

Capital Facilities & Utilities

Introduction

The Capital Facilities and Utilities chapter summarizes capital facilities and utilities systems for the City of Monroe, including existing conditions and the issues affecting them. This chapter also identifies how such systems relate to planning for the City's physical development. The chapter supports the policies contained in Chapter 2.

"Capital facilities" is a term used in a variety of ways. In this chapter, capital facilities refers to long term fixed assets that have a significant life (typically ten years, at least three years), and a substantial cost (at least \$20,000). These facilities would typically require policy decisions related to multi-year financing compared to smaller projects.

More detailed information on certain capital facilities and utilities may also be found in Appendices of this plan. This includes the City's Utility Systems Plan (Appendix H); the Parks, Recreation, and Open Space (PROS) Plan (Appendix F); and the Transportation Plan (Appendix D).



Figure 8.01 - The provision of cost-effective and reliable services is a primary role of cities. This plan strives to establish strategic, mutually-beneficial relationships between service provision and other goals residents wish to achieve. (Image source: Studio Cascade, Inc.)

Purpose & Relationship to the Growth Management Act (GMA)

Capital facilities elements (RCW 36.70A.070(3)) and utilities elements (RCW 36.70A.070(4)) are required by Washington State's Growth Management Act (GMA). This comprehensive plan has chosen to combine the two elements to better coordinate between the provision of public and private utility services. For example, new developments need both city services (such as water and sewer) as well as private utility services (such as natural gas and cable). Coordinating how these services are provided offers efficiencies.

Providing urban services in urban growth areas is also a goal of the GMA. To accomplish this, this element seeks to help Monroe:



Figure 8.02 - The City of Monroe is surrounded by and included within Snohomish County Fire Protection District No. 3. Plans currently call for a new station in Monroe north of the railroad tracks. (Image source: Studio Cascade, Inc.)

- *Provide capital facilities for land development envisioned or authorized by the Land Use chapter of this plan*
- *Maintain the quality of life for existing and future development by establishing and maintaining standards for the level of service of capital facilities*
- *Coordinate and provide consistency among the many plans for capital improvements, including:*
 - *Other chapters of the comprehensive plan*
 - *Master plans and other studies of the local government*
 - *Plans for capital facilities of state and/or regional/local significance*
- *Ensure the timely provision of adequate and concurrent facilities*
- *Document all capital projects and their financing.*

While this chapter has a 20-year planning horizon, it also informs the City’s shorter-term

capital facility decisions. Therefore, there is a direct relationship between this chapter and the City’s Six-Year Capital Facilities Plan (CFP). Six-year CFP’s are also required by the GMA.

Concurrency

The GMA seeks to have public facilities and services provided concurrent with development. Concurrency means that adequate public facilities will be in place to support new development or will be provided within a specified time thereafter.¹ Concurrency is a key concept that led to the passage of the GMA.

Concurrency requires that facilities have sufficient capacity to serve development without decreasing levels of service (LOS) below adopted minimum standards. While the GMA requires concurrency only for transportation facilities, the Washington State Department of Commerce recommends concurrency for water and sewer systems as well. The GMA also requires all other public facilities to be “adequate.”

Planning Area

For the purposes of this element, the water service area defines Monroe’s utility and capital facilities planning area. The water service area extends beyond both the city limits and the urban growth area (UGA). It includes an area that reflects the City’s recent acquisition of a nearby water association. While the City’s capital facilities funding decisions primarily focus within the City limits and the UGA where annexations may be expected, the service planning area is much larger, as shown in Figure 8.03.

Existing Conditions

Utilities

Monroe has a full range of urban services. This includes, for example, public water and wastewater systems; power and telecommunications facilities; public schools providing K-12 education; and fire, police, and emergency medical services. But not all available services are provided by the City of Monroe.

¹ See WAC 365-195-070[3]

This section briefly summarizes Monroe’s utility services.

Utility systems directly provided by the City of Monroe include water, wastewater and stormwater. A new utility system plan for all three utilities was prepared concurrently with this comprehensive plan by BHC Consultants. The City of Monroe Utility System Plan provides extensive detail on the City’s three utilities, and is incorporated into this plan by reference. The Utility System Plan is contained as Appendix H.

