# 2025-2030 SIX-YEAR STRATEGIC BUSINESS PLAN

# LAKE WHATCOM WATER & SEWER DISTRICT



Adopted July 10, 2024

#### Mission

To provide the best possible water and sewer services to District customers in a cost efficient manner, and in a way that contributes to protecting Lake Whatcom water quality.

LAKE WHATCOM WATER & SEWER DISTRICT 1220 LAKEWAY DRIVE BELLINGHAM, WASHINGTON 98229

# 2025-2030 SIX-YEAR STRATEGIC BUSINESS PLAN LAKE WHATCOM WATER & SEWER DISTRICT

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President, Board of Commissioners

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2024 EFFECTIVE UTILITY MANAGEMENT SELF-ASSESSMENT RESULTS

# ACRONYMS AND ABBREVIATIONS

AED automatic external defibrillator Board Board of Commissioners

CCCP cross connection control program

City of Bellingham

COG Whatcom Council of Governments

County Whatcom County

CPR cardiopulmonary resuscitation

District Lake Whatcom Water and Sewer District

EUM Effective Utility Management

District Lake Whatcom Water and Sewer District

IACC Washington Infrastructure Assistance Coordinating

Council

I&I inflow and infiltration

LWMP Lake Whatcom Management Program

NASSCO National Association of Sewer Service Companies

Plan Six-Year Strategic Business Plan

PRV pressure reducing valve RCW Revised Code of Washington

SCADA supervisory control and data acquisition (system)

SVCA Sudden Valley Community Association

SWFA South Whatcom Fire Authority

USEPA U.S. Environmental Protection Agency

WASWD Washington Association of Sewer and Water Districts
WSRMP Washington Water and Sewer Risk Management Pool
WUCC Whatcom Water Utility Coordinating Committee

WWA Whatcom Water Alliance

# I INTRODUCTION

This Lake Whatcom Water and Sewer District (District) six-year strategic business plan (Plan) has been developed to look beyond the traditional budget process in identifying, and better positioning the District to adequately respond to future needs and fiscal constraints. Recognizing that the District biennially undergoes development of Board of Commissioners (Board) -guided goals through creation of an operating and capital budget, this Plan looks six years into the future with an intent to proactively plan today for what is anticipated tomorrow. Built into this Plan are department-specific goals with strategies for completion, and workload indicators and performance measures to monitor goal attainment.

This Plan looks at the trends of the District to anticipate future needs. Financial resources are also forecast, taking into consideration economic indicators, recent legislation, and anticipated mandates. This Plan is then focused on using available resources in the most efficient manner to provide quality service to our customers, while supplementing existing resources as necessary to meet the current and future needs of the District.

# 1.1 District Guiding Principles

The District is a special purpose district authorized under <u>Title 57 Revised Code of Washington</u> (RCW). Originally formed in 1968 as Whatcom County Water District No. 10, the District provides water service to approximately 3,800 connections and sewer service to approximately 4,000 connections (a population base of approximately 10,700 customers) in an 18-square mile area encompassing Lake Whatcom. The District is operated by 18 full-time professionals, governed by a five-member board of commissioners elected from within the District, and has an annual budget of approximately \$10.5 million.

The District's mission is to provide the best possible water and sewer services to District customers in a cost efficient manner, and in a way that contributes to protecting Lake Whatcom's water quality. The mission is achieved through continual pursuit of the following principles:

- 1. Provide safe and reliable drinking water with sufficient capacity to meet fire flow requirements and sewage collection to District customers.
- 2. Establish connection charges and utility rates necessary to maintain the District's financial viability.
- 3. Protect the natural resources within the Lake Whatcom watershed through cooperative efforts with other community and governmental organizations.
- 4. Be recognized as an outstanding public utility that is responsive to the diverse expectations of its customers.
- 5. Maintain the District's facilities through effective planning, prevention, and corrective maintenance practices.

- 6. Provide sewer and water service to those portions of the District as may reasonably be served.
- 7. Have an organization environment that is responsive to customer needs, promotes teamwork and a safe work environment, and allows all people to achieve their full potential.

# 1.2 Plan Purpose

The purpose of this strategic business plan is to define District goals, and the actions and resources necessary to achieve those goals, over the near-term (six year) planning horizon, while ensuring consistency with the District's mission and Board-defined policy objectives.

# 1.3 Plan Development Process

This Plan serves as an integral mechanism supporting the District's objective of continual improvement of its operations and services. The District's mission statement, when coupled with its administrative code, form the *foundation* from which all operational-level decisions are made. Relying upon the policies defined in its foundation, the Board develops operational and capital improvement budgets that align with the foundation and that are influenced by employee input, District planning processes, and analysis and other forms of *internal input*, along with *external input* received from our customers and partners.

To define areas in which to focus improvement efforts relative to all District functions, the District first conducted a comprehensive assessment of all operational attributes of its services. To accomplish this, District Board and staff underwent a systematic process of assessing the ten attributes of a water/sewer utility, as defined under the Effective Utility Management (EUM) process (USEPA, 2017). The ten attributes are:

- product quality
- customer satisfaction
- employee and leadership development
- operational optimization
- financial viability

- infrastructure strategy and performance
- enterprise resiliency
- community sustainability
- water resource sustainability
- stakeholder understanding and support

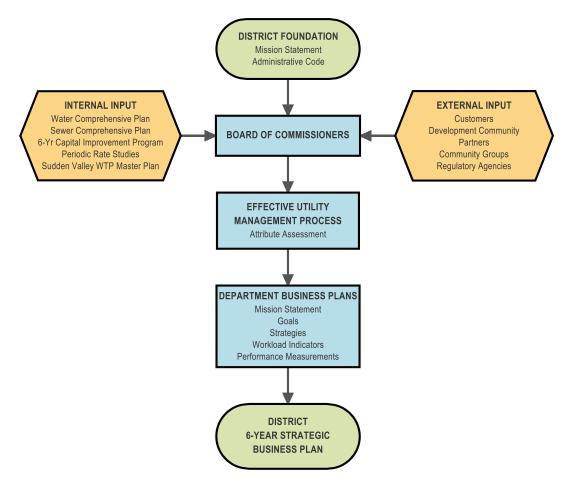
The EUM self-assessment process allows for the rating of the District's performance of each attribute, and for the ranking of importance of each attribute relative to the others. The self-assessment process was completed independently by the Board, management team, and staff to determine each group's assessment of current performance and prioritization of attributes, and then aggregated into an overall assessment for Board consideration. Conducting the self-assessment exercise independently by each group allowed that group to gain a better understanding of the other two groups' perspectives (Appendix A presents the overall results of the 2024 EUM self-assessment).

