Lake Whatcom Water & Sewer District
Board Meeting Access Information

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6:30 pm — 8:30 pm

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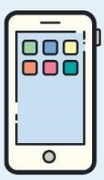

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QUESTIONS?

If you have questions about attending an upcoming meeting, please contact Administrative Assistant Rachael Hope at rachael.hope@lwwsd.org or 360-734-9224.

Public Comment Periods

Lake Whatcom Water & Sewer District's Board of Commissioners values feedback, questions, and concerns from our constituents. The public comment period is....

A chance to be heard

Public comment periods are built in to the agenda at each Regular Meeting of the Board of Commissioners, one near the beginning, and one near the end of the meeting.

A chance to listen

Commissioners will listen, but will not respond or engage in a dialogue during the public comment period. Direct questions are noted by staff for follow-up.

Limited to 3 minutes per commenter

For the sake of time, and to leave plenty of time for scheduled agenda items, public comments are limited to 45 minutes per comment period.

Just one way to reach us!

Can't attend a Board Meeting in person? Comments can be submitted any time through mail, email, our online contact form, or by phone.

Questions?

Contact us at general.inbox@lwwsd.org or 360-734-9224

Our Meetings

Regular Meetings of the Board of Commissioners are held on the second Wednesday of each month at 6:30 pm and the last Wednesday of each month at 8:00 am.

LAKE WHATCOM WATER AND SEWER DISTRICT
1220 Lakeway Drive
Bellingham, WA 98229

REGULAR MEETING OF THE BOARD OF COMMISSIONERS

AGENDA

December 14, 2022
6:30 p.m. – Regular Session

1. CALL TO ORDER

2. ROLL CALL

3. PUBLIC COMMENT OPPORTUNITY
   At this time, members of the public may address the Board of Commissioners. Please state your name and address prior to making comments, and limit your comments to three minutes. For the sake of time, each public comment period will be limited to 45 minutes.

4. ADDITIONS, DELETIONS, OR CHANGES TO THE AGENDA

5. CONSENT AGENDA

6. SPECIFIC ITEMS OF BUSINESS
   A. 2023-24 Biennial Budget Adoption
   B. Non-union Employees 2023 Salary Cost-of-Living-Adjustment Approval

7. OTHER BUSINESS

8. STAFF REPORTS
   A. General Manager

9. PUBLIC COMMENT OPPORTUNITY

10. EXECUTIVE SESSION
    Executive Session per RCW 42.30.110(1)(g): To review the performance of a public employee (General Manager performance evaluation) – *30 minutes*

11. ADJOURNMENT

AGENDA BILL Item 5		**Consent Agenda**		
DATE SUBMITTED:	December 8, 2022	MEETING DATE:	December 14, 2022	
TO: BOARD OF COMMISSIONERS		FROM: Rachael Hope		
GENERAL MANAGER APPROVAL				
ATTACHED DOCUMENTS		1. See below		
TYPE OF ACTION REQUESTED		RESOLUTION ☐	FORMAL ACTION/ MOTION ☒	INFORMATIONAL /OTHER ☐

****TO BE UPDATED 12.14.2022****

BACKGROUND / EXPLANATION OF IMPACT

- Meeting Minutes for the 11.09.22 Regular Board Meeting
- Meeting Minutes for the 11.30.22 Regular Board Meeting
- Payroll for Pay Period #25 (11.26.2022 through 12.09.2022) total to be added
- Payroll Benefits for Pay Period #25 total to be added
- Accounts Payable Vouchers total to be added

FISCAL IMPACT

Fiscal impact is as indicated in the payroll/benefits/accounts payable quantities defined above. All costs are within the Board-approved 2022 Budget.

RECOMMENDED BOARD ACTION

Staff recommends the Board approve the Consent Agenda.

PROPOSED MOTION

A recommended motion is:

"I move to approve the Consent Agenda as presented."

LAKE WHATCOM WATER AND SEWER DISTRICT
1220 Lakeway Drive
Bellingham, WA 98229

REGULAR SESSION OF THE BOARD OF COMMISSIONERS

Minutes

November 09, 2022

Board President Laura Abele called the Regular Session to order at 6:31 p.m.

Attendees:	Commissioner Laura Abele (v)	General Manager Justin Clary
	Commissioner Todd Citron (v)	District Engineer/Assistant GM Bill Hunter
	Commissioner John Carter (v)	Finance Manager/Treasurer Jenny Signs
	Commissioner Bruce Ford (v)	Operations/Maintenance Manager Brent Winters
	Commissioner Jeff Knakal	Recording Secretary Rachael Hope

Also in attendance were:

- Jason Dahlstrom, incoming Operations/Maintenance Manager
- Luke Phifer of Carmichael Clark
- Mitchell & Brittany Barrows, District Residents

Attendees noted with (v) attended the meeting virtually.

Roll Call

General Manager Justin Clary performed a roll call.

Changes to Agenda

Clary requested the addition of a business item presenting District Resolution No. 887 after item 6.B. The Board agreed.

Consent Agenda

Action Taken

Citron moved, Knakal seconded, approval of:

- **Meeting Minutes for the October 12, 2022 Regular Board Meeting**
- **Meeting Minutes for the October 26, 2022 Regular Board Meeting**
- **Payroll for Pay Period #22 (10/15/2022 through 10/28/2022) totaling $47,073.70**
- **Payroll Benefits for Pay Period #22 totaling $54,462.20**
- **Accounts Payable Vouchers totaling $286,230.60**

Motion passed.

Resolution No. 886 - Update to Master Fees and Charges Schedule

Clary recalled that in accordance with the powers granted under Revised Code of Washington Section 57.08.007, from time-to-time the Board of Commissioners reviews and updates the District's fees and charges

to ensure that the District receives appropriate payment for services rendered. The current revision of the Master Fees and Charges Schedule was adopted by the Board under Resolution No. 879 on November 24, 2021.

A component of the Master Fees and Charges Schedule is the District's water and sewer general facilities charges (GFCs), which are set at the equitable share of system costs for properties wishing to connect to District services. Following the most recent analysis in 2017, FCS Group was selected to conduct an updated analysis as included in the 2022 Board-adopted Budget. This analysis began with a Board presentation at the April 27, 2022 Board meeting, and further discussion took place during regularly scheduled meetings in September and October.

During its October 26 meeting, the Board directed staff to develop a resolution revising the Master Fees and Charges Schedule, effective January 1, 2023. The proposed Master Fees and Charges Schedule 29 also accommodates extension of charges in lieu of assessment associated with Utility Local Improvement District (ULID) No. 18 through 2028 defined in Resolution No. 885 adopted by the Board during its September 28, 2022, meeting. Other revisions to the Schedule are clerical in nature (e.g., deleting fees that will no longer be applicable in 2023).

Action Taken
Citron moved, Ford seconded to adopt Resolution No. 886, as presented. Motion passed.

Developer Extension Agreement Application for 2588 Woodcliff Lane Water Main Extension
Hunter explained that District resident Mitchell Barrows submitted an application to establish a Developer Extension Agreement (DEA) with the District for a water main extension to serve 2588 Woodcliff Lane. The application was received on August 29, 2022, and the application fee was paid on September 15, 2022. The subject property is an undeveloped parcel near Lake Whatcom Boulevard, just north of Sudden Valley. The proposed development is one single family residence on a single parcel.

The first step in the DEA process is for the Board of Commissioners to evaluate whether to allow an extension and to determine any conditions of a contract. Hunter highlighted requirements from the District's Administrative Code Section 3.4; including locations and key issues on both the water and sewer service sides of the undeveloped property. Discussion followed.

Action Taken
Motion A: Ford moved, Carter seconded to authorize the General Manager to execute a Developer Extension Agreement with Mitchel Barrows for a water main extension and water service to one single family residence at 2588 Woodcliff Lane with the following conditions:

1. **Connection to the District's existing gravity sewer system is required.**
2. **Water main extension is in Lake Whatcom Boulevard right-of-way between the parcel's projected property lines onto Lake Whatcom Boulevard.**
3. **Hydraulic modeling and water main sizing is performed by District's general engineering consultant for the full loop condition (main connected at each end) and worst-case dead-end condition between Strawberry Point and Sudden Valley.**
4. **Water meter is located at end of new water main in Lake Whatcom Boulevard right-of-way with private service line from meter to subject property.**
5. **Automatic water main flushing device is installed at end of new main.**

Motion B: Citron moved, Knakal seconded, to amend the original motion to include a condition that the DEA work done by the contractor and homeowner will comply with all District rules and

regulations, including changes made necessary by the result of the hydraulic modeling in item 3. Motion B passed.

Motion A passed.

Resolution No. 887: Expressing the District's Gratitude towards Operations and Maintenance Manager Brent Winters and Recognizing His Years of Service to the Lake Whatcom Community

Clary presented the Board with Resolution No. 887, recognizing Brent Winters for his excellent service with the District in anticipation of his retirement at the end of 2022. The resolution was read into record. The Board recognized Winters for his example to staff and hard work during his tenure as the District's first Operations and Maintenance Manager.

Action Taken

Citron moved, Ford seconded to adopt Resolution No. 887, as presented. Motion passed.

Scenic Intertie Leak Repair Public Works Construction Contract Award

Hunter indicated that the Scenic Avenue Intertie Valve Repair Project is located along Lakeway Drive at the intersection with Scenic Avenue, just outside the City of Bellingham limits. On September 5, 2022, the District was notified of significant surface water on Lakeway Drive near the intertie valve cluster. In coordination with the City of Bellingham it was determined the water was from a leaking District valve at the intertie between the District's and City's water systems.

This project consists of the replacement of existing piping, valve and fittings on the 8-inch ductile iron water main to restore the emergency intertie. The project replaces the defective valve as well as eliminates redundant valves. The District published an advertisement for bids in the Bellingham Herald on October 9, 2022. Four bids were received.

The apparent low bidder, Soper Hill Construction Company, LLC, met the Washington State Mandatory Bidder Responsibility Criteria established per RCW 39.04.350(1), but did not substantially meet the supplemental bidder responsibility criteria established for this project. District staff recommended awarding the Scenic Avenue Intertie Valve Repair Project contract to the lowest responsive responsible bidder.

Action Taken

Citron moved, Carter seconded, to award the Scenic Avenue Intertie Valve Repair Project public works contract to Premium Services Incorporated for a total contract price of $53,575.64 including 8.6% sales tax and authorize the General Manager to execute the contract. Motion passed.

Draft 2023-2024 Biennial Budget

Signs presented the commissioners with an updated preliminary draft budget for 2023-24 using projected revenues based upon rate increases established in the Master Fees & Charges Schedule 28 and projected 2022 operating expenses and projects defined in the District's water and sewer capital improvement plans. Hunter provided updated information on continuing and active projects included in the capital improvements section of the proposed budget. Discussion followed.

General Manager's Report

Clary updated the Board on several topics, including his recent meeting with Congressman Larsen's local liaison, FEMA funding related to the November 2021 flood event, and the District's recent press release highlighting the District's receipt of the Washington State Department of Health's Treatment Optimization

Program for its 21st consecutive year. Clary recognized Water Treatment Plant Operator Kevin Cook and operations staff for their dedication to providing quality water.

Executive Session Per RCW 42.30.110(1)g) General Manager Performance Evaluation – 30 Minutes

Abele recessed the Regular Session to Executive Session at 7:49 p.m. It was estimated that the Executive Session would take about 30 minutes. The purpose of the Executive Session was to discuss the General Manager's Performance Evaluation. Abele recessed the Executive Session and reconvened the Regular Session at 8:14 p.m. No action was taken.

With no further business, Abele adjourned the Regular Session 8:15 p.m.

_____

Board President, Laura Abele

Attest: _____

Recording Secretary, Rachael Hope

Minutes approved by motion at ☐ Regular ☐ Special Board Meeting on _____

Date Minutes Approved

LAKE WHATCOM WATER AND SEWER DISTRICT
1220 Lakeway Drive
Bellingham, WA 98229

REGULAR SESSION OF THE BOARD OF COMMISSIONERS

Minutes

November 30, 2022

Board President Laura Abele called the Regular Session to order at 8:00 a.m.

Attendees:	Commissioner Laura Abele (v)	General Manager Justin Clary
	Commissioner Todd Citron (v)	Assistant GM/District Engineer Bill Hunter
	Commissioner Bruce Ford	Finance Manager/Treasurer Jenny Signs
	Commissioner Jeff Knakal (v)	Acting O&M Manager Jason Dahlstrom

Excused Absence: Commissioner John Carter

Also in attendance were resident Andy Duffus (v), District employee Greg Soto, and Melanie Mankamyer (v) of Wilson Engineering. Attendees noted with (v) attended the meeting virtually.

Roll Call

General Manager Justin Clary performed a roll call to identify Commissioners in attendance. It was confirmed that all participants were able to be heard and hear each other clearly.

Consent Agenda

Action Taken

Citron moved, Knakal seconded, approval of:

- **Payroll for Pay Period #23 (10/29/2022 through 11/11/2022) totaling $48,137.35**
- **Payroll for Pay Period #24 (11/12/2022 through 11/25/2022) totaling $52,011.94**
- **Payroll Benefits for Pay Period #23 totaling $54,762.76**
- **Payroll Benefits for Pay Period #24 totaling $36,234.10**
- **Accounts Payable Vouchers totaling $145,204.28**

Motion passed.

2022 Budget Amendment No. 2 Approval

Signs recalled that the District's 2022 Annual Budget was adopted at the regularly scheduled Board of Commissioner's meeting on December 8, 2021. Included in that budget was a line item on the "Lake Whatcom Water and Sewer Fund Summaries 2022" page that identified specific revenues to be accrued in the coming years for surplus. This line was called "2022 Rate Study Surplus Assigned". However, because no formal action has been taken by the Board to create an assignment specific to these revenues, staff recommended amending the 2022 Budget to remove the "assigned" wording from the official document until further action is taken, as well as revising the wording on that same page and in the "General Manager's Message" section of the

document from "2022 Projected Unassigned Year End Fund Balance" to "2022 Projected Year End Fund Balance". Per the BARS Cash Accounting Manual, only General Funds can have "unassigned" fund balances.

Action Taken

Carter moved, Knakal seconded to approve Amendment No. 2 to the 2022 Annual Budget as recommended by staff. Motion passed.

Public Comment

Mr. Duffus asked the Board for an update on the DISH Wireless cell tower project in light of the passing of Whatcom County's Notice of Additional Requirements deadline associated with facility permitting. Clary explained that as the 180 day window to provide the additional information expired today, District staff will reach out to Whatcom County staff to seek an update on the permitting process on December 1.

Wilson Engineering 2023 On-call Rates Approval

Clary explained that Wilson Engineering provides on-call engineering services to the District through a professional services agreement executed on September 2, 2021, and effective through July 31, 2026. Per Section 8.4 of the agreement, Wilson Engineering may annually request revision to the approved rates to accommodate inflation and market conditions. Staff presented the Board with a letter from Wilson Engineering dated November 16, 2022, requesting revision to its rates and fees for 2023.

Action Taken

Citron moved, Knakal seconded to approve rates and fees to be effective January 1, 2023, for professional services performed by Wilson Engineering under the existing on-call professional services contract with the District, as requested in the November 16, 2022 letter from Wilson Engineering. Motion passed.

Beaver Creek Exposed Sewer Main Temporary Protections Presentation

Hunter summarized that on or around November 12, 2021, a significant rain event began that caused flooding throughout Whatcom County and specifically within the District's service area. The flood event significantly impacted much of the District's infrastructure, resulting in the general manager's emergency declaration to mitigate immediate impacts of the event.

While in the days and months following the flood event the District was able to repair/replace impacted infrastructure, District staff were unable to safely assess the condition of sewer main and lateral crossings of Beaver Creek in Sudden Valley. Once creek flows abated in late summer, District staff were able to hike the entirety of the portion of Beaver Creek where known sewer main/lateral crossings exist. Through that assessment, the District began working with Washington Department of Fish and Wildlife staff to gain approval for construction of temporary protective measures of four sewer mains that were found to be exposed due to the 2021 flood event flows having scoured the creek bottom down to the mains.

During the week of October 17, 2022, District staff constructed temporary protective measures at the four crossings, just in advance of the wet season and associated return of higher flows in Beaver Creek. Hunter, Dahlstrom, and Soto provided the Board with an overview of the temporary measures constructed, as well as planned actions for permanent solutions. Discussion followed.

General Manager's Report

Clary updated the Board on several topics including Jonathan Lydiard's promotion from Maintenance Worker 2 to Maintenance Worker Lead effective January 1, 2023, and subsequent planned hiring of another Maintenance Worker to take place in January/February of 2023.

Engineering Department Report
Hunter provided an update on district projects, including a short recap of 23 projects completed in 2022, and work with property owners adjacent to the Lakewood & Rocky Ridge pump station projects to identify and secure easements for foot and vehicle access.

Finance Department Report
Signs highlighted that water and sewer fund revenues are exceeding expenditures as expected, touched on growth in fund balances, and reported that operating expenditures have been managed and are on or under budget despite ongoing high inflation rates. She also gave an update on the current state audit, which is expected to be completed within the next week.

Operations & Maintenance Department Report
Dahlstrom reported on field crew operations, including water treatment plant operations, lake turnover, and continuation of the crew's excellent safety record with no injuries or near-misses. He highlighted installation of guard-rails on the Opal reservoir to improve safety during inspections, as well as recent work with new insert-a-valve technology, which allows insertion of gate valves without interruption of service. Discussion followed.

President Abele offered the Board's commendation to District staff on the continued excellent safety record.

With no further business, Abele adjourned the Regular Session at 8:53 a.m.

_____ Attest: _____
Board President, Laura Abele Recording Secretary, Rachael Hope

Minutes approved by motion at ☐ Regular ☐ Special Board Meeting on _____
Date Minutes Approved

AGENDA BILL Item 6.A	**2023-24 Biennial Budget Adoption**		
DATE SUBMITTED:	December 6, 2022	MEETING DATE:	December 14, 2022
TO: BOARD OF COMMISSIONERS		FROM: Jenny Signs, Finance Manager/Treasurer	
GENERAL MANAGER APPROVAL			
ATTACHED DOCUMENTS		1. 2023-24 Biennial Budget	
TYPE OF ACTION REQUESTED		RESOLUTION ☐	FORMAL ACTION/ MOTION ☒ / INFORMATIONAL /OTHER ☐

BACKGROUND / EXPLANATION OF IMPACT

Through the powers granted under Revised Code of Washington Title 57 (Water-Sewer Districts) and codified under the District's Administrative Code Title 2, Chapter 2.2 (1) (revised by the board via adoption of Resolution No. 884 on July 13, 2022):

> *The General Manager shall develop an operating and capital improvement budget biennially for both the water and sewer systems. The biennial budget shall provide for the forecasting of revenues and expenditures for the following two fiscal years. The biennial fiscal period shall start on January 1 of an odd-numbered year and end on December 31 of the following even-numbered year. The budget shall be presented to the Board of Commissioners for review and approval prior to the end of December in advance of the next biennium.*

Using projected revenues based upon rate increases adopted by Resolution No. 879 (4.5% and 3.75% water and sewer rates, respectively), actual 2022 operating expenses and projects defined in the District's water and sewer capital improvement plans, District staff have developed the attached budget for Board consideration. Earlier revisions of the budget were presented during regularly scheduled meetings of the Board held on October 12 and November 9, 2022. Comments provided by the Board during those meetings have been incorporated into the attached 2023-24 Budget.

