

# Utilities Element

## Introduction

Utilities are the basic building blocks of town living. While we may take these services for granted, not thinking much about the electric lines that make it possible to turn the lights on, pipes that bring drinking water to our faucets, or the wastewater treatment facilities that clean the water we send down the drain, utilities make living in town possible.

This element establishes an overall strategy for providing adequate utility service to serve the growth projected in the Land Use Element. The Growth Management Act (GMA) calls for facilities and services needed to support development, such as wastewater, water supply, solid waste, electrical service, and other urban facilities and utilities, to occur concurrently with the development and consistent with local plans and growth projections. This requires local jurisdictions to make facilities available as demand develops and achieve and maintain a level of service (LOS) standards that keep up with demand from new development. This element works together with the Land Use and Capital Facilities elements to make sure Coupeville will have adequate utilities to serve existing and future growth in a timely and cost-effective manner.

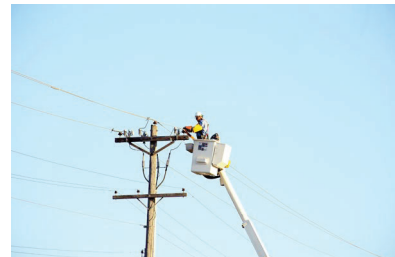
## Existing Conditions Summary

Utilities in Coupeville are a combination of Town-managed and non-Town-managed utilities. Town-managed utilities include water, stormwater, and sewer; these utilities are governed by functional plans, which are adopted by reference (see the "Existing Conditions Summary" in the Capital Facilities Element and the CFP Appendix).

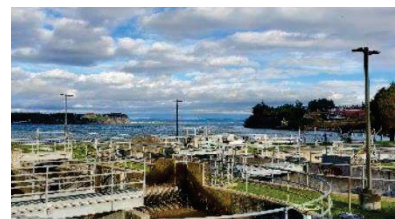
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Utilities have several layers of State and Federal regulations that preempt local controls. Nothing in this element is intended to interfere with compliance with applicable regulations or policies of the Washington Utilities and Transportation Commission (WUTC), the Federal Energy Regulatory Commission (FERC), or Revised Code of Washington (RCW) Title 80.

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*Electrician working with a utility pole (photo credit: American Public Power Association).*



*Coupeville Wastewater Treatment Plant (photo credit: Mary MacPherson)*

Non-Town-managed utilities include power, solid waste, and telecommunications (natural gas service is not available in Coupeville). Planning for privately managed utilities is recognized as the primary responsibility of the utility provider, requiring them to manage infrastructure needs and repairs in aging systems, respond to growth, respond to consumer needs, and adapt to new technologies. Table U-1 summarizes the utilities, providers, and applicable plans that further guide the agencies. See Appendix I - Utilities for a description of non-Town-managed utilities.

*Table U-1 - Utility service providers and functional plans.*

| Facility Type            | Provider(s)                                                 | Description                                                                                                                                         | Applicable Plan(s)                                                                                                                        |
|--------------------------|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Town-managed</b>      |                                                             |                                                                                                                                                     |                                                                                                                                           |
| Water                    | Town of Coupeville<br>Public Works and Utilities Department | Infrastructure for providing drinking water to the Town of Coupeville.                                                                              | Adopted Water System Plan<br>Island County Coordinated Water System Plan                                                                  |
| Stormwater               | Town of Coupeville<br>Public Works and Utilities Department | Provides facilities used in the collection, transmission, storage, and treatment or discharge of stormwater within the town.                        | Adopted Integrated Stormwater Management Plan                                                                                             |
| Sanitary Sewer           | Town of Coupeville<br>Public Works and Utilities Department | Provides facilities used in the collection, transmission, storage, and treatment or discharge of waterborne waste within the town.                  | Adopted Comprehensive Sewer Plan                                                                                                          |
| <b>Non-Town-managed*</b> |                                                             |                                                                                                                                                     |                                                                                                                                           |
| Power                    | Puget Sound Energy                                          | Provides electric power to the Town of Coupeville.                                                                                                  | PSE Integrated Resource Plan                                                                                                              |
| Solid Waste              | Island County and Island Disposal                           | Provides automated refuse collection and recycling to residential customers. Island Disposal provides waste hauling via a contract with the County. | Island County Solid Waste and Moderate Risk Waste Management Plan, Island County Capital Facilities Plan, and Capital Improvement Program |
| Telecommunications       | Various                                                     | Provide a range of services, including telephone, cable,                                                                                            | The Washington Utilities and Transportation Commission (WUTC) regulates the rates and services of telephone                               |

