RESOLUTION NO. 8245

A RESOLUTION Adopting the 2024 Comprehensive Sewer Plan

WHEREAS,

A. The previous 2014 Comprehensive Sewer Plan was approved by the Washington State Department of Ecology on July 10, 2015.

B. The City has prepared a 2024 Comprehensive Sewer Plan in accordance with Department of Ecology Guidelines.

C. The City Council finds that the 2024~~0~~ Comprehensive Sewer Plan meets the needs of the City and the State.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The City of Everett City Council adopts the 2024 Comprehensive Sewer Plan.

Scott G. Bader
_____
Council member introducing resolution

Passed and approved this 10th day of December, 2025.

_____
Council President

Executive Summary

Introduction

The State of Washington adopted the Growth Management Act (GMA) with the intent of creating a consistent and unified growth planning process. The GMA requires that the City of Everett (City) create and enact a Comprehensive Plan to provide a 20-year blueprint for local policy, planning and capital facility investment. A Comprehensive Plan is used as a guide for local governments through the establishment of vision statements, goals, objectives, policies, and implementing actions. The City maintains a Comprehensive Sewer Plan (CSP) that constitutes the sewer capital facilities element of Comprehensive Plan in accordance with state law. The last CSP was completed in 2014 and covered a timeframe of 24 years.

This City of Everett 2024 Comprehensive Sewer Plan (2024 Plan) provides a road map for the City service area's long-term wastewater infrastructure needs, based on 10-year and 20-year planning horizons covering the years 2024 to 2043. Planning the wastewater infrastructure needs of a dynamic and fast-growing region is challenging. Expanding populations in the City will require sewer service and the City will be responsible for appropriately collecting, conveying, and treating increasing wastewater flows. Infrastructure design and implementation will be strategically planned to maximize financial resources. Federal, State, and Local regulations contribute to a need to be on the cutting edge of emerging technologies and require the utility to continually think ahead. Planning at this level involves weighing a complicated array of interconnected—and often conflicting—factors and variables. The Plan provides a framework for the City to continue to manage growth within the context of a citywide wastewater service network and achieve the overall goal of providing sewer service to protect public health and the quality of the City's water resources.

The City has focused recent planning efforts and capital improvement plans on the combined sewer system. This is driven by regulatory requirements related to combined sewer overflows. While the 2024 Plan also evaluated the combined sewer system, more emphasis was put on evaluating the separated sewer system. This included installation of flow meters throughout the system and calibration of a hydraulic model.

Previous planning efforts related to the sewer collection system are briefly described below:

- 2020 Comprehensive Plan Amendment reflects the Vision 2040 Regional Growth Strategy adopted in 2008. Growth rates and utilities planning inform system analysis and Capital Improvement Plan (CIP) project development for the 2024 Plan.
- 2014 CSP provided a plan to guide improvements of the City's sewer system. The 2024 Plan carries forward information contained in this prior plan such as level-of-service goals and planning criteria.
- 2021 Water Pollution Control Facility (WPCF) Facilities Plan (2021 Facilities Plan) developed by Stantec Inc. assessed the WPCF and recommended improvements through the year 2040. The content in this document will be summarized and the updates at WPCF since 2021 Facilities Plan developed are provided in Chapter 8.
- 2021 Port Gardner Storage Facility (PGSF) General Sewer Plan (GSP) recommended using the PGSF (formerly Kimberley Clark industrial wastewater treatment plant purchased by the City in 2019) to provide temporary storage and bring four combined sewer overflow (CSO) outfalls, Puget Sound

Outfall (PSO) 4, PSO 5, PSO 6, and PSO 7, into compliance with Chapter 173-245 of the Washington Administrative Code (WAC). This regulation requires the City to reduce overflow frequency to less than once per year on average. The background information, analysis methodologies, and capital improvement alternatives contained in this document are used to inform the 2024 Plan.

- 2020 Comprehensive Water Plan (CWP) reviewed and analyzed the City's existing water system and provided a 10-year CIP and financial plan to support the water system. The water demand forecasts and other planning data discussed in this document are used to inform the analysis in the 2024 Plan.

- 2017 & 2022 Surface Water Comprehensive Plan (SWCP) addressed continued surface water issues. The analyses presented in the SWCP used similar criteria as the 2014 Plan and rainfall inputs that inform the 2024 Plan.

The PGSF project recommended in 2021 PGSF GSP is being completed in three phases. The status of the three phases as of the date of the 2024 Plan is described below:

- Phase 1 is complete and included engineering reports and analysis of the sewer system and affected area.

- Phase 2 is ongoing and includes engineering and design related to PGSF and some demolition at the site in preparation for construction.

- Phase 3 has not started and will include construction and sewer system improvements. The Department of Ecology (Ecology) has set a deadline of December 31, 2027 for the PGSF to be complete and operational.

How The 2024 Plan Should Be Used

The 2024 Plan serves as a guiding document for the City's sewer system improvements. Use of this plan should be supplemented with:

- Annual reviews of CIP to validate short term investment.

- An overall Plan update every 10 years to address system changes.

- Regular updates to the geographic information system data and corresponding hydraulic model to reflect ongoing system improvements and expansion.

- Detailed designs for identified capital projects.

- Updates and refinements to cost estimates during conceptual and final project designs.

WAC Requirements

The 2024 Plan fulfills the requirements of the WAC 173-240-050 (General Sewer Plan). Table ES-1 summarizes the requirements and the sections in the 2024 Plan where the requirements are addressed.