FISCAL IMPACT

The budget for 2023-24 proposes a budget of approximately $9.5 million for the water utility, and budget of approximately $11.4 million for the sewer utility, resulting in a total budget of approximately $20.9 million.

APPLICABLE EFFECTIVE UTILITY MANAGEMENT ATTRIBUTE(S)

The 2023-24 Budget funds District support to all ten EUM attributes at various levels.

RECOMMENDED BOARD ACTION

Staff recommends adoption of the 2023-24 Biennial Budget.

PROPOSED MOTION

A recommended motion is:

"I move to adopt the 2023-24 Biennial Budget, as presented."

2023-24 BIENNIAL BUDGET

LAKE WHATCOM WATER & SEWER DISTRICT

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

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2023-24 BIENNIAL BUDGET

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

APPROVED December 14, 2022

_____
Laura Abele, President, Board of Commissioners

_____
Justin Clary, General Manager

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APPENDIX A
2023-24 BUDGET

APPENDIX B
2023-24 SYSTEM REINVESTMENT PLAN

APPENDIX C
2023-24 REVENUE BOND AND LOANS SUMMARY

1 GENERAL MANAGER'S MESSAGE

Recognizing the relatively predictable nature of utility revenues and workload efficiencies that may be gained, this 2023-24 Budget represents the Lake Whatcom Water and Sewer District's first biennial budget as it transitions from an annual budgeting process. The 2023-24 Budget comprises the fiscal plans for the District for the 2023 and 2024 calendar years (please refer to Appendix A for a comprehensive presentation of the 2023-24 Budget), which is the culmination of a collaborative effort between the Board of Commissioners and staff, and aligns with the District's 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. This budget was developed around touchstones of the District's financial policies, which embody the principles that guide District budgeting and long-term financial management, reinforcing the key values of fiscal prudence, pay-as-you-go financing to the extent practicable, and strong stewardship through asset management.

The District's unwavering adherence to its conservative fiscal policies has allowed it to enter 2023 with stable revenue projections while continuing to preserve its fully funded operations and contingency reserves, as well as maintain funds for future capital costs in each utility earmarked for specific anticipated large projects in the coming years. As a special purpose district authorized under state statute, the District's primary functions are the operation of water and sewer utilities, which create forecastable revenues that are primarily funded by rates associated with water sales and sewer services. To provide rate certainty to its customers, the District adopts a multi-year rate structure every five years that smooths necessary increases over that period. With 2023-24 constituting the second and third years of the current rate structure, revenue projections presented in this biennial budget are anticipated to be relatively accurate. It should also be noted that the 2023-24 Budget maintains the prior-adopted rate increases, despite the recent rate of inflation far exceeding the adopted increases. In addition, though 22 new home permits were issued in 2022, development-related revenue projections have been budgeted conservatively at ten new connections in each budget year to limit reliance on these onetime revenues.

The biennial budget includes approximately $20.9 million in expenditures, which is comprised of allocations of approximately $9.5 million and $11.4 million for the water utility and sewer utility, respectively, while maintaining a restricted bond reserve of $772,000. The water utility budget includes $5.4 million dedicated to operations, a capital reinvestment budget of approximately $3.7 million, and a debt service budget of approximately $444,000. Also supporting conservative fiscal management of the water utility are a contingency reserve of $460,000, an operating reserve of $664,000, and $136,000 for future improvements to the Sudden Valley Water Treatment Plant. The sewer utility budget includes $6.4 million dedicated to operations, a capital reinvestment budget of approximately $3.7 million, and a debt service budget of approximately $1.3 million, as well as a contingency reserve of $815,000, an operating reserve of $521,000, and $277,000 for the District's share of improvements to the solids handling system at City of Bellingham's Post Point Wastewater Treatment Plant (anticipated in 2026).

The 2023-24 Budget reflects a 13.7% increase over the 2022 Budget when averaged over each of the two years. Much of the increase may be attributed to capital reinvestment program carryover for projects that were not completed in 2022 (e.g., Euclid Sewer Lift Station Improvement project, which was delayed due to supply chain issues), as well as significant capital projects planned for the biennium (e.g., Lakewood and Rocky Ridge Sewer Lift Stations Improvements and the Division 7 Water Reservoir Replacement project). Also of note, most expenses associated with the Division 7 Reservoir project will be offset with FEMA grant revenues (estimated at $2 million in grant funding). Also contributing to the year-over-year increase are operational increases (many of which have been conservatively budgeted at inflationary rates above historical trends and recent projections), as well as District personnel-related expenses (annual cost-of-living adjustments to salaries and health insurance increases). Another notable increase is for City of Bellingham utility services (water purchased for the Eagleridge water system and treatment of all District-collected wastewater).

This budget has been carefully crafted to emphasize the Board's service priorities while deploying resources in a manner that ensures maintenance of a positive cash balance throughout the biennium. As a result, the 2023-24 Budget funds reserves at levels defined by District financial policies, while preserving adequate operating capital and investing in critical infrastructure improvements that will prolong the life of our assets and protect the environment. The 2023-24 capital reinvestment program reflects a pay-as-you-go approach funded through a combination of one-time and ongoing resources consistent with the District's asset management philosophy and the District's success in securing external grant funding. The fact that the 2023-24 investments can be made without reliance on debt can be attributed to the ongoing commitment to disciplined adherence to fiscal policies and sound asset management.

Forecasting resources, preparing the budget, monitoring its implementation, and assuring accountability and transparency, all while completing day-to-day work functions, takes an exceptional group of professionals. I want to thank District staff, all of whom had a hand in development of the 2023-24 Budget. I also want to thank the Board of Commissioners, whose leadership and policy direction has placed the District in a position that enables many of the progressive investments found in this budget. Lastly, I thank the District's customers that make up the Lake Whatcom community, without whom we would not have a purpose.

Sincerely,

Justin L. Clary
General Manager

2 SUMMARY OF FUNDS

The Lake Whatcom Water & Sewer District (District) is a special purpose local government authorized under Title 57 Revised Code of Washington (Water-Sewer Districts). Originally formed in 1968 as Whatcom County Water District No. 10, the District's primary function is to provide water and sewer service to customers in an 18-square mile area encompassing much of the Lake Whatcom watershed, including Geneva, Sudden Valley and the North Shore of Lake Whatcom. The District is governed by a five-member Board of Commissioners (Board) who set the policies and rates of the District, and who adopt a biennial budget. The biennial budget defines the operational and capital improvement programs for that each year of the budget, as well as maintenance of operating and contingency reserves to respond to unanticipated events, should they occur. The following summarizes each of the District's funds.

2.1 Water Utility Fund (Fund 401)

This fund serves as the primary operating fund of the District's water utility. The majority of revenue is derived from rates charged to water customers. Other revenue sources are grants, interest income, late payment fees, recording fees, general facility charges, and miscellaneous charges and fees. All fees and charges are set by the Board. Funds collected are used to pay for operations, maintenance, and capital improvement program-related expenditures (system reinvestment) of the water utility in accordance with the Board-approved biennial budget.

Managed within the water utility fund are an operating reserve, contingency reserve, and debt service funds:

- Operating Reserve - The operating reserve serves as a liquidity cushion providing protection from risk of short-term variation in the timing of revenue collection relative to payment of expenses and is maintained consistent with District financial policies at the cost to operate the utility for 90 days.
- Contingency Reserve - The contingency reserve ensures that unanticipated projects related to water system expenditures will be funded, subsequent to Board approval, and is established through the District's financial policies at one percent of the water utility infrastructure replacement cost.
- Debt Service - This fund provides redemption of long-term loans that financed past water utility projects. Principal and interest on those loans are paid entirely from water utility revenues. Debt service payments for principal and interest are paid annually.

2.2 Sewer Utility Fund (Fund 402)

This fund serves as the primary operating fund of the District's sewer utility. The majority of revenue is derived from rates charged to sewer customers. Other revenue sources are interest income, recording fees, general facility charges, payments associated with an existing utility local improvement

district (ULID), and miscellaneous charges and fees. All fees and charges are set by the Board. Funds collected are used to pay for operations, maintenance, and capital improvement program-related expenditures (system reinvestment) of the sewer utility in accordance with the Board-approved biennial budget.

Managed within the sewer utility fund are an operating reserve, contingency reserve, and debt service funds:

- Operating Reserve - The operating reserve serves as a liquidity cushion providing protection from risk of short-term variation in the timing of revenue collection relative to payment of expenses and is maintained consistent with District financial policies at the cost to operate the utility for 60 days.
- Contingency Reserve - The contingency reserve ensures that unanticipated projects related to sewer system expenses will be funded, subsequent to Board approval, and is established through the District's financial policies at one percent of the sewer utility infrastructure replacement cost.
- Debt Service - The debt service allocation provides redemption of outstanding debt incurred associated with a bond that was issued to finance past sewer utility projects. Bond interest is paid semi-annually and the principal is paid annually from sewer utility revenues.

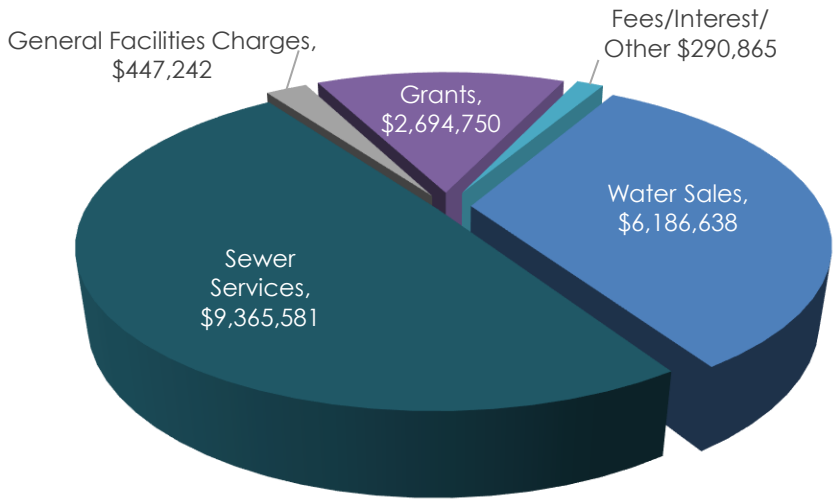
2.3 Bond Reserve Fund (Fund 460)

The Bond Reserve Fund was established by the covenants of the 2016 bond sale and is restricted by definition. A reserve limitation is required to be held in this fund until the outstanding 2016 bond payment obligations are paid in full, which is currently scheduled for 2035.

3 2023-24 REVENUE PROJECTIONS

District functions are funded primarily through revenues received through water sales and sewer service fees, with a relatively small remainder of revenues coming from other fees and charges, which include the general facility charges, and other miscellaneous revenues. One item of note, as mentioned in the General Manager's Message, is that the District anticipates a significant increase in grant revenue relative to recent budgets (primarily from FEMA Hazard Mitigation Grants). These grant revenues account for approximately $2.7 million dollars with the majority of that recognized in the water utility fund supporting the Division 7 Reservoir project (see Appendix B, System Reinvestment Plan, for more detail).

As outlined in its 2021 rate study, the District adopted incremental annual increases to water and sewer rates through 2026 to ensure sufficient funding for operations, outstanding debt service, proposed future debt service, and system reinvestment through capital improvement projects and scheduled equipment replacement. Per the Board-approved multi-year rate schedule, 2023-24 budget revenues are based on water and sewer rate increases of 4.5% and 3.75% percent, respectively, over 2022 for each subsequent year. This results in rate revenue projections of approximately $6.2 million in the water utility fund and $9.4 million in the sewer utility fund.



2023-24 Projected Revenues

The other relatively significant revenue stream is fees the District receives for the connection of new development to its water and sewer systems. These *general facility charges* have been developed based upon the new customer's proportionate share of the cost of constructing the system to which they are connecting, as well as the proportionate share for future system expansion to accommodate that connection's capacity impact. In 2022, the District performed an in depth analysis of its general facility charges, with new charges adopted by the Board effective January 1, 2023. In 2022, new home connections totaled 22, which was 35 percent lower than 2021 connections. Although current indications are that 2023 and 2024 will witness similar levels of new development, development-related revenues have been based upon a more conservative number of ten new homes. This results in

revenue projections for the biennium of approximately $206,000 and $242,000 to the water utility and sewer utility, respectively.

The majority of the other revenues, totaling approximately $291,000, reflects projected interest earned from the various investments the District has as well as late fees. The remaining revenues are comprised of other miscellaneous fees, as well as sewer utility revenues associated with ULID No. 18 which will end in 2023.

Therefore, based upon adopted rate increases and conservative projections of other revenues, the 2023-24 Biennial Budget reflects total revenue of approximately $19 million ($9,161,770 water utility and $9,823,306 sewer utility).

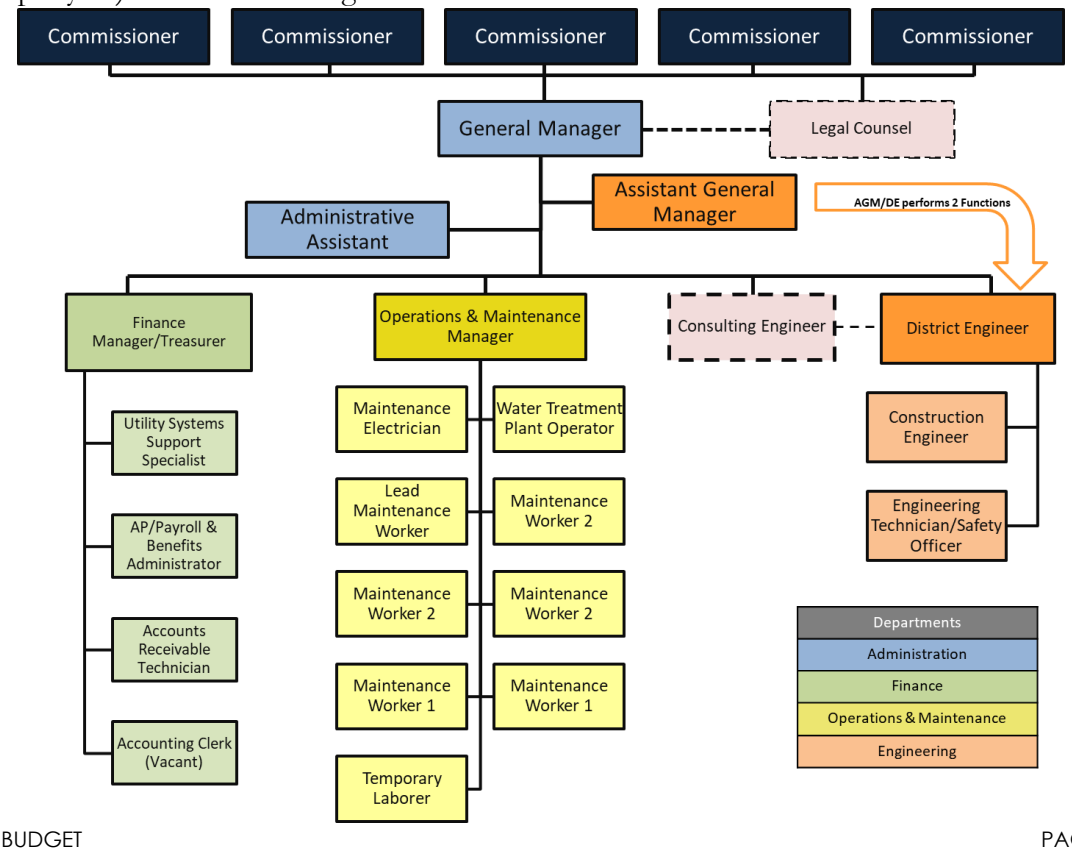
4 2023-24 EXPENDITURES

4.1 Water Utility Fund (Fund 401)

The Water Utility Fund is the primary fund through which the District conducts water utility-related business. It should be noted that many administrative expenses are shared with the Sewer Utility Fund equally. The following sections provide summaries of primary components of the fund expenses.

4.1.1 Operating Expenses

Personnel. Being a service-oriented organization, staff salary and associated benefits make up a large portion of the Water Utility Fund budget. Salary and benefit-related expenses are shared with the Sewer Utility Fund, with exception to the Water Treatment Plant Operator position, which is wholly funded by the Water Utility Fund. For the 2023-24 Budget, the District has budgeted for 18 full-time equivalent (FTE) positions and one seasonal employee. One FTE within the Finance Department will remain vacant (Accounting Clerk) as result of staffing succession and workload. As a result of this staffing change, the District's 2023 administrative payroll budget was reduced by approximately four percent compared to 2022. Beyond the slight staffing revisions, personnel-related cost increases from the 2023-24 Budget are primarily associated with union contract-required cost-of-living adjustments to salaries (three percent per year) and increases to healthcare and related benefits (approximately five percent per year). The 2023-24 Organization Chart is as follows:



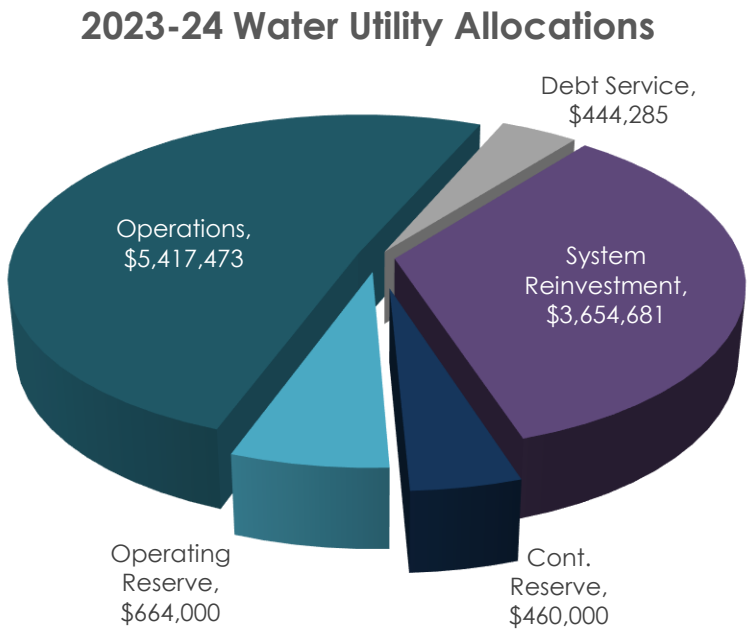
Professional Services. The District relies on a number of professional- and vendor-related services to efficiently and effectively carry out the business of the District. Such providers include contracting with the District's legal counsel and on-call consulting engineer, support services associated with asset management, infrastructure control, administrative systems, and general services (e.g., custodial, landscape maintenance, security, etc.). Many of these services are shared evenly between the water and sewer utilities. The combined professional services for 2023-24 are projected at $400,500. It should be noted that in the 2023-24 Biennial Budget, the District created a new line item to account for the costs associated with Software and IT expenditures that had previously been accounted for in the professional services budget. The combined costs for Software/IT in the 2023-24 budget is approximately $165,000.

