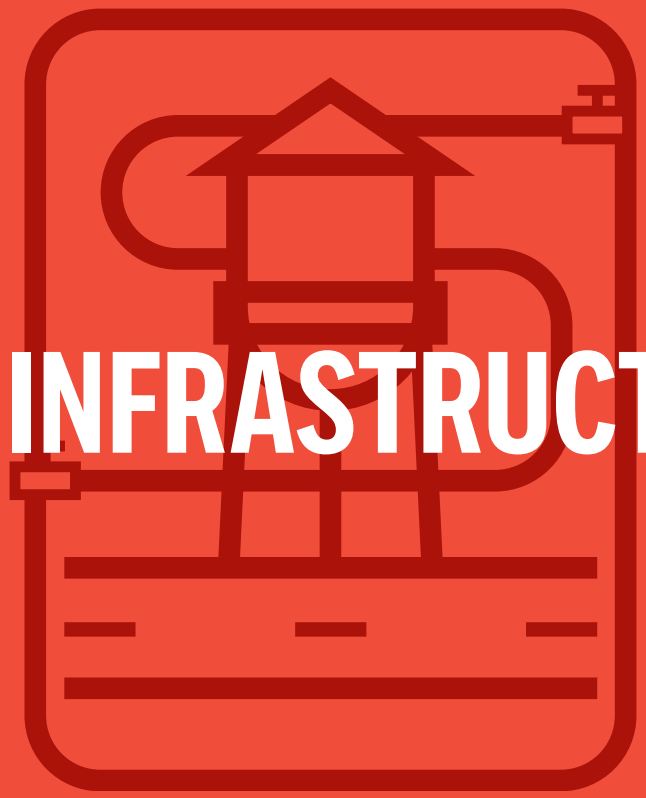
OUR INFRASTRUCTURE






Chapter 9
UTILITIES

Utilities Snapshot

Utilities

Public utilities are integral aspects of modern everyday life. The Growth Management Act (GMA) defines electricity, telecommunications, natural gas, and similar systems as "utilities". Water, sanitary sewer, and stormwater systems are commonly referred to as utilities, but are defined in the GMA as "public facilities". Due to their common conception in the public mind as utilities and closer interrelationship, this chapter identifies water, sewer, stormwater management, solid waste services, electricity, natural gas, and telecommunications as utilities. Some utilities are provided by the City while others are provided by non-city utility purveyors. The past several years have seen many regulatory changes impacting utilities.

Water, Sewer and Stormwater

The City of Marysville provides water, sewer, and stormwater utilities. The City's Water Service Area (WSA) comprises approximately 25 square miles, extending beyond the 20.9 square mile city, while the City's Sewer Service Area (SSA) comprises approximately 23.12 square miles. In 2024, the City provided water service to 24,263 connections. In 2023, sewer service was provided to 20,289 connections. The City's stormwater system consists of approximately 241.9 miles of storm lines and 1,470 stormwater facilities, as well as other infrastructure. Stormwater facilities in the City include both public and private facilities. Overall demand for water, sewer, and stormwater utilities is expected to increase commensurate with growth over the 20-

Solid Waste

Solid waste management in the City is provided by the Public Works Department with recycling services provided via a contractual agreement with Waste management (WM) – Marysville Recycle & Services. In 2024, the City provided solid waste management services to 22,497 accounts totaling 23,481 receptacles. Ninety-six (96) percent of receptacles are residential-size, with the balance commercial-size. Over the past decade, accounts have steadily increased, with a sizable increase occurring in 2022 when accounts from the Central Marysville Annexation transferred from WM to the City. The City's delivery of sanitation services and costs are impacted by a variety of recent, or anticipated changes, including new laws on organic waste recycling.

Electricity and Natural Gas

Electricity and natural gas are provided to city residents and businesses by Snohomish County Public Utility District (PUD) and Puget Sound Energy (PSE). Both PUD and PSE are required to prepare Integrated Resource Plans (IRP), which establish how reliable and affordable utilities will be provided to customers. Both utilities are also subject to new Washington State regulations, such as the Clean Energy Transformation Act (CETA), which requires utilities to be free of greenhouse gas emissions by 2045. Navigating new STATE LAWS and addressing growth are challenges that the utilities must address. A portion of the Olympic Pipeline also traverses the City.

Telecommunications

Telecommunications is the transmission of sound, images, and/or data by wire, radio, optical fiber, cable, satellite, or other electromagnetic or similar means. Telecommunications include, but are not limited to, telephone, cable television, personal wireless services, and internet services. Within the City, several companies provide a variety of these services including, but not limited to, Comcast, Ziply, Astound Broadband, Starlink, and Viasat.

Essential Public Facilities

Essential Public Facilities are defined in WAC 365-196-550 as "public facilities that are typically difficult to site"; however, they may be publicly or privately owned. The City is required to establish a process for identifying and siting Essential Public Facilities that is consistent with and implements applicable Snohomish County County-wide Planning Policies. Further, the City's Comprehensive Plan and development regulations may not preclude the siting of Essential Public Facilities. The City's process for identifying, mitigating, and siting Essential Public Facilities is set forth in MMC Chapter 22G.070.

Section 9.1

INTRODUCTION

Domestic water, sewer, stormwater management, solid waste services, electricity, natural gas, and telecommunications are integral aspects of everyday modern life. While we often take them for granted, public health and essential daily activities depends on these utilities, facilities, and services.

The Growth Management Act (GMA) defines electricity, telecommunications, natural gas and similar systems as "utilities". Water, sanitary sewer, and stormwater systems are commonly referred to as utilities, but are defined in the GMA as "public facilities".[158] Due to their common conception in the public mind as utilities and closer interrelationship, this chapter identifies water, sewer, stormwater management, solid waste services, electricity, natural gas, and telecommunications as utilities.[159] It is important that the City has safe, reliable utility facilities and services that are: appropriate to accommodate anticipated growth; environmentally sensitive, aesthetically compatible with surrounding land uses; and reasonably priced.

The Downtown Stormwater Treatment Facility treats stormwater from Downtown prior to discharging the clean water to Ebey Slough.

Beyond providing the utilities we rely on, the City and other utility providers also need to respond to a rapidly changing regulatory environment and continuously evolving technologies. Stormwater from development must be managed pursuant to the Department of Ecology's Stormwater Management Manual for Western Washington, which is periodically updated to enhance stormwater requirements and promote environmentally friendly stormwater management techniques such as Low Impact Development (LID). Washington state's Clean Energy Transformation Act (CETA), which became law on May 7, 2019, requires an electricity supply free of greenhouse gas emissions by 2045. This law has resulted in significant changes in energy markets and utility providers' operational plans. Electric vehicle usage is another energy demand change that utility providers need to respond to as, by 2035, "all passenger and light-duty vehicles of model year 2035 or later registered"in the State must be zero emissions vehicles.[160] The telecommunications sector has similarly seen many disruptive technologies from the smart phone to 5G, which have required innovation and new infrastructure.

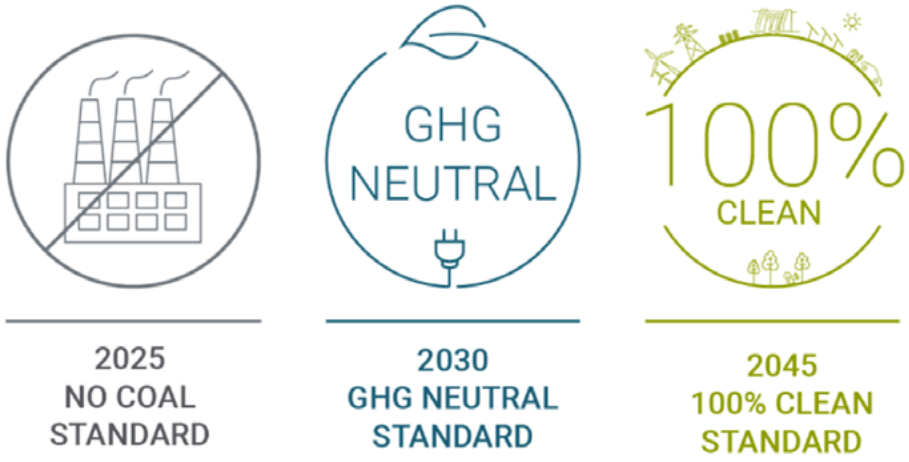
158. Pursuant to RCW 36.70A.030, (32)"Public facilities" include streets, roads, highways, sidewalks, street and road lighting systems, traffic signals, domestic water systems, storm and sanitary sewer systems, parks and recreational facilities, and schools. (33)"Public services" include fire protection and suppression, law enforcement, public health, education, recreation, environmental protection, and other governmental services. Pursuant to RCW 36.70A.070(4)utilities include, but are not limited to, electrical, telecommunications, and natural gas systems.