From the EUM self-assessment process outcomes, the Board identified areas in which additional resources should be allocated over the six-year planning horizon, while still maintaining an overall focus on meeting the District's mission and compliance with all applicable laws and regulations. Attributes identified by the Board for additional focus are:

- operational optimization
- infrastructure strategy and performance

That said, the Board was also clear in its desire that additional focus towards improvement within these attribute services not be to the detriment of District performance associated with the remaining attributes. Relying upon the District's Foundation while taking into consideration Board direction received through undertaking the EUM self-assessment process, each District department reviewed its mission statement that guides its function and goals, and developed a department-specific business plan that is consistent with the Board vision. Each department's business plan was then integrated into this Plan.

The following provides an overview of the process undertaken to prepare this Plan.



# 2 DEPARTMENT-SPECIFIC PLANS

Building upon the District's mission and Board direction as an outcome of the EUM self-assessment process, each department developed a department-specific mission; goals to pursue over the six-year planning horizon that align with the District's and departmental missions and Board direction; schedule, and budgetary and staffing impacts necessary to attain each goal; and performance measures to monitor goal attainment.

## 2.1 Executive

#### Mission Statement

Provide the Board and staff with leadership and advice while implementing best practices to achieve adopted goals and deliver quality services to the community.

#### Overview

The Executive Department is accountable to the Board for the operational results of the organization, effective support of elected officials in achieving their collective goals, fulfillment of the requirements of the general manager, implementation of Board-adopted policies, and provision of a communication linkage among customers, the Board, District departments and other government agencies.

# Description of Programs

The General Manager recommends and implements policy, oversees the operations of the District, and develops and implements the budget. All employees report directly or indirectly to the General Manager. The General Manager is directly supported by the management team and the Administrative Assistant.

Administration. The Administrative Assistant is responsible a variety of administrative functions including management of District records in accordance with state laws, maintenance of District resolutions and the Administrative Code, maintaining a log of all contracts and agreements, and providing timely response public records requests, as well as serving as clerk to the Board.

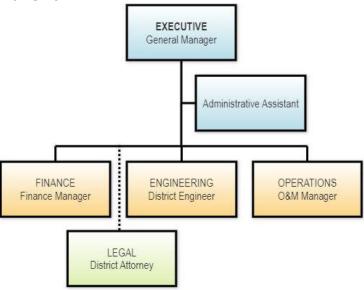
Legal. Legal counsel services are contracted through personal services agreements. Primary, day-to-day counsel is provided by the District Attorney, while additional counsel services may be contracted on a case-by-case basis as needed.

Governmental Affairs. Governmental affairs are primarily completed by the General Manager in collaboration with the Washington Association of Sewer and Water Districts (WASWD). The General Manager works with WASWD lobbyists to ensure that the District's state and federal legislative agendas align with and are promoted during WASWD lobbying efforts.

Public Relations. The General Manager and Administrative Assistant collaborate in developing and publicizing communications that support the distribution of information on District issues and activities to internal and external constituents with the ultimate goal of enhancing public awareness, understanding and interest in District programs, policies, services, and initiatives.

Human Resources. The General Manager, with support from the District Attorney and department managers, is generally responsible for human resources-related functions including labor relations, risk management, serving as the claims agent, citizen advocacy and Title VI civil rights compliance.





# Six-Year Goal Summary:

The Executive Department's goals over the six-year planning period consist of:

- Goal 1 Facilitate achievement of annually established Board initiatives
- Goal 2 Biennial EUM attribute assessment and update to the Six-Year Business Plan
- Goal 3 Maintain intergovernmental relations program
- Goal 4 Enhance public relations program
- Goal 5 Maintain safety program
- Goal 6 Water rights adjudication participation
- Goal 7 American Public Works Association accreditation

#### Detailed Six-Year Goal List

Goal 1 – Facilitate achievement of annually established Board initiatives

Applicable Guiding Principle(s) (see Section 1.1)

> Principle(s) will vary dependent upon Board initiative

Applicable EUM Attribute(s)

Attributes vary dependent upon Board initiative

#### Strategies

- 1. Annually develop objectives and strategies to accomplish Board initiatives
- 2. Report goal attainment progress to the community in the semi-monthly Manager's Report

#### Workload Indicators

- Meetings with management team to attain Board initiatives
- Reporting on the status of completion of Board initiatives
- Annual number of Board initiatives
- Annual number of Board meetings/work sessions held

#### Performance Measures

➤ Completion of initiatives within Board/staff agreed timelines

## Goal 2 - Biennial EUM self-assessment and update to the Six-Year Business Plan

Applicable Guiding Principle(s) (see Section 1.1)

Principles 4, 5, and 7

Applicable EUM Attribute(s)

- Product Quality
- Financial Viability

#### Strategies

- 1. Update the associated financial forecast on an ongoing basis
- 2. Update departmental business plans
- 3. Project fiscal impacts identified in business plans
- 4. Assess revenue and expenditure trends
- 5. Merge trend data with business plan cost data
- 6. Determine the financial delta
- 7. Develop best/worst case scenarios
- 8. Formulate revenue and expenditure options
- 9. Determine affordable service levels
- 10. Select budget balancing options
- 11. Obtain Board authorization to proceed with selected option(s)

#### Workload Indicators

- Draft Departmental Business Plans completed by June 30 of each even-numbered year
- Financial forecast reviewed and updated biennially (each even-numbered year)
- ➤ Balanced budget presented to District Board biennially (each even-numbered year)

#### Performance Measures

Completion of business plan and associated financial forecast updates by September 1 of each even-numbered year

#### Goal 3 – Maintain intergovernmental relations program

Applicable Guiding Principle(s) (see Section 1.1)

Principles 3 and 4

Applicable EUM Attribute(s)

> Stakeholder Understanding and Support

#### Strategies

1. Continue participation in regional organizations (e.g., Lake Whatcom Management Program [LWMP], Whatcom Water Alliance [WWA], Whatcom Water Utility Coordinating Committee [WUCC], Whatcom County Council of Governments [COG], Whatcom Water District Caucus, etc.)