Table ES-1 | WAC 173-240-050 Requirements

Section	Section Description	Location in 2024 Plan
3.a	The purpose and need for the proposed plan.	Chapter 1, Section 1.1.1
3.b	A discussion of who will own, operate, and maintain the systems.	Chapter 3, Section 3.1
3.c	The existing and proposed service boundaries.	Chapter 3, Sections 3.1, 3.2, & 3.4
3.d.i	Boundaries. The boundary lines of the municipality or special district to be sewered, including a vicinity map;	Chapter 3, Figure 3-1, Figure 3-8, & Figure 3-10
3.d.ii	Existing sewers. The location, size, slope, capacity, direction of flow of all existing trunk sewers, and the boundaries of the areas served by each;	Chapter 6
3.d.iii	Proposed sewers. The location, size, slope, capacity, direction of flow of all proposed trunk sewers, and the boundaries of the areas to be served by each;	Chapter 11
3.d.iv	Existing and proposed pump stations and force mains. The location of all existing and proposed pumping stations and force mains, designated to distinguish between those existing and proposed;	Chapter 6, Chapter 7, Chapter 11
3.d.v	Topography and elevations. Topography showing pertinent ground elevations and surface drainage must be included, as well as proposed and existing streets;	Chapter 3, Figure 3-2
3.d.vi	Streams, lakes, and other bodies of water. The location and direction of flow of major streams, the high and low elevations of water surfaces at sewer outlets, and controlled overflow. All existing and potential discharge locations;	Chapter 3, Figure 3.2 & Figure 3-4
3.d.vii	Water systems. The location of wells or other sources of water supply, water storage reservoirs and treatment plants, and water transmission facilities.	Chapter 3, Figure 3-6
3.e	The population trend as indicated by available records, and the estimated future population for the stated design period. Brief description of methodology used to determine future population trends and the concurrence of any applicable local or regional planning agencies.	Chapter 4, Section 4.2
3.f	Any existing domestic or industrial wastewater facilities within twenty miles of the general plan area and within the same topographical drainage basin containing the general plan area.	Chapter 5, Section 5
3.g	A discussion of any infiltration and inflow problems and a discussion of actions that will alleviate these problems in the future.	Chapter 5, Section 5.3; Chapter 7, Appendix E Hydraulic and Hydrologic (H/H) Modelling Tech Memo
3.h	A statement regarding provisions for treatment and discussion of the adequacy of the treatment.	Chapter 8
3.i	List of all establishments producing industrial wastewater, the quantity of wastewater and periods of production, and the character of the industrial wastewater insofar as it may affect the sewer system or treatment plant. Consideration given to future industrial expansion.	Chapter 5, Section 5.5 Chapter 6, Appendix F WPCF Facilities Plan by Stantec, Inc (2021)
3.j	Discussion of the location of all existing private and public wells, or other sources of water supply, and distribution structures as they are related to both existing and proposed domestic wastewater treatment facilities.	Chapter 3, Chapter 8
3.k	Discussion of the various alternatives evaluated, and a determination of the alternative chosen, if applicable.	Chapter 11

Section	Section Description	Location in 2024 Plan
3.l	A discussion, including a table, that shows the cost per service in terms of both debt service and operation and maintenance costs, of all facilities (existing and proposed) during the planning period.	Chapter 12
3.m	A statement regarding compliance with any adopted water quality management plan under the Federal Water Pollution Control Act as amended.	Chapter 2, Section 2.1.1
3.n	A statement regarding compliance with the State Environmental Policy Act (SEPA) and the National Environmental Policy Act (NEPA), if applicable.	Chapter 2, Sections 2.2.5 & 2.2.6

Organization of the 2024 Plan

The 2024 Plan is organized into 12 chapters and appendices as described in **Table ES-2**.

Table ES-2 | Chapter Descriptions

Chapter	Title	Content
1	Introduction	Overview of the existing system and previous planning efforts.
2	Regulatory Requirements and Planning Criteria	Relevant federal, state, county and local regulatory requirements that affect planning and operations of the wastewater system
3	Service Area & Vicinity Characteristics	The physical and administrative characteristics of the City service area.
4	Existing and Future Population Forecast	The current and projected sewer system population, and the impact of projected population growth.
5	Wastewater Flow Characteristics	Current and future wastewater flows and loads within the City service area.
6	Existing Collection & Conveyance Sewer System	Existing gravity sewers, pump stations, and force mains.
7	Sewer System Evaluation	Sewer system capacity and alternatives for improvements to the system using hydrologic and hydraulic modeling; condition assessment of the existing sewer system; risk and resiliency analysis (RRA)
8	Water Pollution Control Facility	Summary of the 2021 Facilities Plan which provided a detailed condition and capacity assessment of the WPCF and recommendations for improvements through the year 2040. Updates at the WPCF since the 2021 Facilities Plan are also discussed.
9	Maintenance and Operations	Documents the City's management structure, the wastewater system operation and maintenance practices, and suggestions to improve operation.
10	Water Reclamation and Reuse	Identifies regulatory requirements for water reclamation and reuse, current water usage, and discusses modifications needed at the WPCF.
11	Capital Improvement Program	20-year plan for implementing capital improvements to improve the performance of the collection and conveyance system; includes opinions of probable costs for near and long-term projects with an estimated implementation timeline.
12	Financial Program	Financial approaches to fund the CIP.
Appendices		

Regulatory Requirements

Collection, conveyance, and treatment facilities operation, design, and construction are regulated through federal, State of Washington, Snohomish County, and City regulations. The 2024 Plan must comply with the requirements listed in RCW 90.48.110 and WAC 173-240; and requires approval from Ecology. The regulations are detailed in Chapter 2. There are several Ecology regulations for the City pertaining to the collection and treatment of wastewater:

- The National Pollutant Discharge Elimination System (NPDES) program, administered by Ecology, is the primary permit for the WPCF, which has been issued NPDES Permit No. WA0024490. The permit was issued on November 21, 2024, goes into effect on January 1, 2025, and expires on December 31, 2029.

- Ecology approved a Pretreatment Program Modification in May 2024. This relates to emerging contaminants and treating wastewater from industrial users in the City service area.

- Ecology also regulates CSO compliance in WAC 173-245 which limits CSO discharges to once per year on a 20-year moving average. CSO compliance is not a focus of the 2024 Plan as the City is addressing that through recent or concurrent planning studies for the Port Gardner Storage Facility (PGSF) project, and the 36th Street CSO Storage project.

- Ecology initially issued the Puget Sound Nutrient General Permit (PSNGP), effective as of Jan. 1, 2022. The Pollution Control Hearings Board (PCHB) invalidated the PSNGP effective Feb. 28, 2025. A revised, draft PSNGP, was reissued June 18, 2025 and is a voluntary program that allows utilities to opt-in to the permit. A public comment review period is now closed, and Ecology is expected to make a decision on issuing the final permit in Fall/Winter of 2025. The City is coordinating with Ecology on the approach for developing nitrogen limits at the time of this Plan.