159. As noted in footnote 1, transportation related matters, defined as "Public facilities" in the GMA, are addressed in the Transportation Element. Parks and recreation related matters and schools/education are defined in GMA as both "Public facilities" and "Public services" and are addressed in the Parks Element and Public Services Element respectively. Fire protection and suppression, law enforcement and other governmental services are defined in GMA as "Public Services" and addressed in the Public Services Element.

160. WSDOT'S Washington State Plan for Electric Vehicle Infrastructure Deployment, July 2023 update.

The Growth Management Act requires that the Utilities Element include: the general location, proposed location, and capacity of all existing and proposed utilities including, but not limited to, electrical lines, telecommunication lines, and natural gas lines (WAC 365-196-420).[161] Public facilities such as water, sewer, and stormwater are required to be addressed in the Comprehensive Plan but are typically covered in the Land Use Element and Capital Facilities Plan, the latter of which must demonstrate "adequate public facilities during the planing period o that available infrastructure does not serve as a limiting factor to redevelopment at urban densities" (WAC 365-196-300(4)(c)).

The Utilities Element assesses the utilities of the City, as well as non-city utility purveyors, to ensure that there is an adequate and reliable supply of utilities to serve residents and businesses.



161. Pursuant to WAC 365-196-420, proposed utilities are those awaiting approval when the Comprehensive Plan is adopted.

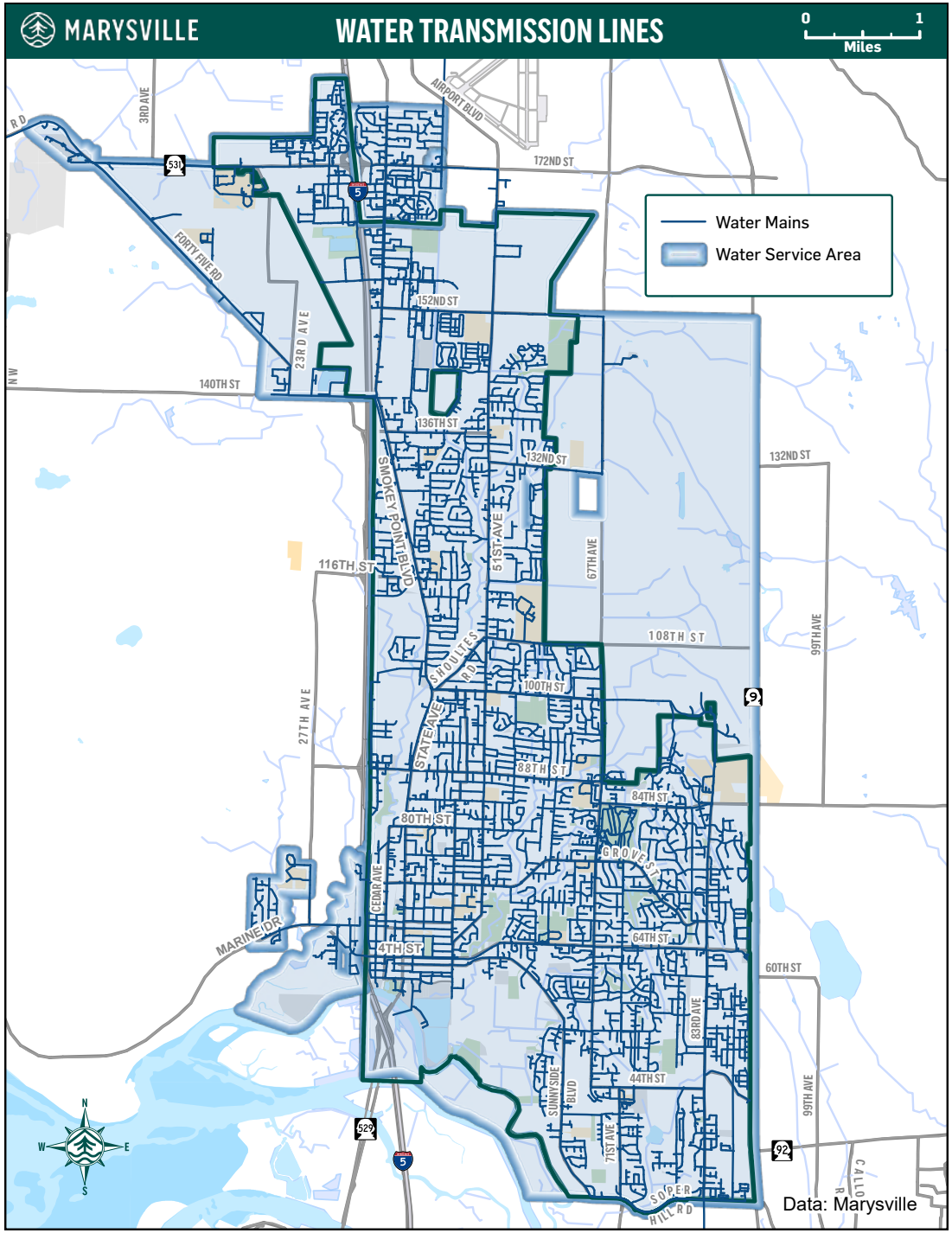
Section 9.2

WATER

The City of Marysville's Water Service Area (WSA) comprises approximately 25 square miles, extending beyond the 20.9 square miles that comprise the City limits as depicted in Figure 9.1. Within the WSA, the City provides public water service, utility management, and water system development. New water services are limited to properties within the City limits or where there are existing water mains (i.e. the retail WSA). Requests for new water service outside of the City limits, but within the UGA, where there are no existing water mains fronting the property, are only granted after annexation to the City or with an executed annexation agreement.

The City's water system was first established in the 1930s with Edward Springs. The City's water supply is currently provided by four wells, a spring, a Ranney well, and an intertie connection with the City of Everett. The City also owns three additional wells that are currently offline for water quality purposes. Water storage is provided by nine reservoirs that have a total capacity of approximately 24.3 million gallons (MG). In addition, the City's WSA has 11 pressure zones (shown in Figure 9.2), with 34 pressure reducing and 16 flow control valve stations. The system also has four booster pump stations and more than 357.3 miles of water main, with main size ranging from 2 inches to 24 inches. Most of the water mains are 8 inches in diameter or less, with the remainder being 10 inches in diameter or larger.

