



LAKE WHATCOM WATER & SEWER DISTRICT

1220 Lakeway Drive
Bellingham, WA, 98229

(360) 734-9224
Fax 738-8250

MEMORANDUM

Date: November 4, 2021

RE: Virtual Meeting Attendance

For the foreseeable future, Lake Whatcom Water & Sewer District's Board of Commissioners will be attending regular meetings by phone/video conference. Per Governor Inslee's [Proclamation No. 20-28.3](#), the District will provide access to interested public via phone/internet utilizing the GoToMeeting platform.

Attending a Meeting

If you would like to attend the November 10, 2021 regular board meeting, access details can be found below. In this evolving climate, we are committed to doing everything possible to provide opportunity for public comment as well as promote health and safety. As such, **the District requests that if possible, public submit comments in written form by noon the day before a scheduled meeting** for inclusion in the meeting discussion. This is *not a requirement* for making a public comment, but is helpful to the staff and commissioners for planning purposes.

November 10, 2021 Regular Board Meeting

Wed, Nov 10, 2021 6:30 PM - 8:30 PM (PST)

Join the meeting from your computer, tablet or smartphone.

<https://global.gotomeeting.com/join/249992141>

You can also dial in using your phone.

United States: [+1 \(224\) 501-3412](tel:+12245013412)

Access Code: 249-992-141

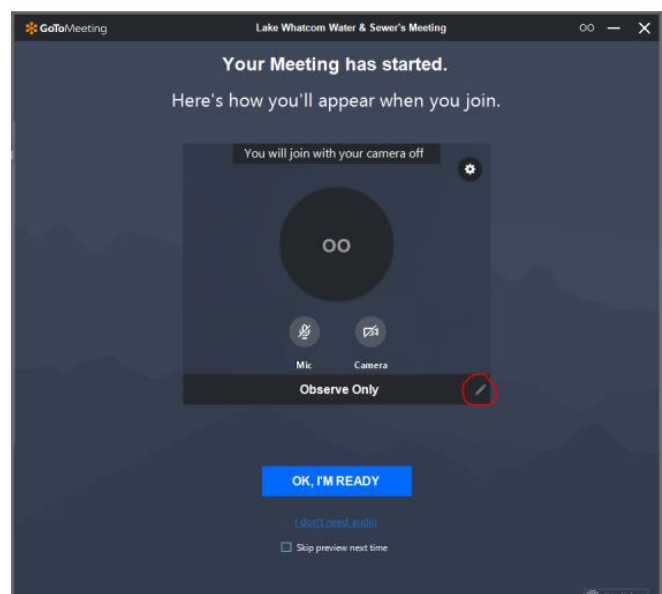
New to GoToMeeting? Get the app now and be ready when the meeting starts:

<https://global.gotomeeting.com/install/249992141>

Attending as an Observer only

If you wish to observe a meeting, but do not plan to speak or appear on video during the meeting, you may attend anonymously.

When you click the link to log in to the meeting, a black box will appear like the one pictured below. Click the pencil icon (circled) and change your name to "Observe Only." Also make sure that your microphone and camera icon are grey and not green. You will be muted by the meeting administrator and will not be included in the roll call.



We appreciate your understanding and patience during these uncertain times.

If you have any questions, please contact Administrative Assistant

Rachael Hope at rachael.hope@lwwsd.org or 360-734-9224.



LAKE WHATCOM WATER AND SEWER DISTRICT

1220 Lakeway Drive
Bellingham, WA 98229

REGULAR MEETING OF THE BOARD OF COMMISSIONERS

AGENDA

November 10, 2021


6:30 p.m. – Regular Session

1. CALL TO ORDER
2. ROLL CALL
3. CONFIRMATION OF COMPLIANCE WITH REMOTE MEETING ATTENDANCE PROTOCOLS
4. PUBLIC COMMENT OPPORTUNITY
At this time, members of the public may address the Board of Commissioners. Please state your name prior to making comments.
5. ADDITIONS, DELETIONS, OR CHANGES TO THE AGENDA
6. CONSENT AGENDA
7. SPECIFIC ITEMS OF BUSINESS
 - A. Resolution No. 878—Whatcom County Natural Hazards Mitigation Plan Update
 - B. Rate Study Discussion
 - C. Draft 2022 Budget Presentation
8. OTHER BUSINESS
9. STAFF REPORTS
 - A. General Manager
10. PUBLIC COMMENT OPPORTUNITY
11. EXECUTIVE SESSION
Executive Session per RCW 42.30.140(4)(a): Considering issues related to collective bargaining with a labor union – 30 minutes
12. 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
13. ADJOURNMENT