| Facility Type | Provider(s) | Description                                    | Applicable Plan(s)                                                                                                                                               |
|---------------|-------------|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|               |             | personal wireless communication, and internet. | companies operating in Washington per WAC 480-120. The WUTC does not normally regulate cable, internet, wireless phones, or VoIP (Voice over Internet Protocol). |

\* Non-Town-managed utilities operate within Town limits through local franchise agreements.

## Water and Sewer Service in Coupeville

The Coupeville water system encompasses approximately 4,800 acres throughout Central Whidbey Island (both inside and outside the town limits) and supplies almost 1,500 residential, commercial, and government connections. Current and future capital facility planning work to carefully balance needed improvements with anticipated growth in water availability due to the Town's reliance on scarce groundwater resources.

Planning for water system connections is based on equivalent residential units (ERUs), as various consumer types can have vastly different consumption rates. An ERU is a system-specific unit of measure used to express the amount of water consumed by a typical full-time single-family residence (WAC 246-290-010). The existing system has an available capacity of 3,020 ERUs based on water sources, and the anticipated maximum number of connections that can be served by the current water rights is 4,094 ERUs. As of 2022, the Town currently has 1,974 ERUs, and demand is projected to reach 3,235 ERUs by 2042. This is 215 ERUs more than the existing capacity based on water sources, but below water rights. Per the Water System Plan, both the treatment system and source capacity need to be increased to meet these demands.

The Town's sanitary sewer system currently provides service to customers within town limits. System capacity is based on design criteria and effluent limits, or waste loadings, of the wastewater treatment plant (WWTP) as established in the Town's current National Pollutant Discharge Elimination System (NPDES) Permit. The estimated 2045 flows and waste loadings based on anticipated growth are all below the NPDES permit limits of the WWTP. However, the 2045 estimated waste loadings are above the 85% loading limit allowed for either parameter. The Town regularly monitors flows and waste loadings and would be required to submit a plan and schedule to the Washington State Department of Ecology if either were to exceed the parameters of the NPDES Permit.

In addition, about one quarter of the land inside town limits in eastern Coupeville, along NE Parker Rd, is outside the current sewer service area. Occupied properties in these areas currently have on-site sewage disposal systems (septic tanks and drain fields). For existing systems, the Town encourages (through the policies of the Utilities Element) conversion from on-site septic systems as sewer lines become available, but does not require conversion unless

on-site systems fail and sewer facilities are available. In addition, per the Comprehensive Sewer Plan and Town Code, any application for a subdivision of parcels in these areas would trigger a review for the requirement for installation of a sewer collection system.

See also the CFP Appendix for additional discussion of the existing water and sewer systems, LOS, and planning projects to meet the demands of growth.

## Goals and Policies

**Goal U-1: Adequate utility services.** Facilitate the development and improvement of all utilities at the appropriate levels of service to serve existing and future growth.

- U-1.1 Coordinate utility providers' planning with land use planning. Base the extension and sizing of system components on the land use plan of the area rather than allowing system capacity to determine land use, but allow utility providers to determine the implementation sequence of utility plan components.
- U-1.2 Adopt level of service (LOS) standards for individual services to measure performance and evaluate future facility needs as defined in Table U-2.