Figure 9.1

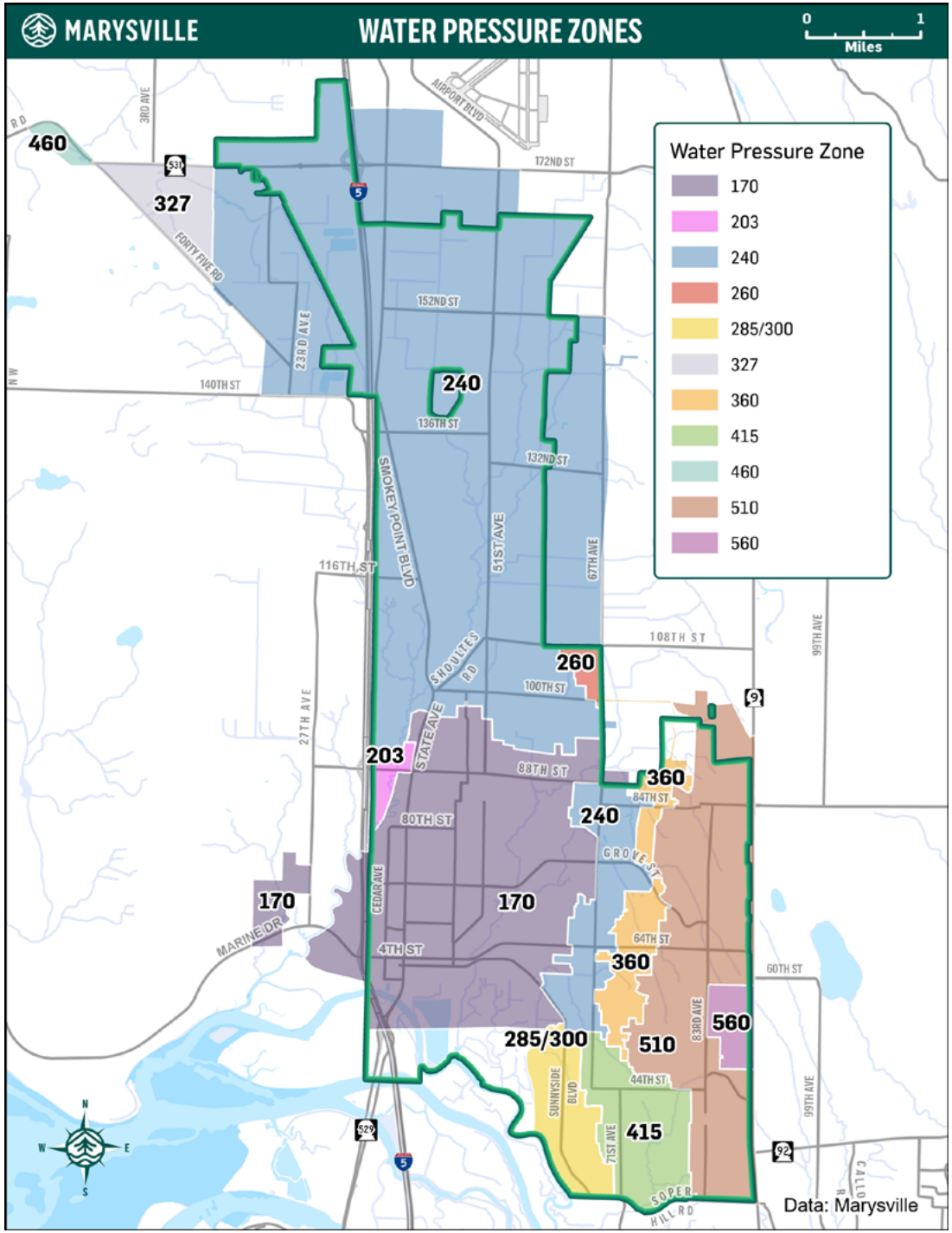


In 2000, the Stillaguamish River Ranney Well and Edward Springs sources were designated groundwater under the influence of surface water (GWI) sources. As a result of the GWI designation, the Edward Springs treatment plant was constructed in 2004, and the Stillaguamish River Water Treatment Plant (WTP) was constructed in 2006. A new treatment facility for the Sunnyside Wells was brought online in 2017.

In 2024, the City provided water service to approximately 24,263 connections. While most water connections are for single family accounts, single family uses generally consume much less water per connection than other customer types.

Water demand is expected to increase approximately commensurate with the City's projected population growth. A comprehensive overview of the City's water system and necessary improvements are set forth in the 2017 Water Comprehensive Plan, which is currently undergoing an update that is expected to be finalized in 2025 - 2026. The updated Water Comprehensive Plan will include detailed demand projections. The Water section of the Capital Facilities Element (page 292)also details necessary improvements.

Figure 9.2



Section 9.3

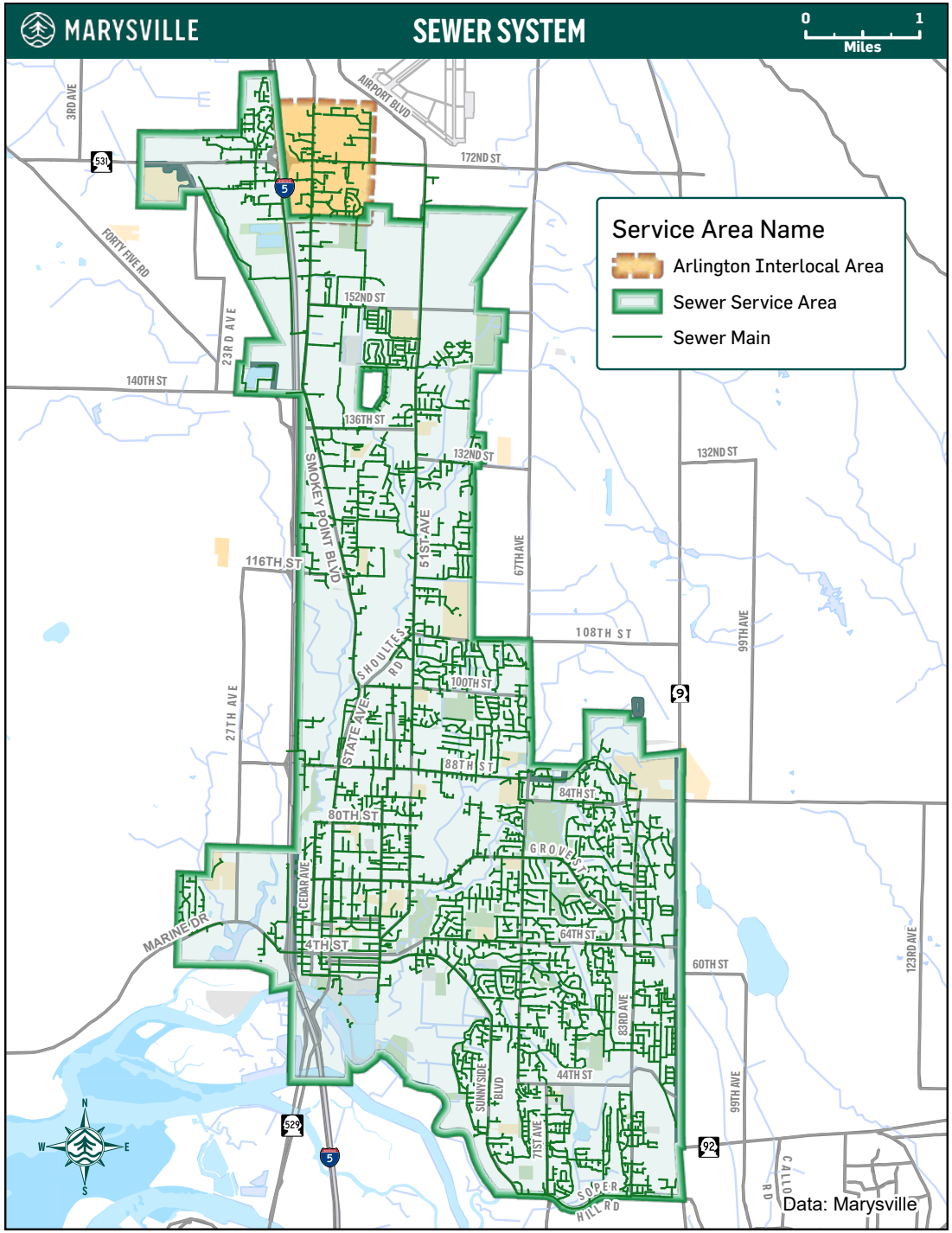
SEWER

The City of Marysville's Sewer Service Area (SSA) comprises approximately 23.12 square miles and is depicted in Figure 9.3. The City's earliest sewers were constructed prior to 1940 in Downtown Marysville. The SSA's gravity collection system includes 242.2 miles of pipeline with diameters ranging from six to 48 inches; most of the pipelines are 8-inches in diameter and constructed with polyvinyl chloride (PVC) pipes. In addition to the gravity system, the City operates and maintains 17 pump stations, approximately 5.88 miles of force main pipe, and 7.17 miles of effluent discharge piping to the City of Everett's deep water outfall.[162] The City's primary pump stations are Soper Hill, Sunnyside, 51st Avenue, 88th Street, Marysville West and West Trunk, with the remainder being smaller, developer-type stations. Wastewater is directed to the City's wastewater treatment plant at the south end of the City, which underwent a major upgrade in 2004 effectively doubling the plant's capacity.

In 2023, the City provided sewer service to approximately 20,289 connections, and over 73,780 people. While most connections are for single family accounts, single family customers generally have a lower demand per connection than other customer types.

Overall sewer demand within the City's system is expected to increase approximately commensurate with the City's projected population growth. A comprehensive overview of the City's sewer system and necessary improvements are set forth in the 2011 Sewer Comprehensive Plan, which is currently undergoing an update that is expected to be finalized in 2025 – 2026. The updated Sewer Comprehensive Plan will include detailed demand projections. The Sewer section of the Capital Facilities Element (page 298) also details necessary improvements.