- The WPCF also has coverage under the Statewide 2015 General Permit for Biosolids Management as an 'active biosolids facility', permit number BA0024490. Biosolids from the WPCF are collected in the aerated lagoon system and stabilized to Class B requirements. The 2022 Statewide Biosolids General Permit was voided by the Pollution Control Hearings Board in January 2024 due to Ecology not meeting SEPA requirements in the issuance of the permit. Ecology did not appeal and later gave notice that all biosolids facilities covered under the Biosolids General Permit issued in 2015 will continue coverage under that version of the permit. Ecology developed a new SEPA review process and the issuance of a new permit that became effective February 1, 2025.

Chapter 2 also outlines the collection system planning criteria that are used to develop projects included in the CIP; the level of service (LOS) methodology which defines how often the capacity criteria can be exceeded; and the system resiliency analysis/criteria which identifies risk for collection system assets from certain threats.

Service Area and Vicinity Characteristics

The City owns and operates a sanitary sewer collection system serving the residents and businesses within its approximate 39,300 acres service area, including majority of the City and extending south, into portions of Mukilteo, Mill Creek, and unincorporated Snohomish County. The sewer service area is divided into two sections: the combined system in the north and the separated system in the south. Areas that are within

the sewer service area but outside the city limits are located within the City's Urban Growth Area (UGA). Figure ES-1 outlines the city limits, sewer service area, and UGA.

The City's treatment service area comprises the area from which wastewater is collected and conveyed for treatment at the WPCF. It consists of the City, a small area outside the City limits but within the City's UGA, and portions of the Alderwood Water and Wastewater District (AWWD), the Mukilteo Water and Wastewater District (MWWD), and the Silver Lake Water and Sewer District (SLWSD). The WPCF also receives treated effluent from the City of Marysville at the upstream end of the chlorine contact channel for discharge through the Port Gardner outfall (Marysville effluent does not go through the WPCF treatment process). This occurs when the City of Marysville treatment plant cannot meet discharge permit requirements. Additionally, there are approximately 300 septic parcels throughout the City and on Smith Island.

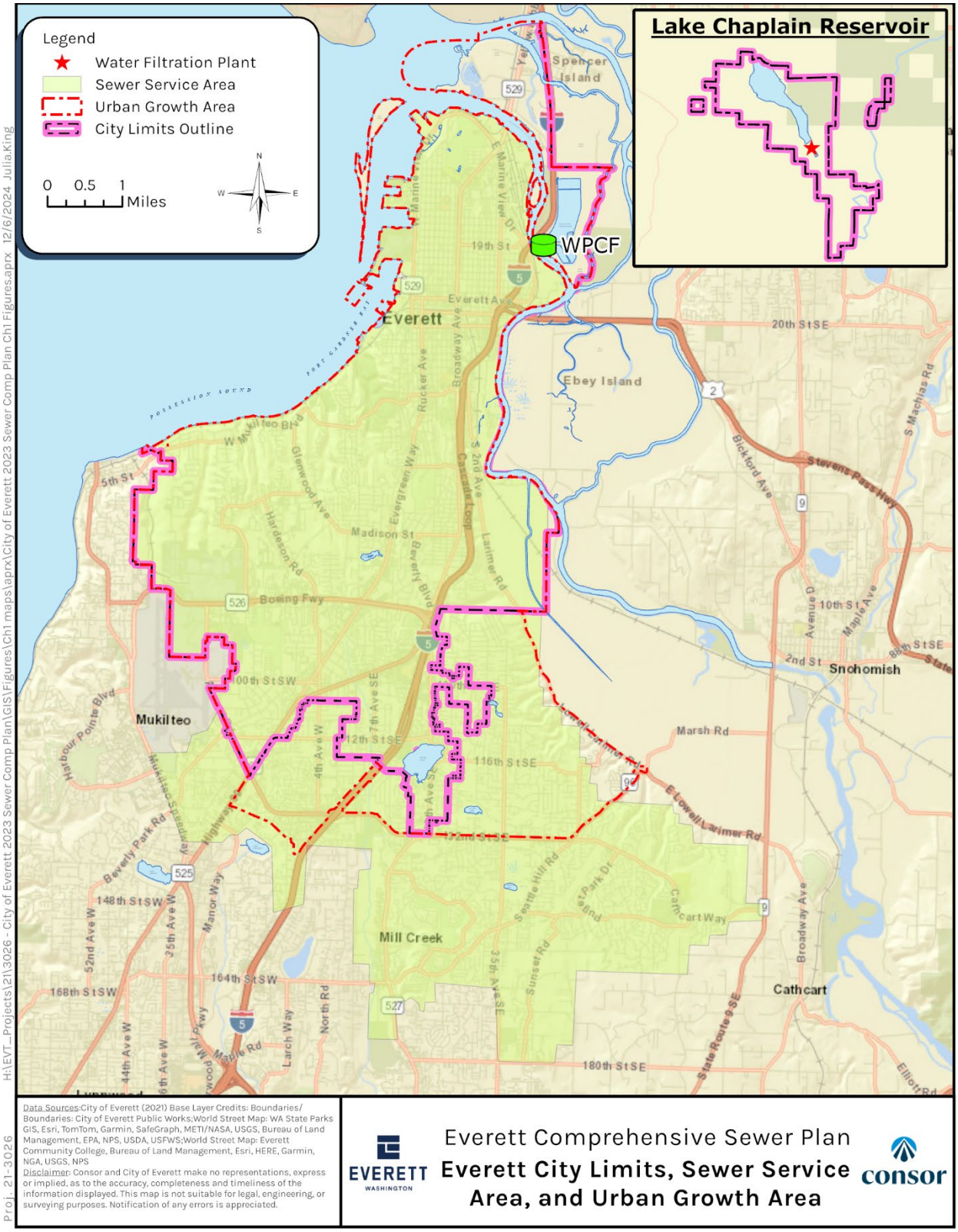
Existing and Future Population Forecasts

Chapter 4 summarizes the existing and future population estimates in the sewer service area. Population data was compiled from previous plans and linear interpolation was used to find population projections in Table ES-3.