City of Bellingham Fees. The District does not have a drinking water source that is connected to the Eagleridge residential neighborhood located on the Lake Whatcom north shore. Therefore, the District purchases water from the City of Bellingham to serve Eagleridge. The total projected cost for water fees from the City of Bellingham for 2023-24 is budgeted at $120,120, which reflects an increase due to anticipated rate increases from the City of Bellingham.

Water Quality Partnerships. With Lake Whatcom as the primary source of drinking water within the District, protection of its water quality is crucial. In 2023 and 2024, the District will continue its partnership with Whatcom County and the City of Bellingham for water quality monitoring and invasive species inspection programs ($162,310).

Utilities. Electricity to treat and distribute water to District customers, and to pump sewage to the City of Bellingham makes up a significant portion of the District's operating budget. Combined water and sewer utility electricity costs, together with other utilities, are budgeted at $550,960.

Fund Carryover. Due to competing workload obligations, approximately $385,000 in 2022 water utility operating monies was not expended under system reinvestment because the associated capital projects were not completed. As a result, these funds will be carried over to 2023-24 when the associated projects will be completed.



4.1.2 Operating Reserve

In accordance with District financial policies, an operating reserve is maintained equivalent to the cost of operating the water utility for 90 days ($664,000).

4.1.3 Contingency Reserve

A contingency reserve is maintained in accordance with the District's financial policies at one percent of the water utility infrastructure replacement cost ($460,000). As this is a contingency fund, no expenditures are budgeted for 2023-24.

4.1.4 System Reinvestment

The *2023-24 Capital System Reinvestment Plan*, included as Appendix B, provides a comprehensive description of the projects that will be completed using system reinvestment funds. Following are projects specific to the water utility:

Category	Project	Cost[1]
Capital Outlay Projects—General		
Water/Sewer	SCADA Telemetry-Managed Ethernet Switches (water portion; 2022 carryover)	$1,850
Water/Sewer	Centimeter Grade GPS (water portion; 2022 carryover)	$2,900
Water/Sewer	Division 30 Booster, PLC, & UPS (water portion; 2022 carryover)	$90,000
Water/Sewer	Miscellaneous General Outlay (water portion; 2022 carryover)	$35,000
Water/Sewer	Replace Tool Truck (Carryover water portion; 2022 carryover)	$37,500
Water/Sewer	Replace Tool Truck (2024)	$49,000
	Subtotal	$216,250
Capital Outlay Projects—Water Utility		
Water	Reservoir – Inspection & Maintenance (2024)	$41,000
Water	Miscellaneous Water Outlay (2023 & 2024)	$44,000
	Subtotal	$85,000
Capital Improvement Projects—Water Utility		
Water	Little Strawberry Bridge Water Main Slip Line (2022 carryover)	$20,000
Water	Geneva Reservoir Valve; Scenic Intertie Repair; Austin-Fremont PRV (2022 carryover)	$21,100
Water	Division 7 Reservoir Replacement Phase 1 (2022 carryover)	$68,000
Water	Reservoir & Site Security (2022 carryover)	$50,000
Water	South Geneva Booster (2022 carryover)	$21,800
Water	Pinto Creek PRV Replacement (2022 carryover)	$18,000
Water	Lead Service Line Inventory Planning (2022 carryover & additional funding)	$11,500
Water	Division 30 Reservoir – Tree Removal (2022 carryover)	$14,100
Water	Alum System Improvements (2023)	$88,000
Water	Division 7 Reservoir Replacement Phase 2 (2023)	$2,889,000
Water	Eagleridge High Flow/Low Flow Pumps (2024)	$116,000
Water	Division 30 Reservoir – Impressed Current Cathodic Protection (2024)	$36,000
	Subtotal	$3,352,500
	TOTAL	$3,653,750

[1] Costs presented in table are rounded, please refer to Appendices A and B for specific projected costs.

4.1.5 Debt Service

The District is obligated to annually set aside sufficient funds for debt service repayment associated with prior District capital improvements, which are summarized in the *Revenue Bonds and Loan Funds Summary* (Appendix C). Water utility-related 2023-24 expenditures to make principal and interest payments on District low interest loans will be associated with:

- Geneva AC Pipe Mains Replacement Project ($284,853)
- Division 22 Water Reservoir Construction Project ($159,432)

Please refer to Appendix C for the 2023-24 Revenue Bond and Loans Summary.

4.2 Sewer Utility Fund (Fund 402)

The Sewer Utility Fund is the primary fund through which the District conducts sewer utility-related business. It should be noted that many administrative expenses are shared with the Water Utility Fund. The following sections provide summaries of primary components of the fund expenses.

4.2.1 Operating Expenses

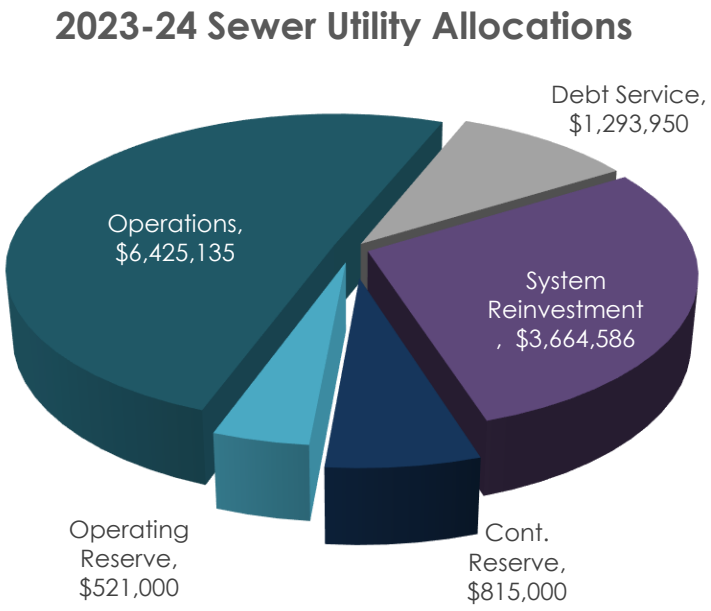
Personnel. As sewer utility-related expenses associated with personnel are largely consistent with those of the water utility, please refer to the personnel discussion in Section 4.1.1.

Professional Services. As sewer utility-related expenses associated with professional services are largely consistent with those of the water utility, please refer to the professional services discussion in Section 4.1.1.

City of Bellingham Fees. To protect the quality of Lake Whatcom, all sewage collected by the District is conveyed to the City of Bellingham's sanitary sewer system and treated at the City's Post Point wastewater treatment plant. As a result, the District pays the City for treatment of all sewage collected by the District. The total projected cost for sewer fees from the City of Bellingham for 2023-24 is budgeted at $1,840,100, which is slightly above prior years' costs to account for city rate increases and additional flow added from new construction being brought onto the system.

Utilities. Please refer to the utilities discussion in Section 4.1.1.

Fund Carryover. Due to competing workload obligations, $1,526,586 in sewer utility operating monies was not used under system reinvestment because the associated capital projects were not completed. As a result, these funds will be carried over to 2023 when the associated projects will be completed.



4.2.2 Operating Reserve

In accordance with District financial policies, an operating reserve is maintained equivalent to the cost of operating the sewer utility for 60 days ($521,000).

4.2.3 Contingency Reserve

A contingency reserve is maintained in accordance with the District's financial policies at one percent of the sewer utility infrastructure replacement cost ($815,000). As this is contingency fund, no expenditures are budgeted for 2023-24.

4.2.4 System Reinvestment

The *2023-24 Capital System Reinvestment Plan*, included as Appendix B, provides a comprehensive description of the projects that will be completed using system reinvestment funds. Following are projects specific to the sewer utility:

Category	Project	Cost[1]
Capital Outlay Projects—General		
Water/Sewer	SCADA Telemetry-Managed Ethernet Switches (sewer portion; 2022 carryover)	$1,850
Water/Sewer	Centimeter Grade GPS (sewer portion; 2022 carryover)	$2,900
Water/Sewer	Division 30 Booster, PLC, & UPS (sewer portion; 2022 carryover)	$90,000
Water/Sewer	Miscellaneous General Outlay (sewer portion; 2022 carryover)	$35,000
Water/Sewer	Replace Tool Truck (Carryover sewer portion; 2022 carryover)	$37,500
Water/Sewer	Replace Tool Truck (2024)	$49,000
Sewer	Replace Sewer Camera Equipment (2024 additional funding)	$150,000
Sewer	Miscellaneous General Capital Outlay (sewer only; 2022 carryover)	$23,000
	Subtotal	$389,250
Capital Improvement Projects—Sewer Utility		
Sewer	Dellesta, Edgewater, & Euclid Sewer Pump Stations (2022 carryover)	$684,500
Sewer	Rocky Ridge & Lakewood Predesign and Shoreline Permitting (2022 carryover)	$319,000
Sewer	Flat Car Reverse Flow to SVPS – Design & Permitting (2022 carryover)	$128,000
Sewer	November 2021 Flood Event – Permanent Protection (2022 carryover)	$55,000
Sewer	LWBI CIPP Renewal Project – Phase 1 (2023)	$185,000
Sewer	Sewer Rehab & Replacement Projects (2023)	$113,000
Sewer	Rocky Ridge Pump Station (2024)	$880,000
Sewer	Lakewood Pump Station (2024)	$792,000
Sewer	System Rehab & Replacement Projects (2024)	$119,000
	Subtotal	$3,275,500
	TOTAL	$3,664,750

[1] Costs presented in table are rounded, please refer to Appendices A and B for specific projected costs.

4.2.5 Debt Service

The District is obligated to annually set aside sufficient funds for debt service repayment associated with prior District capital improvements, which are summarized in the *Revenue Bonds and Loan Funds Summary* (Appendix C). Sewer utility-related expenditures to make principal and interest payments on District bond obligations are solely associated with the 2016 Bond (which consisted of financing the renovation of two sewer lift stations and the District's portion of upgrades to the City of Bellingham's Post Point wastewater treatment plant). The 2023-24 sewer utility debt service will be approximately $1,294,000. Please refer to Appendix C for the 2023-24 Revenue Bond and Loans Summary.

4.3 Bond Reserve Fund (Fund 460)

No expenditures are anticipated in 2023-24 from this fund. A fund balance of approximately $772,000 will be carried over from 2022.

APPENDIX A

2023-24 BUDGET

LAKE WHATCOM WATER AND SEWER FUND SUMMARIES 2023-2024

	401 WATER	402 SEWER	TOTAL		460 BOND RESERVE (RESTRICTED)
2023 Projected Beginning Fund Balance	$1,306,219	$2,889,150	$4,195,369		$772,334
2023 - 2024 Revenues	$9,161,770	$9,823,306	$18,985,076		
2023 - 2024 Expenditures	$ (9,516,439)	$ (11,383,671)	$ (20,900,110)		
Net Surplus/(Deficit)	$ (354,669)	$ (1,560,365)	$ (1,915,034)		$772,334
2024 Projected Ending Fund Balance	$951,550	$1,328,785	$2,280,335		$772,334
2023 - 2024 Allocated to Operating Reserve	$664,000	$521,000	$1,185,000		
2023 - 2024 Allocated to Contingency Reserve Fund	$0	$0	$0		
*2023 - 2024 Rate Study Capital Surplus**	$136,000	$277,000	$413,000		
2023 - 2024 Projected Year End Fund Balance	$ 151,550	$530,785	$682,335		

	426 Water	425 Sewer	Total
2023 Contingency Reserve Funds	$460,000	$815,000	$1,275,000
2024 Contingency Reserve Funds	$460,000	$815,000	$1,275,000

**Aggregate Rate Study Surplus 2022 through 2024*

Lake Whatcom Water and Sewer District
2023 - 2024 Biennial Budget
Water Utility Fund (401)

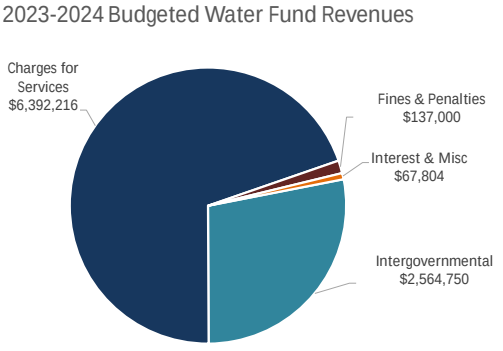
Fund	Dept.	Account	Title	2021 Acutal	2022 Budget	2022 Projected 10.27.2022	2023 Proposed	2024 Proposed	2023-2024 Combined Proposed
			Intergovernmental Revenue						
401	330	331 40 10 00	Federal Grants (FEMA) - (Committed)	$ -	$ 239,000	$ 239,000	$ 1,996,000	$ -	$ 1,996,000
401	330	331 40 10 00	Federal Grants (FEMA) - (Uncommitted)				$ 568,750	$ -	$ 568,750
			Charges For Services						
401	340	343 40 10 00	Water Sales Metered	$ 2,832,355	$ 2,894,977	$ 2,837,078	$ 3,025,251	$ 3,161,387	$ 6,186,638
401	340	343 40 20 01	DEA Permits - Water	$ (7,961)	$ -	$ 300	$ -	$ -	$ -
401	340	343 41 10 01	General Facilities Charges - Water	$ 320,536	$ 84,030	$ 191,224	$ 101,520	$ 104,058	$ 205,578
			Fines & Penalties						
401	350	359 81 10 00	Combined Fees	$ 10,802	$ 28,000	$ 6,356	$ 8,500	$ 8,500	$ 17,000
401	350	359 90 00 00	Late Fees	$ 7,141	$ 58,000	$ 61,278	$ 60,000	$ 60,000	$ 120,000
			Miscellaneous Revenues						
401	360	361 11 00 00	Investment Interest	$ 48,944	$ 20,000	$ 29,875	$ 31,713	$ 34,091	$ 65,804
401	360	369 10 00 00	Sale Of Surplus	$ 4,176	$ 1,000	$ -	$ -	$ -	$ -
401	360	369 10 01 00	Miscellaneous	$ 726	$ 1,000	$ 10,405	$ 1,000	$ 1,000	$ 2,000
401	360	369 40 00 00	Project Reimbursement	$ -	$ -	$ -	$ -	$ -	$ -
401	360	369 80 00 00	Over/Under	$ -	$ -	$ -	$ -	$ -	$ -
			Other Financing Sources						
401	390	395 10 00 00	Sale Of Capital Assets	$ -	$ -	$ -	$ -	$ -	$ -
401	390	395 20 00 00	Deposits	$ (1,500)	$ -	$ 1,500	$ -	$ -	$ -
401	390	395 20 00 01	Compensation For Loss/Impairment (Formerly Ins. Recovery)		$ -	$ 13,130	$ -	$ -	$ -
401	390	398 20 00 01	Insurance Recoveries	$ 137,564	$ -	$ -	$ -	$ -	$ -
Total Water Fund Revenues				$ 3,352,783	$ 3,326,007	$ 3,390,146	$ 5,792,734	$ 3,369,036	$ 9,161,770
			Water Fund Expenditures						
401	534	534 10 10 00	Water - Gen Admin Payroll	$ 369,312	$ 371,770	$ 343,802	$ 358,585	$ 371,432	$ 730,017
401	534	534 10 20 00	Water - Gen Admin Personnel Benefits	$ 150,029	$ 161,024	$ 142,031	$ 183,579	$ 184,645	$ 368,224
401	534	534 10 31 00	Water - Gen Admin Supplies	$ 23,446	$ 25,000	$ 10,126	$ 12,000	$ 12,500	$ 24,500
401	534	534 10 31 01	Water - Meetings/Team building	$ 1,638	$ 2,000	$ 1,451	$ 2,000	$ 2,000	$ 4,000
401	534	534 10 40 00	Water - Merchant Services Fees	$ 14,146	$ 11,500	$ 12,680	$ 13,800	$ 14,200	$ 28,000
401	534	534 10 40 01	Water - Bank Fees	$ 872	$ 800	$ 1,433	$ 1,400	$ 1,400	$ 2,800
401	534	534 10 41 00	Water - Quality Assurance Programs	$ 76,158	$ 81,300	$ 81,300	$ 74,500	$ 87,810	$ 162,310
401	534	534 10 41 01	Water - Gen Admin Prof Srvc	$ 165,771	$ 167,000	$ 150,953	$ 92,325	$ 107,925	$ 200,250
401	534	534 10 41 02	Water - Engineering Srvc	$ 10,931	$ 20,000	$ 8,462	$ 14,000	$ 14,000	$ 28,000
401	534	534 10 41 03	Water - Legal Srvc	$ 28,459	$ 22,000	$ 32,614	$ 31,000	$ 31,000	$ 62,000
401	534	534 10 41 04	Water - DEA Expenditures	$ -	$ -	$ -	$ -	$ -	$ -
401	534	534 10 41 20	Water - 20 Year SVWTP Plan	$ 41,687	$ -	$ -	$ -	$ -	$ -
401	534	534 10 42 00	Water - Admin Communication	$ 29,745	$ 31,000	$ 33,727	$ 33,000	$ 33,000	$ 66,000
401	534	534 10 43 00	Water - Software/IT Subscriptions	$ -	$ -	$ -	$ 41,150	$ 41,405	$ 82,555
401	534	534 10 45 00	Water - Gen Admin Lease	$ 5,919	$ 5,500	$ 5,118	$ 5,500	$ 5,500	$ 11,000
401	534	534 10 46 00	Water - Gen Admin Insurance	$ 103,477	$ 103,500	$ 112,226	$ 108,700	$ 114,000	$ 222,700
401	534	534 10 49 00	Water - Gen Admin Misc.	$ 25	$ 200	$ 38	$ 200	$ 200	$ 400
401	534	534 10 49 01	Water - Memberships/Dues/Permits	$ 17,130	$ 17,250	$ 21,011	$ 20,000	$ 20,500	$ 40,500
401	534	534 10 49 02	Water - Taxes	$ 149,710	$ 147,500	$ 151,183	$ 157,986	$ 165,095	$ 323,081
401	534	534 40 43 00	Water - Admin Training &Travel	$ 3,195	$ 10,000	$ 7,870	$ 13,000	$ 13,000	$ 26,000
401	534	534 40 43 01	Water - Tuition Reimbursement	$ -	$ 500	$ -	$ 500	$ 500	$ 1,000
401	534	534 50 31 00	Water - Maintenance Supplies	$ 88,477	$ 135,000	$ 69,358	$ 115,000	$ 120,500	$ 235,500
401	534	534 50 31 01	Water - Small Assets	$ 60,669	$ 40,000	$ 39,182	$ 45,000	$ 47,250	$ 92,250
401	534	534 50 48 00	Water - Repair & Maint	$ 227,813	$ 60,000	$ 99,667	$ 115,000	$ 120,750	$ 235,750
401	534	534 50 49 00	Water - Insurance Claims	$ -	$ 2,500	$ -	$ 2,500	$ 2,500	$ 5,000
401	534	534 60 41 00	Water - Operations Contracted (Edge Analytical)	$ 7,932	$ 15,500	$ 10,113	$ 12,000	$ 12,000	$ 24,000
401	534	534 60 47 00	Water - City of Bellingham	$ 47,368	$ 52,000	$ 51,931	$ 57,200	$ 62,920	$ 120,120
401	534	534 80 10 00	Water - Operations Payroll	$ 612,497	$ 629,236	$ 650,177	$ 669,866	$ 692,736	$ 1,362,602
401	534	534 80 20 00	Water - Operations Personnel Benefits	$ 250,872	$ 288,653	$ 262,452	$ 287,136	$ 288,803	$ 575,939
401	534	534 80 32 00	Water - Operations Fuel	$ 12,524	$ 12,500	$ 23,837	$ 25,200	$ 26,000	$ 51,200
401	534	534 80 35 00	Water - Safety Supplies	$ 3,207	$ 10,000	$ 10,734	$ 10,000	$ 10,000	$ 20,000
401	534	534 80 35 01	Water - Safety Boots	$ 793	$ 1,400	$ 1,089	$ 1,400	$ 1,400	$ 2,800
401	534	534 80 35 02	Water - Emergency Preparedness	$ -	$ 5,000	$ -	$ 3,000	$ 3,000	$ 6,000
401	534	534 80 43 00	Water - Operation Training/Travel/Certifications	$ 7,270	$ 10,000	$ 3,914	$ 13,000	$ 13,000	$ 26,000
401	534	534 80 47 00	Water - Ops Utilities	$ 120,036	$ 121,200	$ 129,604	$ 134,140	$ 138,835	$ 272,975
401	534	534 80 49 00	Water - Operations Laundry	$ 1,318	$ 2,000	$ 1,245	$ 2,000	$ 2,000	$ 4,000
Total Water Fund Expenditures				$ 2,632,426	$ 2,562,833	$ 2,469,328	$ 2,655,667	$ 2,761,806	$ 5,417,473
			Debt Service						
401	591	591 34 77 01	Geneva AC Mains Principal	$ 119,938	$ 119,938	$ 119,938	$ 119,938	$ 119,938	$ 239,876
401	591	591 34 77 02	Div. 22 Reservoir Principal	$ 65,475	$ 65,475	$ 65,475	$ 65,475	$ 65,475	$ 130,950
401	591	592 34 83 01	Geneva AC Mains Interest	$ 26,986	$ 25,187	$ 25,187	$ 23,388	$ 21,589	$ 44,977
401	591	592 34 83 02	Div. 22 Reservoir Interest	$ 16,696	$ 15,714	$ 15,714	$ 14,732	$ 13,750	$ 28,482
Total Water Fund Debt Service				$ 229,095	$ 226,314	$ 226,314	$ 223,533	$ 220,752	$ 444,285