Figure 9.3



162. This figure does not include effluent discharge force mains.

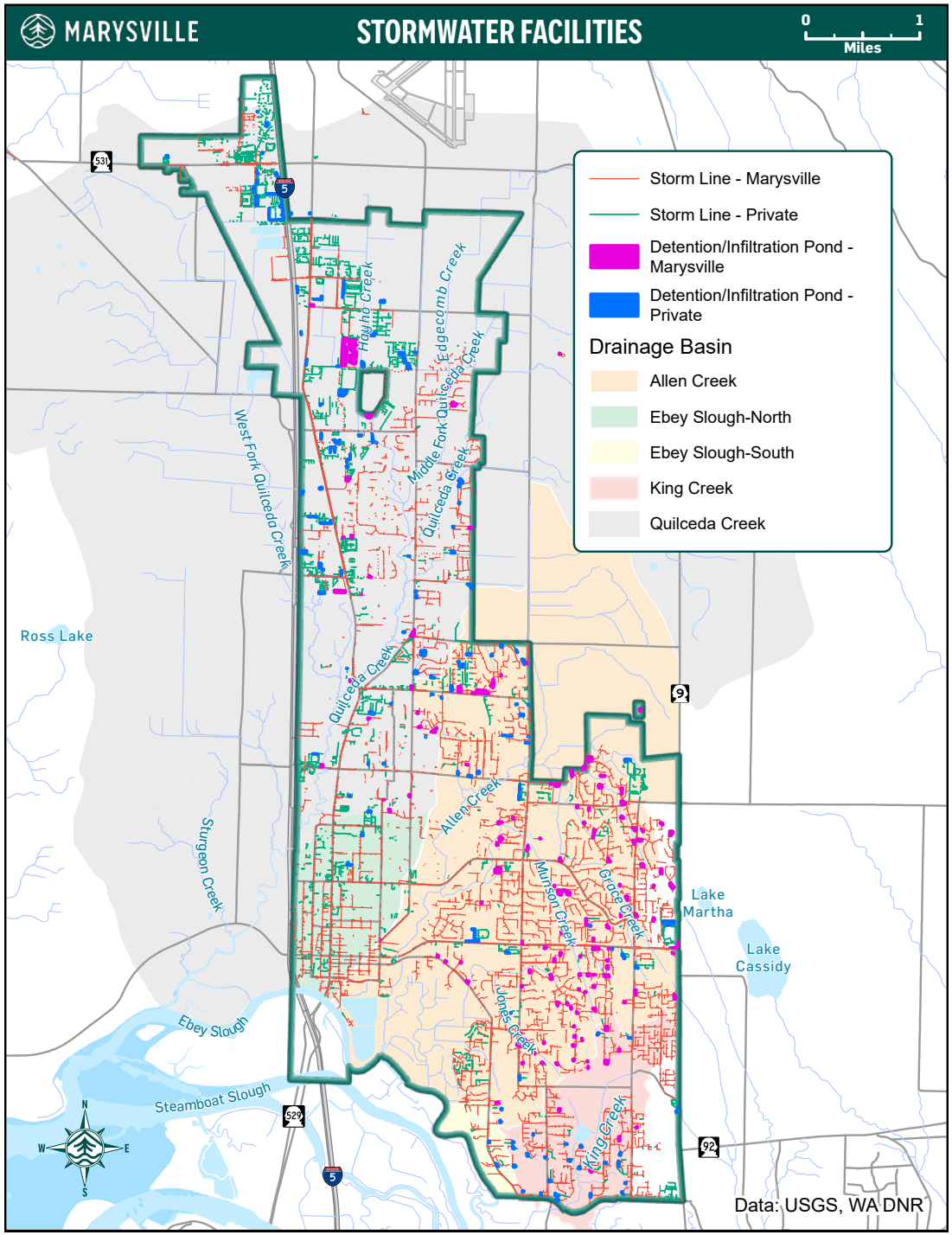
Section 9.4

SURFACE WATER MANAGEMENT

The City of Marysville's Surface Water Management Division manages storm and surface water impacts within the City including flooding. The City is located within the Snohomish River Drainage Basin within Water Resource Inventory Area 7 (WRIA 7), the second largest watershed in the State. Four smaller drainage basins have been delineated around the City's drainage infrastructure: Quilceda Creek, Allen Creek, King Creek and Ebey Slough.[163] Each of these basins empty into Ebey Slough, which then flows into the Snohomish River near Possession Sound. The City's surface water management (SWM) program dates back to 1991; however, surface water utility fees were collected by Snohomish County until 2007 when the City assumed that responsibility.

The City's stormwater system consists of approximately 6,363 lineal feet of detention pipe, 241.9 miles of storm lines, 13,580 catch basins, 1,470 stormwater facilities, and multiple outfalls into area receiving waters, as shown in Figure 9.4.[164] The City also owns and operates four regional stormwater facilities which provide water quality treatment and/or stormwater detention for the Downtown, Marshall-Kruse and Smokey Point Neighborhoods.[165] The City's 2016 Surface Water Comprehensive Plan provides an overview of the major drainage basins and stormwater system within the City; identifies existing water quality and quantity issues; and includes a Capital Improvement Program (CIP) with

Figure 9.4



163. The Stormwater Comprehensive Plan shows five drainage basins of which four have drainage infrastructure while Figure x Streams of the Economic Element shows seven drainage basins. This difference is due to

164. Stormwater facilities include both public and private facilities including, but not limited to, infiltration ponds, bioswales, detention vaults, detention ponds, and similar facilities of varying sizes.

165. The Downtown Stormwater Treatment Facility was completed in 2024 and is a stormwater treatment retrofit facility that will collect and provide water quality treatment for an approximately 463-acre portion of the Downtown. In 2006, regional stormwater facilities were constructed southwest of the intersection of 116th Street NE and 41st Drive NE to serve the commercial development and road infrastructure between Interstate 5 and State Avenue along 116th Street NE in the Marshall-Kruse Neighborhood. Regional Detention Ponds 1 and 2, constructed in 2004 and 2015 respectively, provide flow control and enhanced water quality treatment for approximately 205 acres of high intensity commercial and industrial uses in the Smokey Point Neighborhood.

recommended improvements and programs, both structural and non-structural, to address water quality and quantity problems.[166]

In 2022, a Watershed Planning Basin Assessment was prepared, which analyzes the City's watershed and prioritizes streams that would receive the greatest benefit from stormwater improvements. This was followed by the companion 2023 Watershed Planning Stormwater Action Plan, which identifies stormwater retrofit projects and programs that should be implemented in the prioritized areas.[167] These documents will be used in conjunction with the CIP to pursue future stormwater projects.

The City also holds a National Pollutant Discharge Elimination System (NPDES) Permit, which is a federal permit that regulates stormwater and wastewater discharges to Waters of the State. While this is a federal permit, the regulatory authority has been delegated to the Washington State Department of Ecology (DOE). The first Western Washington Phase II Municipal Stormwater Permit was issued by DOE in January 2007. The City's most recent NPDES permit is active from August 31, 2024 through July 31, 2029. The NPDES Permit requires all affected municipalities to create and implement a Stormwater Management Program which addresses essential program elements.[168] Select cities, including Marysville, must provide additional actions to address Total Maximum Daily Load (TMDL) requirements.[169] New development and redevelopment in the City must manage their stormwater in accordance with the State Department of Ecology's 2019 Stormwater Management Manual for Western Washington, as amended.

The Downtown Stormwater Treatment Facility pictured under construction in the summer of 2023.

The City also partners with neighboring jurisdictions, tribes, and other entities to advance water quality. The City is a member of the Allen Quilceda Watershed Action Team (AQWA). AQWA is a diverse community group working together to implement the Quilceda Allen Watershed Management Plan to improve the overall quality of streams in the Allen Quilceda Watershed through community outreach and improvements to the environment.[170]

The existing surface water system, and proposed surface water system improvements, are outlined in Surface Water section of the Capital Facilities Element. As previously noted, a comprehensive overview of the City's surface water system and necessary improvements to correct deficiencies is set forth in the 2016 Surface Water Comprehensive Plan.

166. Structural solutions include construction of capital projects such as stormwater detention and treatment facilities, infiltration facilities, pipelines, and culverts. Non-structural solutions include construction stormwater management facility inspection and maintenance, public education and outreach, water quality monitoring, implementation of best managements practices(BMPs), and regulations encouraging vegetation preservation and low impact development.

167. The NPDES Permit requires this plan to be updated in 2027.

168. Required program elements include: Stormwater Planning, Public Education and Outreach, Public Involvement and Participation, MS4 Mapping and Documentation, Illicit Discharge Detection and Elimination, Controlling Runoff from New Development, Redevelopment, and Construction Sites, Stormwater Management for Existing Development, Source Control Program for Existing Development, and Operations and Maintenance.