Table 8.01 provides a cursory overview of Monroe’s current utility conditions and objectives, drawn from the Utility System Plan.

Utilities not directly provided by the City itself, such as natural gas, cable and electricity, are identified and summarized in Table 8.02. More detail on these systems are provided in Appendix H, identifying those components relevant to Monroe’s long-range planning.

Public Services & Facilities

Monroe enjoys comprehensive public safety, parks and recreation, municipal, and transportation services. These are summarized in Table 8.03. Additional details on these public services and facilities are provided in appendices to this plan.

An important near term opportunity, however, is the potential co-location of municipal, school district and community college administrative facilities. Though funding availability for this three-in-one campus is still a challenge, all three groups are working together to study its feasibility.

Essential Public Facilities

The GMA defines “essential public facilities” as facilities typically difficult to site, such as airports, state educational facilities and state or regional transportation facilities as defined in RCW 47.06.140; state and local correctional facilities, solid waste handling facilities, and in-patient facilities including substance abuse facilities, mental health facilities, and group homes.

In addition to defining essential public facilities, the GMA requires the city to establish a process for siting such facilities. Comprehensive plans

and development regulations cannot preclude the siting of essential public facilities within jurisdictional boundaries.

Snohomish County has also adopted Countywide Planning Policies for the siting of essential public facilities. These policies are to be implemented through the Snohomish County Tomorrow Steering Committee, and include a common site review process to evaluate facility proposals; collaboration on the development of common siting criteria for the various types of facilities, and prescribe public review of the proposals including mitigation measures to reduce impacts within the jurisdiction where the facility is proposed.

Essential public facilities currently located in Monroe include:

- Monroe Correctional Complex (Washington State Department of Corrections)
- City of Monroe wastewater treatment plant
- City of Monroe Ingraham Hill Reservoir
- City of Monroe Trombley Hill Reservoir
- EvergreenHealth Monroe Hospital
- Fire District No. 3 facilities
- City of Monroe municipal campus, including City Hall, the police building, and public works facilities.
- FirstAir Field airport
- Everett Community College East County Campus

Level-of-Service Standards

The Growth Management Act requires Level-of-Service (LOS) standards for transportation facilities (RCW 36.70A.070, Mandatory Elements). The Washington Administrative Code (WAC) also discusses LOS standards for other types of capital facilities (WAC 365-196, Growth Management – Procedural Criteria for adopting Comprehensive Plans and Development Regulations). Establishing LOS standards for

Table 8.01 - Utilities Overview, City

Utility	Provider	Notes
Water	City of Monroe	<i>Monroe purchases its water from the City of Everett. Since 1996, Monroe's population in 1996 was 6,480 as of 2011 it was 18,806. In response to rapid growth, Monroe has reinvested in its water system, including a new two-million gallon Ingraham Hill reservoir, acquisition of the Department of Corrections 750,000 gallon reservoir with booster pump, a new booster pump station at Tester Road, and new reservoirs and pump stations at North Hill (1.15 million gallons) and Trombley Hill (2.5 million gallons). Based on future land use and forecast growth, the utility system plan recommends a series of more immediate storage, operations and maintenance, and conveyance upgrades to enhance service and assure fire flows in the existing urban area.</i>
Wastewater	City of Monroe	<i>Monroe has implemented a series of upgrades to its treatment plant and is now making upgrades for energy efficiency. The City provides sanitary sewer service to customers within its sewer service area. Wastewater ultimately flows to the Skykomish River through a series of four in-stream diffusers. The utility system plan recommends several upgrades to the collection and conveyance system, focusing on upgrades to pump stations and force mains. It also recommends that the wastewater treatment plant be studied for aerating and biosolids management, with further work to increase primary clarifier capacity. A map of Monroe's existing sewer system is included as Figure 8.04.</i>
Stormwater	City of Monroe	<i>Approximately two-thirds of the City's storm water conveyance system consists of pipe. Some storm water pipes have storage or water quality treatment structures built into the system. The City owns approximately 50 miles of storm water pipe with the pipe inventory consisting primarily of PVC, HDPE and concrete pipe. A portion of the downtown area is a combined sanitary/storm water sewer which discharges to the wastewater treatment plant. The City intends to comply with minimum NPDES requirements, deferring intense capital investment until later and concentrating on system operations and maintenance to ensure conveyed water is adequately treated prior to discharge. However, four projects are identified that address drainage issues near Frylands and south of US 2 in the vicinity of Blueberry Lane.</i>