Table ES-3 | Current and Future Service Area Populations

Year	City of Everett	Alderwood	Mukilteo	Silver Lake	Total Service Area
2023	123,700	8,700	6,000	47,200	185,600
2029	133,400	9,800	6,800	50,600	200,600
2043	155,800	11,600	7,400	58,800	233,600

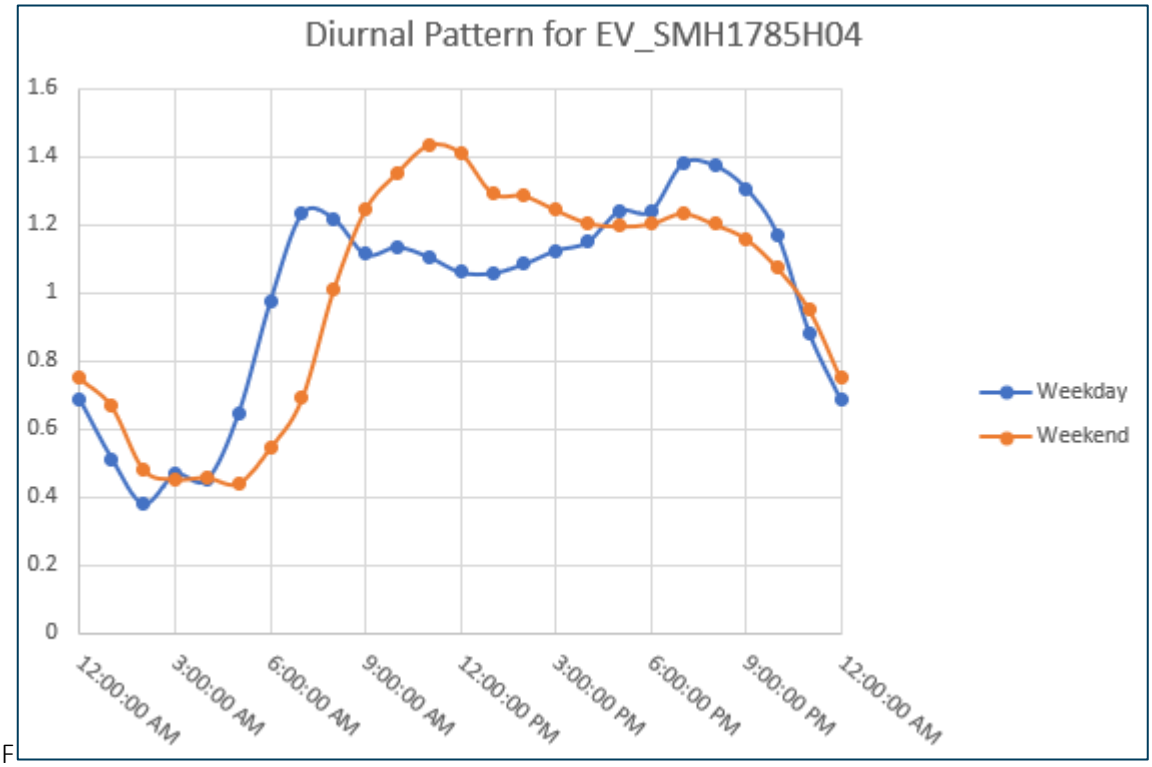
Figure ES-1 | Everett City Limits, Sewer Service Area, and Urban Growth Area



Wastewater Flow Characteristics

The existing wastewater flows were determined using data from flow monitoring locations in the City's wastewater collection system for the 2021/2022 wet season. The wastewater flow metrics determined were existing average dry weather flow (ADWF), diurnal patterns, and rainfall dependent inflow and infiltration (RDII). The wastewater flow metrics were used to develop and calibrate the H/H model used for the project. **Figure ES-2** shows a typical diurnal pattern for weekdays and weekends at meter EV_SMH1785H04.

Figure ES-2 | Average Diurnal Pattern as meter EV_SMH1785H04



F

The RDII analysis evaluated how much flow enters the wastewater conveyance system from groundwater and surface water because of rainfall. A high RDII could be indicative of infrastructure that requires maintenance or replacement. **Chapter 5** determines severity of basin areas by ranking them based on RDII rates. RDII was not computed for combined basins as the system is designed to include sources of inflow.

Future flow rates were determined from population growth and pipe condition deterioration. Population growth in the City service area is assumed to increase by approximately 26 percent over the 20-year planning horizon (see **Chapter 4**). Therefore, ADWF average values for each meter basin were increased by 26 percent in the H/H model. This assumes that future water usage is similar to current water usage. It was also assumed that the usage of water throughout the day would remain consistent, therefore no modifications to diurnal patterns were made.

The RDII degradation is assumed to be 7 percent per decade which is a value used by neighboring jurisdiction King County Wastewater Treatment Division in their planning efforts. The H/H model was adjusted so that RDII was increased in future modeling scenarios. See the H/H modeling technical memorandum in **Appendix E** and **Chapter 7** for more information.

Chapter 5 also discusses future flow rates, industrial flows, and flow contributions from adjacent sewer systems.

Existing Collection and Conveyance Sewer System

The City owns and operates a collection and conveyance system that consists of a network of gravity mains, force mains, interceptors, regulators, and lift stations that convey wastewater to the WPCF. The collection and conveyance system is shown in Figure ES-3.

The City's combined system, carrying both stormwater and wastewater, is in the north part of the City and serves approximately 6,400 acres. There are approximately 619,000 feet of gravity mains and 80,600 feet of force mains in the combined system. The combined system contains eleven main interceptors: 17th Street Interceptor, Broadway Trunk, Hoyt Trunk, Memorial Stadium Interceptor, Snohomish River CSO Interceptor, Summit Avenue Interceptor and Summit Tunnel, Trunk A, Trunk B, and 37th Street Trunk.