169. The City has been collecting ambient water quality monitoring data since about 2000. Most recent water quality data collected by the City is in response to the TMDL requirements in the NPDES Phase II Permit.

170. AQWA team members include: Adopt-a-Stream, the cities of Arlington and Marysville, the Marysville School District, Snohomish County Conservation District, Snohomish County Surface Water Management, Sound Salmon Solutions, the Tulalip Tribes, and the Washington State Department of Ecology. Team activities include, but are not limited to: the restoration of a section of Jones Creek and the creation of an outdoor environmental education center, community outreach through newsletters targeted at streamside residents, restoration activities such as planting native plants along stream banks, youth education on water quality and its impacts on stream organisms, and Earth Day celebration activities.

Section 9.5

SOLID WASTE

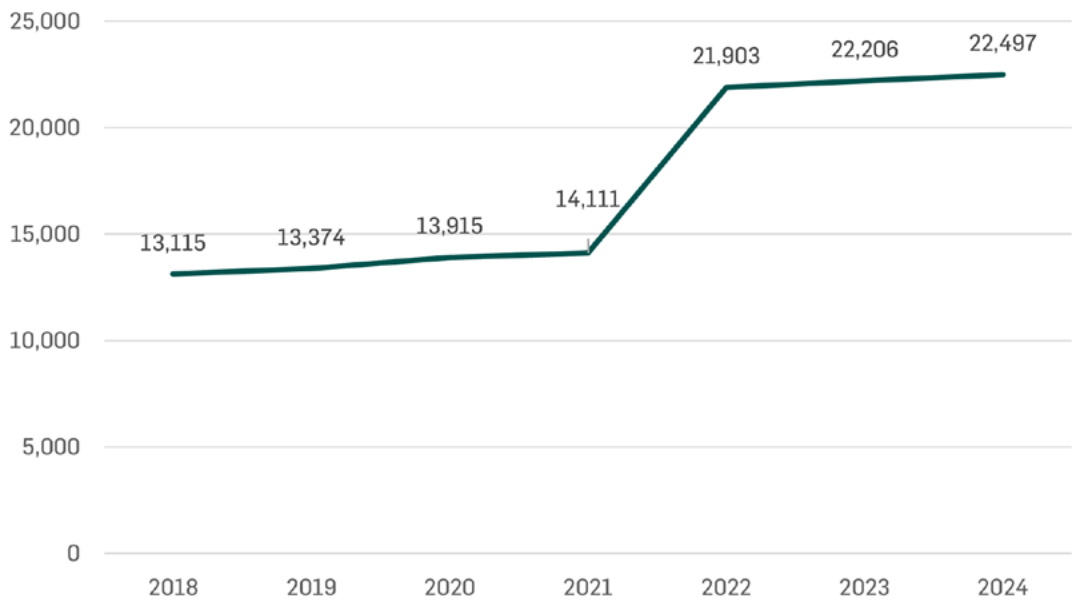
Solid waste management in the City is provided by the City of Marysville's Public Works Department with recycling services provided via a contractual agreement with WM – Marysville Recycle & Services.[171]

In 2024, the City provided solid waste management services to 22,497 accounts totaling 23,481 receptacles. Ninety-six (96) percent of receptacles are residential-size (20 to 96-gallon) and four (4) percent are commercial-size (1 to 8 yard). Over the past decade, the number of accounts has steadily increased, with a significant increase occurring in 2022 when accounts from the Central Marysville Annexation transferred from WM to the City as shown in Figure 9.5.

The Solid Waste Division has 10 garbage trucks, three commercial front load trucks and seven front load trucks with the Curotto-Can system.[172] The newer front-loading automated trucks can serve any size container. A garbage truck can serve between 500 and 700 accounts per day.

In the City, WM Marysville Recycle & Services provides recycling services every other week to residential and commercial customers. Materials that can be recycled include mixed paper, corrugated cardboard, newspaper, glass, tin, aluminum, and certain types of plastic (Types 1 and 2). An optional weekly organic service that recycles yard and food waste is also available.

Figure 9.5



171. WM – Marysville Recycle and Services is provided by Waste Management.

172. The Curotto Can system is an add-on for automated front load garbage trucks that allows it to function as a side loader.

General land use considerations that impact solid waste management services include development density and road networks. Areas of higher density development permit more efficient collection of solid waste. The road network is a factor in providing efficient service; a street system that isolates neighborhoods and has many cul-de-sacs and dead ends impacts the speed of collection.

The City's delivery of sanitation services and associated costs have been impacted by a variety of recent, or anticipated changes, as summarized below:

- Since 2018, there has been difficulty in ensuring that recycling is shipped to buyers without contamination. Consequently, the cost for recycling has increased as contamination fees have been added;
- In March 2024, the City completed a full, city-wide reroute of sanitation routes to address the fast pace of growth in certain areas and to maintain efficient service;
- In 2024, Snohomish County is completing a solid waste rate study. Fees are anticipated to increase anywhere from 10 to 40 percent in 2024; however, the ultimate rates will not be known until late 2024 when all studies are complete; and
- Washington State recently passed two organic management laws: HB1799 and HB2301.[173] HB1799 requires that businesses and residents that generate a specified amount of organic waste each week arrange for organics collection of compost material on site. These requirements will be implemented in four phases:
  - In 2024, provisions apply to businesses generating 8 cubic yards of organic waste per week;
  - In 2025, provisions apply to businesses generating 4 cubic yards of organic waste a week; and
  - In 2026, provisions apply to businesses generating at least 96 gallons of organic waste a week.
  - In 2030, organic collection services must be provided to residential households on a non-elective basis.

A state-of-the-art Marysville garbage truck.

173. Snohomish County conducts comprehensive waste management planning for the County including Marysville.

Section 9.6

ELECTRICITY

Electrical System Overview

Snohomish County PUD provides electrical service to over 377,269 electrical customers in Snohomish County with approximately 30,278 customers in Marysville. PUD's electric system consists of "transmission lines, substations, distribution lines, transformers, meters, and general plant. It also includes customer service, engineering and design, energy-efficiency services, and administrative functions that support the construction, operations and maintenance of the transmission and distribution system."[174] Within the City of Marysville, PUD's transmission lines are limited to 115 kV. The Bonneville Power Administration and Seattle City Lights have high voltage transmission lines (230 to 500 kilovolt (kV)) that run north-south to the east of the Marysville city limits while Puget Sound Energy has high voltage lines (230 kV) that run north-south in the southeastern part of the City as shown in Figure 9.8.

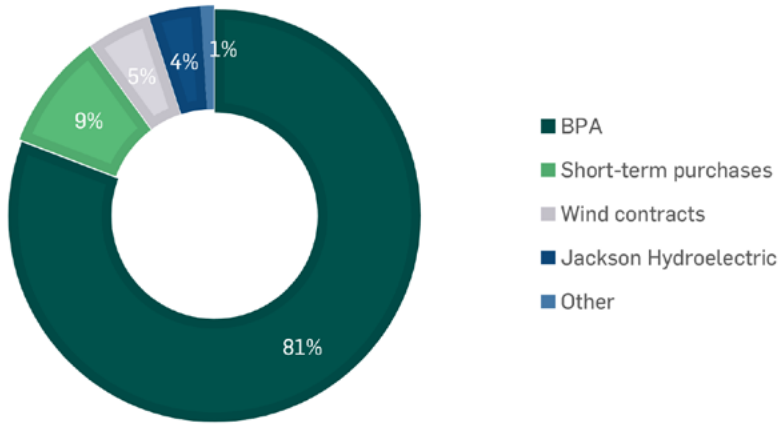
An electric vehicle (EV) charger at the Civic Center.

The majority of PUD's power is from the Bonneville Power Administration (BPA), a federal agency with which the PUD has a long-term power purchase agreement effective through September 2028. In 2024, 80 percent of PUD's power was supplied by BPA with the balance primarily coming from short-term power purchases, wind power contracts, the Jackson Hydroelectric project, and four small PUD-owned hydroelectric projects (see Figure 9.6). When retail loads exceeds PUD's standard energy resources, short-term market purchases are made to manage short-term load and resource variations; these costs are offset by wholesale power market sales.

Regulatory Environment

PUD is governed by its Board of Commissioners, who are elected by Snohomish County voters. The Board sets policy and rates and oversees the General Manager. The PUD is subject to State laws and regulations including the Clean Energy Transformation Act (CETA).