Table 8.02 - Utilities Overview, Non-City

Utility	Provider	Notes
Power	Snohomish County PUD #1	<i>Sufficient capacity exists to serve forecast demand, with two substations located in Monroe.</i>
	Puget Sound Energy (PSE)	<i>PSE maintains two utility corridors through Monroe, one of which is developed with a 115kV transmission line.</i>
Natural gas	Puget Sound Energy (PSE)	<i>The popularity of natural gas is growing, and new facilities may be needed to serve an increasing customer base.</i>
Phone (land line)	Frontier	<i>Frontier provides local and long-distance service through its land line network.</i>
Phone (wireless)	Verizon, AT&T, T-Mobile & others	<i>Various providers offer wireless service, with arrays of cell site antennae located in Monroe.</i>
Cable TV	Comcast	<i>Comcast provides cable TV service, including OnDemand, DVR and HDTV.</i>
Internet	Comcast, Verizon, AT&T, & others	<i>Wireless Internet access, access via cable, and access via DSL are all available in Monroe.</i>
Solid Waste	Republic Services	<i>Services are provided via contract with Republic Services, with waste delivered to Snohomish County transfer stations. Republic also provides recycling and yard waste services.</i>

Table 8.03 – Public Services & Facilities

Utility	Provider	Notes
Roads	City of Monroe, State of Washington	<i>A summary discussion of the City’s traffic circulation system and proposed six-year transportation improvement plan can be found in the Transportation Element; complete details may be found in the Transportation Plan included as an appendix to this plan.</i>
Parks and recreation	City of Monroe, Snohomish County, State of Washington	<i>An updated inventory and planned parks capital improvement projects are contained in the Parks, Recreation, and Open Space Plan, included as an appendix to this plan.</i>
Fire protection	Snohomish County Fire Protection District #3	<i>The City of Monroe is surrounded by and included within the district. District plans call for a new station in Monroe north of the railroad tracks.</i>
Police	City of Monroe	<i>The department provides 24/7 service. Appendix J lists forecast needs for additional officers, equipment and office space.</i>
Municipal facilities	City of Monroe	<i>There are three main components of the City campus: City Hall, the police building and the public works facility. All need upgrades and expansion.</i>
Schools	Monroe School District	<i>Monroe has K-12 education facilities, and the City collects school impact fees, adopting the District’s capital facilities plan by reference into this comprehensive plan.</i>

other types of capital facilities is allowed, but is not required.

The City of Monroe has adopted minimum LOS standards for the following capital facilities: fire services, parks, police services, potable water, schools, sanitary sewer, and transportation facilities. These standards were adopted in the Comprehensive Plan or in individual comprehensive facility plans that were adopted into the Capital Facilities Element by reference.

The established minimum LOS standards are listed in Table 8.04 for reference.

of capital facility, although may be subject to certain restrictions

- *Single-use sources – Single-use revenue sources include taxes, fees and grants which are dedicated to a single type of capital facility or infrastructure investment.*

The City employs a number of these funding approaches, including the charging of impact fees for parks and the assessment of a real estate excise tax. Appendix G lists the full range of funding sources and how these revenue streams have contributed to the City’s and the school district’s budgets over the past five years.

Capital Facilities Financing

The six-year and 20-year capital facilities programs identify improvements intended to implement the comprehensive plan along with potential funding sources. Appendix G lists potential funding sources that may be available for various capital projects. Some funding sources are local in nature, while others draw from state or federal sources.

The sources generally fall into one of two categories:

- *Multi-use sources – Multi-use revenue sources include taxes, fees and grants that may be used for virtually any type*

Capital Facilities Needs vs. Funding Capacity

The Growth Management Act (GMA) requires that transportation and capital facilities elements of the comprehensive plan contain finance plans that match future transportation and other capital facilities needs against projected revenue capacities. Probable funding sources and potential revenue capacities are identified in Appendix H for each capital facility need.