**AGENDA
BILL
Item 6**

Consent Agenda

DATE SUBMITTED:	November 4, 2021	MEETING DATE:	November 10, 2021
TO: BOARD OF COMMISSIONERS	FROM: Rachael Hope		
GENERAL MANAGER APPROVAL			
ATTACHED DOCUMENTS	1. See below		
TYPE OF ACTION REQUESTED	RESOLUTION <input type="checkbox"/>	FORMAL ACTION/ MOTION <input checked="" type="checkbox"/>	INFORMATIONAL /OTHER <input type="checkbox"/>

****TO BE UPDATED 11.10.2021****

BACKGROUND / EXPLANATION OF IMPACT

- Minutes for the October 13, 2021 Regular Board Meeting
- Minutes for the October 25, 2021 Special Work Session
- Minutes for the October 27, 2021 Regular Board Meeting
- Payroll Taxes for 3rd Quarter 2021 totaling \$8,044.72
- Payroll for Pay Period #22 (10/16/2021 through 10/29/2021) totaling \$45,246.21
- Payroll Benefits for Pay Period #22 totaling \$50,623.16
- 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 2021 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

October 13, 2021

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

Attendees: Commissioner Laura Abele	General Manager Justin Clary
Commissioner Todd Citron	District Engineer/Assistant GM Bill Hunter
Commissioner John Carter	Finance Manager/Treasurer Jenny Signs
Commissioner Bruce Ford	Operations Manager Brent Winters
Commissioner Leslie McRoberts	District Legal Counsel Bob Carmichael
Recording Secretary Rachael Hope	

Also in attendance were District employees Rich Munson, Jonathan Lydiard, and Ken Zangari; as well as one observation only attendee. All attendees participated remotely by phone or video conferencing.

Roll Call

General Manager Justin Clary performed a roll call to identify those in attendance, and then verbally confirmed that the meeting was noticed in accordance with Resolution No. 859 allowing remote meeting attendance, as well as in compliance with current statutory requirements. It was confirmed that all participants were able to be heard and hear each other clearly.

Changes to Agenda

General Manager Justin Clary requested that Item 7A regarding Resolution 877 be delayed until Commissioner Carter was able to fix some connection issues. The Board agreed.

Consent Agenda

Action Taken

McRoberts moved, Citron seconded, approval of:

- **Minutes for the September 29, 2021 Regular Board Meeting**
- **Payroll for Pay Period #20 (09/28/2021 through 10/01/2021) totaling \$49,362.38**
- **Payroll Benefits for Pay Period #20 totaling \$52,658.28**
- **Accounts Payable Vouchers totaling \$309,358.11**

Motion passed.

Dellesta and Edgewater Sewer Lift Stations Improvements Public Works Contract Close-out

Hunter recalled that the Board of Commissioners approved the contract award of the Dellesta and Edgewater Sewer Pump Station Improvements public works contract (District Capital Project No. C1802-CON) to RAM Construction General Contractors LLC (RAM) during its regularly scheduled meeting on June 10, 2020. RAM has completed all contract requirements. Staff recommended accepting the Dellesta and Edgewater Sewer Pump Station Improvements construction contract as complete.

Action Taken

Ford moved, McRoberts seconded, to accept the Dellesta and Edgewater Sewer Pump Stations Improvements construction contract as complete and authorize staff to close-out the public works contract. Motion passed.

Beaver and Flat Car Lift Stations PLC and UPS Improvements Public Works Contract Close-out

Hunter explained the Board of Commissioners approved the contract award of the Beaver and Flat Car PLC and UPS Improvements contract (District Capital Project No. M1917) to Quality Controls Corporation (QCC) during its regularly scheduled meeting on October 28, 2020. QCC has completed all contract requirements. Staff recommended accepting the Beaver and Flat Car Sewer Lift Stations PLC and UPS Improvement construction contract as complete.