- 2. Expand collaboration with city of Bellingham (City), Whatcom County (County), Sudden Valley Community Association (SVCA), and South Whatcom Fire Authority (SWFA) staff and officials
- 3. Expand participation in state organizations (e.g., Washington Association of Sewer and Water Districts [WASWD], Water and Sewer Risk Management Pool [WSRMP], Infrastructure Assistance Coordinating Council [IACC], etc.)

#### Workload Indicators

- Participation in LWMP data group, interjurisdictional coordinating team, policy group, and joint councils meetings
- Participation in WWA, WUCC, COG, and Whatcom Water Districts meetings
- ➤ Participation WASWD and WSRMP meetings (section meeting, managers meetings, etc.)
- ➤ Meet with City, County, SVCA, and SWFA staff
- ➤ Attendance of WASWD and IACC conferences
- ➤ Presentation at SVCA board meetings

#### Performance Measures

- Annual budgetary allocation supporting organization memberships, as applicable
- ➤ Number of LWMP meetings attended
- Number of WWA, WUCC, COG, and Whatcom Water Districts meetings attended
- Number of meetings with City, County, SVCA, and SWFA staff
- Number of conferences attended
- ➤ Number of presentations to the SVCA board

#### Goal 4 – Enhance public relations program

Applicable Guiding Principle(s) (see Section 1.1)

Principles 3, 4, and 7

#### Applicable EUM Attribute(s)

- > Customer Satisfaction
- ➤ Community Sustainability
- Stakeholder Understanding and Support

#### Strategies

- 1. Comprehensive update of website
- 2. Complete District rebranding
- 3. Increase number of Facebook followers
- 4. Increase frequency of issuance of press releases and Facebook and Nextdoor posts
- 5. Continue participation in community events

#### Workload Indicators

- > Update of the District's website
- ➤ Issuance of press releases and Facebook/Nextdoor posts on a regular basis
- Active participation in community events

#### Performance Measures

- > Completion of website update in 2025
- Completion of District rebranding by 2028
- Number of Facebook followers
- Number of press releases issued

- Number of Facebook posts (target one per week average)
- Number of community events District participates in

#### Goal 5 – Maintain safety program

Applicable Guiding Principle(s) (see Section 1.1)

➤ Principle 7

Applicable EUM Attribute(s)

- > Employee Leadership & Development
- ➤ Enterprise Resiliency

#### Strategies

- 1. Routine review and update, as appropriate, of the District's safety programs
- 2. Annual completion by May 1 of assigned online safety training by all staff
- 3. Maintenance of applicable certifications (e.g., cardiopulmonary resuscitation [CPR]/first aid/automatic external defibrillator [AED], excavation safety, lifting/rigging, etc.)
- 4. Monthly meeting of the safety committee
- 5. Quarterly safety inspections by management
- 6. Annual safety facility safety audits by management

#### Workload Indicators

- > Staff review of District safety programs
- > Staff completion of assigned online safety training
- > Staff attendance of required certification courses

#### Performance Measures

- Annual review of a minimum of nine (9) District safety programs
- Monthly meeting of the District safety committee
- > Staff maintenance of job-applicable certifications
- Annual number of safety inspections
- Annual number of lost time injuries and near misses

#### Goal 6 – Water rights adjudication participation

Applicable Guiding Principle(s) (see Section 1.1)

➤ Principle 1

Applicable EUM Attribute(s)

- ➤ Product Quality
- ➤ Water Resource Sustainability

#### Strategies

- 1. Attend adjudication-related public meetings, open houses, webinars, etc. to stay abreast of the adjudication process
- 2. Consult with District legal counsel and consultant engineer as needed
- 3. Prioritize filing of claims to position for early review in process

#### Workload Indicators

Attendance of adjudication-related presentations/meetings

#### Performance Measures

- Claims filed associated with each District water right within the required year (2025)
- ➤ Documentation supporting claims filed within two years of filing the associated claim (2027)

#### Goal 7 – American Public Works Association accreditation

Applicable Guiding Principle(s) (see Section 1.1)

Principles 1, 4, and 7

# Applicable EUM Attribute(s)

- ➤ Product Quality
- Customer Satisfaction
- Employee Leadership and Development
- > Operational Optimization
- Financial Viability
- ➤ Infrastructure Strategy and Performance

#### Strategies

- 1. Review and pursue completion of accreditation requirements in advance of formal registration
- 2. Assign District resources (staff) to pursue/complete specific accreditation metrics
- 3. Solicit assistance from accredited agencies as needed

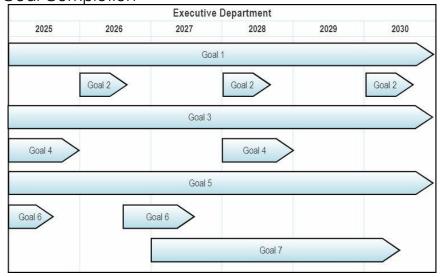
#### Workload Indicators

- ➤ Accreditation Team status meetings
- Consistent completion of accreditation-required metrics (Practice sub-goals)

#### Performance Measures

- Number of Accreditation Team meetings held annually
- Number of Practice sub-goals completed annually
- Formal registration in 2026
- ➤ APWA accreditation in 2029

Timeline for Goal Completion



# Budgetary/Staffing Impacts to Implement

Following presents estimated staffing increases (presented as full-time equivalents) above baseline (2024) conditions associated with implementation of departmental goals.

Position	2025	2026	2027	2028	2029	2030	Total
none	-	-	-	-	-	-	-

The following presents an estimated cost above baseline (2024) conditions associated with implementation of each departmental goal.