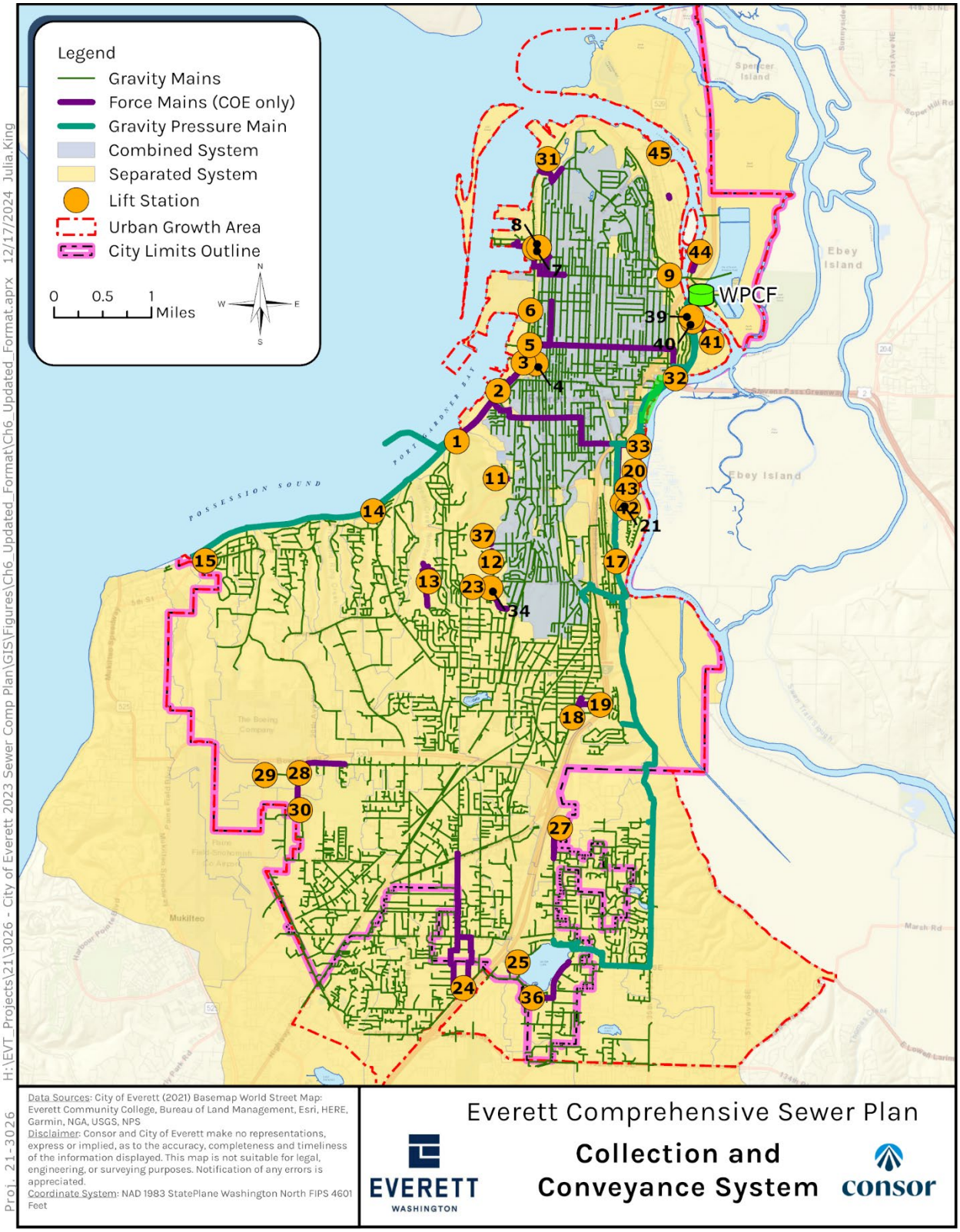
The City's separated system, conveying only wastewater, is in the south part of the City and covers approximately 24,400 acres which includes areas in AWWD, SLWSD, and MWWD. There is approximately 1,013,000 feet of gravity mains and 94,000 feet of force mains in the separated system. The separated system contains four main interceptors: Central Interceptor, Mukilteo Beach Interceptor, South End Interceptor (South), and South End Interceptor (North).

The City currently maintains and operates 35 active lift stations in its service area and three abandoned stations. The lift stations have firm capacities ranging from 120 to 12,600 gallons per minute (gpm).

There are currently 32 regulators. Many of them were installed in the 1960s and 1990s; five have been installed since 2008. There are eight types of hydraulic configurations to divert wet weather flows: weir, leaping weir, overflow pipe, dam, slide gate, motor operated slide gate, weir gate, and Cipoletti weir.

The City has 13 active CSO outfalls; six discharge to the Snohomish River and seven discharges to Port Gardner Bay in Puget Sound.

Figure ES-3 | Collection and Conveyance System



Sewer System Evaluation

The system evaluation of the collection and conveyance system for the existing and 20-year planning horizon is summarized in Chapter 7. The system was evaluated for conveyance capacity, condition, and risk and resiliency.

The conveyance capacity of the system to convey flows to the WPCF was evaluated using the City H/H model. The model contains the City's combined and separated systems and is set up to capture both systems' response to rainfall. Two model scenarios were created to evaluate deficiencies – existing and future (i.e. 20-year planning horizon). Simulation results for peak flow and peak hydraulic grade line at system components were compared to a defined set of capacity criteria. New capital projects to mitigate the deficiencies were determined for each scenario. A rainfall timeseries, referred to as the 15-storm timeseries, was developed and used for model simulations. A version of the 15-storm timeseries that incorporates climate change was developed for use in the future model scenario.

A pipe is deemed deficient if the simulated hydraulic grade line at the connecting manholes is within 5-feet of the ground surface in the separated system or 2-feet from the ground surface in the combined system more than five times during the simulation using the 15-storm timeseries. The storm series contains 25-years of historic rainfall condensed to include major storms; therefore, more than five exceedances roughly equate to less than a 5-year level-of-service. Lift stations are deemed deficient if peak hourly flow into the station exceeds the station's firm capacity or the modeled capacity of the station is insufficient to convey simulated flows thereby causing system backups.