Transportation facilities needs and funding sources are discussed in general terms in the Transportation chapter (reference Chapter 4) and in more detail in the Transportation System Plan included in Appendix D. The parks and recreation facility needs and funding sources are discussed in general terms in the PROS chapter of this plan

(reference Chapter 7), with more detail provided in the PROS plan in Appendix F.

Since the comprehensive planning is an on-going process, the six-year funding strategies included in this plan's appendices will be continually reviewed and updated.

Capital Improvement Program

Both the six-year CFP and the 20-year Capital Improvement Program (CIP) are presented in Appendix H. These plan and program lists include both capital and non-capital projects, and present a prioritized plan for city expenditures to implement this plan. The six-year CFP and the 20-year CIP identify the types of expenditures, the policies they are intended to implement, their proposed timing and an approximation of cost.

These capital projects - and to a certain extent, non-capital projects - help guide the City to expand its capacity to serve a growing population consistent with the City's anticipated financial resources. In doing so, it also helps the City maintain its adopted LOS standards.

Policy Overview

The provision of capital facilities is one of the primary roles of government agencies. The policies and actions contained in this plan (reference Chapter 2) reflect how public facilities and public services are provided to maintain level of service standards.

The policies and actions address:

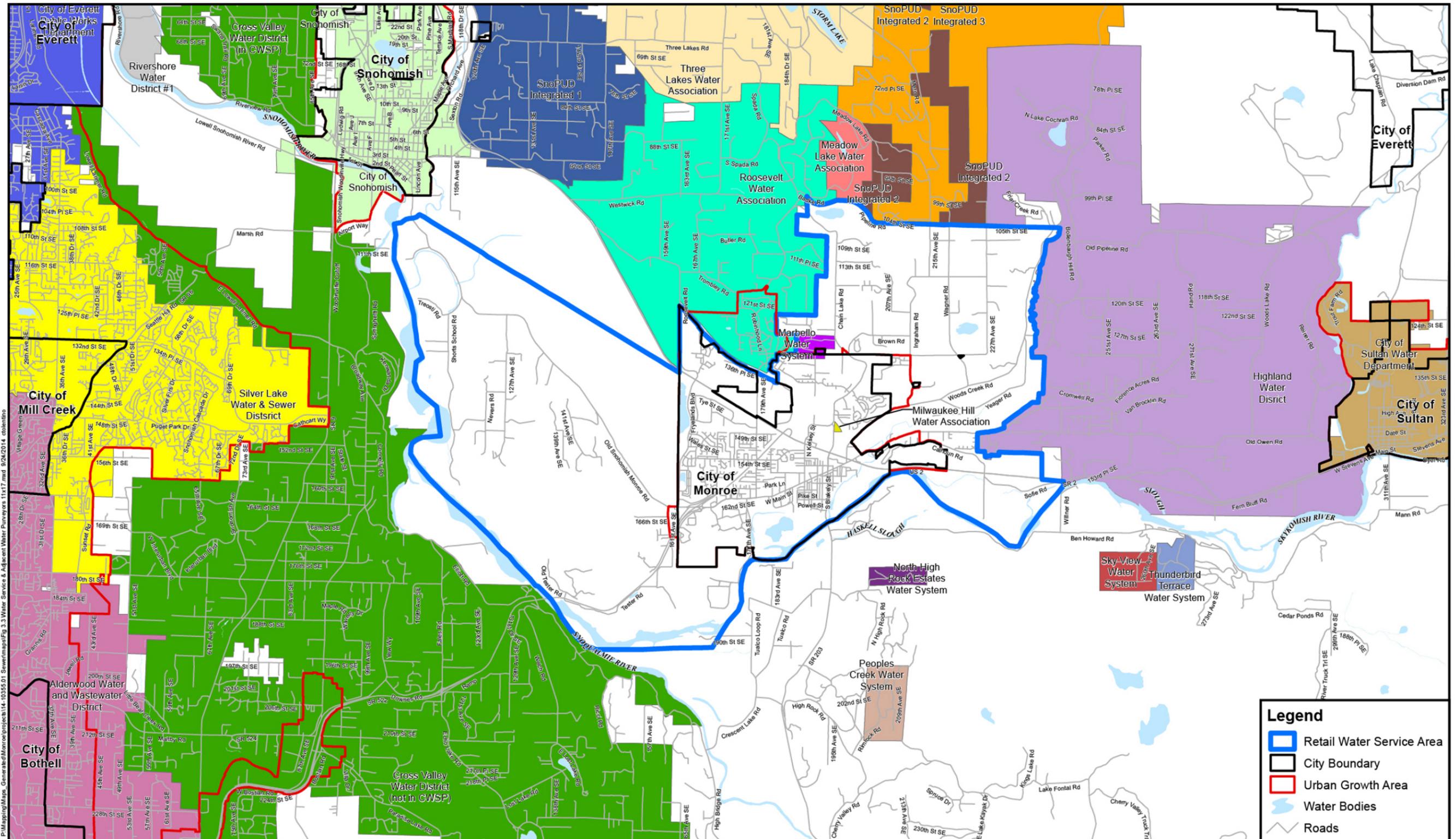
- *Improving coordination between service sectors, maximizing opportunities to achieve multiple aims with project investments*
- *Supporting residential and commercial infill patterns city-wide*
- *Directing infrastructure development to support economic development objectives*
- *Maintaining LOS standards for all services and facilities*
- *Coordinating with regional agencies for service and service cost improvements for residents*
- *Addressing stormwater, natural resource, solid waste and sustainability goals*
- *Supporting transportation needs and objectives, including trails and overall walkability.*