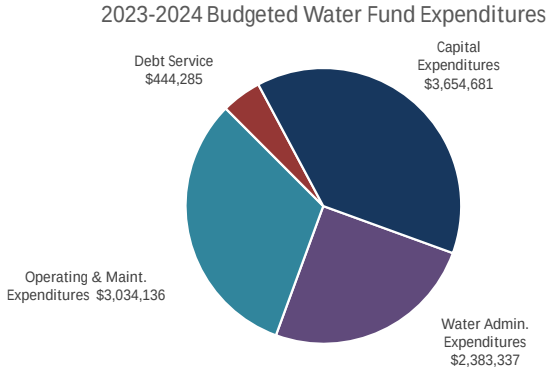
Lake Whatcom Water and Sewer District
2023 - 2024 Biennial Budget
Water Utility Fund (401)

Fund	Dept.	Account	Title	2021 Acutal	2022 Budget	2022 Projected 10.27.2022	2023 Proposed	2024 Proposed	2023-2024 Combined Proposed
System Reinvestments									
			Capital Expenditures						
401	594	594 34 60 01	Capital Outlay - Budget Only		$ 528,250		$ 2,983,000	$ 280,000	$ 3,263,000
401	594	594 34 62 01	Capital Projects - Water Structures	$ 286,909		$ 324,165			$ -
401	594	594 34 63 01	Capital Projects - Water System	$ 171,349		$ 71,133			$ -
401	594	594 34 64 01	Capital Outlay - Water Equipment	$ 40,398		$ 27,759			$ -
401	594	594 34 65 01	Capital Outlay - Small Water Projects	$ -					$ -
			Capital Outlay Carryover Projects/Additional Funding	$ -	$ 273,000		$ 385,181	$ 6,500	$ 391,681
Total Water Fund Capital Expenditures				$ 498,656	$ 801,250	$ 423,057	$ 3,368,181	$ 286,500	$ 3,654,681
			Other Financing Sources						
401	597	597 10 00 20	Transfers Out To Fund 420	$ -	$ -	$ -	$ -	$ -	$ -
401	597	597 10 00 25	Transfers Out To Fund 425	$ -	$ -	$ -	$ -	$ -	$ -
401	597	597 10 00 26	Transfers Out To Fund 426	$ -	$ -	$ -	$ -	$ -	$ -
401	597	597 10 00 40	Transfers Out To Fund 440	$ -	$ -	$ -	$ -	$ -	$ -
401	597	597 10 00 50	Transfers Out To Fund 450	$ -	$ -	$ -	$ -	$ -	$ -
401	597	597 10 00 70	Transfers Out To Fund 450	$ -	$ -	$ -	$ -	$ -	$ -
Total Water Fund Other Financing Sources				$ -	$ -	$ -	$ -	$ -	$ -
Total Water Fund Expenditures				$ 3,360,177	$ 3,590,397	$ 3,118,699	$ 6,247,381	$ 3,269,058	$ 9,516,439
Fund Gain/Loss				$ (7,394)	$ (264,390)	$ 271,447	$ (454,647)	$ 99,978	$ (354,669)

Fund Balance Summary	
2022 Beginning Fund Balance	$ 1,034,772
2022 Projected Gain/Loss	$ 271,447
2022 Projected Ending Fund Balance	$ 1,306,219
2023 Projected Gain/Loss	$ (454,647)
2023 Projected Ending Fund Balance	$ 851,572
2024 Projected Gain/Loss	$ 99,978
2024 Projected Ending Fund Balance	$ 951,550

Water Contingency Reserve Fund Balance Summary	
2022 Beginning Fund Balance	$ 460,000
2022 Projected Gain/Loss	$ -
2022 Projected Ending Fund Balance	$ 460,000
2023 Projected Gain/Loss	$ -
2023 Projected Ending Fund Balance	$ 460,000
2024 Projected Gain/Loss	$ -
2024 Projected Ending Fund Balance	$ 460,000





Lake Whatcom Water and Sewer District
2023-2024 Biennial Budget
Sewer Utility Fund (402)

Fund	Dept.	Account	Title	2021 Actual	2022 Budget	2022 Projected 10.27.22	2023 Proposed	2024 Proposed	2023-2024 Combined Proposed
			Intergovernmental Revenue						
401	330	331 97 10 02	Federal Grants (FEMA)	$ -	$ 182,400	$ 182,400	$ 130,000	$ -	$ 130,000
			Charges For Services						
402	340	343 50 11 00	Sewer Service Residential	$ 4,314,666	$ 4,425,315	$ 4,509,339	$ 4,591,264	$ 4,763,437	$ 9,354,701
402	340	343 50 19 00	Sewer Service Other	$ 4,961	$ 4,500	$ 5,723	$ 5,340	$ 5,540	$ 10,880
402	340	343 50 80 00	Latecomers Fee ULID #18	$ 250	$ -	$ 16,198	$ -	$ -	$ -
402	340	343 51 10 02	General Facilities Charges - Sewer	$ 343,302	$ 88,600	$ 204,626	$ 119,340	$ 122,324	$ 241,664
			Miscellaneous Revenues						
402	360	361 11 00 02	Investment Interest	$ 48,944	$ 20,000	$ 29,875	$ 31,713	$ 34,091	$ 65,804
402	360	361 40 00 02	ULID 18 Interest/Penalties	$ 3,355	$ 1,800	$ 805	$ 2,531	$ -	$ 2,531
402	360	368 10 00 02	ULID 18 Principal Payments	$ 11,416	$ 8,000	$ 6,277	$ 5,444	$ -	$ 5,444
402	360	369 10 00 02	Sale Of Surplus	$ 1,010	$ 1,000	$ -	$ 1,000	$ 1,000	$ 2,000
402	360	369 40 00 02	Project Reimbursement	$ 4,641	$ 4,141	$ 4,141	$ 4,141	$ 4,141	$ 8,282
402	360	369 91 01 02	Miscellaneous	$ 1,665	$ 1,000	$ 10,405	$ 1,000	$ 1,000	$ 2,000
			Other Financing Sources						
402	390	395 10 00 02	Sale Of Capital Assets	$ -	$ -	$ -	$ -	$ -	$ -
402	395	395 20 00 02	Compensation for Loss/Impairment of Capital Asset		$ 13,130	$ 13,130			
402	397	397 10 00 02	Transfers In	$ -	$ -	$ -	$ -	$ -	$ -
Total Sewer Fund Revenues				$ 4,734,210	$ 4,567,486	$ 4,982,919	$ 4,891,773	$ 4,931,533	$ 9,823,306
			Sewer Fund Expenditures						
402	535	535 10 10 00	Sewer - Admin Payroll	$ 366,872	$ 371,770	$ 343,802	$ 358,585	$ 371,434	$ 730,019
402	535	535 10 20 00	Sewer - Gen Admin Personnel Benefits	$ 150,051	$ 161,024	$ 142,028	$ 162,646	$ 163,622	$ 326,268
402	535	535 10 31 00	Sewer - Gen Admin Supplies	$ 13,344	$ 16,800	$ 9,828	$ 11,000	$ 11,500	$ 22,500
402	535	535 10 31 01	Sewer - Meetings/Team Building	$ 1,952	$ 2,000	$ 1,550	$ 2,000	$ 2,000	$ 4,000
402	535	535 10 40 00	Sewer - Merchant Services Fees	$ 12,764	$ 11,500	$ 12,680	$ 13,800	$ 14,200	$ 28,000
402	535	535 10 40 01	Sewer - Bank Fees	$ 872	$ 750	$ 1,433	$ 1,400	$ 1,400	$ 2,800
402	535	535 10 41 01	Sewer - Gen Admin Prof Srvc	$ 123,840	$ 187,500	$ 123,167	$ 92,325	$ 107,925	$ 200,250
402	535	535 10 41 02	Sewer - Engineering Srvc	$ 12,068	$ 20,000	$ 5,735	$ 14,000	$ 14,000	$ 28,000
402	535	535 10 41 03	Sewer - Legal Srvc	$ 28,459	$ 22,000	$ 32,614	$ 31,000	$ 31,000	$ 62,000
402	535	535 10 42 00	Sewer - Admin Communication	$ 29,744	$ 31,000	$ 32,173	$ 33,000	$ 33,000	$ 66,000
402	535	535 10 43 00	Sewer - Software/IT Subscriptions	$ -	$ -	$ -	$ 41,150	$ 41,405	$ 82,555
402	535	535 10 45 00	Sewer - Gen Admin Lease	$ 5,918	$ 5,500	$ 5,118	$ 5,500	$ 5,500	$ 11,000
402	535	535 10 46 00	Sewer - Gen Admin Insurance	$ 103,478	$ 103,500	$ 112,226	$ 108,700	$ 114,000	$ 222,700
402	535	535 10 49 00	Sewer - Gen Admin Misc.	$ 11	$ 200	$ 50	$ 200	$ 200	$ 400
402	535	535 10 49 01	Sewer - Memberships/Dues/Permits	$ 9,420	$ 10,000	$ 14,651	$ 14,700	$ 15,300	$ 30,000
402	535	535 10 49 02	Sewer - Taxes	$ 100,819	$ 122,000	$ 108,136	$ 115,000	$ 115,000	$ 230,000
402	535	535 40 43 00	Sewer - Gen Admin Training &Travel	$ 2,848	$ 10,000	$ 7,448	$ 13,000	$ 13,000	$ 26,000
402	535	535 40 43 01	Sewer - Tuition Reimbursement	$ -	$ 500	$ -	$ 500	$ 500	$ 1,000
402	535	535 50 31 00	Sewer - Maintenance Supplies	$ 29,556	$ 45,000	$ 19,845	$ 45,000	$ 45,000	$ 90,000
402	535	535 50 31 01	Sewer - Small Assets	$ 40,840	$ 30,000	$ 62,018	$ 40,000	$ 42,000	$ 82,000
402	535	535 50 48 00	Sewer - Repair & Maint	$ 116,649	$ 125,000	$ 242,653	$ 135,000	$ 140,000	$ 275,000
402	535	535 50 49 00	Sewer - Insurance Claims	$ 5,540	$ 2,500	$ 5,000	$ 2,500	$ 2,500	$ 5,000
402	535	535 60 41 00	Sewer - Operations Contracted	$ 22,480	$ -	$ -	$ -	$ -	$ -
402	535	535 60 47 00	Sewer - City of Bellingham	$ 686,197	$ 816,000	$ 783,480	$ 897,600	$ 942,500	$ 1,840,100
402	535	535 80 10 00	Sewer - Operations Payroll	$ 491,336	$ 530,481	$ 568,194	$ 568,194	$ 588,048	$ 1,156,242
402	535	535 80 20 00	Sewer - Operations Personnel Benefits	$ 200,054	$ 237,606	$ 254,395	$ 254,395	$ 255,921	$ 510,316
402	535	535 80 32 00	Sewer - Operations Fuel	$ 15,116	$ 14,200	$ 32,490	$ 25,200	$ 26,000	$ 51,200
402	535	535 80 35 00	Sewer - Safety Supplies	$ 3,200	$ 10,000	$ 8,885	$ 10,000	$ 10,000	$ 20,000
402	535	535 80 35 01	Sewer - Safety Boots	$ 793	$ 1,400	$ 1,089	$ 1,400	$ 1,400	$ 2,800
402	535	535 80 35 02	Sewer - Emergency Preparedness	$ -	$ 5,000	$ -	$ 5,000	$ 5,000	$ 10,000
402	535	535 80 43 00	Sewer - Operations Training/Travel/Certification	$ 4,879	$ 10,000	$ 1,837	$ 13,000	$ 13,000	$ 26,000
402	535	535 80 47 00	Sewer - Ops Utilities	$ 110,361	$ 110,000	$ 118,840	$ 136,602	$ 141,383	$ 277,985
402	535	535 80 49 00	Sewer - Operations Laundry	$ 1,997	$ 2,500	$ 1,851	$ 2,500	$ 2,500	$ 5,000
Total Sewer Fund Expenditures				$ 2,691,458	$ 3,015,731	$ 3,053,216	$ 3,154,897	$ 3,270,238	$ 6,425,135
			Debt Service						
402	591	591 35 77 02	Bond 2016 Principal	$ 435,000	$ 445,000	$ 445,000	$ 470,000	$ 480,000	$ 950,000
402	591	591 35 83 02	Bond 2016 Interest	$ 205,425	$ 192,376	$ 192,376	$ 179,025	$ 164,925	$ 343,950
Total Sewer Fund Debt Service				$ 640,425	$ 637,376	$ 637,376	$ 649,025	$ 644,925	$ 1,293,950
			Capital Expenditures						
402	594	594 35 60 02	Capital Outlay - Budget Only		$ 805,880		$ 298,000	$ 1,840,000	$ 2,138,000
402	594	594 35 62 02	Capital Projects - Sewer Structures	$ 517,334		$ 155,391			$ -
402	594	594 35 63 02	Capital Projects - Sewer System	$ 234,179		$ 290,858			$ -
402	594	594 35 64 02	Capital Outlay - Sewer Equipment	$ 41,083		$ 62,803			$ -
402	594	594 35 65 02	Capital Outlay - Small Sewer Projects						$ -
402	594	594 35 65 02	Capital Outlay - Carry Over Projects/Additional Funding		$ 1,138,000		$ 1,376,586	$ 150,000	$ 1,526,586
Total Sewer Fund Capital Expenditures				$ 792,596	$ 1,943,880	$ 509,052	$ 1,674,586	$ 1,990,000	$ 3,664,586

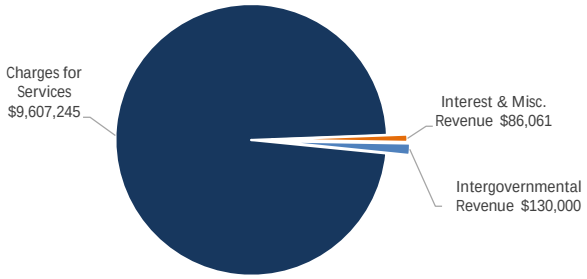
Lake Whatcom Water and Sewer District
2023-2024 Biennial Budget
Sewer Utility Fund (402)

Fund	Dept.	Account	Title	2021 Actual	2022 Budget	2022 Projected 10.27.22	2023 Proposed	2024 Proposed	2023-2024 Combined Proposed
			Other Financing Sources						
402	597	597 10 00 25	Transfer Out To Sewer Contingency	$ 18,912	$ -				
Total Other Financing Sources				$ 18,912	$ -				
Total Sewer Fund Expenditures				$ 4,143,391	$ 5,596,987	$ 4,199,644	$ 5,478,508	$ 5,905,163	$ 11,383,671
Fund Gain/Loss				$ 590,819	$ (1,029,501)	$ 783,275	$ (586,735)	$ (973,630)	$ (1,560,365)

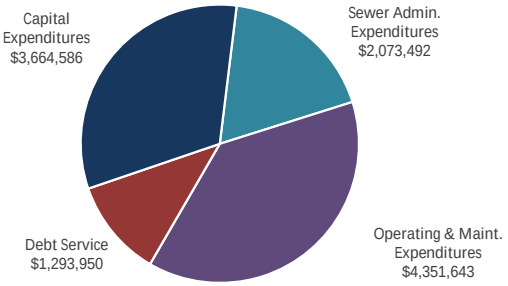
Fund Balance Summary	
2022 Beginning Fund Balance	$ 2,105,875
2022 Projected Gain/Loss	$ 783,275
2022 Projected Ending Fund Balance	$ 2,889,150
2023 Projected Gain/Loss	$ (586,735)
2023 Projected Ending Fund Balance	$ 2,302,415
2024 Projected Gain/Loss	$ (973,630)
2024 Projected Ending Fund Balance	$ 1,328,785

Sewer Contingency Reserve Fund Balance Summary	
2022 Beginning Fund Balance	$ 815,000
2022 Projected Gain/Loss	$ -
2022 Projected Ending Fund Balance	$ 815,000
2023 Projected Gain/Loss	$ -
2023 Projected Ending Fund Balance	$ 815,000
2024 Projected Gain/Loss	$ -
2024 Projected Ending Fund Balance	$ 815,000

2023-2024 Budgeted Sewer Fund Revenues



2023-2024 Budgeted Sewer Fund Expenditures



Lake Whatcom Water and Sewer District
2023 - 2024 Biennial Budget
Sewer Contingency Reserve Fund (425)

