off impacts on natural water systems and their associated ecosystems, and reduce damage to adjoining properties.
- U-4.2** Follow a coordinated facilities strategy that preserves and enhances the natural drainage ways and other natural storm water systems to minimize run-off impacts from development.
- U-4.3** Allow storm water retention/detention facilities to be used as partial fulfillment of open space requirements when aesthetically and environmentally acceptable to the City. In determining the degree to which this is allowed, consideration will be given to the nature of the development.
- U-4.4** Design storm water facilities such that peak rate of flow from a property shall approximate pre-development levels.
- U-4.5** Strive for pre-development levels of infiltration per adopted requirements in the design of storm water management facilities.
- U-4.6** Retain open channel drainage systems, natural or man-made, and encourage new systems when feasible.
- U-4.7** Design and construct storm water management systems to minimize adverse impacts to natural water systems and ground water aquifers.
- U-4.8** Establish Stormwater Utility standards to address methods to control run-off during construction to limit erosion, siltation, and stream channel scouring.
- U-4.9** Work with state and regional agencies to develop and implement policies in the Stormwater Management Manual for the Puget Sound Basin.
- U-4.10** Work with state and regional agencies to implement policies in the Bear Creek Basin Plan (1990) and any subsequent plans that may be developed for the other basins in the Woodinville area.
- U-4.11** Continue to use and officially adopt the King County Surface Water Design Manual, as amended, or other manual consistent with the State Department of Ecology's Stormwater Technical Manual.

**GOAL U-5: Encourage reduced energy consumption, conservation, the use of renewable technologies, and energy responsible land use decisions.**

**Policies**

- U-5.1** Consider cost-effective energy conservation technologies including, but not limited to, site plans, construction methods, materials used, and landscaping and development regulations. Such technologies for methods and materials shall also promote practices that do not compromise human health conditions when occupied or used, reduce the need for future additional utility distribution facilities, and leave options for increasing conservation technologies in the future.
- U-5.2** Coordinate with the current electrical provider when considering land use designations or new development in the vicinity of proposed utility facility to ensure compatibility.
- U-5.3** Support the availability of telecommunications systems and telecommuting as a means to mitigate the transportation impact of development and growth.
- U-5.4** Require the underground installation of new electrical distribution lines where reasonably feasible and not a health or safety concern, and encourage underground placement of existing distribution lines as streets are widened and/or areas are redeveloped through such tools as local improvement districts, consistent with Washington Utilities and Transportation Commission tariffs.
- U-5.5** Devote resources to encourage and enforce the Washington State Energy Code during the building permit process.
- U-5.6** Ensure that utility purveyors limit disturbance to vegetation within major utility transmission corridors as necessary for safety and maintenance of transmission lines.
1. Encourage pruning of trees to direct growth away from utility lines,
  2. Encourage phased replacement of vegetation located improperly in the right-of-way,
  3. Encourage pruning of trees according to professional arboricultural specifications and standards, and
  4. Encourage the selection of tree species recommended by the City's Tree Board that can withstand wind and are compatible with utility lines.

**11.3 Plan Implementation and Monitoring**

The following programs are used by the City to ensure that the goals and policies established in the Utilities Element will be achieved.

**11.3.1 Coordinate Review of Development Applications**

The City shall implement a development review system, which ensures review of development applications by the appropriate utility provider. The development review system will include:

1. Reasonable review periods to facilitate coordinated reviews and ensure timely responses by reviewers, and

2. Assurances that other public utility providers will reserve and construct public facility capacity consistent with the City's concurrency requirements.

*Implements Policies U-1.11, U-2.1, U-2.2, U-3.1 through U-3.3, and U-6.2.*

### **11.3.2 Interlocal/Joint Planning Agreements**

The City shall make every reasonable effort to negotiate and enter into interlocal/joint planning agreements with all applicable utility providers within the urban growth area to:

1. Coordinate planning for the siting of new facilities,
2. Coordinate planning of capital facilities for consistency with the City's land use map,
3. Establish cooperative and coordinated planning strategies when utility expansions affect more than one jurisdiction,
4. Coordinate joint and/or shared use of utility corridors and facilities,
5. Establish cooperative planning, development, and financing strategies for regional storm water detention and flood control projects,
6. Coordinate public utility level-of-service standards,
7. Ensure that the level-of-service required and the financial responsibility of other public utility providers to pay the cost of their facilities is clearly delineated, and
8. Support and implement state and regional plans, which affect the City.