Goal	2025	2026	2027	2028	2029	2030	Total
1	\$ TBD*	\$ TBD*	\$ TBD*	\$ TBD*	\$ TBD*	\$ TBD*	\$ TBD
2	\$ -	\$-	\$ -	\$ -	\$ -	\$ -	\$ -
3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4	\$ 15,000	\$ -	\$ -	\$ 20,000	\$ -	\$ -	\$ 35,000
5	\$ -	\$ -	\$ -	\$ -	\$ -	4 -	\$ -
6	\$ 10,000	\$ -	\$ 10,000	\$ -	\$ -	\$ -	\$ 20,000
7	\$ -	\$ -	\$ 6,000	\$ -	\$ -	\$ 10,000	\$ 16,000

<sup>\*</sup>pursue subject to available funds

## 2.2 Finance

#### Mission Statement

Utilize a financial best practices model to effectively employ compliance, innovation, technology, and resources through a service-oriented, team approach in meeting regulatory responsibilities and customer needs while creating financial sustainability.

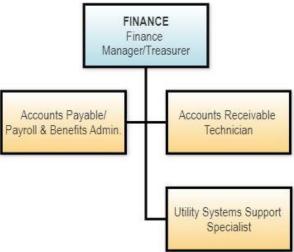
#### Overview

The Finance Department oversees the financial planning for the District to include budgeting for capital projects and operations, investments, debt service obligations, and fiscal policy development. The Finance Department also manages the financial resources and accounting functions of the District, which includes maintenance of the financial system, preparation of the annual comprehensive financial statements, payroll, benefit administration, and utility billing. The Finance Manager/Treasure manages the department.

#### Description of Programs

The Finance Department ensures the District's financial stability through proper accounting procedures and management of funds that include revenues, expenditures, investments, and debt service, in accordance with District fiscal policies and state statutes. The Finance Department is also responsible for long-range planning relative to service rates, general facilities charges, and investments.

# 2024 Organizational Chart



## Six-Year Goal Summary:

The Finance Department's goals over the six-year planning period consist of:

- Goal 1 Improve performance standards and enhance professional growth and development
- Goal 2 Improve financial sustainability and forecasting
- Goal 3 Maximize and utilize technology to improve workflow

#### Detailed Six-Year Goal List

Goal 1 – Improve performance standards and enhance professional growth and development Applicable Guiding Principle(s) (see Section 1.1)

Principles 4 and 7

Applicable EUM Attribute(s)

- Employee Leadership and Development
- Operational Optimization

#### Strategies

- 1. Create a working environment that encourages growth and responsibility among staff
- 2. Expand employee cross-training and focus on employee professional development
- 3. Reinforce adopted policies and procedures
- 4. Enhance communication between staff and management

#### Workload Indicators

- Review each job description within the department on a regular basis and seek opportunities for cross-training where job descriptions and duties allow
- ➤ Identify professional trainings and webinars that align with job duties and encourage growth in accounting principles for each employee
- > Issue weekly updates to staff addressing policies, procedures, events, and ongoing projects
- Increase number of employee training opportunities centered on accounting standards and best practices
- > Develop a comprehensive financial procedure manual

#### Performance Measures

- Number of trainings and webinars attended by staff
- Cross-training and development of a tracking system for each employee as part of their annual review listing new skills and knowledge base acquired year over year
- Number of weekly updates from the Finance Manager
- Number of staff meetings and engagement activities
- > Implementation of comprehensive financial procedure manual which focuses on best practices, standard operating procedures for each position, internal controls to protect against fraud, and financial policies

# Goal 2 – Improve financial sustainability and forecasting

Applicable Guiding Principle(s) (see Section 1.1)

Principles 2 and 5

Applicable EUM Attribute(s)

- Financial Viability
- ➤ Enterprise Resiliency

#### Strategies

- 1. Manage overhead and personnel costs for rate sustaining operational costs
- 2. Develop a long-term forecasting model
- 3. Assist other departments in achieving operational goals which include compliance and accountability as part of the District's financial standards and state statutes
- 4. Review and update of financial policies
- 5. Review of investments and investment opportunities
- 6. Remain current with financial industry standards

#### Workload Indicators

- Development and routine evaluation of long-term forecasting model
- Provide clear and timely instructions, guidance, and schedule to departments for: preparation of budgets, budget amendments or modifications, and reporting requirements
- ➤ Routine evaluation of biennial budget
- Routine evaluation of financial policies
- > Routine evaluation of investments

#### Performance Measures

- Overhead and personnel costs align with sustainable rate revenue by increasing proportionately to rate increases
- Forecasting model is utilized on a regular basis for "what if" situations, rate modeling, and budgeting, and is updated regularly to provide assistance in making sound financial decisions
- Number of meetings with department heads to review operating and capital costs align with the adopted budget and project timeline
- Financial policies are implemented and kept current to align with industry best practices and standards
- > Investment revenue increases while maintaining safety and liquidity requirements
- Accurate and informative annual financial statements are produced in accordance with the State Auditor's Office to meet all deadlines and reporting requirements

Goal 3 – Maximize and utilize technology to improve workflow

Applicable Guiding Principle(s) (see Section 1.1)

> Principle 7

Applicable EUM Attribute(s)

> Operational Optimization

#### Strategies

- 1. Research options to streamline accounts receivable and accounts payable operations
- 2. Improve records retention within the functions of payroll and benefit administration
- 3. Improve business continuity within the finance department
- 4. Increase staff training and use technology to improve workflow

#### Workload Indicators

- Meet with banking representatives to improve how daily deposits are made
- Work with other departments to utilize records retention software to maintain lifetime records for payroll and benefits
- ➤ Convert the accounts payable process to a paperless process and paperless record retention
- Research implementation of Springbrook Cloud to determine if it is a good fit for the District
- > Increase staff and management trainings on new technology and processes

#### Performance Measures

- Implementation of either remote deposit capture or electronic processing of checks received for payment at the District office
- > Implementation of document management software to create a searchable database of payroll and benefits records to eliminate paper records and storage
- ➤ Implementation of a paperless process for the approval and record retention of accounts payable.
- > Utilization of internal server drive to store accounts payable records
- Number of meetings with Springbrook representatives to discuss costs and implementation strategies should a shift be made to Springbrook Cloud
- > Number of trainings for staff on recent technology and processes with successful implementation