Fund	Dept.	Account	Title	2021 Actual	2022 Budget	2022 Projected 8.1.2022	2023 Proposed	2024 Proposed	2023-2024 Combined Proposed
			Other Financing Sources						
425	397	397 10 00 25	Transfer In From Sewer Fund	$ 18,912	$ -	$ -	$ -	$ -	$ -
Total Fund Revenue				$ 18,912	$ -	$ -	$ -	$ -	$ -
			Other Financing Sources						
425	597	597 10 20 00	Transfers Out To Fund 420	$ -	$ -	$ -	$ -	$ -	
Total Fund Expenditures				$ -	$ -	$ -	$ -	$ -	$ -
Fund Gain/Loss				$ 18,912	$ -	$ -	$ -	$ -	$ -

Sewer Contingency Reserve Fund Balance Summary

2022 Beginning Fund Balance	$ 815,000
2022 Projected Gain/Loss	$ -
2022 Projected Ending Fund Balance	$ 815,000
2023 Projected Gain/Loss	$ -
2023 Projected Ending Fund Balance	$ 815,000
2024 Projected Gain/Loss	$ -
2024 Projected Ending Fund Balance	$ 815,000

Lake Whatcom Water and Sewer District
2023 - 2023 Biennial Budget
Water Contingency Reserve Fund (426)

Fund	Dept.	Account	Title	2021 Actual	2022 Budget	2022 Projected 8.1.2022	2023 Proposed	2024 Proposed	2023-2024 Combined Proposed
			Other Financing Sources						
426	397	397 10 00 26	Transfers In From Fund 401	$ -	$ -	$ -	$ -	$ -	
Total Fund Revenue				$ -	$ -	$ -	$ -	$ -	$ -
Total Fund Expenditures				$ -	$ -	$ -	$ -	$ -	$ -

Water Contingency Reserve Fund Balance Summary

2022 Beginning Fund Balance	$ 460,000
2022 Projected Gain/Loss	$ -
2022 Projected Ending Fund Balance	$ 460,000
2023 Projected Gain/Loss	$ -
2023 Projected Ending Fund Balance	$ 460,000
2024 Projected Gain/Loss	$ -
2024 Projected Ending Fund Balance	$ 460,000

Lake Whatcom Water and Sewer District
2023 - 2024 Biennial Budget
Bond Reserve Fund (460)

Fund	Program	Dept.	Sub Dept.	Account	Title	2021 Actual	2022 Budget	2022 Projected 8.1.2022	2023 Proposed	2024 Proposed	2023-2024 Combined Proposed
Total Fund Revenue						$ -	$ -	$ -	$ -	$ -	$ -
Total Fund Expenditures						$ -	$ -	$ -	$ -	$ -	$ -

Bond Reserve Fund Balance Summary

2022 Beginning Fund Balance	$ 772,334
2022 Projected Gain/Loss	$ -
2022 Projected Ending Fund Balance	$ 772,334
2023 Projected Gain/Loss	$ -
2023 Projected Ending Fund Balance	$ 772,334
2024 Projected Gain/Loss	$ -
2024 Projected Ending Fund Balance	$ 772,334

APPENDIX B

2023-24 SYSTEM REINVESTMENT PLAN

System Reinvestment Plan - Introduction

The System Reinvestment Plan (sometimes also referred to as a Capital Improvement Plan) is organized into two plans, one for water and the other for sewer. The plans show scheduled projects over a six-year period from 2023 through 2028, with more detailed information included for projects scheduled in the 2023/2024 budget cycle.

The plan includes the following worksheets and reports:

1. 2023/2024 Continuing Active Project Estimates
2. Sewer System Reinvestment Plan 2023 thru 2028 (CASH FUNDED)
3. Water System Reinvestment Plan 2023 thru 2028 (CASH FUNDED)
4. 2023/2024 Capital Outlay
5. Debt/Grant Funding Plan 2023 thru 2028
6. Project Narratives

Description and purpose of each worksheet and report is summarized below:

1. **2023/2024 Continuing Active Project Estimates**. This worksheet is a list of active projects, most of which are projects that were authorized in previous budget years. Staff, based on workload, emergencies, and priorities, are actively utilizing resources to move projects towards completion, or are planning to start work on these projects as soon as priorities and resources allow. The list contains additional projects added between budget cycles that were deemed necessary or emergency in nature. The purpose of this worksheet is to provide a projected budget to completion for each project considering all new and known information, as well as providing the accounting department amounts spent to date, estimated additional payments in 2022, and estimated expenses in 2023 and 2024.

2. **Sewer System Reinvestment Plan 2023 thru 2028.** This report schedules new projects, or in many cases new project phases. These projects are funded by cash from rate revenues, designated as system reinvestment. Annual system reinvestment budget amount targets have been established in the most recent rate study adopted in early 2022. The target amounts are shown on the second page under the report footer section labeled “Analytical Summary”. The Analytical Summary section also includes assumed year-over-year cost escalations applied to cost estimates, along with average spending over various number of years, and a spending chart. The analytical data is used to develop a plan through multiple iterations to best fit district needs, priorities, and funding limitations. The plan is grouped into several categories:

    - **Capital Outlay – General.** Includes water and sewer related equipment and small/minor projects. Costs are split 50% / 50% between water and sewer utilities. The Capital Outlay worksheet following the system reinvestment plans itemizes any equipment and small/minor projects grouped (note for 2023/2024 there are no Capital Outlay – General items).
    - **Capital Outlay – Sewer.** Includes 100% sewer related equipment. Refer to the Capital Outlay worksheet following the system reinvestment plans which itemizes equipment and small/minor projects (not for 2023/2024 there are no Capital Outlay – Sewer items).
    - **Capital Projects – Sewer**. Includes significant projects in terms of cost, planning, permitting, project management, and design efforts. For detailed information about a project’s purpose, scope, budget estimate, and assumptions refer to the Project Narratives at the end of this section. Project Narratives are provided for all new projects funded in 2023 and 2024

and are keyed to the line items in the System Reinvestment Plan by the CIP Project # (i.e. 0032).

3. **Water System Reinvestment Plan 2023 thru 2028**. This report is identical in form and purpose as the sewer system reinvestment plan above, but in this case for the water utility. See the Sewer System Reinvestment Plan description above for details. The plan is grouped into several categories:

   - **Capital Outlay – General.** Includes water and sewer related equipment and small/minor projects. Costs are split 50% / 50% between water and sewer utilities. The Capital Outlay worksheet following the system reinvestment plans itemizes any equipment and small/minor projects grouped (note for 2023/2024 there are no Capital Outlay – General items).
   - **Capital Outlay – Water**. Includes 100% water related equipment and small/minor projects. Refer to the Capital Outlay worksheet following the system reinvestment plans which itemizes equipment and small/minor projects grouped together under the CIP Projects #0219a Misc 2023 Water Capital Outlay and #0219b Misc 2024 Water Capital Outlay.
   - **Capital Projects – Water**. Includes significant projects in terms of cost, planning, permitting, project management, and design efforts. For detailed information about a project's purpose, scope, budget estimate, and assumptions refer to the Project Narratives at the end of this section. Project Narratives are provided for all new projects funded in 2023 and 2024 and are keyed to the line items in the System Reinvestment Plan by the CIP Project # (i.e. 1001).

4. **2023/2024 Capital Outlay**. This worksheet lists small and minor projects, equipment, components, or material purchases. The purpose is to provide a worksheet to list these items, which in some years are numerous, and group them into a single larger "project" that is included in the system reinvestment plan.

5. **Debt/Grant Funding Plan 2023 thru 2028**. This report schedules new debt and grant funding. New debt funding is per recommendations in the most recent rate study adopted by the District in early 2022. The plan is grouped into several categories:
   - **Contingent on Receiving Grant Funding.** Includes projects identified in the Sudden Valley Water Treatment Plant 20-year Facility Plan. These are projects that the Board of Commissions would like to do, but only if they are funded by grants. They are arbitrarily scheduled for 2028 so that they appear in the 6-year plan.
   - **Haz Mit Grant Funds.** Includes Hazard Mitigation Grant Funds for the Division 7 Reservoir Replacement Project.
   - **New Sewer Debt – Bond, PWTF, Etc.** This is a placeholder for the District's share of the upcoming City of Bellingham Post Point Wastewater Treatment Plant biosolids handing improvements.
   - **New Water Debt – Bond, PWTF, Etc.** Includes Sudden Valley Water Treatment Plant projects in the 20-year Facilities Plan that were identified by the Board of Commissioners to be funded by debt as part of the adopted 2022 rate study.

6. **Project Narratives**. These are specific project narratives that describe the proposed project, asset needs, cost estimates, and assumptions. The narratives are keyed to the system reinvestment plan projects by the CIP# (the Capital Improvement Plan Project #). Narratives are included for projects in the 2023 and 2024 budget cycle.

2023/2024 Continuing Active Project Estimates

Project Number	Report Last Revised 11/01/2022 Project Title / Tasks	Projected Budget To Completion	Spent to Date as of 10/19/2022	Additional Payments in 2022	Estimated 2023 Expenses	Estimated 2024 Expenses
C 1802	Dellesta, Edgewater & Euclid Sewer Pump Stations	1,816,583	1,130,839	1,236	684,508	0
C 2112	Rocky Ridge & Lakewood Predesign and Shoreline Permitting	439,000	108,294	11,706	319,000	0
C 2113	Flat Car Reverse Flow to SVPS - Design & Permitting	153,000	10,575	14,425	128,000	0
M 2120C	Nov 2021 Flood - Permanent Protection - Beaver Creek Exposed Sewer Mains - Begin Design and Permitting (Design scope unknown, construction cost unknown)	40,000	0	0	40,000	0
M 2120E	Nov 2021 Flood - Permanent Protection - 1120 Dondee Ct Exposed Sewer Lateral - Begin Design and Permitting (Design scope unknown, construction cost unknown)	15,000	0	0	15,000	0
C 2202	Replace Sewer Camera Equipment	150,000	0	0	0	150,000
M 2207	UPS and Battery Backup Mods (Various Stations)	15,000	0	0	15,000	0
M 2208	Tomb SPS Control Panel Mods	8,000	0	0	8,000	0
	Subtotal Sewer	***2,636,583***	***1,249,708***	***27,367***	***1,209,508***	***150,000***
C 1909	Little Strawberry Bridge Water Main Slip Line with HDPE	20,000	0	0	20,000	0
C 1913	SVWTP 20-Year Facility Plan	140,000	128,805	11,195	0	0
C 2012	Austin-Fremont PRV Rebuild	10,000	0	0	10,000	0
C 2109	Geneva Res Valve for Emergency Isolation	10,000	4,860	0	5,140	0
C 2111	Div 7 Reservoir Replacement	243,080	153,503	21,497	68,080	0
C 2111.1	Phase 1- Wilson Design & Permitting	201,080	153,503	21,497	26,080	0
C 2111.2	Phase 1 - Easements (per Appraisal Group of the NW)	42,000	0	0	42,000	0
C 2210	Reservoir and WTP Site Security Assessment and Plan	50,000	0	0	50,000	0
C 2211	South Geneva Booster Standby Generator and ATS	60,000	38,235	0	21,765	0
M 2213	Pinto Creek PRV Replacement and Add Flow Meter	18,000	0	0	18,000	0
C 2214	Lead Service Line Inventory Planning	15,000	0	2,500	6,000	6,500
A 2215	Exterior Coating Assessment/Estimates for D22 roof and D30	13,780	0	13,780	0	0
M 2226	Div 30 Reservoir Removal of Hazard Trees	20,000	5,882	0	14,118	0
M 2230	Scenic Ave Intertie Valve Repair	60,000	0	55,000	5,000	0
	Subtotal Water	***659,860***	***331,285***	***103,972***	***218,103***	***6,500***
C 2006	SCADA Telemetry - Managed Ethernet Switches	20,000	16,263	0	3,737	0
C 2106	SVWTP to SVPS Telemetry Comm Study, Testing	10,000	4,224	0	5,776	0
C 2203	Div 30 Booster and SVSPS PLC and UPS Improvements	224,643	0	45,000	179,643	0
C 2216	Replace Tool Truck	75,000	0	0	75,000	0
M 2218	Spare PLC Components	20,000	0	0	20,000	0
C 2219	1000 Gal Diesel Fuel Tank at Shop	20,000	0	0	20,000	0
M 2221	Shop Perimeter Fence Repair from Tree Damage	10,000	0	0	10,000	0
A 2228	Agate Area Wells Exhibits and Mapping	5,400	0	5,400	0	0
C 2231	Stand-alone Temporary Control Panel	20,000	0	0	20,000	0
	Subtotal General	***405,043***	***20,487***	***50,400***	***334,156***	***0***
	Grand Total	*3,701,486*	*1,601,480*	*181,739*	*1,761,767*	*156,500*

Sewer System Reinvestment Plan 2023 thru 2028 (CASH FUNDED)

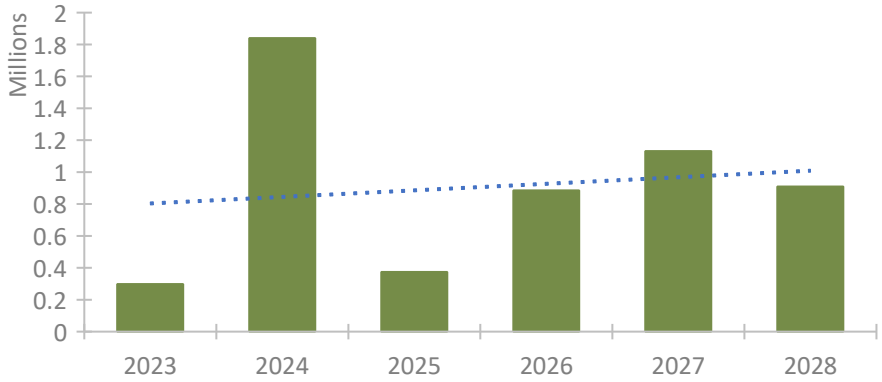
Program Area / CIP Project # / CIP Project Name			Total	2023	2024	2025	2026	2027	2028
	BRE								
Capital Outlay - General (Costs are halved, split 50/50 between Water/Sewer)									
A0005	50	IT Infrastructure - Replace/Update Hardware, Network Security, & OS (newest server installed in 2022)	37,500			18,000			19,500
V0001	18	Replace Tool Truck (7 tool trucks in fleet, oldest 1999 model, newest 2020 model)	156,000		49,000		52,000		55,000
E0007	12	Replace Mini Excavator (2005 model in fleet)	52,000						52,000
E0002	10	Replace 5-yard Dump Truck (2007 model in fleet)	93,000					93,000	
V0002	9	Replace Admin Staff Vehicle (4 cars in fleet, oldest 2000 model, newest 2017 model)	19,500					19,500	
		Subtotal	**358,000**		**49,000**	**18,000**	**52,000**	**112,500**	**126,500**
Capital Outlay - Sewer									
A0010	35	Update Sewer Comprehensive Plan (Current Plan approved 7/21/2020)	113,000				113,000		
E0003	14	Replace Sewer Camera Vehicle (2003 model in fleet)	116,000					116,000	
		Subtotal	**229,000**				**113,000**	**116,000**	
Capital Projects - Sewer									
0032a	36	Agate Bay Sewer Pump Station - Predesign and Shorelines Permitting	146,000			146,000			
0032b	36	Agate Bay Sewer Pump Station - Design and Bidding	188,000				188,000		
0032c	36	Agate Bay Sewer Pump Station - Construction	813,000					813,000	
0222b	36	LWBI CIPP Renewal Project P1-2023 (when all P1 done current ERU capacity w/o need for det tank)	185,000	185,000					
0222c	36	LWBI CIPP Renewal Project P1-2024 (when all P1 done current ERU capacity w/o need for det tank)	174,000			174,000			
0222d	36	LWBI CIPP Renewal Project P2 (when all P2 done build-out ERU capacity w/o need for det tank)	532,000				532,000		
0055	30	Rocky Ridge Pump Station - Construction and SDC	880,000		880,000				
0056	30	Lakewood Pump Station - Construction and SDC	792,000		792,000				
0171	18	Sudden Valley Sewer Pump Station - Recondition Electrical Controls	248,000						248,000
0172	16	Flat Car Sewer Pump Station - Recondition Electrical Controls	248,000						248,000
0173	16	Beaver Sewer Pump Station- Recondition Electrical Controls	248,000						248,000
S0001a	15	Sewer System Rehab and Replacement Projects	232,000	113,000	119,000				
S0001b	15	Sewer System Rehab and Replacement Projects	36,000			36,000			
S0001c	15	Sewer System Rehab and Replacement Projects	77,000					38,000	39,000
0202	12	Airport Sewer Crossing Gravity Pipeline Sag - Reinstall 250LF to Remove Sag	52,000					52,000	
		Subtotal	**4,851,000**	**298,000**	**1,791,000**	**356,000**	**720,000**	**903,000**	**783,000**
		Grand Total	**5,438,000**	**298,000**	**1,840,000**	**374,000**	**885,000**	**1,131,500**	**909,500**

Program Area / CIP Project # / CIP Project Name	Total	2023	2024	2025	2026	2027	2028
BRE							

Analytical Summary

Assumed Year over Year Cost Estimate Escalation:	10.0%	5.0%	3.0%	3.0%	3.0%	3.0%
Annual Budget Targets per 2022 Rate Study (Study assumes 3% annual construction Inflation) ===>	$820k	$830k	$840k	$850k		

Average Annual Total	Over Plan Years
1,069,000	Years 1+2
837,333	Years 1+2+3
849,250	Years 1+2+3+4
905,700	Years 1+2+3+4+5
906,333	Years 1+2+3+4+5+6



Water System Reinvestment Plan 2023 thru 2028 (CASH FUNDED)