The policies seek to ensure public facilities and services keep pace with growth and demand consistent with adopted levels of service.



Table 8.04 - Level of Service (LOS) standards

Utility/Service	LOS criteria
Fire Services	Monroe Fire District #3 has established an alarm response time of less than six and one quarter (6.25) minutes for the City of Monroe and an average response time of 12.30 minutes for the remainder of the district service area.
Parks and recreation	A level of service of 4.75 acres per 1,000 residents for parks and one mile of trail per 1,000 residents has been adopted. Additional considerations for service areas by park type are encouraged to direct acquisition and development of new parks.
Police services	The Monroe Police Department has established an alarm response time of three minutes or less for an "in progress" request for service within the urban growth area.
Potable water	The need and demand are determined by standards and equations provided in the Water System Design Manual from the Department of Health (see Chapter W 6 of Appendix H for additional detail).
Schools	The Monroe School District set minimum educational service standards are outlined in the adopted Monroe School District Capital Facilities Plan. The Snohomish School District set minimum educational service standards are outlined in the adopted Snohomish School District Capital Facilities Plan.
Sanitary sewer	The need and demand are determined by standards and equations provided in the Sewage Works Design Manual from the Department of Ecology (see Chapter SS 10 of Appendix H for additional detail).
Transportation	The City of Monroe has established a minimum LOS standard of "C" on all local collector street intersections, except for intersections with state highways; minimum LOS standard of "D" for all non-state arterial intersections; and a minimum LOS standard of "D" for state highway segments, including intersections with city streets or private driveways, subject to the Interlocal Agreement between the City of Monroe and the Washington State Department of Transportation, dated February 22, 1990.

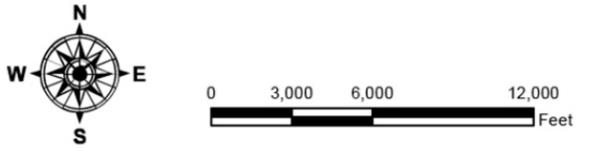


Legend

- Retail Water Service Area
- City Boundary
- Urban Growth Area
- Water Bodies
- Roads