*Implements Policies U-1.2 through U-1.4, U-1.6, U-1.8, U-2.1, U-2.2, U-3.1 through U-3.4, U-4.1, U-4.3, U-4.9, and U-4.10.*

### **11.3.3 Planning Consistency**

The City's review of plans of other utility providers should include:

1. Review of the system plans of all utility providers for consistency with the Comprehensive Plan and distribution of the City's Comprehensive Plan for review by utility providers,
2. Guidelines for resolving any inconsistencies between utility providers' plans and the City's Comprehensive Plan,
3. Maintenance of up-to-date maps of the existing and proposed locations of utility facilities, and
4. Provision of the City's sensitive area maps and relevant zoning codes to utility providers.

*Implements Policies U-1.1 and U-1.2.*

### **11.3.4 Coordination of Construction Projects**

The City shall coordinate the timing and scope of construction projects in a manner which:

1. Allows for the coordination of City construction and utility construction, and
2. Provides ample notification to utility providers of construction maintenance or repair of streets and other City facilities to coordinate City projects and the work of utilities.

*Implements Policy U-1.7.*

### **11.3.5 Utility Siting Regulations**

The City shall amend, as necessary, its land use regulations to specify siting criteria for utility infrastructure including regulations that:

1. Eliminate barriers to the installation of utilities facilities consistent with the policies of the Comprehensive Plan,
2. Require compliance with the Sensitive Areas Regulations when constructing utilities,
3. Consider the use of alternative technologies and energy sources including conservation,
4. Support telecommunications systems and telecommuting as means to mitigate transportation impacts,
5. Incorporate location criteria as identified in Policy U-1.12 to minimize adverse effects to the environment and protect environmentally sensitive areas,
6. Require utilities to share corridors in new development when reasonable and possible, and
7. Encourage utilities to co-locate distribution lines when completing upgrades, or when utility relocations are considered as part of major street improvements.

*Implements Policies U-1.6, U-1.7, U-1.9, U-6.3 and U-6.4.*

### **11.3.6 Design Criteria**

The City shall amend its land use regulations as necessary, to specify or modify design guidelines for building construction, including utility infrastructure and landscaping. The guidelines will include criteria to minimize adverse impacts to the environment, protect environmentally sensitive areas, and conserve energy and water resources.

*Implements Policies U-1.8, U-2.3, U-2.4, U-4.2, and U-4.4 through U-4.8.*

### **11.3.7 Adequate Facilities**

The City shall amend its land use regulations as necessary, to ensure the availability of adequate public facilities consistent with the following:

1. Require new development to connect to the municipal water system and encourage the same for existing development,
2. Limit the use of on-site wastewater disposal systems and require hook-up to sewer lines as they become available, and

3. Require that peak rate of flow of storm water from a property approximates pre-development flow.

*Implements Policies U-1.2, U-2.1, U-2.2, U-2.4, U-3.1, U-3.2, and U-4.4.*

### **11.3.8 Establish Programs**

The City shall encourage the following programs to encourage conservation, the reduction of energy consumption, best management practices of storm and ground waters, and proper pruning of trees within the public rights-of-way:

1. Solid waste reduction/recycling programs: City Departments,
2. Solid waste reduction/recycling programs: Community-wide,
3. City procurement policies to encourage the use of recycled-content products,
4. Public education programs about solid waste management, recycling, water conservation, energy conservation, best management practices of storm and ground waters, and proper pruning of trees within the public rights-of-way,
5. Energy code enforcement,
6. Environmental responsibility, and
7. Surface Water Comprehensive Plan.

*Implements Policies U-2.4, U-5.1 through 5.3 and U-6.5.*

### **11.3.9 Vegetation and Tree Pruning in Utilities Corridors**

The City shall review and amend as necessary, its street tree plantings, pruning guidelines and policies, and coordinate with utility providers to:

1. Minimize the potential for interference with utility lines,
2. Ensure compliance with the placement and aesthetics criteria set forth in Policy U-6.6,
3. Require utilities to provide the City with the utility's policies and guidelines regarding tree pruning, and
4. Require prior notification of tree pruning activities in order for the City to review the proposed pruning and propose alternative measures.

*Implements Policy U-6.6.*