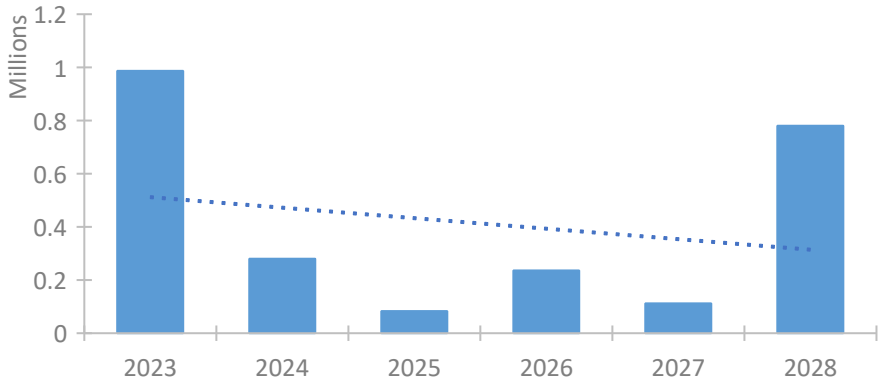
Program Area / CIP Project # / CIP Project Name	BRE		Total	2023	2024	2025	2026	2027	2028
Capital Outlay - General (Costs are halved, split 50/50 between Water/Sewer)									
A0005	50	IT Infrastructure - Replace/Update Hardware, Network Security, & OS (newest server installed in 2022)	37,500			18,000			19,500
V0001	18	Replace Tool Truck (7 tool trucks in fleet, oldest 1999 model, newest 2020 model)	156,000		49,000		52,000		55,000
E0007	12	Replace Mini Excavator (2005 model in fleet)	52,000						52,000
E0002	10	Replace 5-yard Dump Truck (2007 model in fleet)	93,000					93,000	
V0002	9	Replace Admin Staff Vehicle (4 cars in fleet, oldest 2000 model, newest 2017 model)	19,500					19,500	
		Subtotal	**358,000**		**49,000**	**18,000**	**52,000**	**112,500**	**126,500**
Capital Outlay - Water									
W0005	35	Reservoirs - Inspection & Maintenance	41,000		41,000				
V0003	18	Replace Locator / Meter Reading Van (2018 model in fleet)	53,000						53,000
W0009	16	SVWTP - Replace 6 Turbidimeters and 2 Chlorine Analyzers	59,000						59,000
0219a	1	Misc 2023 Water Capital Outlay	6,000	6,000					
0219b	1	Misc 2024 Water Capital Outlay	38,000		38,000				
		Subtotal	**197,000**	**6,000**	**79,000**				**112,000**
Capital Projects - Water									
1001	72	SVWTP - Core - Alum System Improvements	88,000	88,000					
0145a	70	Div 7 Reservoir Phase 2 Construction FEMA HMG 12.5% Local Match Commitment	229,000	229,000					
0145b	70	Div 7 Reservoir Phase 2 Construction Supplemental LWWSD Cash Funding	664,000	664,000					
0228	36	Eagleridge - Replace High Flow Pumps Control Panel, Integrate with Low Flow Pumps	116,000		116,000				
1004	32	SVWTP - Core - Replace Transfer Pumps - Design and Construction	542,000						542,000
0110	18	Security - Intrusion Alarms at Reservoirs, Cameras at SVWTP AHWTP	184,000				184,000		
0215	16	1237 Lakeview St - Replace 2" PVC with 2" HDPE	65,000			65,000			
0226	12	Division 30 Reservoir - Impressed Current Cathodic Protection	36,000		36,000				
		Subtotal	**1,924,000**	**981,000**	**152,000**	**65,000**	**184,000**		**542,000**
		Grand Total	**2,479,000**	**987,000**	**280,000**	**83,000**	**236,000**	**112,500**	**780,500**

Program Area / CIP Project # / CIP Project Name	Total	2023	2024	2025	2026	2027	2028
BRE							

Analytical Summary

Assumed Year over Year Cost Estimate Escalation:	10.0%	5.0%	3.0%	3.0%	3.0%	3.0%
Annual Budget Targets per 2022 Rate Study ===>	$260k	$270k	$280k	$290k		

Average Annual Total	Over Plan Year
633,500	Years 1+2
450,000	Years 1+2+3
396,500	Years 1+2+3+4
339,700	Years 1+2+3+4+5
413,167	Years 1+2+3+4+5+6



2023/2024 Capital Outlay

Report Last Revised 10/27/2022

CoF	PoF	RF	BRE	2023 Budget Amount	2024 Budget Amount	Description
						Sewer
				$0	$0	Total Sewer
						Water
2	10	1.00	20	$5,000		BOOSTER - Eagleridge Diesel Fuel Tank Replacements.
2	9	1.00	18		$18,000	SVWTP - Replace 4 filter flow meters.
2	9	1.00	18		$5,000	SVWTP - Replace backwash flow meter.
1	1	1.00	1		$10,000	DISTRIBUTION - Install Autoflushers on deadend water mains on Wood Rush (towards lake) and Big Leaf (Div 30 area).
				$5,000	$33,000	Total Water
						General (costs split 50/50 between water/sewer)
				$0	$0	Total General
				$5,000	$33,000	Grand Total

This appears as CIP #0219a "Misc 2023 Water Capital Outlay" on the 6-year Water System Reinvestment Plan

$6,000 **Inflated to 2023 Dollars (10% from 2022 to 2023) - rounded to nearest $1000**

$38,000 **Inflated to 2024 Dollars (10% from 2022 to 2023 + 5% from 2023 to 2024) - rounded to nearest $1000**

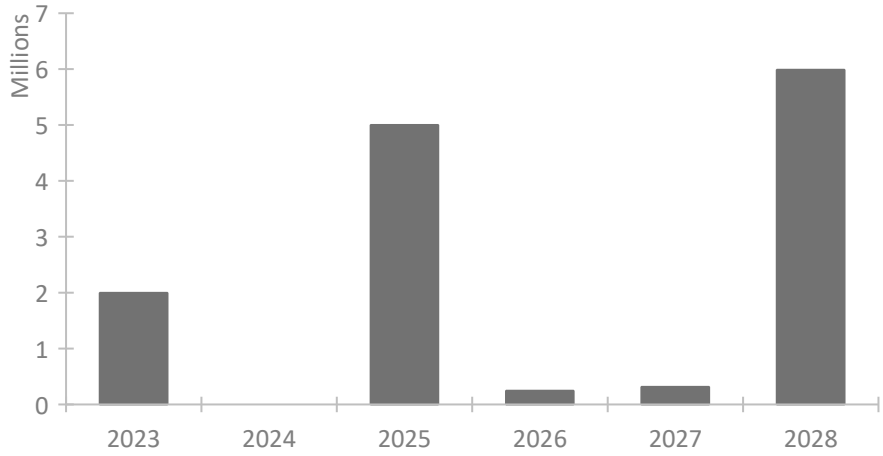
This appears as CIP #0219b "Misc 2024 Water Capital Outlay" on the 6-year Water System Reinvestment Plan

Debt/Grant Funding Plan 2023 thru 2028

Program Area / CIP Project # / CIP Project Name			Fund	Total	2023	2024	2025	2026	2027	2028
Contingent on Receiving Grant Funding (note: unknown if/when obtained)										
1010	36	SVWTP - Core Seismic - WTP Main Bldg Seismic Retrofits (Grant Contingent)		194,000						194,000
1009	35	SVWTP - Core Security - Site Security Improvements (Grant Contingent)		194,000						194,000
1011	32	SVWTP - Core Seismic - Finished Water Pump Bldg Seismic Retrofits (Grant Contingent)		464,000						464,000
1012	27	SVWTP - Medium Config - Chlorine Gas Modifications (Grant Contingent)		395,000						395,000
1013	18	SVWTP - Medium Config - Rehabilitate & Repurpose Existing CCB (Grant Contingent)		1,599,000						1,599,000
		Subtotal		**2,846,000**						**2,846,000**
Haz Mit Grant Funds (87.5% Grant) - Amounts do NOT include 12.5% local match										
0145c	70	Div 7 Reservoir Phase 1 - Grant Funding $393.702 (which is 87.5% of $449,975)		394,000	394,000					
0145d	70	Div 7 Reservoir Phase 2 Construction - Grant Funding $1,602,174 (which is 87.5% of $1,831,055)		1,602,000	1,602,000					
		Subtotal		**1,996,000**	**1,996,000**					
New Sewer Debt - Bond, PWTF, Etc										
0193	100	COB Post Point WWTP Biosolids Handling (LWWSD Cost Share 4.8%) - Estimate as of 9/26/2022 per COB Council Decision to Rehab Incinerators		5,000,000			5,000,000			
		Subtotal		**5,000,000**			**5,000,000**			
New Water Debt - Bond, PWTF, Etc										
1002a	72	SVWTP - Core - New 0.3MG Welded Steel CCB - Design, Permitting		245,000				245,000		
1002b	72	SVWTP - Core - New 0.3MG Welded Steel CCB - Design, Permitting (continued)		316,000					316,000	
1002c	72	SVWTP - Core - New 0.3MG Welded Steel CCB - Construction		1,968,000						1,968,000
1006	54	SVWTP - Medium Config - Rehab Existing Filters 1 & 2		283,000						
1003	32	SVWTP - Core - Replace Finished Water Pumps		1,174,000						1,174,000
W9999	1	Blank		0	0	0	0	0	0	0
		Subtotal		**3,986,000**	**0**	**0**	**0**	**245,000**	**316,000**	**3,142,000**
		Grand Total		**13,828,000**	**1,996,000**	**0**	**5,000,000**	**245,000**	**316,000**	**5,988,000**

Analytical Summary

Assumed Year over Year Cost Estimate Escalation:	10.0%	5.0%	3.0%	3.0%	3.0%	3.0%



CAPITAL PROJECT NARRATIVE

Project Name:	Rocky Ridge Sewer Pump Station Replacement
CIP #:	0055

Asset Register:	Sewer ➔ Pump Stations ➔ Rocky Ridge				
Failure Mode:	Capacity	Level of Service	Mortality	Efficiency	
Business Risk Exposure:	30	= 10 x 3 x 1 (PoF x CoF x Redundancy)			
Remaining Life:	0 years	**Consumed Life:**	40+ years	**Effective Life:**	40 years

PURPOSE and DESCRIPTION OF THE PROJECT

Project includes retrofitting existing Smith & Loveless wet well mounted pump station with new single speed pumps, controls, telemetry, pressure transducers for monitoring the wet well level, backup high and low floats and a pole mounted work light manually switched at control panel. Land access is limited to foot traffic and the project will need to address a construction easement or access to the site via Lake Whatcom. The retrofit is part of a District wide pump station plan to replace all 30+ year old equipment.

The existing pump station was installed in the 1970's and is located adjacent to Lake Whatcom. Two existing 10 HP pumps each have a design point of 100 GPM at 70-feet TDH. The wet well diameter is four feet and the power service is currently 3-phase / 230V. Check valves are inaccessible for maintenance and cleaning. If a check valve ever jams it would be a major project to access the check valves for service.

Phase 1 – Predesign, Permitting is in progress (District project #C2112). Predesign report was completed and presented to board on 7/13/2022. Board moved to pursue permitting and design of replacements with top mounted configurations. Two board members expressed importance to provide all-weather foot path/stair access. Staff is pursing permitting and design of all-weather footpath/stair access to each station; and planning to have an additive bid alternate on the bid form for the work.

CAPITAL PROJECT NARRATIVE

Budget Estimate (*Based on Edgewater and Dellesta. Assumes doing two stations at same time – Lakewood & Rocky Ridge)*

	Rocky Ridge	Lakewood	
Phase 1 - Predesign, Permitting (In Progress - Project #C2112)	88,500	88,500	Existing $177k NTE contract with RH2 (included with 2023/20204 Continuing Active Project Estimates)
Phase 2 - Design & Bidding			
RR & LW Pump Stations	104,500	104,500	Future amendment with RH2
Access Trail/Stairs	20,000	13,000	Future amendment with RH2
Easements (placeholder)	20,000	-	Assume WWU $0 for easement
Subtotal	144,500	117,500	($262k included in 2023/2024 Continuing Active Project Estimates for future amendments and easement placeholder)
Phase 3 - Construction, SDC			
Construction			
RR & LW Pump Stations	596,000	563,000	
Access Trail/Stairs	110,000	70,000	
Subtotal	706,000	633,000	
Services During Construction			
RR & LW Pump Stations	46,500	46,500	Future amendment with RH2
Access Trail/Stairs	9,000	6,000	Future amendment with RH2
Subtotal	55,500	52,500	
Subtotal Phase 3	761,500	685,500	
Subtotal Phase 3 Including Escalation 10% in 2023 + 5% in 2024	880,000	792,000	($880k for RR and $792k for LW construction included on Sewer System Reinvestment Plan in year 2024)
Grand Project Total - All Phases	**1,113,000**	**998,000**	

For further information about this project contact Bill Hunter.

Revision History

- Created 8/1/2006.
- Revised 8/2/2006 by MMM: Revised project scope, added budget.
- Revised 8/3/2006 by BH: Added to purpose.
- Revised 8/28/2006 by MMM: Revised PS description.
- Revised 12/6/2007 by BH: Adjusted budget to reflect recent Plum/Strawberry Canyon project costs.
- Revised 8/6/2009 by BH: Adjusted budget to reflect recent Tomb PS project.
- Revised 10/4/2011 by BH: Updated budget numbers to be a bit more conservative.
- Revised 12/5/2016 by BH: Updated budget numbers base on recent pump station projects.
- Revised 10/24/17 by KH. Updated narrative and updated budget numbers based on recent pump station projects.
- Revised 11/30/2020 by BH. Updated budget numbers based on Edgewater and Dellesta Sewer Pump Station Improvements.
- Updated 11/30/2021 by BH. Updated phase status and budget estimates.
- Updated 10/31/2022 by BH. Updated project cost estimates based on RH2 input 9/15/2022.

CAPITAL PROJECT NARRATIVE

Project Name:	Lakewood Sewer Pump Station Replacement
CIP #:	0056

Asset Register:	Sewer ➔ Pump Stations ➔ Lakewood				
Failure Mode:	Capacity	Level of Service	Mortality	Efficiency	
Business Risk Exposure:	30	= 10 x 3 x 1 (PoF x CoF x Redundancy)			
Remaining Life:	0 years	**Consumed Life:**	46 years	**Effective Life:**	40 years

PURPOSE and DESCRIPTION OF THE PROJECT

Project includes retrofitting existing Smith & Loveless wet well mounted pump station with new single speed pumps, controls, telemetry, pressure transducers for monitoring the wet well level, backup high and low floats and a pole mounted work light manually switched at control panel. Maintenance access is sometimes an issue with the adjacent homeowner and the project will need to provide a new permanent access road and easement either through WWU or the adjacent homeowner's property. The retrofit is part of a District wide pump station plan to replace all 30+ year old equipment.

The existing pump station was installed in the 1974 and is located adjacent to Lake Whatcom. The service area for this pump station is very small (about 5 residences and the WWU Lakewood facility). Wastewater from this station is re-pumped by Airport Pump Station. The station has two existing 15 HP pumps; each have a design point of 100 GPM at 85-feet TDH. The wet well diameter is x-feet and the power service is currently 3-phase / 230V. Check valves are inaccessible for maintenance and cleaning. If a check valve ever jams it would be a major project to access the check valves for service. The O&M Manual for this pump station is missing.

Phase 1 – Predesign, Permitting is in progress (District project #C2112). Predesign report was completed and presented to board on 7/13/2022. Board moved to pursue permitting and design of replacements with top mounted configurations. Two board members expressed importance to provide all-weather foot path/stair access. Staff is pursing permitting and design of all-weather footpath/stair access to each station; and planning to have an additive bid alternate on the bid form for the work.

CAPITAL PROJECT NARRATIVE

Budget Estimate (*Based on Edgewater and Dellesta. Assumes doing two stations at same time – Lakewood & Rocky Ridge)*

	Rocky Ridge	Lakewood	
Phase 1 - Predesign, Permitting (In Progress - Project #C2112)	88,500	88,500	Existing $177k NTE contract with RH2 (included with 2023/20204 Continuing Active Project Estimates)
Phase 2 - Design & Bidding			
RR & LW Pump Stations	104,500	104,500	Future amendment with RH2
Access Trail/Stairs	20,000	13,000	Future amendment with RH2
Easements (placeholder)	20,000	-	Assume WWU $0 for easement
Subtotal	144,500	117,500	($262k included in 2023/2024 Continuing Active Project Estimates for future amendments and easement placeholder)
Phase 3 - Construction, SDC			
Construction			
RR & LW Pump Stations	596,000	563,000	
Access Trail/Stairs	110,000	70,000	
Subtotal	706,000	633,000	
Services During Construction			
RR & LW Pump Stations	46,500	46,500	Future amendment with RH2
Access Trail/Stairs	9,000	6,000	Future amendment with RH2
Subtotal	55,500	52,500	
Subtotal Phase 3	761,500	685,500	
Subtotal Phase 3 Including Escalation 10% in 2023 + 5% in 2024	880,000	792,000	($880k for RR and $792k for LW construction included on Sewer System Reinvestment Plan in year 2024)
Grand Project Total - All Phases	**1,113,000**	**998,000**	

CAPITAL PROJECT NARRATIVE

For further information about this project contact Bill Hunter.

Revision History

- Created 8/2/2006.
- Revised 8/2/2006 by MMM: Revised project scope, added budget.
- Revised 8/3/2006 by BH: Added to purpose.
- Revised 12/6/2007 by BH: Adjusted budget up slightly.
- Revised 8/6/2009 by BH: Adjusted budget to reflect recent Tomb PS project.
- Revised 10/4/2011 by BH: Updated budget numbers to be a bit more conservative.
- Revised 12/5/2016 by BH: Updated budget numbers base on recent pump station projects.
- Revised 10/24/17 by KH. Updated narrative and updated budget numbers based on recent pump station projects.
- Revised 11/30/2020 by BH. Updated budget numbers based on Edgewater and Dellesta Sewer Pump Station Improvements.
- Updated 11/30/2021 by BH. Updated phase status and budget estimates.
- Updated 10/31/2022 by BH. Updated project cost estimates based on RH2 input 9/15/2022.

CAPITAL PROJECT NARRATIVE

Project Name:	Division 7 Reservoir Replacement
CIP #:	0145

Asset Register:	Water ➔ Reservoirs				
Failure Mode:	Capacity	Level of Service	Mortality	Efficiency	
Business Risk Exposure:	54	= 6 x 9 x 1 (PoF x CoF x Redundancy)			
Remaining Life:	51 years	**Consumed Life:**	49 years	**Effective Life:**	100 years

PURPOSE and DESCRIPTION OF THE PROJECT

A structural analysis of the Lake Whatcom Water and Sewer District Division 7 water reservoir has found significant deficiencies in its ability to meet existing earthquake code requirements (BHC report, December 2016). The recent Water System Plan also analyzed the capacity of the Division 7 reservoir and found it to be significantly oversized at a volume of one million gallons. The Water System Plan recommended an alternatives analysis for this reservoir to compare the cost of making seismic upgrades and replacing the interior and exterior coatings that are beyond their useful life against the alternative of replacing the Division 7 reservoir with a more appropriate (~half a million gallons) amount of storage volume. Wilson Engineering LLC prepared a technical memorandum dated February 8, 2018 that documents the analysis of alternatives.

Alternative 2 was recommended as the preferred alternative that replaces 1-millon gallon Division 7 reservoir with two smaller 185,000 gallon reservoirs. The advantages noted in the tech memo for Alternative 2 include:

1. Capital Cost – the estimated capital cost of Alternative 2 is significantly lower than other alternatives.
2. Water Quality – The existing Division 7 reservoir is significantly oversized and results in an excessive average water age of 4.6 days. The hydraulic residence time in the reservoirs proposed in Alternative 2 would be 2.1 days under average day demand in a build-out scenario. This would be within the AWWA recommendation of less than 2.5 days average hydraulic residence time and would help improve water quality in terms of less formation of disinfection by-products and better maintenance of chlorine residual in the distribution system.
3. Improved Water Pressure – Installing new storage 25 feet higher than the existing reservoir will improve water pressure for those houses immediately adjacent to the reservoir. The increased pressure will not negatively impact the system in terms of over pressurizing or decreasing pumped flow excessively.
4. Resiliency – Having two parallel water storage reservoirs provides substantially improved system resiliency in case of emergency (earthquake or unexpected failure of one tank) or typical maintenance. Having the ability to keep one reservoir in service while taking the other out of service will improve the District's ability to serve their customers efficiently.