Action Taken

Ford moved, McRoberts seconded, to accept the Beaver and Flat Car Sewer Lift Stations PLC and UPS Improvements construction contract as complete and authorize staff to close-out the public works contract. Motion passed.

Resolution No. 877 Mandatory Vaccination of District Staff, Volunteers and On-site Contractors

Clary apprised the Board that on August 9, 2021, Governor Inslee issued Proclamation No. 21.14, mandating that all State employees become fully vaccinated from COVID-19 by October 18, unless they qualify for a bona fide medical or religious exemption. Following the initial proclamation, a few local governments have also implemented a mandatory vaccination policy for their staff, and many more are beginning to consider such a policy. During the board's August 25 meeting, Commissioner Ford raised this issue, and the Board requested inclusion of discussion of adopting a mandatory vaccination policy on a future meeting agenda.

At the September 29, 2021 regular meeting Clary highlighted multiple topics and considerations, including staffing redundancy, current and available protective measures, mandatory subject of bargaining considerations, options for dis-incentivizing remaining unvaccinated, exemptions, and staffing. Discussion included contributions from District employees Jonathan Lydiard, Jason Dahlstrom, and Kristin Hemenway. The Board requested that the draft resolution be reviewed for legal compliance, as well as had specific questions relative to eligibility for unemployment and COBRA health insurance for staff whose employment is discontinued due to failure to comply with the resolution, if adopted by the Board, as well as how the District will administer a vaccination exemption process.

Action Taken

Citron moved, Ford seconded, to amend Resolution No. 877 so that any references to a December 24, 2021 deadline be replaced with a December 27, 2021 deadline. Motion passed, with Commissioner McRoberts abstaining.

Ford moved, Citron seconded, to adopt Resolution No. 877 as amended. Motion passed, with Commissioners McRoberts and Carter opposing.

Division 7 Reservoir Replacement Project Design Award

Hunter briefly highlighted that a structural analysis of the Division 7 reservoir in 2016 identified significant deficiencies in the reservoir's ability to meet current earthquake code requirements. After an alternatives analysis completed in 2018, the Board selected replacement of the existing reservoir with two smaller reservoirs to provide system redundancy and resiliency to the facility. In 2018, the District submitted an application for a FEMA Hazard Mitigation Grant to replace the existing reservoir, as well as to install ShakeAlert (earthquake early warning system) on all District reservoirs, water pumps and water treatment plants. Though the District was notified of grant award (77.5% external funding with 12.5% District match), an official funding agreement has yet to be received. However, based upon communication with FEMA and Washington State officials, funding approval is proceeding with the goal of construction in 2023.

Based upon the current grant funding/construction schedule, the District issued a request for qualifications for design, permitting, and services during construction associated with this project through publication in the Bellingham Herald on September 13, 2021, and received responses from three consultants. A consultant selection committee comprised of Commissioner Citron, the general manager, assistant general manager/district engineer, construction engineer, engineering technician/safety officer, and water treatment plant operator was created to review the submittals and select the most qualified consultant for the project. The committee recommended awarding the project design to Wilson Engineering.

Action Taken

Ford moved, Citron seconded, to authorize the general manager to enter into negotiations of a professional services agreement with Wilson Engineering for design, permitting, and services during construction associated with the Division 7 Reservoir Replacement Project. Motion passed.

Preliminary 2022 Budget Presentation

Signs explained that the purpose of this agenda item was to present staff's current draft and highlight various areas for feedback from the Board. Using projected revenues based upon rate increases recommended in the preliminary rate study (6% and 5% water and sewer rates, respectively), actual 2021 operating expenses, and projects defined in the District's water and sewer capital improvement plans, District staff developed a preliminary draft budget for Board discussion. Discussion followed.

General Manager's Report

Clary updated the Board on several topics, including the District's continued response to the COVID-19 pandemic as well as the upcoming October 25 Board Retreat Special Work Session, an update on the District's voluntary billing suspension policy, and the development of an agenda for the upcoming legislative session. Discussion followed.

With no further business, Abele adjourned the Regular Session 8:18 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

WORK SESSION OF THE BOARD OF COMMISSIONERS

Minutes

October 25, 2021

Board President Laura Abele called the Work Session to order at 1:00 p.m.