Figure 9.6
PUD Net Power Supply (MWh)



Source: 2024 Snohomish County PUD No. 1 2024 Proposed Budget

174. Snohomish County PUD No. 1 2024 Proposed Budget: Comprehensive-Solid-and-Hazardous-Waste-Management-Plan(snohomishcountywa.gov)

Integrated Resource Plan

PUD's 2021 Integrated Resource Plan 2022 – 2045 Study Period, which underwent a large update with the adoption of the Snohomish PUD 2023 IRP Update, establishes how "the utility will provide reliable electric service to its customers at the lowest reasonable cost while adhering to the policy requirements of electric utilities."[175] PUD is currently negotiating a long-term contract with BPA that is anticipated to supply 80 percent or more of PUD's power needs after 2028. Changes in state and local policy have increased the electrification portion of the utility's load forecast. Electric vehicles and buildings with new or converted electrification of space and water heating are driving this. The 2024 – 2045 annual average load growth is anticipated to be 2.07%, up from the 0.96% forecast in the 2021 IRP. CETA requires utilities to have 80 percent of their energy from clean sources by 2030 and 100 percent by 2045; PUD anticipates meeting this target 15 years ahead of the statutory requirement.

Future Projects

Several transmission line, substation and other infrastructure projects will be pursued during the planning period as outlined in Figure 9.7 below.

Figure 9.7
Major PUD Infrastructure Projects

TIER (POPULATION)	RESIDENTIAL ZONES
North Marysville substation 115kV loop-through	Convert the Transmission Line connection from the current tap configuration to a looped-in configuration to reduce interruptions in service.
Stimson Crossing to Sills Corner new transmission line	Design and construct approximately five miles of a new transmission line from Stimson Crossing Substation to Sills Corner to reduce outage exposure, improve operational flexibility and maintenance of the existing line from Stanwood to Camano.
Stimson Crossing to North Stanwood transmission line rebuild	Reconductor approximately seven miles of the existing, aging 115 kV transmission line to larger conductor; reconductoring will improve the transmission network capacity and reliability.
Stimson Crossing substation upgrade	Convert the 115kV Stimson ring bus to a breaker-and-half configuration.
East Marysville Circuit Tie	Reconductor small wire to large conductor to provide a tie between two different East Marysville circuits to provide greater flexibility and support the expected load increase due to development in Whiskey Ridge along 87th Avenue NE.
Getchell Switching Station	Design and construct a new 115kV transmission switching station at the northeast corner of Highway 9 and 84th Street NE that includes four 115kV transmission lines. This project supports load growth, and transmission reliability needed due to large industrial uses.

Source: Snohomish PUD

175. Snohomish PUD's 2021 Integrated Resource Plan 2022 – 2045 Study Period

Section 9.7

NATURAL GAS

Natural Gas System Overview

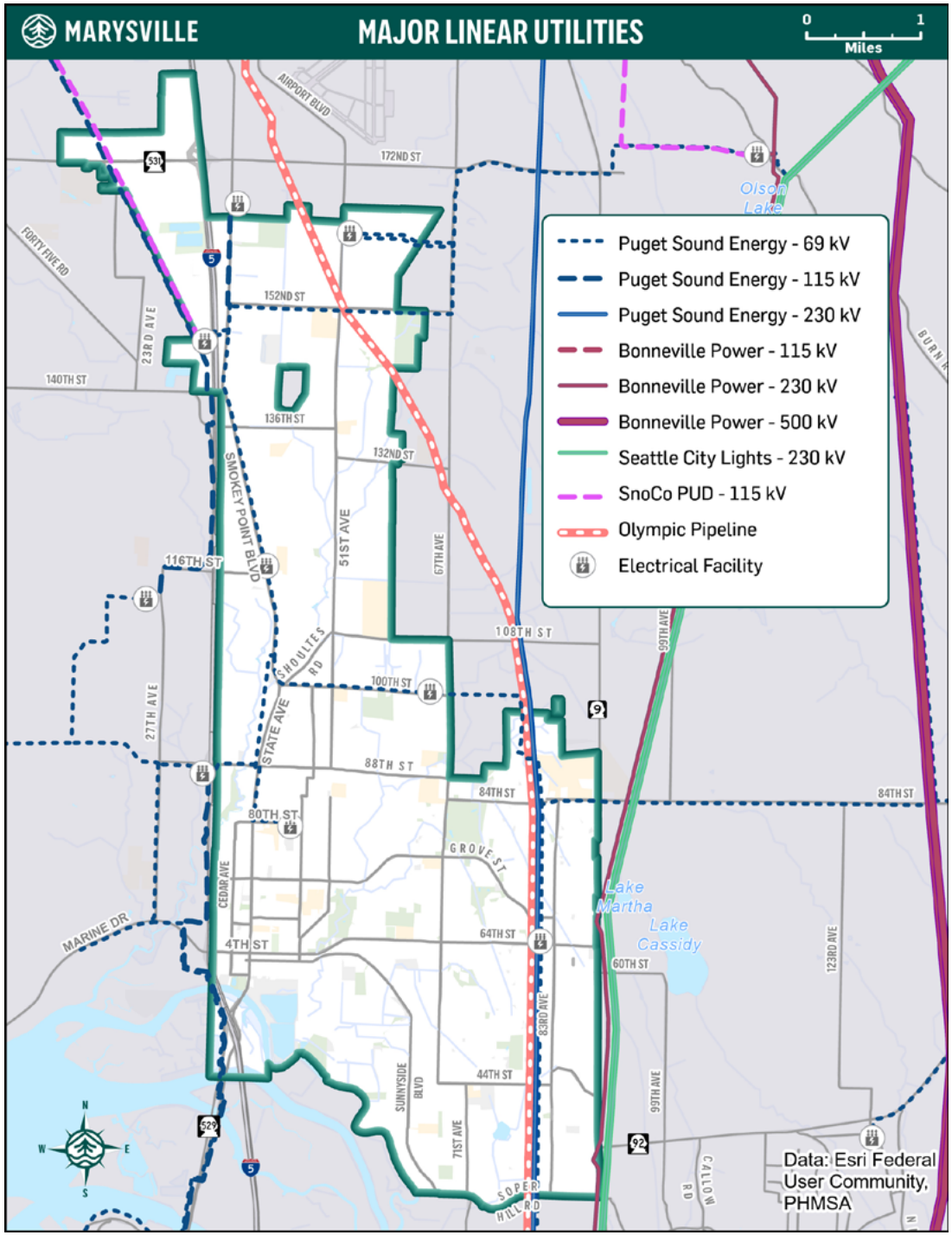
Puget Sound Energy (PSE) is a private utility company that provides natural gas service to Marysville. PSE is Washington State's oldest local energy company and serves approximately 1.2 million electric customers and more than 900,000 natural gas customers. PSE builds, operates, and maintains an extensive gas system in Snohomish County, which consists of transmission and distribution natural gas mains, odorizing stations, pressure regulation stations, heaters, corrosion protection systems, above ground appurtenances, and metering systems. PSE receives gas from Williams Northwest Pipeline at 15 Gate Stations. PSE operates and maintains 75 miles of high pressure main, 78 District Regulators, nearly 2,175 miles of intermediate main, and serves 152,000 meters.

Gate Station infrastructure serves as a place of custody transfer, measurement, odorant treatment, and pressure regulation. Gas pressure is most commonly reduced to levels at or below 250 PSIG, then continues throughout PSE's supply system in steel mains ranging in diameter of two to 20 inches. Over-pressure protection mechanisms release gas into the atmosphere, enact secondary regulation, or completely shut off the gas supply to ensure safety. PSE also applies corrosion control mitigation systems to prevent pipe damage. Since natural gas is naturally odorless, the odorant mercaptan is injected to the gas so that leaks are detectable.

Regulatory Environment

PSE's operations and rates are governed by the Washington Utilities and Transportation Commission (UTC). PSE's natural gas utility operations and standards are further regulated by the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA). Both the UTC and PHMSA monitor, assess, and enforce compliance and reliability standards for PSE. Natural gas utilities in Washington state are also subject

Figure 9.8



to the Washington Climate Commitment Act (CCA), which caps and reduces greenhouse gas emissions from large emitting sources to lower 95% of carbon emissions by 2050. This new program puts a price on greenhouse gas emissions emitted in the state and increases the cost to deliver electricity and natural gas to PSE's customers. PSE strives to decarbonize via PSE 2030, a strategic framework for guiding the company's capital investments over the next 10 years. PSE 2030 is in alignment with their Beyond Net Zero Carbon goals and their commitments to safety, reliability, affordability, and equity.