5. Maintenance – Replacing a steel reservoir with concrete reservoirs decreases maintenance efforts and costs. The corrosion protection systems (interior and exterior coatings, cathodic protection) that are required for steel reservoirs are not needed for concrete reservoirs. Current interior coatings for a steel reservoir need to be replaced/refurbished at least every 15 years. This requires the tank to be taken out of service for the work, and this is significantly challenging with only one tank.
6. Construction/Operation Feasibility – other alternatives would require temporary storage during construction that would either be prohibitively expensive or would make operation of the system during construction very challenging. Selected alternative allows the existing tank to remain in service during construction.

In 2018, the District submitted a FEMA Hazard Mitigation Grant application to replace the Division 7 Reservoir with two new reservoirs constructed to meet seismic standards, and to implement ShakeAlert on reservoirs, water pumps and water treatment plants District-wide.

The grant application was developed in conjunction with Washington State Emergency Management Division (WA-EMD) and the Federal Emergency Management Agency (FEMA) as a Hazard Mitigation project. The cost share would be as follows: FEMA 75%, WA-EMD 12.5%, and LWWSD 12.5%.

In 2019, the District also applied for a Public Works Trust Fund loan to assist with the District's 12.5% share. Unfortunately, the District's application did not score high enough to qualify.

In late summer 2021 the District went through a Request for Qualifications process to select the most qualified engineering consultant for the project. On October 13, 2021, the Board of Commissioners selected Wilson Engineering LLC as the most qualified consultant and an Architectural/Engineering Agreement was executed shortly after.

In late 2021, the District learned that is was awarded grant funding for the project.

In early spring 2022, the grant agreement was executed for Phase 1 – Design and Permitting.

Through 2022 the consultant and staff have completed significant parts of predesign and sizing of the proposed reservoirs. Project briefings were provided to the board at the May 25, 2022 and July 13, 2022 meetings. At the latter meeting, the board affirmed by motion to proceed with design and permitting of two proposed reservoirs totaling 475,800 gallons. Permit application documents and the Washington State Department of Health project report are being prepared for submittal to reviewing agencies.

Budget Estimate

See attached spreadsheet that summarizes current cost estimates, grant funding, and funding shortfall.

Construction cost estimates, one in May 2022 and a second in October 2022, have been prepared to track projected costs for funding and budgeting. Estimated construction costs have escalated significantly from the estimates prepared in 2018 and 2021.

Staff is developing a request for additional grant funds due to construction cost estimate escalation. The grant coordinator indicated that can a request for additional funding can be

made, but there is no guarantee of the desired result. Staff is also looking at possible DWSRF or PWTF loans.

The District also applied for a hazard mitigation grant (HMG) to fund the new 0.3 million gallon SVWTP Chlorine Contact Basin (CCB) which is estimated near $2M. The District's Debt/Grant Funding Plan schedules new debt for the SVWTP CCB in the 2026-2028 time frame. If HMG grant funding comes through on the SVWTP CCB, it could allow the District to utilize the planned debt for the SVWTP CCB and switch it to fund the shortfall for the Division 7 Reservoir. There has been no news from agencies regarding the status of the SVWTP CCB grant application.

For further information about this project contact Bill Hunter.

Revision History

- Created 11/30/2020 by BH.
- 11/2/2022 BH. Update narrative and budget estimates.

Division 7 Reservoir Project Cost Estimate and Funding Summary

District Project #C2111 (aka CIP# 0145 in Water System Reinvestment and Debt/Grant Plans)
Project Estimates as of 10/27/2022

Estimated Project Costs			
Phase 1 - Wilson Agreeement	$	201,080.00	Design, Permitting, Bidding
Phase 1 - Easements (per Appraisal Group of the NW)	$	42,000.00	
Subtotal Phase 1	$	243,080.00	
Phase 2 - Wilson 30% Design Construction Cost Estimate 10/20/2022	$	2,602,000.00	Includes 20% contingecy and sales tax.
Cost Escalation from 2022 to 2023	$	-	No escalation applied since cost estimate refreshed and current as of October 2022.
Subtotal Phase 2 Construction Contract in 2023 Dollars	$	2,602,000.00	
Phase 2 - Draft Wilson Services During Construction 10/11/2022	$	100,000.00	Assumes LWWSD performs certified payroll reviews, field observation, inspection reports. $183k if all work performed by Wilson.
Subtotal Phase 2	$	2,702,000.00	
Total Estimated Project Cost	$	2,945,080.00	

Funding Sources			
Phase 1 - Design, Permitting, Etc			
Federal Grant Funding (75%)	$	337,458.75	Note $394k ($337.5k + $56.2k) shown on Grant/Debt Funding Plan in year 2023 which is the Federal and State funding 87.5% share
State Grant Funding (12.5%)	$	56,243.13	
Local Match - LWWSD (12.5%)	$	56,243.13	
Subtotal Phase 1 Funding per Grant Agreement	$	449,945.00	
Phase 2 - Consruction			
Federal Grant Funding (75%)	$	1,373,291.25	Note $1.602M ($1,373.3k + $228.9k) is shown on Grant/Debt Funding Plan in year 2023 which is the Federal and State 87.5% share
State Grant Funding (12.5%)	$	228,881.88	
Local Match - LWWSD (12.5%)	$	228,881.88	Note $229k LWWSD 12.5% share shown on Water System Reinvestment Plan in year 2023
Subtotal Phase 2 Funding per Grant Application	$	1,831,055.00	Note grant agreement amendmentment was planned by FEMA, State & LWWSD to add construction funding once reservoir predesign was nearing completion when project scope requirements have been defined to prepare accurate construction
Total Original Project Funding Plan	$	2,281,000.00	
Projected Additional Funding Needs	**$**	**664,080.00**	Note $664k LWWSD supplemental funding shown on Water System Reinvestment Plan in year 2023

CAPITAL PROJECT NARRATIVE

Project Name:	LWBI CIPP Renewal Project
CIP #:	0222

Asset Register:	Sewer ➔ Collection System					
Failure Mode:	Capacity	Level of Service		Mortality	Efficiency	
Business Risk Exposure:	36	= 6 x 6 x 1 (PoF x CoF x Redundancy)				
Remaining Life:	50 years	**Consumed Life:**	50 years	**Effective Life:**	100 years	

PURPOSE and DESCRIPTION OF THE PROJECT

Perform cure-in-place-pipe (CIPP) pipe rehabilitation on multiple gravity sewer pipe segments along Lake Whatcom Boulevard. The proposed project will begin at manhole GT- 27 (near 2670 Lake Whatcom Boulevard) and will continue downstream to manhole GT-25. Eventual, full CIPP rehabilitation of twenty pipe segments of the Lake Whatcom Boulevard Interceptor (LWBI) will eliminate the District's dependence on the Sudden Valley sewer detention basin to prevent sewer overflows at full build-out ERUs.

The LWBI has been in operation nearly 50 years. Recent television inspection identifying pipe wall corrosion and significant struvite buildup, along with a small sewer overflow at manhole GT-29 in February 2020, prompted an updated hydraulic analysis of the LWBI. This hydraulic analysis modelled the overflow event and with model calibration estimated the current pipe conditions and system capacity. The hydraulic modelling confirmed that existing pipe wall conditions are reducing the system capacity. Iterative modeling using projected pipe conditions following CIPP renewal, shows that upon relining twenty segments, the LWBI interceptor will have sufficient system capacity without dependence on the detention basin.

The segments have been prioritized in the hydraulic analysis as Priority 1 and Priority 2 repairs.

> Priority 1 repairs are pipe segment repairs that will eliminate the dependence on the detention basin to prevent sewer overflows for current ERUs.
>
> Priority 2 repairs are pipe repairs that will eliminate dependence on the detention basin to prevent sewer overflows for build-out ERUs.

Below is the pipe relining plan.

Priority	Planned Construction Year	Upstream MH	Downstream MH	Segment	Diameter (inch)	Length (feet)	LWBI CIPP Budget Estimate ($)
Priority 1	**2021**	GT-29STP	GT-28	29-28 (480 LF)	10	480	
		GT-28	GT-27A	28-27A (213 LF)	10	213	
		GT-27A	GT-27	27A-27 (170 LF)	10	170	2021 COMPLETED
		GT-24	GT-23	24-23 (438 LF)	14	438	CONTRACT AMOUT
						1301	$ 149,923.00
	2022	GT-27	GT-26	27-26 (313 LF)	10	313	2022 COMPLETED
		GT-26	GT-25	26-25 (385 LF)	10	385	CONTRACT AMOUT
						698	$ 89,103.00
	2023	GT-25	GT-24	25-24 (402 LF)	14	402	
		GT-23	GT-22	23-22 (269 LF)	14	269	
		GT-22	GT-21	22-21 (404 LF)	14	404	
						1075	$ 185,000.00
	2025	GT-21	GT-20	21-20 (472 LF)	14	472	
		GT-20	GT-19	20-19 (373 LF)	14	373	
						845	$ 174,000.00
Priority 2	**2026**	GT-19	GT-8	19-18 (384 LF)	14	384	
		GT-18	GT-17	18-17 (196 LF)	14	196	
		GT-17	GT16	17-16 (292 LF)	14	292	
		GT-16	GT-15	16-15 (321 LF)	14	321	
		GT-15	GT-14	15-14 (268 LF)	14	268	
		GT-14	GT-13	14-13 (306 LF)	14	306	
		GT-13	GT-12	13-12 (410 LF)	14	410	
		GT-12	GT-11	12-11 (374 LF)	14	374	
		GT-11	7	11-SPCAB (299 LF)	14	299	
						2850	$ 532,000.00

When all of the above pipe segments are rehabilitated with CIPP, the LWBI will have sufficient capacity for full system build-out without reliance on the Sudden Valley Detention Basin.

Budget Estimate:

$185,000 for segments scheduled for renewal in 2023 (2023 dollars).
$174,000 for segments scheduled for renewal in 2025 (2025 dollars).
$532,000 for segments scheduled for renewal in 2026 (2026 dollars).

Assumed escalation rates:

10% 2022 to 2023
5% 2023 to 2024
3% 2024 to 2025+ (compounded each year beyond)

CAPITAL PROJECT NARRATIVE

For further information about this project contact Bill Hunter.

Revision History

- Created 11/30/21 by KH & BH.
- 10/31/2022 by BH. Updated historical and future costs.

CAPITAL PROJECT NARRATIVE

Project Name:	Division 30 Reservoir Impressed Current Cathodic Protection System
CIP #:	0226

Asset Register:	Water ➔ Reservoirs					
Failure Mode:	Capacity	Level of Service		Mortality	Efficiency	
Business Risk Exposure:	NA	= _ x _ x _ (PoF x CoF x Redundancy)				
Remaining Life:	NA	**Consumed Life:**		**Effective Life:**		

PURPOSE and DESCRIPTION OF THE PROJECT

This project includes installation of an impressed current cathodic protection system at the Division 30 Reservoir.

Norton Corrosion performed an annual inspection of the Division 30 galvanic cathodic protection system in March 2022. The report notes that the level of corrosion in the Division 30 Reservoir exceeds what the galvanic cathodic protection system can provide and recommends the installation of an impressed current cathodic protection system. Subsequently, September 2022, Evergreen Coating Consultants (ECC) performed a coating analysis on several of the District's steel reservoirs. At this time, ECC noted the most significant interior coating deterioration is in the interior, above the waterline, and at the interior roof plates. These areas are not protected by cathodic protection systems.

The reservoir coating inspection performed by ECC in the Fall 2022 confirms the coating failures observed by Norton Corrosion at the Division 30 reservoir. The assessment by ECC reports the following current coating conditions:

Surface	Rust Grade (Sept. 2022)	Percent of Surface Rusted
Interior Roof Plates	2-G	Greater than 16.0% to 33.0%
Interior Shell Wall	6-S	Greater than 0.3% to 1.0%
Interior Ladder	5-G	Greater than 1.0% to 3.0%
Interior Overflow Pipe	5-S	Greater than 1.0% to 3.0%
Interior Inlet Pipe	3-G	Greater than 10.0% to 16.0%
Exterior Roof Plates	5-S	Greater than 1.0% to 3.0%
Exterior Shell Wall	5-S	Greater than 1.0% to 3.0%
Exterior Ladder and Cage	7-S	Greater than 0.1% to 0.3%

Where S=Spot, G=General and P=Pinpoint
Where Scale and Description of Rust Grades are per SSPC-VIS 2

ECC estimates the interior coating has 3 to 5 years of life left at this time befor steel loss starts to become more of a concern.

Evergreen Coating Consultants outlined three alternatives for this reservoir:

1. Build a new reservoir. To be feasible, the reservoir would need to either be built on land adjacent to the existing reservoir or the existing reservoir would need to be demolished so that this reservoir can be constructed. A 26-foot diameter by 40-foot tall reservoir would provide sufficient storage and hydraulic pressure. It may be possible to clear a large enough area on the existing site to construct a reservoir of that size and then demolish the existing in order to provide working space around the structure. Alternatively, it may be possible to modify the pump station that supplies the Division 30 reservoir to work as a closed zone during construction.

   Constructing a concrete, Baker Silo-style reservoir is significantly cheaper than constructing a welded steel reservoir of the same volume or even seismically upgrading and recoating the existing reservoir. The concrete reservoir will also have a lower lifecycle cost than either the new or rehabilitated welded steel reservoir due to the cost to recoat the steel reservoir over time.

2. Recoat the reservoir and not seismically upgrade it. ECC recommends recoating the interior with an AWWA D102 ICS 5 system and topcoating the exterior with an epoxy tie-coat and polyurethane finish coat that would result in a coating life of approximately 15 to 20 years. The reservoir would remain seismically deficient; however, it would preserve the steel of the reservoir. This option would require alternative storage while out of service for approximately two months.

3. Seismically upgrade and recoat the reservoir. This alternative would cause significant damage to the existing exterior coating system and thus require its full removal and replacement. ECC recommends replacing the interior coatings with an AWWA D102 ICS 3 system and the exterior with an AWWA D102 OCS 4 system providing a coating life of approximately 25 to 30 years. The reservoir would be seismically stable. This option would require alternative storage while out of service for approximately four months.

Division 30 Reservoir Alternative Opinion of Probable Construction Costs

Alternative	Total Project Cost
Alternative 1 – Construct new concrete reservoir	$1,020,000
Alternative 2 – Recoat the reservoir without seismic upgrades	$630,000
Alternative 3 – Seismically upgrade and recoat reservoir	$1,400,000

ECC's opinion is that an impressed current cathodic protection system would not extend the interior coatings life above the water level, but would extend the submerged coating life below the water level. An impressed current cathodic protection system can be reused/replaced when/if the welded steel reservoir is rehabilitated or replaced. However, if the District replaces the Division 30 reservoir with a concrete reservoir, the impressed current cathodic protection system would not be reused.

CAPITAL PROJECT NARRATIVE

Budget Estimate for installation of impressed current cathodic protection system:

Cost estimate in 2022 dollars.

$27,000 ($25,000 for installation of system + $2k for contingencies)

Cost estimate in 2024 dollars.

$36,000

Assumed escalation rates:
10% 2022 to 2023
5% 2023 to 2024
3% 2024 to 2025+ (compounded each year beyond)

For further information about this project contact Bill Hunter or Kristin Hemenway.

Revision History
- Created 11/4/2019 by BH
- Revised 11/2/2022 by KH

Project Name:	Eagleridge – Replace High Flow Pumps Control Panel, Integrate with Low Flow Pumps
CIP #:	0228

Asset Register:	Water ➔ Booster Pump				
Failure Mode:	Capacity	Level of Service	Mortality	Efficiency	
Business Risk Exposure:	36	9 x 4 x 1= (PoF x CoF x Redundancy Factor)			
Remaining Life:	0	**Consumed Life:**	33	**Effective Life:**	30

PURPOSE and DESCRIPTION OF THE PROJECT

The purpose of this project is the replace the high flow pumps control panel.

The Eagleridge Booster Pump Station, along with the rest of the Eagleridge water system, was constructed in 1989. The station was originally built to deliver City of Bellingham water throughout the Eagleridge system because City water system pressures alone were not sufficient to meet minimum pressure and flow requirements. The Eagleridge community is situated on a hillside, with the highest service being approximately 80 feet higher than the intertie.

At some point between 1989 and 2016, the City of Bellingham increased the pressure in the service area that feeds the Eagleridge system. Based on this, a recent project (District Project #C2011) was developed to study whether part or all of the pump station could be decommissioned. The engineering study determined that low flow (or domestic use) pumps are not required, and that the high flow pumps (pumps used to deliver fire flows) are needed.

In 2022 the Board of Commissioners, in coordination and input from the Eagleridge community, determined that maintaining historical water pressures above Washington State Department of Health design guidelines and District Design and Construction Standards is required to maintain pressures at historical levels of service. How to fund replacement of the low flow pumps has not been determined; whether by District rate payers as a whole or a special benefit fee applicable to only Eagleridge customers.

The determination that low flow pumps must be maintained or replaced, is a key consideration in determining the most economical solution to replacing the aging high flow pumps control panel.

The high flow pumps must remain, as the hydraulic analysis found that the City pressures were not sufficient to deliver the minimum required flow and pressure in a fire flow scenario. The hydraulic analysis found the existing high flow pumps to be oversized, and since they are simple on/off pumps (i.e., not controlled by a Variable Frequency Drive) with pump control valves (no pressure reducing function), they tend to create undesirable pressure spikes in the system. The analysis therefore concluded that the high flow pumps could be replaced with modern and

appropriately-sized pumps, or as a lower cost alternative, the existing pump control valves could be modified to add a pressure reducing function to prevent pressure spikes.

Either way, the control of the high flow pumps needs to be coordinated with the to-be-replaced low flow pumps. Custom control panels, programmable logic controller (PLC) programming and integration add a significant amount of labor costs versus package stations that have all controls and pumps delivered as a unit ready to start.

Even though the purpose of this project is simple (to replace the high flow pumps control panel), the integration/coordination of how the station will operate needs to be investigate and thought out. It may be as simple as replacing a single on/off control panel for the high flow pumps or as involved as providing a brand-new package pump system that can deliver all flows low to high.

Budget Estimate

$116k is budgeted in 2024 to determine the best overall renewal strategy for the station (both high flow and low flow pumps), and to provide some funds towards construction of the high flow pumps control panel replacement (or possibly new package station).

The scope of work depends on what is determined as the best renewal strategy, and the subsequent construction costs.

Revision History

- Created 11/2/2022 by BH.

Project Name:	Sudden Valley WTP Alum System Improvements
CIP #:	1001

Asset Register:	Water ➔ Treatment Plant					
Failure Mode:	Capacity	Level of Service		Mortality	Efficiency	
Business Risk Exposure:	60	= 10 x 6 x 1 (PoF x CoF x Redundancy)				
Remaining Life (yrs):	0	**Consumed Life (yrs):**	15	**Effective Life (yrs):**	15	

Project Purpose
The purpose of this project is to replace the existing alum storage and injections systems.

Project Description
The WTP injects alum into the raw water supply piping upstream of the flocculation tank to aid coagulation of particulates in the raw water.