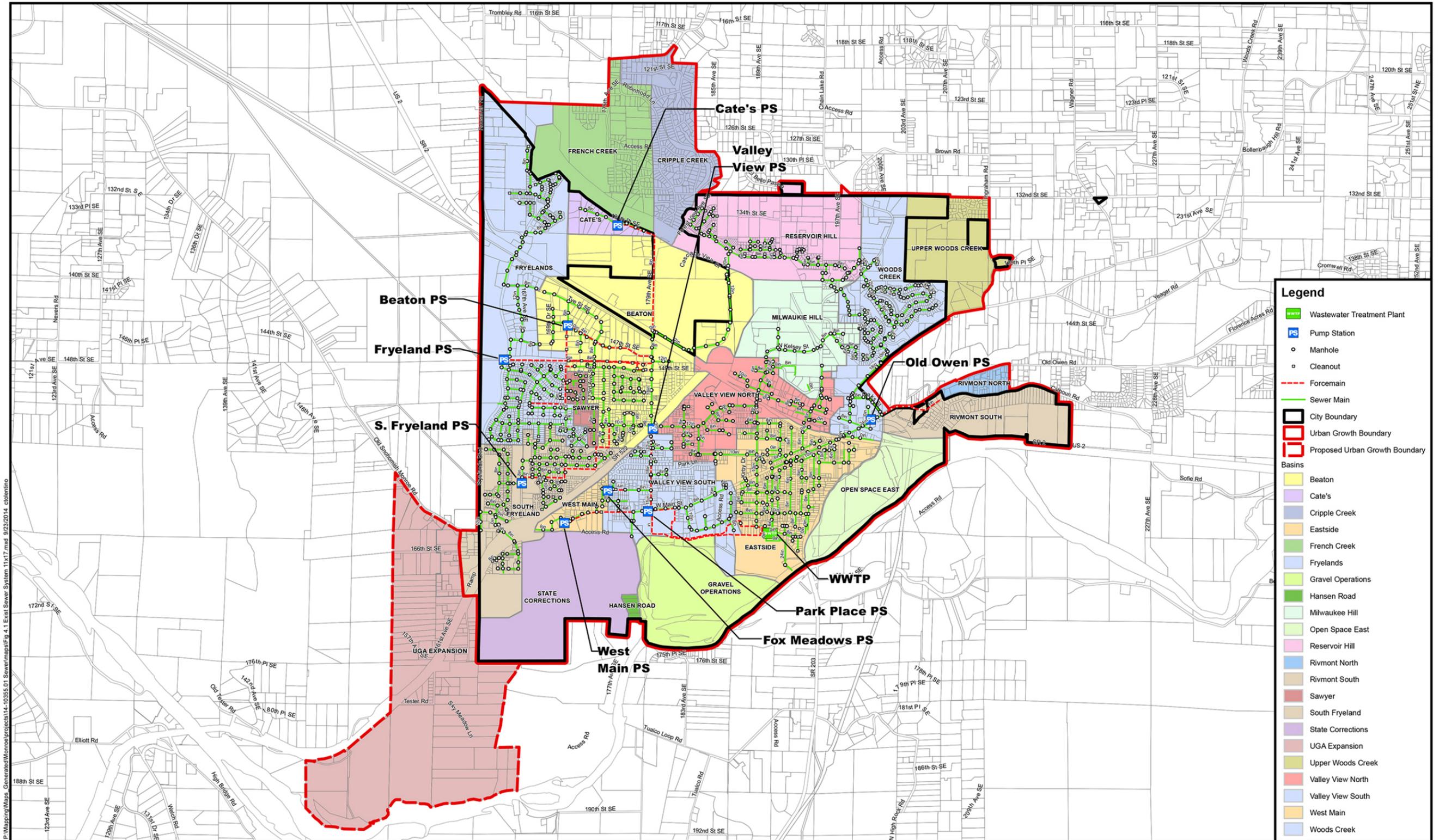
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Water System: City of Monroe 2014
 Snohomish County base data 2014
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MONROE WASHINGTON
Water Service Area & Adjacent Water Districts
 Utility Systems Plan
 City of Monroe, Washington
 September 2014

Figure 1.03 - Monroe's water service area extends well beyond City Limits and UGA boundaries. This map also shows adjacent service districts. (Image source: 2015 Utility Systems Plan, City of Monroe)



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Sewer System: City of Monroe 2014
 Snohomish County base data 2014
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MONROE WASHINGTON
Existing Sewer System
 Utility Systems Plan - Sewer
 City of Monroe, Washington
 September 2014

Figure 1.04 - Monroe's existing sewer systems map, September 2014. (Image source: 2015 Utility Systems Plan, City of Monroe)