Attendees: Commissioner Laura Abele
Commissioner Todd Citron
Commissioner John Carter
Commissioner Bruce Ford
Commissioner Leslie McRoberts
General Manager Justin Clary
Assistant General Manager/District Engineer Bill Hunter
Operations & Maintenance Manager Brent Winters
Finance Manager/Treasurer Jenny Signs
Recording Secretary Rachael Hope

Also in attendance were Tage Aaker and Sam Ault of FCS Group. All attendees participated remotely by phone or video conferencing.

Review of District Mission & Goals and Confirmation of Retreat Objectives

General Manager Justin Clary briefly highlighted the District's mission and goals to begin the meeting. He explained that the purpose of this Board workshop was to further discuss the District's Six-Year Strategic plan and currently-in-progress rate study. The objective was to provide staff with guidance on the Board's preferred focus for capital improvements and project prioritization.

Six-Year Obligation/Initiative Review

Clary recalled that the six-year strategic business plan was developed by District staff and presented to the Board previously at a work session on September 8, 2021. Specific topics of discussion for this work session included incorporation of Board comments from that meeting, as well as focus on Operational Projections, Capital Improvement/System Reinvestment Plan, and Strategic Plan Initiatives. Discussion followed.

Rate Impact Analysis & Initiative Prioritization

Clary led the Board into discussion about the ongoing rate study and prioritization of various possible initiatives to address and place focus on.

With no further business, Abele adjourned the Work Session 5:00 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 *October 27, 2021*

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

Attendees: Commissioner Laura Abele	General Manager Justin Clary
Commissioner Todd Citron	District Engineer/Assistant GM Bill Hunter
Commissioner John Carter	Current Finance Manager/Treasurer Jenny Signs
Commissioner Bruce Ford	Operations Manager Brent Winters
Commissioner Leslie McRoberts	Recording Secretary Rachael Hope

All attendees participated remotely by phone or video conferencing.

Roll Call

General Manager Justin Clary performed a roll call to identify those in attendance, and then verbally confirmed that the meeting was noticed in accordance with Resolution No. 859 allowing remote meeting attendance, as well as in compliance with current statutory requirements. It was confirmed that all participants were able to be heard and hear each other clearly, excluding one anonymous attendee who followed District procedure for attending as an observer only.

Consent Agenda

Action Taken

Citron moved, McRoberts seconded, approval of:

- **Payroll for Pay Period #21 (10/2/2021 through 10/15/2021) totaling \$47,409.62**
- **Payroll Benefits for Pay Period #21 totaling \$50,704.95**
- **Accounts Payable Vouchers totaling \$78,280.57**

Motion passed.

Vendor Agreement between Lake Whatcom Water & Sewer District and Opportunity Council

Signs explained that since December of 2020, Congress has allocated funding and grants through the Low-Income Home Water and Wastewater Program (LIHWAP) as well as the American Recovery Plan. Through these programs, the State of Washington received a total allocation of \$19,976,183. Eligible customers are approved in the amount needed to bring their water and sewer utility account to zero up to a maximum benefit of \$2,500 per customer.

In Whatcom County, customer eligibility is determined by the Opportunity Council based on the guidelines set forth by the Low-Income Home Energy Assistance Program (LIHEAP) and will work in conjunction with this

program to automatically approve water customers who already qualify for the LIHEAP assistance, which are comprised of households with incomes at or below 150% of the federal poverty level. For those customers whose account is in arrearage more than \$2,500, the District will offer payment plans for the amount due over \$2,500 to ensure service is maintained.

Staff presented an agreement for Board approval defining the conditions that the District must agree to so that the Opportunity Council can make assistance payments to the District on behalf of eligible households. Funding is only available through the approved Agency (Opportunity Council), therefore staff recommended the Board authorize the execution of the Low-Income Home Water and Wastewater Assistance Program Vendor Agreement to assist the District's qualifying customers in applying funding to their utility accounts that are in arrearage and danger of being disconnected. Discussion followed.

Action Taken

Citron moved, Carter seconded, to authorize the General Manager to execute the Low-Income Home Water and Wastewater Assistance Program Vendor Agreement with the Opportunity Council, as presented. Motion passed.