Timeline for Goal Completion

2025	2026	2027	2028	2029	2030
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		Goal	1		
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		Goal	2		
		$\overline{}$			
	Goal 3		>		

# Budgetary/Staffing Impacts to Implement

Following presents estimated staffing increases (presented as full-time equivalents) above baseline (2024) conditions associated with implementation of departmental goals. Of note, the sole staffing change anticipated over the six-year planning horizon is the planned shift of the Utility Systems Support Specialist position to the Operations and Maintenance Department upon the retirement of the individual currently in that position (2027 is shown for general planning purposes only—no firm timeline for retirement has been provided by the employee). Further, it is anticipated that the current employee within the Accounts Payable, Payroll & Benefits position will be retiring during the six-year planning horizon. While this does not affect staffing levels, as the District will fill this position, some goals for the department are designed to plan for this succession to ensure continuity.

Position	2025	2026	2027	2028	2029	2030	Total
Utility Systems Support	-	-	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)
Specialist							

The following presents an estimated cost above baseline (2024) conditions associated with implementation of each departmental goal.

Goal	2025	2026	2027	2028	2029	2030	Total
1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

# 2.3 Engineering

#### Mission Statement

Manage the development, renewal, and replacement of District public infrastructure to provide efficient, reliable, and sustainable water and sewer service utilizing asset management principles; and provide engineering technical support to Operations & Maintenance, Finance, and Administrative staff as well as existing and future customers.

#### Overview

The Engineering Department manages the District's capital improvement (system reinvestment) program, which consists of the design, permitting, and construction of all new and existing District-owned infrastructure. The department also manages the District's asset management system, safety program, and emergency management program. The District Engineer manages the department, with support provided by the Construction Engineer, Engineering Technician/Safety Officer and consulting engineer.

# Description of Programs

System Reinvestment Program. The Engineering Department is responsible for implementing and periodically updating the District's Water System Comprehensive Plan and Comprehensive Sewer Plan which define utility system improvements over the 20-year planning horizon. The department manages and implements a 6-year system reinvestment plan for each utility that schedules and allocates funding for specific capital projects. Capital projects are managed by the department. Consulting engineers typically provide support for pre-design, permitting, design, bidding, and

construction administration. The District Engineer is responsible for preparing the 6-year and 20-year capital improvement plans and managing all phases of capital improvement projects. The Construction Engineer typically takes the lead role and serves as field inspector during the construction phase of capital improvement projects, and utilizes a consulting engineer as needed for specialized technical support and materials testing.

Asset Management. The District uses GIS-based OpenGov (formerly Cartegraph) asset management software to track asset location, condition, maintenance, labor/equipment/material costs, remaining service life, and renewal/replacement of all District-owned infrastructure and equipment. The asset management goal is to maximize the service life of infrastructure and equipment, and plan for renewal/replacement prior to failure. OpenGov is also used to track and document customer services requests, look up customer account records related to private water/sewer permits and as-builts, and to track and document land development requests including water/sewer permits from initial inquiry to final water/sewer connection.

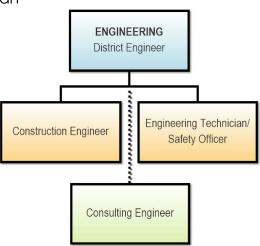
Development Services. The Engineering Department provides development services through performing water/sewer availability assessments, which consist of physical identification of the locations of connection of new development to water/sewer infrastructure, communication of additional development requirements (e.g., restrictive covenants, utility local improvement district and/or latecomer fees, etc.), and development and administration of developer extension agreements.

Safety Program. The Engineering Technician/Safety Officer administers the District's safety program, creates, and updates safety programs, and provides staff training needed to maintain certifications and proficiency.

Emergency Management Program. The Engineering Technician/Safety Officer leads the District's efforts in maintaining its emergency response plan, crisis communications plan and business continuity plan, as well as facilitating field and tabletop emergency response exercises.

Cross Connection Control Program (CCCP). The Engineering Technician/Safety Officer implements the District's CCCP to comply with drinking water regulations.

# 2024 Organizational Chart



# Six-Year Goal Summary:

The Engineering Department's goals over the six-year planning period consist of:

Goal 1 – Identify, design and construct capital improvement projects that support production of safe and high-quality potable water and effective collection and conveyance of wastewater

Goal 2 – Further develop the District Asset Management System to ensure timely maintenance and rehabilitation to maximize the useful life of District assets and to plan for asset reinvestment to optimize the effective use of the annual capital budget

Goal 3 – Strategically optimize the use and further development of the District's geographic information system (GIS) to support District operations

Goal 4 – Support the on-going development of the District's document management program to ensure maintenance and access to pertinent Engineering documents

#### Detailed Six-Year Goal List

Goal 1 – Identify, design and construct capital improvement projects that support production of safe and high-quality potable water and effective collection and conveyance of wastewater

Applicable Guiding Principle(s) (see Section 1.1)

Principles1, 4 and 5

Applicable EUM Attribute(s)

- Product Quality
- ➤ Infrastructure Strategy and Performance
- ➤ Enterprise Resiliency

#### Strategies

- 1. Develop six-year and 20-year capital reinvestment plans informed by coordination with the District Finance, and Operations and Maintenance teams
- 2. Integrate the District's asset management program into the development and update of the capital improvement program

#### Workload Indicators

- Number of capital projects constructed during the current budget biennium
- ➤ Hours of on-site inspection provided by District staff
- ➤ Hours of design and construction administration services provided by consulting engineers

#### Performance Measures

- ➤ Biennial update of the six-year and 20-year capital improvement plans
- ➤ Board adoption of a biennial capital reinvestment budget that provides for timely asset repair and replacement
- Completion of planned capital projects on schedule and within budget

Goal 2 – Further develop the District Asset Management System to ensure timely maintenance and rehabilitation to maximize the useful life of District assets and to plan for asset reinvestment to optimize the effective use of the annual capital budget

Applicable Guiding Principle(s) (see Section 1.1)