*Table U-2 - Utility level of service standards.*

| Facility Type  | Level of Service                                                                                                                                                                                                                              |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Water          | Potable Water: Group A System under WAC 246.290 compliant with Washington Department of Health (DOH) standards.<br><br>Water Supply: Permitted equivalent residential units by DOH and water rights per the Washington Department of Ecology. |
| Stormwater     | Detention: Maintain existing unless 10-year post- development peak data is less than 0.5 cfs.<br><br>Collection: 10-year, 24-hour storm.                                                                                                      |
| Sanitary Sewer | A municipal system that allows the collection of peak wastewater discharge, plus infiltration and inflow.                                                                                                                                     |
| Power          | Electric service is available for all residential and commercial customers.                                                                                                                                                                   |
| Solid Waste    | Once a week, curbside pickup.                                                                                                                                                                                                                 |

- U-1.3 Ensure new development meets Coupeville's water and sanitary sewer LOS before development may be permitted. Mitigation may be required to meet the adopted LOS.

- U-1.4 Allow new development only when and where all available public utilities can adequately serve demand.
- U-1.5 Review new development applications for consistency with departmental functional plans (e.g., *Abbreviated Water System Plan*, *Comprehensive Sewer Plan*, and *Integrated Stormwater Management Plan*).
- U-1.6 Process permits and approvals for utility facilities in a fair, predictable, and timely manner and in accordance with local, state, and federal regulations.
- U-1.7 Digitize the Town's inventory of existing utilities, including water, sewer, and stormwater infrastructure.

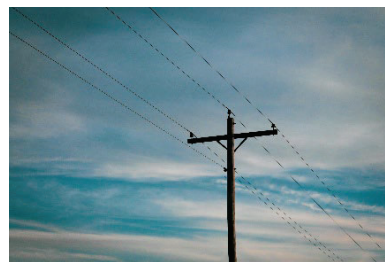
### Utility Specific

- U-1.8 Require connection to the Town water system for all new development within town limits unless otherwise allowed by State or County regulations. Encourage properties on existing private well systems to connect to town water.
- U-1.9 Coordinate with Island County to require all new development, and encourage existing properties on private well systems outside town limits but within the Coupeville water service area, to connect to the Town water system.
- U-1.10 Operate and maintain the stormwater system to protect surface and groundwater quality, and to preserve and enhance environmentally sensitive areas.
- U-1.11 Establish procedures for the elimination of inappropriate discharges into the stormwater system.
- U-1.12 Design future stormwater facilities and upgrades to existing facilities to eliminate direct discharge of stormwater runoff to Penn Cove without proper treatment and to minimize the number of stormwater outfalls on Penn Cove.
- U-1.13 Require connection to the town sewer system for all new development within town limits where sewer service is available.
- U-1.14 Encourage conversion from on-site septic systems as sewer lines become available.
- U-1.15 Require conversion from on-site septic systems when on-site systems fail and sewer facilities are available.
- U-1.16 Require that installation of septic tanks or other alternative domestic waste systems meet Island County Department of Health standards for soil suitability and location.

**Goal U-2: Quality, affordable utility service.** Ensure safe, reliable, and quality utility services are available at reasonable and equitable rates throughout Coupeville.

- U-2.1 Provide timely, effective notice of new construction and road maintenance projects. Promote co-location of utility facilities in shared trenches where feasible and coordination of construction timing to minimize construction-related disruptions and reduce the cost of utility delivery.
- U-2.2 Structure rates and fees for Town-operated utilities to recover all costs, including overhead and costs related to the extension, operation, and maintenance of those utilities.
- U-2.3 Assign costs for utility extensions and installations for new development and recently annexed areas to the developer or property owners.
- U-2.4 Explore reduced utility connection fees for low-income households and small infill housing.
- U-2.5 Encourage conservation of resources to delay the need for additional facilities.
- U-2.6 Encourage system design practices that minimize the number and duration of interruptions to customer service.
- U-2.7 Promote public awareness of proper procedures for notification of utility providers before construction activities (e.g., Call Before You Dig, etc.).