The alum tank is beyond its useful life and should be replaced. This project replaces the existing alum storage tank and metering pump system but continues with equipment located within the existing WTP Main Building. It is an interim solution until the chemical equipment is relocated to a new building scheduled for 2036 in the SVWTP 20-Year Facility Plan. When equipment is finally relocated to a new building it will address problems with its proximity to electrical equipment which is contributing to deterioration and/or corrosion of the electrical components.

The project scope and cost estimate were prepared Gray & Osborne, Inc. as part of the Sudden Valley Water Treatment Plant Alternatives Analysis and 20-year Facility Plan. Below is a snapshot of the cost estimate breakdown from Tech Memo #20434-4 SVWTP Chemical System Analysis the Alternatives Analysis report.

Budget Construction Cost Estimate

LAKE WHATCOM WATER AND SEWER DISTRICT

SUDDEN VALLEY WTP ASSESSMENT AND ALTERNATIVES ANALYSIS PROJECT
PRELIMINARY COST ESTIMATE

Technical Memorandum 20434-4 - Liquid Alum in Existing WTP Main Building
November 4, 2020
G&O# 20434.00

NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1	Mobilization and Demobilization	1	LS	$ 6,500	$ 6,500
2	Alum System Modifications	1	LS	$ 18,000	$ 18,000
3	Piping, Valves, and Appurtenances	1	LS	$ 5,000	$ 5,000
4	Telemetry / SCADA Modifications	1	LS	$ 8,000	$ 8,000
				Subtotal*	**$ 37,500**
				Contingency (25%)	$ 9,400
				Subtotal	**$ 46,900**
				Washington State Sales Tax (9.0%)**	$ 4,200
				Subtotal	**$ 51,100**
				Design and Project Administration (25.0%)***	$ 12,800
				TOTAL CONSTRUCTION COST	**$ 64,000**

* Costs listed are in 2020 dollars
** Current sales tax rate is 8.7%.
*** Standard project design and administration fees are 25% of the subtotal including contingency and tax

Cost Estimate Escalation

15% from 2020 dollars to November 2022 dollars per ENR Construction Cost Index
$74k ($64k x 1.15)

10% assumed escalation from 2022 to 2023
$82k ($74k x 1.10)
$6k Additional contingencies
$88k Total 2023 budget estimate

For further information about this project contact Bill Hunter.

Revision History

- Created 6/17/2021 by KPS (G&O).
- 11/2/2022 BH. Updated project narrative description and budget estimate.

CAPITAL PROJECT NARRATIVE

Project Name:	Sewer System Rehabilitation and Replacement Projects
CIP #:	S0001

Asset Register:	Sewer ➔ Collection System					
Failure Mode:	Capacity	Level of Service		Mortality	Efficiency	
Business Risk Exposure:	10	= 10 x 1 x 1 (PoF x CoF x Redundancy)				
Remaining Life:		**Consumed Life:**		**Effective Life:**		

PURPOSE and DESCRIPTION OF THE PROJECT

Combines several separate District projects into one annual project. The goals of this project include: finding and repairing inflow and infiltration (I&I) sources, rehabilitating degraded pipelines, and increasing capacity where needed to provide for planned growth and future flow rates.

The annual project scope and focus will vary based on the type of high priority items identified during the previous year. Types of work include: sewer main slip lining (spot repairs and full lengths), pressure grouting service tees, pressure grouting manhole leaks/voids, rebuild/seal manholes, smoke testing, and other efforts to reduce I&I, rehabilitate pipelines, and increase capacity where needed.

Engineering (Plans, Specs & Est.):	District Staff
Bid & Contract Administration:	District Staff
Construction:	$113,000 (2023)
	$119,000 (2024)
	$36,000 (2025)
	$38,000 (2027)
	$39,000 (2028)

2023 & 2024 budget includes $113,000 and $119,000 respectively for the following tasks:

Task 1 – Inflow and Infiltration Repairs. Work includes minor sewer system rehab and replacement that target elimination of inflow and infiltration. The District will utilize a unit price contract to make the repairs as they are found. Staff will package the repairs to minimize mobilization costs and complete as many improvements as the budget allows. The type of work includes but is not limited to: manhole / wet well grouting, pipe slip lining and spot repairs, lateral grouting, and other miscellaneous repairs.

Cost estimates have been escalated to future years assuming the following escalation rates:

10% 2022 to 2023
5% 2023 to 2024
3% 2024 to 2025+ (compounded each year beyond)

For further information about this project call Bill Hunter.

Revision History

- 10/26/2011. Combined separate I&I related projects into one annual project budget. Bill Hunter. Footnote: October 2011 Pro-Vac Estimate (Hank) for Smoke Testing: $0.65/LF and can test approximately 10,000 LF per day.
- 11/18/2013. Minor budget updates. Bill Hunter.
- 12/6/2016. Updated budget for year 2017. BH.
- 11/6/2018. Updated budget for year 2019. BH.
- 11/4/2019. Updated budget for year 2020. BH.
- 12/1/2020. Updated budget and cost estimates for year 2021, edited project description. BH & KH.
- 11/30/2021. Updated budget and cost estimates for year 2022, edited project description. BH.

CAPITAL PROJECT NARRATIVE

Project Name:	Replace Tool Truck
CIP #:	V0001

Asset Register:	General ➔ Vehicles and Equipment ➔ Tool Truck					
Failure Mode:	Capacity	Level of Service		Mortality	Efficiency	
Business Risk Exposure:	N/A	= _ x _ x _ (PoF x CoF x Redundancy)				
Remaining Life:	N/A	**Consumed Life:**	N/A	**Effective Life:**	N/A	

PURPOSE and DESCRIPTION OF THE PROJECT

Project includes replacing a Tool Truck approximately every 2 years. There are 7 Tool trucks currently in the fleet.

The District has targeted a 12 to 15 year replacement schedule. The trucks are well maintained and should last their targeted service life. The replacement cycle assumes trucks may need to have a few major repairs, but the overall cost is less than purchasing trucks on a more frequent schedule.

Existing tool trucks average 12,000 – 15,000 miles per year. After 15-years of service a truck would have 180,000 to 225,000 miles.

Current inventory and mileage as of 11/30/2021

ID	Year	Manufacturer	Model	Description	Mileage
VEH24	1999	Ford	F-350	Utility Truck w/ Service Body	169845
VEH31	2005	Chevy	Silverado 3500	Chevy Silverado	170436
VEH41	2010	Ford	F350	Used by Maintenance Electrician	80184
VEH47	2012	Chevy	Silverado 3500	Utility Truck w/ Service Body	96126
VEH51	2017	Ford	F350	Utility Truck w/ Service Body	43626
VEH52	2018	Ford	F350	Utility Truck w/ Service Body	29048
VEH56	2020	Ford	F350	Includes Utility Box Body and Snow Plow	7799

Budget Estimate: $98,000 (2024 dollars)

Revision History

- Updated 12/5/2016 by BH. Updated description and budget estimate based on current state bid prices.
- Updated 10/24/2017 by RM. Updated description and vehicle mileages.
- Updated 11/30/2021 by RM. Updated prices from state contract and vehicle mileages
- Updated 10/31/2022 by RM Updated prices from state contract and vehicle mileages

CAPITAL PROJECT NARRATIVE

Project Name:	Reservoir Inspection and Maintenance
CIP #:	W0005

Asset Register:	Water ➔ Reservoirs			
Failure Mode:	Capacity	Level of Service	Mortality	Efficiency
Business Risk Exposure:	16	= 4 x 4 x 1 (PoF x CoF x Redundancy)		
Remaining Life:		**Consumed Life:**		**Effective Life:**

PURPOSE and DESCRIPTION OF THE PROJECT

Visually inspect and clean the inside all of the District's reservoirs and Sudden Valley Water Treatment Plant intake screen. Divers will also performed minor maintenance and repairs noted by the District and found during the inspection. Staff recommends this work be performed every 6 years. The last inspection/cleaning was done in 2018.

Below is a listing of the District's reservoirs compiled Cartegraph the District's asset management software).

ID	Year Built	Estimated OCI	Estimated OCR	Capacity (gal)	Material	Diameter (ft)	Height (ft)
DIV22-1	1971	48.1	Average	520,088	Steel	50	35
DIV22-2	2017	94.96	Excellent	626,000	Steel	56	39.33
DIV30	1973	61.4	Good	151,390	Steel	25.5	40.5
DIV7	1971	66.87	Good	997,939	Steel	70	35
GEN	1979	33.52	Fair	519,206	Steel	53	33
LWRTC	2009	61.48	Good	107,461	Concrete	31	20
OPAL	1999	46.7	Average	80,596	Concrete	31	16
SVWTP-CCB	1992	32.62	Fair	160,000	Steel	40	25
SVWTP-CLR	1971	47.91	Average	39,600	Concrete	26	18

The previous inspection and cleaning work was completed in 2018 by H2O Solutions (District project #M1806).

CAPITAL PROJECT NARRATIVE

Budget Estimate

$24,000	2018 Project Costs (including sales tax)
$6,000	Assume $6k extra to add new Division 22-2 Reservoir to list.
$30,000	Estimate in 2018 dollars

The cost in 2024 is estimated at $41,000.

Cost escalation calculated using historical ENR Construction Cost Index and future cost escalation rates of:

10% 2022 to 2023
5% 2023 to 2024
3% 2024 to 2025+ (compounded each year beyond)

For further information about this project call Bill Hunter.

Revision History

- Created 8/4/2006 by RM.
- Updated 10/23/2017 by BH.
- Updated 10/31/22 by RM

APPENDIX C

2023-24 REVENUE BOND AND LOANS SUMMARY

APPENDIX C

Revenue Bonds and Loan Summary

The District has obtained publicly funded loans to construct projects. The project title, outstanding balance, funding source, agency, and interest rates are noted as follows:

Project Title		Balance Remaining 12/31/2023	Funding Source	Agency/Servicer	End Date	Rate
Geneva AC Mains	$	1,439,250	Rates	Drinking Water State Revolving Fund	2035	1.50%
Division 22 Reservoir	$	916,946	Rates	Drinking Water State Revolving Fund	2037	1.50%
2016 Revenue Bonds	$	4,255,000	Rates	US Bank	2035	2.25%
Total Outstanding Debt 12/31/2023	*$*	*6,611,196*				

Project Title		Balance Remaining 12/31/2024	Funding Source	Agency/Servicer	End Date	Rate
Geneva AC Mains	$	1,319,313	Rates	Drinking Water State Revolving Fund	2035	1.50%
Division 22 Reservoir	$	851,171	Rates	Drinking Water State Revolving Fund	2037	1.50%
2016 Revenue Bonds	$	3,775,000	Rates	US Bank	2035	2.25%
Total Outstanding Debt 12/31/2024	*$*	*5,945,484*				

AGENDA BILL Item 6.B	**2023 Non-represented Staff Cost-of-Living-Adjustment**			
DATE SUBMITTED:	November 30, 2022	MEETING DATE:	December 14, 2022	
TO: BOARD OF COMMISSIONERS		FROM: Justin Clary, General Manager		
GENERAL MANAGER APPROVAL				
ATTACHED DOCUMENTS		1. none		
TYPE OF ACTION REQUESTED		RESOLUTION ☐	FORMAL ACTION/ MOTION ☒	INFORMATIONAL /OTHER ☐

BACKGROUND / EXPLANATION OF IMPACT

Traditionally non-represented employees have received the same annual cost-of-living-adjustment (COLA) as the represented (union) employees. Non-union employees include the General Manager, District Engineer/Assistant General Manager, Finance Manager/Treasurer, Operations & Maintenance Manager, and Administrative Assistant. For 2023, represented employees' COLA will be 3%, per the current collective bargaining agreement between AFSCME and the District. In addition, per the CBA represented staff will receive a one-time payment of $500 for the October 2021-October 2022 Consumer Price Index for All Urban Consumers (CPI-U) in the Seattle area exceeding 3.5 % and an additional $500 one-time payment for the CPI-U exceeding 4% (the October-to-October CPI-U was 8.9%). The one-time payments will be provided in the first paycheck of 2023. Recognizing significant inflation over the past year, the general manager proposes that the same COLA and one-time payments contractually required for represented employees be provided to non-represented employees, as well.

FISCAL IMPACT

The fiscal impact would be an additional $23,522 in 2023 (including step increases for two eligible employees). The draft 2023-24 Budget accommodates this proposed increase.

APPLICABLE EFFECTIVE UTILITY MANAGEMENT ATTRIBUTE(S)

Employee Leadership & Development

RECOMMENDED BOARD ACTION

Staff recommends that the Board approve a COLA for non-represented staff that is effective January 1, 2023, and equal to 3%, as well as two one-time payments of $500 ($1,000 total) on the first paycheck of 2023 consistent with payments provided to represented staff.

PROPOSED MOTION

A recommended motion is:

> "I move to approve a salary adjustment for all non-represented District staff that is equal to an increase of 3% and effective January 1, 2023, as well as two one-time $500 payments to those staff consistent with payments provided to represented staff."

AGENDA BILL Item 8.A		**General Manager's Report**		
DATE SUBMITTED:	December 8, 2022	MEETING DATE:	December 14, 2022	
TO: BOARD OF COMMISSIONERS		FROM: Justin Clary, General Manager		
GENERAL MANAGER APPROVAL				
ATTACHED DOCUMENTS		1. General Manager's Report		
TYPE OF ACTION REQUESTED		RESOLUTION ☐	FORMAL ACTION/ MOTION ☐	INFORMATIONAL /OTHER ☒

BACKGROUND / EXPLANATION OF IMPACT

Updated information from the General Manager in advance of the Board meeting.

FISCAL IMPACT

None.

RECOMMENDED BOARD ACTION

None required.

PROPOSED MOTION

None.

LAKE WHATCOM WATER AND SEWER DISTRICT

General Manager's Report

Upcoming Dates & Announcements

Regular Meeting – Wednesday, December 14, 2022 – 6:30 p.m.

Important Upcoming Dates

Lake Whatcom Water & Sewer District			
Regular Board Meeting	Wed Jan 11, 2023 (Dec 28 cancelled)	6:30 p.m.	Board Room/Hybrid
Employee Staff Meeting	Thu Dec 15, 2022	8:00 a.m.	Board Room/Hybrid Commissioner Citron to attend
Investment Comm. Meeting	Wed Jan 25, 2023	10:00 a.m.	Board Room/Hybrid
Safety Committee Meeting	Wed Dec 22, 2022	8:00 a.m.	Board Room/Hybrid
Lake Whatcom Management Program			
Policy Group Meeting	Wed Feb 8, 2023	3:00 p.m.	City of Bellingham Fireplace Room 625 Halleck Street/Hybrid
Joint Councils Meeting	Wed Mar 29, 2023	6:00 p.m.	Bellingham City Council Chambers 210 Lottie Street
Other Meetings			
WASWD Section III Meeting	Tue Jan 10, 2022	6:00 p.m.	Bob's Burgers 8822 Quil Ceda Pkwy, Tulalip, WA
Whatcom Water Districts Caucus Meeting	Wed Dec 21, 2022	2:00 p.m.	Remote Attendance
Whatcom County Council of Governments Board Meeting	Wed Dec 14, 2022	3:30 p.m.	Council of Governments Offices 314 E Champion Street/Hybrid

Committee Meeting Reports

Safety Committee:

- No committee meeting has been held since last board meeting.

Investment Committee:

- No committee meeting has been held since last board meeting.

Upcoming Board Meeting Topics

- 2023 election of officers and Investment Committee members
- 2023 appointment of representatives to Lake Whatcom Management Program and Whatcom County Council of Governments
- Assigned capital reserve policy development
- Facility security risk assessment contract award
- Water reservoir coating assessment presentation
- City of Bellingham Post Point Resource Recovery Project shift implications on District
- Glen Cove Water Association assumption consideration
- DISH Wireless proposed cell tower public hearing/resolution consideration

2022 Initiatives Status

Administration and Operations

Capital Improvement Project Financing Plan

- Develop a financial plan that proactively prepares the District for significant capital projects on the near-term horizon while maintaining Board-defined operational levels-of-service.
  The board adopted an updated rate structure in 2021 and revision to the general facilities charges during the November 9 board meeting, both of which incorporate anticipated CIP costs over the next decade. To lessen the financial impact of borrowing for anticipated large-scale projects, surplus reserves have been created in the water and sewer utility funds to build funds designated for these projects. In addition, external funding is aggressively being sought, primarily in the form of FEMA Hazard Mitigation Grants.

General Facilities Charges Review

- Conduct a review of District water and sewer general facilities (connection) charges (GFCs) to ensure appropriate fees are being assessed to new development.
  The board adopted updated GFCs during the November 9 board meeting.

Records Management System Overhaul

- Complete transition of the District's current records management system to a more robust system that ensures compliance with statutory requirements and gains efficiencies in document management.
  District staff are evaluating the three records management software systems available under the State contract.

Safety Program Update

- Continue systematic review and revision of District's safety programs by updating nine programs in 2022.
  The safety committee has finalized updates to nine (9) programs (PPE, safety responsibilities, slips, trips and falls, heat-related illness, wildfire smoke, respiratory protection, back injury prevention, medical emergencies, and office safety) and is reviewing the hand and power tools program.

Capital Improvement Program Support

- Support the Engineering Department through management of specific capital improvement project(s).
  Due to workload issues within the Engineering Department, the general manager has taken on a support role (either in the form of project manager or providing technical support) for a number of District capital improvement projects.

Emergency Response/System Security

Emergency Readiness

- Re-engage with Whatcom County Department of Emergency Management to hold tabletop emergency response exercises, as well as a field exercise (pandemic-dependent).
  District held a tabletop exercise May 25 at the Whatcom County Division of Emergency Management facility—topic was cybersecurity awareness.
  Whatcom Conservation District staff conducted facility audits (SVWTP, Division 30 reservoir, Beaver sewer lift station) on May 16 regarding wildfire resilience preparedness and completed actions throughout the summer based upon the audits at all facilities.

Cybersecurity Assessment

- Hire an IT-service provider to perform a third-party assessment of the District's vulnerability to cybercriminal attack.
  The District has requested USEPA conduct a confidential cybersecurity assessment of the District's facilities; a cybersecurity assessment screening meeting with USEPA representatives and District staff and consultants was conducted on December 8.

Community/Public Relations

General

- Website
  The District's web content is reviewed and updated on a regular basis.
- Social Media
  Posts are made to District Facebook, LinkedIn, and Nextdoor (new) pages regularly; Nextdoor is also regularly monitored for District-related posts.
- Press Releases
  Press releases were issued on March 2 (commissioner redistricting public hearing), March 21 (sewage overflow at North Point lift station), June 29 (Commissioner McRoberts resignation), September 1 (Commissioner Knakal appointment), and November 2 (TOP Award receipt).

Intergovernmental Relations

- *J Clary is scheduled to attend the WASWD Section III meeting on December 13.*

Lake Whatcom Water Quality

Lake Whatcom Management Program

- Participate in meetings of Lake Whatcom Management Program partners.
  J Clary attended a WWU Institute for Watershed Studies event and the Policy Group meeting, both of which were held on December 7.

Onsite Septic System Conversion Program

- Pursue connection of the one remaining septic-served parcel located within 200 feet of District sewer system identified in the memorandum to the Board dated April 9, 2020.
  To be initiated.