Pipeline and lift station conditions were evaluated through site visits, desktop analysis, and through conversations with City Maintenance and Operations (M&O) staff. Lift station condition was evaluated through site visits. To better inform the City's prioritization of future asset upgrades and replacements, lift station "Asset Health" score was developed that synthesizes each lift station's existing likelihood of failure (condition) and consequence of failure (CoF). Each criterion is rated on a 1 to 5 scale where higher numbers indicate worse conditions and high criticality, then the scores are multiplied together to get the overall Asset Health score. The resulting scores ranged from 3.1 to 10.5, with two pump stations rating higher than 10, 26 pumps stations rated between five and 10 and seven pump stations rated below five. The City directed that lift stations with asset health scores greater than 11 be deemed in poor condition, therefore, none of the lift stations are considered to be in poor condition at this time.

Pipe and manhole conditions were evaluated through desktop analysis. The City regularly conducted closed circuit television (CCTV) and inspected pipes using CCTV videos and Granite inspection and scoring reports. The City provided the existing pipe data and directed that all existing 4- and 6-inch diameter sewer mains require replacement and upsizing, and pipes that are over 80 years old are considered as deteriorated or aging and require replacement or rehabilitation within the 20-year planning horizon. Costs were developed for the pipeline rehabilitation and replacement program assuming approximately 30 percent of the pipes will be replaced, and 70 percent will be rehabilitated.

A Risk and Resiliency Analysis (RRA) was also conducted using the United States Environmental Protection Agency's (EPA) risk and resilience assessment framework. This process was used to determine the likelihood of failure and summarize the existing system resiliency for the collection system. As a result, 130 prioritized assets were identified, and 22 threats were selected. Each asset and threat were paired, referred to as an "asset-threat pair", which indicates that threat has the potential to negatively impact the ability of the asset to function and the City's ability to continue service. Each critical asset-threat pair was rated with

a consequence level that identifies the impact to the sewer service if the pair were to occur. The City identified a total of 65 prioritized threat-assets pairs, shown in .

Results of the sewer system evaluation inform the Capital Improvement Plan.

Water Pollution Control Facility

The WPCF information contained in the 2024 Plan was taken from the 2021 Facilities Plan. The Facilities plan assessed the existing and projected future flows and loads through the year 2040 for the base condition (annual average), maximum month dry weather, and maximum month wet weather for flowrate, BOD, TSS, ammonia, and total Kjeldahl nitrogen (TKN), as summarized in Chapter 8.

The WPCF is located on Smith Island in the northern portion of the City and was constructed in 1960 as an oxidation pond. The WPCF was upgraded over time to include a conventional secondary treatment process. The WPCF is designed to treat flows up to 27 million gallons per day (MGD) under low river levels (dry weather) maximum month conditions and 40 MGD under high river levels (wet weather) maximum month conditions, with corresponding influent loading under low river/high river conditions of 75,000/83,000 lbs/day biological oxygen demand (BOD) and 68,000/89,000 lbs/day total suspended solids (TSS).

The WPCF splits influent flow into two interconnected "plants", the South Plant and North Plant. The South Plant contains a conventional secondary treatment process with primary clarifiers, trickling filters, secondary clarifiers, aeration cells (AC), and chlorination system to treat base flows from the collection system. The North Plant contains the original oxidation pond, a polishing pond, and a disinfection system to treat peak flows associated with the combined sewer system. The water treated in the North Plant is discharged to the Snohomish River, and water treated in the South Plant is discharged to the Port Gardner Bay outfall. In addition, there are 13 permitted combined sewer outfalls which are located throughout the collection system as described in Chapter 6.

The 2021 Facilities Plan evaluated and documented equipment condition, redundancy, operation, and resiliency. The Facilities Plan also evaluated the capacity of the plant and evaluated the risk at the plant due to natural hazards.

The condition evaluation process assigned a score for plant components that considered equipment condition and criticality. The result shows that the following locations have equipment that requires critical needs: headworks, primary treatment, trickling filters, solids contact, secondary clarifiers, South Effluent Pump Station (SEPS), aerated cell two (AC2), oxidation/polishing, Final Effluent North (FEN), odor control system, increased current cathodic protection system, and roadway.

The risk evaluation process considered the risk to the WPCF associated with seismic events and climate change. The evaluation found that the diversion structure, headworks, and dechlorination building are at higher risk during a seismic event and should be further evaluated. Climate change will result in increased rainfall intensity and sea level rise, and which could impact the WPCF.

A biological process model and hydraulic model were developed to evaluate the capacity of each unit process through the year 2040 based on current operations and considered the potential actions required in response to the currently under appeal PSNGP. The results indicate that secondary clarifiers, north and south effluent pump stations, and lagoon/aeration cells will not have adequate capacity through 2040.

Maintenance and Operation

Chapter 9 discusses the maintenance and operations (M&O) requirements, activities, and staffing for the sewer system. Additionally, this chapter identifies issues and recommends improvements for the same. The City of Everett Public Works Department is responsible for the M&O and consists of three main work groups: Technical Services Group (TSG), Sewer and Drainage Group (S&D), and the WPCF group.

The M&O activities include regular inspection of pump stations, cleaning, and repairs of sewer pipes; CCTV inspection and condition assessment reports; inspections and preventative maintenance of the WPCF equipment; ongoing records management for all components of the system; industrial pre-treatment program, updates to the WPCF's operation and maintenance manual; and daily laboratory testing of City's water system.

Evaluation of M&O activities as part of the 2024 Plan considered lift stations and the collection system. No M&O issues were identified for the lift stations. The collection system was found to have several issues common to wastewater collection system. Flat parts of the system with shallow grades are susceptible to solids accumulation and ragging. Some areas are known to have high RDII which indicates a condition issue.

Water Reclamation and Reuse

Chapter 10 provides background on the Reclaimed Water Act and requirements of the Reclaimed Water Rule (Chapter 173-219 WAC) which is the basis of determining water reclamation and reuse in the WPCF.