Principles 1 and 5

Applicable EUM Attribute(s)

- Operational Optimization
- Financial Viability

- ➤ Infrastructure Strategy & Performance
- ➤ Enterprise Resiliency

## Strategies

- 1. Develop and refine the District-wide inventory of assets with complete and accurate inventory of age, condition and estimated remaining useful life of each asset
- 2. Develop a Strategic Asset Management Plan to provide the framework for implementation of the program
- 3. Create an Asset Management committee to identify goals, objectives, and action plan to develop and implement the Asset Management Plan
- 4. Coordinate with Operations staff to regularly inspect and document the condition of all District assets
- 5. Strategically use the OpenGov asset management software to develop capital reinvestment plans for linear assets
- 6. Identify and prioritize asset evaluation to maximize effectiveness while managing limited District resources

#### Workload Indicators

- Number of asset decay curves added
- Number of Overall Condition Index scores added or updated
- Number of asset replacement plans developed for linear assets
- Number of Asset Committee meetings held

#### Performance Measures

- Life extension of assets beyond the typical expected useful life published by reputable sources
- ➤ Development of a written strategic asset management plan that has been accepted by District staff and Board
- > Creation of an asset management committee
- Goal 3 Strategically optimize the use and further development of the District's geographic information system (GIS) to support District operations

# Applicable Guiding Principle(s) (see Section 1.1)

➤ Principle 5

# Applicable EUM Attribute(s)

- Operational Optimization
- ➤ Infrastructure Strategy and Performance

#### Strategies

- 1. Develop a GIS management and development plan to identify District objectives and priorities for the use and further development of the District's GIS system.
- 2. Balance District goals and objectives with staffing availability.
- 3. Redirect department labor resources towards field inspection/GPS and GIS map dataset improvements.
- 4. Fund temporary GIS/engineering interns for collection of GPS locations, and updates to GIS datasets

#### Workload Indicators

- Completion of a GIS management and development plan.
- Number of assets field located by GPS and updated in GIS.

#### Performance Measures

- Completion of internal GIS utilization and improvement plan
- ➤ Budget for and hire temporary summer GIS/engineering intern to assist with asset field inspection/GPS and update GIS datasets
- Completion of an updated GIS database with sufficient accuracy for use by District staff

Goal 4 – Support the on-going development of the District's document management program to ensure maintenance and access to pertinent Engineering documents

Applicable Guiding Principle(s) (see Section 1.1)

➤ Principle 5

Applicable EUM Attribute(s)

➤ Enterprise Resiliency

#### Strategies

- 1. Inventory all District facility records pertinent to engineering, asset management, and capital planning including, but not limited to record drawings, engineering reports, calculations, and condition assessment
- 2. Support integration of engineering records into the Laserfische document management system
- 3. Assist in the development of standard operating procedures for Engineering document retention and filing structure
- 4. Budget for and hire an intern to assist with records management tasks

#### Workload Indicators

- Number of records inventoried
- Number of records filed

#### Performance Measures

- Complete inventory of all engineering records and prioritization of records needed for on-going system operation, maintenance, and rehabilitation.
- ➤ Inventory and filing of 25% of records by the end of 2025, 50% by 2026, 75% by 2027, and 100% by 2028.

Timeline for Goal Completion

		Engineering	Department		
2025	2026	2027	2028	2029	2030
		Goal 1			
	Goal 2				
		Goal 3			÷
	Goal 4		$\overline{}$		

# Budgetary/Staffing Impacts to Implement

Following presents estimated staffing increases (presented as full-time equivalents) above baseline (2024) conditions associated with implementation of departmental goals.

Position	2025	2026	2027	2028	2029	2030	Total
Intern (seasonal)	0.25	0.25	0.25	0.25	-	-	0.25

The following presents an estimated cost above baseline (2024) conditions associated with implementation of each departmental goal.

Goal	2025	2026	2027	2028	2029	2030	Total
1	\$ 0	\$0	\$0	\$ 0	\$ 0	\$0	\$ 0
2	\$ 0	\$0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
3	\$ 0	\$0	\$ 20,000	\$ 20,000	\$ 0	\$ 0	\$ 40,000
4	\$ 20,000	\$ 20,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 40,000

# 2.4 Operations and Maintenance

#### Mission Statement

Manage the District's water and wastewater systems in a manner that provides reliable services, ensures public health and safety, meets all regulatory requirements, protects environmental resources, and operates in a financially sound manner.

#### Overview

The Operations and Maintenance (O&M) Department manages the operation and maintenance of all District-owned facilities, including water and sewer infrastructure and District buildings. The department is also responsible for the inspection of all sewer connections and installation of all water connections for new development connecting to District systems to ensure compliance with state and District standards. The O&M Manager manages the department, with regular support provided by the Maintenance Worker Lead.

The Department uses preventative maintenance plans, established using industry standards, best practices, and previous experience, to maintain District assets. OpenGov (formerly Cartegraph) is the software used by all O&M staff to track, assign, and document the work scheduled and completed within the department.

## Description of Programs

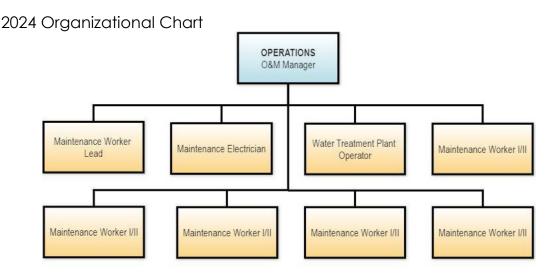
Water Utility. The department operates and maintains the District's three Group A water supply systems in compliance with state water quantity and quality requirements. This includes performing day-to-day operation and maintenance of the water system including response to utility service requests, asset repairs, facilities inspection, supplies, monitoring, communicating with customers, maintenance management, and all other functions associated with the operation and maintenance of the water system.

Sewer Utility. The department provides sewer services to residents/customers located in the Sudden Valley-Geneva area and the North Shore of Lake Whatcom. This includes performing day-to-day operation and maintenance of the wastewater system including maintenance

management, alarm monitoring, asset repairs, facility inspections, and all other functions associated with the operation and maintenance of this system.