2021 Lake Whatcom Blvd Sewer Main CIPP Public Works Contract Close-out

Hunter recalled that the Board of Commissioners approved the contract award of the 2021 Lake Whatcom Boulevard Sewer Main CIPP contract (District Capital Project No. C2114) to Michels Corporation during its regularly scheduled meeting on March 10, 2021. The project installed approximately 1,300 lineal feet of 10-inch and 14-inch diameter cure-in-place pipe (CIPP) in the gravity sewer main located in Lake Whatcom Boulevard. The CIPP increases the hydraulic capacity (flow rate) and renews the condition of the pipe. Michael's has completed all contract requirements.

Action Taken

Ford moved, Citron seconded, to accept the 2021 Lake Whatcom Boulevard Sewer Main CIPP construction contract as complete and authorize staff to close-out the public works contract. Motion passed.

General Manager's Report

Clary updated the Board on several topics, including the District's continued response to the COVID-19 pandemic, American Rescue Plan Act funding, and finalizing the 2022 legislative agenda. Discussion followed.

Engineering Department Report

Hunter highlighted several areas, including continued processing of water availability requests, predesign for the Division 7 Reservoir, and installation of block heaters in the vehicle yard to ensure continued operations during cold weather periods.

Finance Department Report

Signs reported on a reduction in arrearages during increased collection efforts for past due accounts as well as general revenues and expenditures through the end of September.

Operations & Maintenance Department Report

Winters gave a brief report on field crew operations, including ongoing safety training, reservoir inspections, installation of a new sample station at the Geneva reservoir, and air relief valve maintenance.

Executive Session Per RCW 42.30.110(1)(g) Reviewing the Performance of a Public Employee – 30 Minutes

Abele recessed the Regular Session to Executive Session at 8:36 a.m. It was estimated that the Executive Session would take 30 minutes. The purpose of the Executive Session was to discuss the General Manager's annual performance appraisal by the Board. Abele recessed the Executive Session and reconvened the Regular Session at 9:00 a.m. No action was taken.

With no further business, Abele adjourned the Regular Session 9:00 a.m.

Board President, Laura Abele

Attest: _____
Recording Secretary, Rachael Hope

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

CHECK REGISTER

Lake Whatcom W-S District

Time: 13:45:54 Date: 10/28/2021

10/28/2021 To: 10/28/2021

Page: 1

Trans	Date	Type	Acct #	Chk #	Claimant	Amount	Memo
3291	10/28/2021	Payroll	5	12165	WA ST EMPL. SECURITY DEPT PAID FAMILY & MEDICAL LEAVE	1,269.36	Pay Cycle(s) 07/01/2021 To 07/01/2021 - PFMLA; Pay Cycle(s) 07/15/2021 To 07/15/2021 - PFMLA; Pay Cycle(s) 07/29/2021 To 07/29/2021 - PFMLA; Pay Cycle(s) 08/12/2021 To 08/12/2021 - PFMLA; Pay Cycle(s)
3292	10/28/2021	Payroll	5	12166	WA ST DEPT OF EMPLOYMENT SECUR	1,041.65	3rd Quarter 07/01/2021 - 09/30/2021
3293	10/28/2021	Payroll	5	12167	WA ST DEPT OF LABOR AND IND	5,733.71	3RD Quarter 07/01/2021 - 09/30/2021
						5,551.22	
						2,493.50	
						8,044.72	Payroll: 8,044.72

I do hereby certify, under penalty of perjury, that the above is an unpaid, just, and due obligation as described herein, and that I am authorized to certify this claim.