The Reclaimed Water Rule defines three classes of water: Class A+, A and B, based on treatment requirements and use-based performance standards. The use of Class A+ water for potable purposes is not yet permitted in Washington. Class A water can be used in applications where site runoff and public employee contact is likely whereas Class B water has more stringent restrictions for usage. Since the WPCF is unable to meet fecal coliform limits, it does not meet the requirements for Class A or B for reclaimed water reuse.

The City does not have any plans to produce or market reclaimed water in the near term as it was determined to be costly and challenging to transport due to the inconvenient location of the WPCF.

Capital Improvements Plan

The CIP projects were developed to address existing system deficiencies, address regulatory requirements, and provide adequate capacity for projected flows and loads. CIP projects to address immediate needs are presented in a 10-year planning horizon (from 2024 to 2034) and future CIP projects are included in the 20-year planning horizon (from 2034 to 2044). CIP projects for the 10-year and 20-year planning horizons are presented in and . A planning level cost opinion of CIP project implementation is provided. The financial analysis considers the CIP developed for the 2024 Plan and existing City CIP projects.

Table ES-4 | Near Term Capacity Driven Projects

CIP No.	Project Name	Rounded Project Cost (2024 Dollars)
CIP-CON-1	Annual Pipe Rehabilitation and Replacement (year 9 and 10)	$7,166,300/yr
CIP-CAP-SEP-11A	Increase LS18 Pump and Downstream Pipe Capacity	$18,514,000
CIP-CAP-COM-10A	LS09 Firm Capacity and Force Main Upgrade	$14,000
CIP-CAP-COM-45	47th St Trunk Storage Capacity Increase	$8,520,000
CIP-CAP-COM-32	Broadway Avenue & 25th Street Pipe Capacity Increase	$7,110,000
CIP-CAP-COM-37	McDougal Avenue Pipe Capacity Increase	$4,710,000
CIP-CAP-COM-44	47th Street SE & Fowler Avenue Pipe Capacity Increase	$8,530,000
CIP-CAP-COM-23	Colby Avenue & 36th Street Pipe Capacity Increase	$2,610,000
CIP-CAP-SEP-4	North Park Drive Pipe Capacity Increase	$24,270,000
CIP-CAP-COM-43	Evergreen Way & 47th St SE Pipe Capacity Increase	$1,490,000
CIP-CAP-COM-62	Pine Street Pipe Capacity Increase	$6,100,000
CIP-CAP-COM-7	East Marine View Drive Pipe Capacity Increase	$8,960,000
CIP-CAP-COM-36	Broadway Avenue & 24th Street Pipe Capacity Increase	$3,300,000
CIP-CAP-COM-33	Rockefeller Avenue & 24th Street Pipe Capacity Increase	$1,730,000
CIP-CAP-COM-41	Evergreen Way & Wilmington Avenue Pipe Capacity Increase	$9,970,000
CIP-CAP-COM-35	Broadway Avenue & 21st Street Pipe Capacity Increase	$1,760,000
CIP-CAP-COM-49	Grand Avenue Pipe Diversion	$8,190,000
CIP-CAP-COM-42	Wilmington Avenue Pipe Capacity Increase	$3,000,000
CIP-CAP-COM-40	Evergreen Way Pipe Capacity Increase	$12,640,000
CIP-CAP-COM-48	Crescent Avenue Pipe Capacity Increase	$1,400,000
CIP-CAP-SEP-9	75th Street SE Pipe Capacity Increase	$6,430,000
CIP-CAP-SEP-2	Seal Manholes near Mukilteo Interceptor	$27,000
CIP-CAP-COM-46	37th St Trunk System Separation	$3,900,000
CIP-CAP-SEP-6	E Glen Drive Pipe Capacity Increase	$5,960,000
CIP-CAP-COM-65	Highland Avenue Pipe Capacity Increase	$5,360,000
CIP-CAP-COM-4	12th Street Pipe Capacity Increase	$320,000
CIP-CAP-COM-3	Waverly Avenue Pipe Capacity Increase	$4,950,000
CIP-CAP-COM-56	McDougall Avenue Pipe Capacity Increase	$420,000
CIP-CAP-SEP-10	Upstream LS18 Pipe Capacity Increase	$1,680,000
CIP-CAP-COM-34	California Street Pipe Capacity Increase	$540,000
CIP-CAP-COM-28	Rockefeller Avenue & 17th Street Pipe Capacity Increase	$820,000
CIP-CAP-COM-58	Hewitt Avenue Pipe Capacity Increase	$420,000
CIP-CAP-COM-57	Smith Avenue & 38th Street Pipe Capacity Increase	$2,680,000
CIP-CAP-COM-60	26th Street Pipe Capacity Increase	$660,000
CIP-CAP-COM-63	Walnut Street Pipe Capacity Increase	$2,080,000
CIP-CAP-COM-30	Broadway Avenue & 19th Street Pipe Capacity Increase	$2,240,000
	Total (2024 Dollars)	**$185,637,600**