Facilities. The department performs all routine maintenance of District facilities, most notably being the District's administrative office (1220 Lakeway Drive) and maintenance facility (1010 Lakeview Street).

Development Services. The O&M Manager inspects all new connections to the water and sewer systems to ensure construction complies with District construction standards and creates inspection records and as-built documentation. In addition, field staff perform all connections to District water mains for new development.



## Six-Year Goal Summary:

The Operations Department's goals over the six-year planning period consist of:

- Goal 1 Ensure the continuity of potable water production that meets or exceeds regulatory requirements
- Goal 2 Enhance system resiliency through the proactive maintenance and upgrade of District electrical systems, instrumentation, controls, and communications
- Goal 3 Ensure the effective and reliable collection and conveyance of sewage through routine inspection and preventative maintenance of sewer infrastructure
- Goal 4 Ensure the realization of the maximum operable life of District water infrastructure
- Goal 5 Maintain level-of-service expectations related to development services

#### Detailed Six-Year Goal List

Goal 1 – Ensure the continuity of potable water production that meets or exceeds regulatory requirements

Applicable Guiding Principle(s) (see Section 1.1)

Principles 1 and 5

Applicable EUM Attribute(s)

➤ Product Quality

#### Strategies

- 1. Develop a continuous improvement plan relevant to the water treatment plants to ensure that current requirements are met, and future requirements are planned for
- 2. Use a systematic approach to identify and upgrade components not specifically identified in the SVWTP 20-year master plan, using in-house resources to design and complete improvements, as appropriate

#### Workload Indicators

- Number of routine water system reports submitted to agencies
- Number of routine water treatment plant samples collected/analyzed
- Number of routine water distribution system samples collected/analyzed
- Number of hours performing equipment calibration and maintenance
- Number of hours inventorying and preparing treatment chemicals

#### Performance Measures

- Meet all Department of Health water quality requirements without violation
- Labor hours used to perform preventative maintenance tasks at water treatment plants
- Percentage of samples analyzed by laboratory that are satisfactory
- Number of annual water quality customer complaints received
- Total new tasks completed for water treatment plant assets
  - Tasks related to preventative maintenance
  - Tasks unrelated to preventative maintenance

Goal 2 – Enhance system resiliency through the proactive maintenance and upgrade of District electrical systems, instrumentation, controls, and communications

Applicable Guiding Principle(s) (see Section 1.1)

> Principles 1 and 5

Applicable EUM Attribute(s)

- Operational Optimization
- > Enterprise Resiliency

#### Strategies

- 1. Identify systems that are past the end of useful life or lack third-party support and create a replacement program to ensure resiliency
- 2. Provide funding through biennial budget process to support District resiliency with oncall electrical services and SCADA support services to use contracted resources and concurrently:
  - Conduct workload study to capture full costs of services relative to third-party SCADA and controls support
  - Develop a District-specific Maintenance Technician job description based on similar positions at comparable agencies and tailored to fit District needs
  - Analyze cost/benefit of third-party support versus in-house support
- 3. Provide funding through the biennial budget process to procure and maintain spare parts inventory for repairs (many instrumentation and controls parts are long lead time items)

#### Workload Indicators

Scheduled inspections of electrical cabinets, components and associated equipment using District labor and resources

- Repair of electrical cabinets, components and associated equipment using District labor and resources
- > SCADA hardware/software installation, repair, and maintenance using contracted services
- On-call services provided by external contractor, including communications providers and District-contracted services

#### Performance Measures

- Number of inspections per year
- Number of repairs per year
- Total cost of SCADA services, including District labor and resources
- > Total cost of electrical, instrumentation, and controls services, including District labor and resources
- > Total downtime of communications networks
  - Downtime (in hours) due to external failures
  - Downtime (in hours) due to internal failures

Goal 3 – Ensure the effective and reliable collection and conveyance of sewage through routine inspection and preventative maintenance of sewer infrastructure

Applicable Guiding Principle(s) (see Section 1.1)

Principles 1 and 5

Applicable EUM Attribute(s)

- Product Quality
- > Customer Satisfaction
- ➤ Infrastructure Strategy and Performance

#### Strategies

- 1. Perform monthly inspection of sewer lift stations, and maintain as needed
- 2. Adhere to preventative maintenance plans for sewer assets, including regular inspections of all sewer assets at intervals based on Overall Condition Index and manufacturer recommendations
- 3. Systematically televise/inspect sewer mains using National Association of Sewer Service Companies (NASSCO) standards to define pipe condition and identify structural defects and construction features (dry season, June October)
- Systematically televise/inspect sewer mains and manholes using NASSCO standards to define pipe condition and identify inflow and infiltration issues (wet season, November – May)

#### Workload Indicators

- Monthly inspection of sewer lift stations (16 labor hours/month)
- > Total number of preventative maintenance tasks scheduled
- > Total number of preventative maintenance tasks completed
- Total number of repairs associated with sewer assets
- Labor hours expended televising/inspecting sewer mains

#### Performance Measures

- Number of sewer system overflows per year
- ➤ Labor hours spent performing preventative maintenance tasks associated with sewer assets
- > Total cost of repairs associated with sewer assets
- ➤ Miles of sewer main televised/inspected per year

- Annual volume of inflow and infiltration (I&I) conveyed to City of Bellingham
- Annual cost of I&I treatment (by City of Bellingham)

## Goal 4 – Ensure the maximum operable life of District water infrastructure

Applicable Guiding Principle(s) (see Section 1.1)

➤ Principles 1 and 5

Applicable EUM Attribute(s)

- Product Quality
- > Customer Satisfaction
- ➤ Infrastructure Strategy and Performance

#### Strategies

- 1. Adhere to preventative maintenance plans for water assets, including regular inspection of all water assets at intervals based on Overall Condition Index and manufacturer recommendations.
- 2. Systematically identify and replace aging pressure reducing valves (PRV) throughout the water system to ensure proper operating conditions

#### Workload Indicators

- Total number of preventative maintenance tasks scheduled
- > Total number of preventative maintenance tasks completed
- > Total number of PRVs rated as needs replacement