Sign  Date 10/27/2021
General Manager, Justin Clary

Board Authorization - The duly elected board for this district has reviewed the claims listed and approved the payment by motion at the meeting listed below:

Board President, Laura Abele

Attest : _____
Recording Secretary, Rachael Hope

Approved by motion at _____ Regular _____ Special Board Meeting on _____
Date Approved

CHECK REGISTER

PAYROLL

Lake Whatcom W-S District

Time: 11:14:57 Date: 11/02/2021

11/04/2021 To: 11/04/2021

Page: 1

Trans	Date	Type	Acct #	Chk #	Claimant	Amount	Memo
3316	11/04/2021	Payroll	5	EFT		3,390.93	10/16/2021 - 10/29/2021 PR 22
3317	11/04/2021	Payroll	5	EFT		3,731.63	10/16/2021 - 10/29/2021 PR 22
3318	11/04/2021	Payroll	5	EFT		4,073.81	10/16/2021 - 10/29/2021 PR 22
3319	11/04/2021	Payroll	5	EFT		1,779.65	10/16/2021 - 10/29/2021 PR 22
3321	11/04/2021	Payroll	5	EFT		1,616.08	10/16/2021 - 10/29/2021 PR 22
3322	11/04/2021	Payroll	5	EFT		1,698.74	10/16/2021 - 10/29/2021 PR 22
3323	11/04/2021	Payroll	5	EFT		2,916.07	10/16/2021 - 10/29/2021 PR 22
3324	11/04/2021	Payroll	5	EFT		2,079.27	10/16/2021 - 10/29/2021 PR 22
3325	11/04/2021	Payroll	5	EFT		3,327.11	10/16/2021 - 10/29/2021 PR 22
3326	11/04/2021	Payroll	5	EFT		2,007.41	10/16/2021 - 10/29/2021 PR 22
3327	11/04/2021	Payroll	5	EFT		2,143.30	10/16/2021 - 10/29/2021 PR 22
3328	11/04/2021	Payroll	5	EFT		2,490.01	10/16/2021 - 10/29/2021 PR 22
3329	11/04/2021	Payroll	5	EFT		1,814.83	10/16/2021 - 10/29/2021 PR 22
3330	11/04/2021	Payroll	5	EFT		2,101.28	10/16/2021 - 10/29/2021 PR 22
3331	11/04/2021	Payroll	5	EFT		3,178.42	10/16/2021 - 10/29/2021 PR 22
3332	11/04/2021	Payroll	5	EFT		2,863.22	10/16/2021 - 10/29/2021 PR 22
3333	11/04/2021	Payroll	5	EFT		2,570.18	10/16/2021 - 10/29/2021 PR 22
3320	11/04/2021	Payroll	5	12168		1,464.27	10/16/2021 - 10/29/2021 PR 22
401 Water Fund						14,078.47	
402 Sewer Fund						31,167.74	

45,246.21 Payroll: 45,246.21

I do hereby certify, under penalty of perjury, that the above is an unpaid, just, and due obligation as described herein, and that I am authorized to certify this claim.

Sign  Date 11/2/2021
General Manager, Justin Clary

Board Authorization - The duly elected board for this district has reviewed the claims listed and approved the payment by motion at the meeting listed below:

Board President, Laura Abele

Attest : _____
Recording Secretary, Rachael Hope

Approved by motion at _____ Regular _____ Special Board Meeting on _____
Date Approved