Marysville residents rely on PSE and the City to coordinate efforts on ordinances and codes that protect existing energy facilities while embracing new clean energy technology. One of the primary intentions of the Utility Element is to assure proper coordination of public land use planning and infrastructure planning by providers.

Integrated Resource Plan

Puget Sound Energy files an Integrated Resource Plan (IRP) with the UTC every two years. An IRP is a 20-year or longer evaluation of a utility's energy needs. The 2023 Gas Utility Integrated Resource Plan (IRP) "evaluates how a range of potential future outcomes could affect PSE's ability to meet their customers' natural gas supply needs". The analysis considers policies, costs, economic conditions, physical energy systems, and future resource procurement.

PSE's natural gas resource needs are determined by peak day demand, which occurs in the winter when temperatures are lowest and heating needs are highest. The current design standard ensures that PSE supply is planned to meet firm loads on a 13° design peak day, corresponding to a 52-heating degree day (HDD). Two primary factors influence demand — peak day demand per customer and the number of customers. The heating season and the number of lowest-temperature days in the year remain relatively constant, and use per customer is growing slowly, so the most significant factor PSE uses to determine peak load growth is the increase in customer count. Currently, PSE's annual base gas energy demand is 93,942 MDth per year in 2024 and is projected to grow at a 0.4 percent average annual growth rate to 103,611 MDth per year in 2050.[176] PSE's peak gas demand is anticipated to increase from 996 MDth in 2024 to 1,189 MDth in 2050.

A Puget Sound Energy (PSE) technician checking for gas leaks.

Future Projects

To meet regional natural gas demand, PSE's delivery system is modified every year to address customer growth, load changes that require system reinforcement, rights-of-way improvements, and pipeline integrity issues. PSE must maintain large-diameter transmission pipelines, system components and infrastructure, City Gate Stations, and smaller utility-owned gas mains. The system responds differently year to year, so PSE is constantly adding or modifying infrastructure to meet gas volume and pressure demands.

Ongoing gas system integrity work may include:

- **Pipe Replacement:** PSE will continue pipe investigations to determine the exact location of any DuPont pipe and qualified steel wrapped pipe requiring replacement. Dupont manufactured polyethylene main and service piping, plus qualified steel wrapped intermediate pressure main and service piping may require attention.
- **Sewer Cross Bores:** PSE will conduct investigations of cross bores to determine where gas lines have been cross bored through sewer lines, and then make subsequent repairs.
- **Buried Meters:** There will be ongoing projects to remediate locations where above ground gas meter set piping was inadvertently buried.

176. MDth (pronounced "million British thermal units per hour") is a unit of measurement used in the energy industry to quantify the amount of energy needed or produced by a system or process.

Section 9.8

OLYMPIC PIPELINE

Portions of the Olympic Pipeline traverse the City of Marysville as shown in Figure 9.8 The Olympic Pipeline is a 400-mile interstate pipeline system that runs in a 299-mile corridor that extends from Blaine, Washington to Portland, Oregon. It transports over 4.9 billion gallons of gasoline, diesel, and jet fuel from four refineries: two each in Whatcom and Skagit Counties. The pipeline serves a variety of distributors including those at Seattle's Harbor Island, Seattle-Tacoma International Airport, Renton, Tacoma, Vancouver, Washington, and Portland. It is the sole supplier of jet fuel to Seattle-Tacoma International Airport. The diesel and gasoline supplies fuel stations across Washington and other states. In the pipeline corridor, there are two lines (16" and 20") that are buried 3 to 4 feet deep.

Between 2004 and 2009, over $50 million dollars have been invested to improve the integrity and safety of the pipeline. In January 2006 BP sold majority ownership in the Olympic Pipeline to Enbridge, retaining only 15 percent ownership. Coordination of development activity between the City and Olympic Pipeline ensures the pipeline remains undisturbed.

The Olympic Pipeline, Puget Sound Pipeline, and other major regional utilities, are located in the utility corridor shown here.

Section 9.9

TELECOMMUNICATIONS

Telecommunications is the transmission of sound, images, and/or data by wire, radio, optical fiber, cable, satellite, or other electromagnetic or similar means. Telecommunications include, but are not limited to, telephone, cable television, personal wireless services, and internet services. The following are telecommunications providers currently serving Marysville:

Telephone Services

Comcast (Xfinity) and Ziply (formerly Frontier) provide landline telephone services to Marysville. Fiber optic cable connects switching offices and is used for transport of data and voice traffic.

Cable Services

Comcast (Xfinity) and Astound Broadband, provide digital cable service, which is an alternative to digital subscriber lines (DSL), and cable television to the majority of the City.

Wireless Communication

Wireless communication or wireless is a combination of a portion of the radio frequency spectrum with switching technology, making it possible to provide mobile telephone service to virtually any number of subscribers within a given service area. Transmission quality is comparable to that provided by conventional landline telephones, and the same dialing capabilities and features available to landline customers are available to wireless customers. This involves the location of towers and antennas throughout the community. AT&T, Sprint, T-Mobile, and Verizon Wireless provide wireless service to the City.

Internet Service Providers

Numerous Internet Service Providers (ISP) serve the City. High-speed internet services are available via broadband and Fiber to the Premises. Dial-up internet services are available for those who have access to telephone service.

- **Broadband.** Broadband internet is the fastest and most common form of internet access. The term broadband means that the internet is always available.[177] Broadband is offered in Marysville by Comcast, Astound Broadband in the Lakewood neighborhood, Starlink, and Viasat. DSL, T1s and MPLS are offered by Ziply Fiber.
- **Fiber to the Premises (FTTP).** Fiber to the Premises (FTTP) is a fiber optic cable delivery medium that provides Internet access directly to a user or groups of users from an Internet service provider (ISP). FTTP runs at a much faster speed than a coaxial cable Internet or dial-up connection. This fiber optic communication delivery style is conducted through the use of an optical distribution network that links the central office to the premises occupied by the subscriber(s). Astound Business Solutions and Ziply Fiber offer FTTP service within Marysville.

177. Examples of broadband include: cable internet, fiber-optic internet, 5G home internet, DSL (digital subscriber line) internet, satellite internet, and 4G/5G wireless internet.

Section 9.10

ESSENTIAL PUBLIC FACILITIES

Essential Public Facilities are defined in WAC 365-196-550 as "public facilities that are typically difficult to site"; however, they may be publicly or privately owned. Essential public facilities include, but are not limited to, airports, state education facilities, certain types of transportation facilities, state and local correctional facilities, solid waste handling facilities, in-patient facilities including substance abuse facilities, mental health facilities, group homes, secure community transition facilities, and any facility on Washington State's 10-year Capital Plan maintained by the Office of Financial Management.[178] The City of Marysville is required to establish a process for identifying and siting Essential Public Facilities that is consistent with and implements applicable Snohomish County County-wide Planning Policies. Further, the City's Comprehensive Plan and development regulations may not preclude the siting of Essential Public Facilities.

The new Marysville Municipal Jail is an Essential Public Facility that benefits Marysville and surrounding communities.

Regardless of whether it is a new, existing, or an expanded or modified existing public facility, the major component in the identification of an Essential Public Facility is whether it provides or is necessary to provide a public service, and whether it is difficult to site. When identifying Essential Public Facilities, the City must take a broad view of what constitutes a public facility, involving the full range of public services provided by, substantially funded by, or contracted for the government, or provided by private entities subject to public service obligations. The City's siting process must consider the need for county-wide, regional, or statewide uniformity in connection with the kind of facility under review.

The City recognizes that it must be willing to host Essential Public Facilities. It is, however, important to acknowledge the City's existing contribution in providing facilities with regional benefits that extend beyond Marysville.

These facilities include, but are not limited to:

- Marysville Municipal Jail
- Smokey Point Behavioral Hospital
- Roads of Statewide or Regional Significance: Interstate 5 and Highway 9
- State highways: State Road 528, State Road 529, State Road 531
- Rail transportation (i.e. Burlington Northern Santa Fe railroad)

The City is required under RCW 36.70A.200(1)(a) to "include a process for identifying and siting Essential Public Facilities". The City's process for identifying, mitigating and siting Essential Public Facilities is set forth in MMC Chapter 22G.070.

178. Transportation facilities that are deemed Essential Public Facilities include: state or regional transportation facilities, transportation facilities of statewide significance as defined in RCW 47.06.140 (i.e. the interstate highway system, interregional state principal arterial including ferry connections that serve statewide travel, intercity passenger rail services and high-speed ground transportation, major passenger intermodal terminals excluding all airport facilities and services, the freight railroad system, etc.), high capacity transportation systems, and regional transit authority facilities.