The Opportunity Council offers bill assistance to income-eligible households for their home heating, energy, water, and sewer bills as part of state and federally funded programs like Washington State's Low-Income Home Energy Assistance Program (LIHEAP) and the U.S. Department of Health & Human Service's Low Income Household Water Assistance Program (LIHWAP).



*Electric post under a cloudy sky (photo credit: D. Gibson).*

**Goal U-3: Sensitive and Sustainable Design.** Minimize impacts associated with the siting, development, and operation of utility facilities on adjacent properties and the natural environment.

- U-3.1 Provide timely, effective notice of new construction and road maintenance projects. Promote co-location of utility facilities in shared trenches where reasonably feasible and coordination of construction timing to minimize construction-related disruptions and reduce the cost of utility delivery.
- U-3.2 Consolidate utilities where feasible.



*Road sign in the middle of the road (photo credit: Tom Fisk).*

U-3.3 Work with utility providers to inform the community about utility activities and to provide opportunities for public engagement in the planning processes.

U-3.4 Monitor land uses within wellhead protection areas for potential contamination sources for the town water supply wells.

U-3.5 Assure that utility facilities are sited, constructed, operated, and maintained consistent with environmental best management practices to minimize impacts on natural features, sensitive and/or critical areas, and water quality and quantity. For example, street lighting should be shielded and directed downward.

U-3.6 Employ Low Impact Development (LID) practices where feasible through Town projects, incentive programs, and revised development standards and street regulations.

U-3.7 Ensure exposure to human-made electromagnetic fields in Coupeville is consistent with State and Federal regulations and guidelines set by the International Commission on Non-Ionizing Radiation Protection.

U-3.8 Encourage utility providers to minimize tree trimming and vegetation removal during routine maintenance. Require utility providers to notify the Town prior to maintenance or removal of vegetation in public right-of-way.

U-3.9 Require underground installation of new utility services and, when economically feasible, encourage conversion of existing overhead systems to underground systems through local improvement districts, contract agreements between property owners and utility companies, and by other legal means.

Prioritize undergrounding utilities in historic areas and non-residential districts.



*Dark skies are critical for salmon survival. Shielded street lighting prevents light from spilling into lakes and rivers beyond where it is needed.*



*A heron in an environmentally critical area.*



*Construction workers inspecting underground utilities (photo credit: Miguel Castillo).*

- U-3.10 Promote public education on choosing and maintaining vegetation with growth habits that will not interfere with nearby utilities.
- U-3.11 Support the use of utility corridors for recreation and open space purposes, where appropriate.
- U-3.12 Consider sea level rise impacts when planning for the expansion and/or improvements of the existing wastewater treatment facility.

**Goal U-4: Resource Conservation.** Encourage effective energy conservation and recycling measures, including the reduction of energy consumption in Town facilities.

- U-4.1 Facilitate conversion to cost-effective and environmentally sensitive alternative technologies and renewable energy sources while incorporating the latest technologies available into the services provided.
- U-4.2 Encourage the use of energy conservation design strategies in building designs and land use.
- U-4.3 Encourage the use of solar energy for water and space heating, and adopt standards to protect solar access.
- U-4.4 Require new multifamily and commercial development to provide on-site recycling services.
- U-4.5 Encourage and actively participate in a uniform regional approach to solid waste management that promotes education, recycling, and composting while maintaining a cost-effective and responsive collection system.
- U-4.6 Work with the Town's solid waste hauler to include glass and yard waste in curbside recycling for residential and commercial customers.
- U-4.7 Investigate the establishment of a Town-led model recycling program and use recycled products for Town activities whenever possible.
- U-4.8 Investigate the feasibility of Town led green beds / municipal compost.



*Solar panel installation (photo credit: Gustavo Fring).*



*2018 Whidbey Island dumpster dive competition to celebrate and sort trash in celebration of Earth Day (photo credit: Scott Wood).*



*Plastic bottles (photo credit: Mail Maeder).*