#### Performance Measures

- Labor hours spent performing preventative maintenance tasks associated with water assets
- Total cost of replacing PRVs needing replacement
- Number of customer complaints regarding water pressure per year
- Number of water leaks repaired

#### Goal 5 – Maintain level-of-service expectations related to development services

Applicable Guiding Principle(s) (see Section 1.1)

Principles 4 and 7

Applicable EUM Attribute(s)

> Customer Satisfaction

#### Strategies

1. Monitor workload to drive appropriate staffing/resource allocation

#### Workload Indicators

- ➤ Water/sewer connection inquiries processed
- ➤ Water/sewer connection permits issued
- ➤ New water service installations

#### Performance Measures

- Pre-construction meetings attended (annual)
- ➤ Water/sewer connections permits issued (annual)
- > Inspector labor hours for new development inspections (annual)
- Maintenance staff labor hours for new development installations (annual)

**Timeline for Goal Completion** 

Operations & Maintenance Department											
2025	2026	2027	2028	2029	2030						
		Goal	1								
		Goal :	2								
		Goal (	3								
		Goal	4								
		Goal 5	5								

# Budgetary/Staffing Impacts to Implement

O&M Department functions are predominantly comprised of routine, scheduled preventative maintenance tasks to ensure efficient operation and realization of the full-service life of District infrastructure. The increased sophistication of District systems (e.g., SCADA controls, use of asset management system, increased complexity), coupled with increasing age of most infrastructure creating more frequent unanticipated system repairs, has continued to result in an increased demand on O&M Department staff. Despite the increase in staffing provided by the addition of another Maintenance Worker in 2022, department workload continues to exceed available resources. The number of full-time equivalent field employees has now returned to the level it was at prior to the creation of Maintenance Worker Lead and O&M Manager. The following presents estimated staffing increases (presented as full-time equivalents) above baseline (2024) conditions associated with implementation of departmental goals, dependent on the outcome of the workload analysis relative to Goal No. 2. Of note is the planned shift of the Utility Systems Support Specialist position to the Operations and Maintenance Department upon the retirement of the individual currently in that position (2027 is shown for general planning purposes only—no firm timeline for retirement has been provided by the employee).

Position	2025	2026	2027	2028	2029	2030	Total
Maintenance Technician	-	-	1.0	1.0	1.0	1.0	1.0
Utility Systems Support	-	-	1.0	1.0	1.0	1.0	1.0
Specialist							

The following presents an estimated cost above baseline (2024) conditions associated with implementation of each departmental goal.

Goal	2025	2026	2027	2028	2029	2030	Total
1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	\$ 10,000	\$ 10,000	\$ 132,000*	\$ 144,000*	\$ 159,000*	\$ 174,000*	\$ 629,000*
3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4	\$ 20,000	\$ 20,000	\$ 20.000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 120,000
5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

<sup>\*</sup>pursue subject to workload cost/benefit analysis and available funds

# 3 SIX-YEAR BUDGET AND STAFFING SUMMARY

From 2025 through 2030, a one new full-time position (subject to workload analysis and funding) and one seasonal intern may be anticipated with estimated annual costs above the 2024 baseline ranging from \$20,000 in 2025 and \$194,000 in 2030. The estimated costs include personnel, vehicles, and equipment, but do not include overhead such as office space and utilities.

Position	2025	2026	2027	2028	2029	2030	Total
Maintenance Technician	-	-	1.0	1.0	1.0	1.0	1.0
Intern (seasonal)	0.25	0.25	0.25	0.25	-	-	0.25

The following presents an estimated cost above the 2024 baseline conditions associated with implementation of each departmental business plan.

Department	2025	2026	2027	2028	2029	2030	Total
Executive	\$ 25,000	\$ -	\$ 16,000	\$ 20,000	\$ -	\$ 10,000	\$ 71,000
Finance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Engineering	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ -	\$ -	\$ 80,000
Operations	\$ 30,000	\$ 30,000	\$ 152,000	\$ 164,000	\$ 179,000	\$ 194,000	\$ 749,000
Total	\$ 75,000	\$ 50,000	\$ 188,000	\$ 204,000	\$ 179,000	\$ 204,000	\$ 900,000

<sup>\*</sup>certain goals will only be pursued subject to available funds

# 4 DISTRICT-WIDE STRATEGIC BUSINESS PLAN

This Plan compiles the departmental business plans for 2025-2030 into a holistic District-wide plan, which pools all functions of the District into one common purpose—to achieve service delivery goals. This Plan is intended to assist decision makers in understanding the interrelationship between and impacts of all departments and programs.

Planning is the strength of government and is vital to ensure future community needs are met. Planning is continuous within the organization in areas such as fiscal management, capital improvements, and utility system component repair and replacement. These plans flow into strategic goals of departmental plans.

With departmental plans in place and steps taken to implement them, performance measures may be established to assess the District's performance in achieving strategic goals. Progress towards achieving strategic goals may be monitored through collection of data. Because this is the District's first attempt at implementing performance measures, initial data will provide benchmarks against which future data is compared.

As such, this Plan is not an annual or biennial process, but rather it is one that is continually monitored and refined. Departments will meet on a regular basis to assess measurements and maintain focus on goals. Employees will apprise the General Manager on how things are going at the customer interaction level while stakeholders will let the Board know how they perceive the function of services.

# **REFERENCES**

USEPA. 2017. Effective Utility Management, A Primer for Water and Wastewater Utilities. U.S. Environmental Protection Agency. January 2017.

# APPENDIX A

2024 EFFECTIVE UTILITY MANAGEMENT SELF-ASSESSMENT RESULTS

Attribute	Importance (1-10)	Achievement (1-5)	
Product Quality	PQ	1.7	1.3
Customer Satisfaction	CS	5.4	1.8
Employee and Leadership Development	ED	5.9	1.5
Operations Optimization	00	4.8	2.0
Financial Viability	FV	3.0	1.9
Infrastructure Strategy and Performance	IS	4.3	2.2
Enterprise Resiliency	ER	5.6	1.9
Community Sustainability	SU	9.2	1.7
Water Resource Sustainability	WS	6.2	1.7
Stakeholder Understanding & Support	SS	9.1	2.0