Section 9.11

GOALS AND POLICIES

UT 1 Facilitate the development of all utilities at the appropriate levels of service to accommodate the City of Marysville's projected growth.

UT 1.1 Accommodate new residential, commercial, and industrial development only when required utilities are available prior to, or concurrent with, development. Concurrency indicates that utilities are available within six years of construction of the new development. Payment of mitigation fees is considered concurrency.

UT 1.2 Coordinate the City's land use planning with the utility providers' planning.

UT 1.3 Provide urban level utilities only in Urban Growth Areas and encourage development in areas where utilities are already available before developing areas where new utilities would be required.

UT 1.4 Facilitate and encourage conservation of resources to delay the need for additional facilities.

- Encourage water conservation, reuse, and reclamation. Conservation should be aggressively pursued as a means to ensuring efficient water use and protection of water resources, and as a water supply source that can make a substantial contribution to meeting future regional water needs. Water reclamation and reuse should be encouraged for high water users including large commercial and industrial developments, parks, schools, and golf courses.
- Maintain or restore, where feasible, natural drainage systems in order to minimize the need for public expenditures recognizing both the amenity and utilitarian functions of the natural drainage system.
- Encourage reduction of solid waste, recycling, and pretreatment of industrial wastes. Educate the public on how to reduce their garbage output and participate in waste reduction and recycling program, and encourage the expansion of existing recycling programs.
- Encourage new techniques for sewage and sludge disposal that also ensure public and environmental health.

UT 1.5 Extension of utilities should be carefully staged to achieve orderly, regular, and compact development.

UT 1.6 Assess the condition of infrastructure at appropriate intervals, and rehabilitate, repair, or maintain as necessary to ensure public safety and protection of utility assets.

UT 2 Promote the provision of utilities that: are safe, reliable, and reasonably priced; minimize impacts on the natural environment; and are aesthetically compatible with surrounding land uses.

UT 2.1 Prioritize utility line extensions where on-site systems have created known pollution or health hazards.

UT 2.2 Provide urban level utilities in Urban Growth Areas to enhance the quality of life, and maintain viable, efficient, and cost-effective delivery. Promote affordable and equitable access to public services, including drinking water and telecommunication infrastructure, to provide access to all communities, especially underserved communities.

UT 2.3 Use incentives to encourage undergrounding of utility distribution lines.

UT 2.4 Reduce the per unit cost of public utilities by encouraging urban density development, allowing efficient distribution of public and private services and facilities.

UT 2.5 Respect the capability of the land and natural systems when determining how to provide utilities. This may include, but is not limited to, the following practices:

- Encouraging the design of developments to utilize natural drainage patterns;
- Limiting the amount of grading and impervious surfaces, and the removal of vegetation to minimize problems associated with increased volume and velocity of stormwater runoff as well as erosion, siltation, and pollutants in the drainage system and watercourses. Replanting should occur as appropriate; and
- As appropriate, restricting the extent of development on lands with significant critical areas or potentially geologically hazardous areas.

UT 2.6 In order that utilities make a positive contribution to the built environment, the City will consider opportunities to incorporate accessible open space as an element of major public projects, including public utilities' facilities. Innovative approaches to planning, design, and development of these facilities to address existing and growth-related open space needs will be encouraged. For example, storm detention facilities combined with public or private parks or open space accomplish multiple objectives.

UT 2.7 Properly manage stormwater and prevent illicit discharges into any natural water course, storm drainage system, or sanitary sewer in accordance with Federal, State, County, and local water quality regulations and standards.

- Require development to provide facilities that comply with currently adopted version of the Department of Ecology's Stormwater Management Manual for Western Washington. Implementing these standards will help protect private property, preserve the natural drainage pattern and ensure that runoff is similar to predeveloped conditions, and promote water quality and quantity; and
- Where feasible, encourage the development of regional detention facilities instead of stormwater facilities for a single site.

UT 2.8 Allow location of utility distribution sites within residential areas, provided that they are suitably landscaped and buffered, designed, and improved to prevent hazards to life and adverse effects on the surrounding neighborhood.

UT 2.9 Require collocation of telecommunication facilities whenever possible to minimize the aesthetic impacts of multiple towers in the community. Work with telecommunication providers to construct antennas on existing structures, and new towers that use materials and structures that minimize visual impacts.

UT 2.10 To ensure that growth is accommodated and adequate utilities are provided in a timely and cost-effective manner, facility location should be determined by the needs of facility users and clients, and the requirements of utility providers. The siting of facilities should address negative impacts on surrounding neighborhoods, and properly consider present and future health and environmental impacts. Dispersal among neighborhoods should be an important consideration, but not a sole determinant of final siting decisions. The City's goal is to foster positive relationships between facilities and their neighbors, so that facilities will be regarded as assets to communities.

UT 2.11 Process permits and approvals for utility facilities in a fair and timely manner consistent with development regulations to foster predictability.

UT 3 Coordinate and communicate with partner jurisdictions, entities and businesses to ensure optimal delivery of utility facilities and services.

UT 3.1 Seek to coordinate, where appropriate, investment in utilities with business, employment, and economic development opportunities.

UT 3.2 Coordinate and consolidate utilities districts, where feasible, to distribute public and private services more efficiently.

179. Coordination on storm drainage management is of particular importance, and requires coordination with Snohomish County, Snohomish County Diking District No. 3, neighboring jurisdictions, and residents to improve storm drainage and to mitigate the impacts of increased stormwater runoff from new development.

UT 3.3 Recognize the inter-jurisdictional characteristics of providing utilities and work with Snohomish County, other jurisdictions, and area-wide residents.[179]

UT 3.4 To facilitate coordination of public and private utility trenching activities, to promote cost efficiencies, and to reduce disruption in the street right-of-way, the Public Works Department shall provide timely and effective notification to interested utilities of road construction and of maintenance and upgrades of existing roads.

UT 3.5 Public easements and rights-of-way should be considered multiple-purpose utility/public facility corridors. New utility systems, including water, sewer, gas, power, and communications transmission and distribution lines, should be located in existing public rights-of-way and easements where possible.

UT 3.6 Promote, when feasible, sharing trenches and coordination of construction timing to minimize construction-related disruptions to the public and reduce the cost to the public of utility delivery.

UT 3.7 Encourage the development of telecommunications infrastructure city-wide and region-wide.

UT 3.8 Coordinate the formulation and periodic update of the utility element with adjacent jurisdictions.

UT 3.9 Coordinate and seek to cooperate with other jurisdictions in the implementation of multi-jurisdictional utility facility additions and improvements.

UT 3.10 The City, utility providers, and school districts should maintain open communications to keep each other informed of plans and recommendations regarding closures, changes, and expansions of schools, street, utilities, and other facilities that might impact each other.

UT 3.11 Route development applications for new electric vehicle infrastructure, or projects providing electric vehicle charging stations, to both PUD and PSE to enable them to plan for and provide adequate facilities and energy for these new energy uses.

UT 3.12 Provide utilities with annual population, employment, and development projections. The City and utilities will seek to jointly evaluate actual patterns and rates of growth, and compare such patterns and rates to demand forecasts.

UT 4 Siting of Essential Public Facilities should be balanced and equitable, recognizing the City's existing contributions in providing such facilities as well as the County-wide need and impacts to local populations.

UT 4.1 Local Essential Public Facilities should be sited or expanded to support the county-wide land use pattern, minimize public costs, and protect the environment and public health, including reducing adverse impacts upon historically marginalized populations and disproportionately burdened communities.

UT 4.2 Local Essential Public Facilities must first be considered for location inside Urban Growth Areas unless it is demonstrated that a non-urban site is the most appropriate location for location of the facility. Local Essential Public Facilities located outside of the UGA shall be self-contained or be served by urban governmental services in a manner that shall not promote sprawl.

UT 4.3 The City will collaborate with the County and public agencies and special districts, as necessary, to identify opportunities to co-locate local Essential Public Facilities.

UT 4.4 The City will impose reasonable conditions and/or mitigation of adverse environmental impacts on approval of a development agreement or other land use approvals as a result of the siting of Federal, State-wide, regional, or local Essential Public Facilities.

UT 4.5 The City will maintain, and periodically update, its Essential Public Facilities standards to ensure consistency with the provisions of the Growth Management Act and the long-term resilience of these facilities.