Table ES-5 | Long Term Capacity Driven Projects

CIP No.	Project Name	Rounded Project Cost (2024 Dollars)
CIP-CON-2	Annual Pipe Rehabilitation and Replacement (10-20 yr)	$7,166,200/yr
CIP-CAP-COM-1	5th Street Storage Upgrade	$13,870,000
CIP-CAP-COM-10B	LS09 Firm Capacity and Force Main Upgrade	$13,400,000
CIP-CAP-COM-12	17th St Interceptor Tributary Pipe Capacity Increase	$13,650,000
CIP-CAP-COM-13	Rucker Avenue Pipe Capacity Increase	$1,560,000
CIP-CAP-COM-14	19th Street Pipe Capacity Increase	$1,900,000
CIP-CAP-COM-15	23rd Street Pipe Capacity Increase	$1,660,000
CIP-CAP-COM-16	24th Street Pipe Capacity Increase	$1,410,000
CIP-CAP-COM-17	25th Street Pipe Capacity Increase	$860,000
CIP-CAP-COM-18	Grand Avenue Pipe Capacity Increase	$2,940,000
CIP-CAP-COM-19	West Marine View Drive Pipe Capacity Increase	$880,000
CIP-CAP-COM-2	Legion Memorial Golf Course Pipe Capacity Increase	$590,000
CIP-CAP-COM-20	Nassau St Pipe Capacity Increase	$2,070,000
CIP-CAP-COM-21	Wall Street & Grand Ave Pipe Capacity Increase	$3,610,000
CIP-CAP-COM-22	Colby Avenue & Wall Street Pipe Capacity Increase	$810,000
CIP-CAP-COM-24	Federal Avenue Pipe Capacity Increase	$1,880,000
CIP-CAP-COM-26	Hoyt Avenue Pipe Capacity Increase	$400,000
CIP-CAP-COM-27	Tulalip Avenue Capacity Increase	$800,000
CIP-CAP-COM-29	Rockefeller Avenue & 22nd Street Pipe Capacity Increase	$2,920,000
CIP-CAP-COM-31	Broadway Avenue & 21st Street Pipe Capacity Increase	$3,810,000
CIP-CAP-COM-38	Broadway Trunk Interceptor Parallel Pipe Installation and Pipe Capacity Increase	$9,700,000
CIP-CAP-COM-39	Fleming Street Pipe Capacity Increase	$3,230,000
CIP-CAP-COM-5	14th Street Pipe Capacity Increase	$2,140,000
CIP-CAP-COM-53	43rd Street SE Pipe Capacity Increase	$620,000
CIP-CAP-COM-54	41st Street Creek Diversion	$11,200,000
CIP-CAP-COM-55	Memorial Stadium Pipe Installation	$3,440,000
CIP-CAP-COM-6	Hayes Street Pipe Capacity Increase	$6,740,000
CIP-CAP-COM-61	Chestnut Street & 22nd Street Pipe Capacity Increase	$8,870,000
CIP-CAP-COM-8	Chestnut Street & E Marine View Drive Pipe Capacity Increase	$664,000
CIP-CAP-COM-9	15th Street Pipe Capacity Increase	$390,000
CIP-CAP-SEP-11B	Increase LS18 Pump and Downstream Pipe Capacity	$2,700,000
CIP-CAP-SEP-12	Increase LS19 Pump Capacity	$3,500,000
CIP-CAP-SEP-1B	LS15 Capacity Increase and Force Main Expansion	$9,800,000
CIP-CAP-SEP-3	Merrill Creek Parkway Pipe Capacity Increase	$8,670,000
CIP-CAP-SEP-5	Dogwood Drive Pipe Capacity Increase	$4,430,000
CIP-CAP-SEP-7	Seal Manholes in 37th St Trunk Basin	$20,000
CIP-CAP-SEP-8	Evergreen Way Pipe Capacity Increase	$9,280,000
	Total (2024 dollars)	**$226,076,000**

Note:
Project costs are an estimate and subject to change in the future.

Table ES-6 | Total CIP

CIP	Timeframe	Total Cost (Inflated Dollars[1])
Existing CIP	2024-2033	$470,830,000
Proposed CIP (Near Term)	2024-2033	$226,349,000
Proposed CIP (Long Term)	2034-2043	$348,942,000
	Total	**$1,046,121,000**

Note:
1. Assumes inflation at 3 percent per year.

Financial Program

Chapter 12 consists of the financial analysis performed by FCS group to develop a funding plan ("revenue requirement") for the City's sewer utility for the 2024 to 2043 planning horizon. The revenue requirement was identified based on operating and maintenance expenditures, fiscal policies, and the capital funding needs identified in Chapter 11.

The results of the analysis indicates that a rate adjustment of 14 percent per year 2025 to 2026 and 12 percent per year 2027 to 2028 would be sufficient to support the capital program in the near term. A 12 percent increase per year would need to continue for 2029 and 2030, followed by 8 percent increases in 2031 and 2032, with the additional caveat that there be a 30 percent deferral of planned capital spending in 2029 and 2030, with those projects (or portions of projects) occurring instead in 2039 and 2040. Table ES-7 shows the "across-the-board" rate adjustments for the next five years, applied to the City's monthly fixed rate for the Metered Residential and Commercial customer classes. The same percentage rate adjustments apply to all classes and rates. It is recommended to conduct another detailed rate study before 2029 to reassess financial statements and strategies.

Table ES-7 | Monthly Fixed Rate Adjustments from 2025 to 2029

Metered Residential & Commercial Class	2024	2025	2026	2027	2028	2029
Rate Increase	-	15.5%	14.0%	12.0%	12.0%	12.0%
Fixed Charge	$57.94	$66.92	$76.29	$85.44	$95.70	$107.18
Change ($)	-	+$8.98	+$9.37	+$9.15	+$10.26	+$11.48

RES 8245_2024 Comprehensive Sewer Plan_Resolution

Final Audit Report 2025-12-12

Created:	2025-12-11
By:	Marisa Nishimura (MNishimura@everettwa.gov)
Status:	Signed
Transaction ID:	CBJCHBCAABAA6HxWYF8iWuMUTA6k5BoRe6iC0afJnxc2

"RES 8245_2024 Comprehensive Sewer Plan_Resolution" History

Document created by Marisa Nishimura (MNishimura@everettwa.gov)
2025-12-11 - 8:41:43 PM GMT

Document emailed to sbader@everettwa.gov for signature
2025-12-11 - 8:42:27 PM GMT

Email viewed by sbader@everettwa.gov
2025-12-11 - 10:47:39 PM GMT

Signer sbader@everettwa.gov entered name at signing as Scott G. Bader
2025-12-12 - 4:06:55 PM GMT

Document e-signed by Scott G. Bader (sbader@everettwa.gov)
Signature Date: 2025-12-12 - 4:06:57 PM GMT - Time Source: server

Document emailed to Donald Schwab (DSchwab@everettwa.gov) for signature
2025-12-12 - 4:07:03 PM GMT

Email viewed by Donald Schwab (DSchwab@everettwa.gov)
2025-12-12 - 7:03:15 PM GMT

Document e-signed by Donald Schwab (DSchwab@everettwa.gov)
Signature Date: 2025-12-12 - 7:03:28 PM GMT - Time Source: server

Agreement completed.
2025-12-12 - 7:03:28 PM GMT