BENEFITS

CHECK REGISTER

Lake Whatcom W-S District

Time: 11:37:23 Date: 11/02/2021

11/04/2021 To: 11/04/2021

Page: 1

Trans	Date	Type	Acct #	Chk #	Claimant	Amount	Memo
3334	11/04/2021	Payroll	5	EFT	UNITED STATES TREASURY	17,106.83	941 Deposit for Pay Cycle(s) 11/04/2021 - 11/04/2021
3335	11/04/2021	Payroll	5	EFT	WA ST SUPPORT ENFORCEMENT REGISTRY	208.34	Pay Cycle(s) 11/04/2021 To 11/04/2021 - SUP ENF
3336	11/04/2021	Payroll	5	12169	AFLAC	354.85	Pay Cycle(s) 11/04/2021 To 11/04/2021 - AFLAC Pre-Tax; Pay Cycle(s) 11/04/2021 To 11/04/2021 - AFLAC Post-Tax
3337	11/04/2021	Payroll	5	12170	AFSCME LOCAL	367.56	Pay Cycle(s) 11/04/2021 To 11/04/2021 - Union Dues; Pay Cycle(s) 11/04/2021 To 11/04/2021 - Union Fund
3338	11/04/2021	Payroll	5	12171	DEPARTMENT OF RETIREMENT SYSTEMS	4,169.50	Pay Cycle(s) 11/04/2021 To 11/04/2021 - DCP
3339	11/04/2021	Payroll	5	12172	HRA VEBA TRUST (PAYEE)	590.00	Pay Cycle(s) 11/04/2021 To 11/04/2021 - VEBA
3340	11/04/2021	Payroll	5	12173	VANTAGEPOINT TRANSFER AGENTS - 306798	100.00	Pay Cycle(s) 11/04/2021 To 11/04/2021 - ICMA
3341	11/04/2021	Payroll	5	12174	WA ST HEALTH CARE AUTHORITY	16,061.98	Pay Cycle(s) 11/04/2021 To 11/04/2021 - PEBB Medical; Pay Cycle(s) 11/04/2021 To 11/04/2021 - PEBB ADD LTD; Pay Cycle(s) 11/04/2021 To 11/04/2021 - PEBB SMK Surcharge; Pay Cycle(s) 11/04/2021 To 11/04/2021
3342	11/04/2021	Payroll	5	12175	WA ST PUBLIC EMP RET PLAN 2	8,645.60	Pay Cycle(s) 11/04/2021 To 11/04/2021 - PERS 2
3343	11/04/2021	Payroll	5	12176	WA ST PUBLIC EMP RET PLAN 3	3,018.50	Pay Cycle(s) 11/04/2021 To 11/04/2021 - PERS 3
401 Water Fund						37,420.03	
402 Sewer Fund						13,203.13	
						50,623.16	Payroll: 50,623.16

CHECK REGISTER

Lake Whatcom W-S District


Time: 11:37:23 Date: 11/02/2021

11/04/2021 To: 11/04/2021

Page: 2

Trans	Date	Type	Acct #	Chk #	Claimant	Amount	Memo
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I do hereby certify, under penalty of perjury, that the above is an unpaid, just, and due obligation as described herein, and that I am authorized to certify this claim.

Sign  Date 11/2/2021
General Manager, Justin Clary

Board Authorization - The duly elected board for this district has reviewed the claims listed and approved the payment by motion at the meeting listed below:

Board President, Laura Abele


Attest : _____
Recording Secretary, Rachael Hope

Approved by motion at _____ Regular _____ Special Board Meeting on _____
Date Approved



**AGENDA
BILL
Item 7.A**

**Resolution No. 878
Whatcom County Natural Hazards
Mitigation Plan**

DATE SUBMITTED:	October 28, 2021	MEETING DATE:	November 10, 2021
TO: BOARD OF COMMISSIONERS		FROM: Justin Clary, General Manager	
GENERAL MANAGER APPROVAL			
ATTACHED DOCUMENTS		1. Draft Resolution No. 878	
		2. District-specific Section, Whatcom County Natural Hazards Mitigation Plan (9/30/2021)	
TYPE OF ACTION REQUESTED	RESOLUTION <input checked="" type="checkbox"/>	FORMAL ACTION/ MOTION <input type="checkbox"/>	INFORMATIONAL /OTHER <input type="checkbox"/>

BACKGROUND / EXPLANATION OF IMPACT

The Federal Emergency Management Agency (FEMA) of the U.S. Department of Homeland Security encourages counties and their local governments to maintain natural hazard mitigation plans specific to their region and operations so that those agencies are better prepared for when a disaster occurs. An incentive for maintaining a FEMA-approved natural hazard mitigation plan, beyond emergency preparedness, is that those participating agencies are eligible for FEMA grant funding (as an example, the District's Division 7 reservoir replacement will primarily be funded through a FEMA hazard mitigation grant).

The District, in partnership with Whatcom County and a number of other local governments in the county, first developed a county-specific natural hazard mitigation plan in 2005, which has been updated every five years since in accordance with FEMA review requirements. The COVID-19 pandemic delayed the County's initiation of the most recent update until earlier this year. Since that time, the County and participating agencies, with the assistance of the Western Washington University Resilience Institute, has went through a systematic process of reviewing and updating the plan. Following provides highlights of the plan update process.

- January 27. Plan update kick-off meeting
- February 9. Plan update meeting no. 2
- February 24. Plan update meeting no. 3
- March 9. Plan update meeting no. 4
- March 23. Virtual public meeting no. 1
- March 24. Plan update meeting no. 5
- April 6. Plan update meeting no. 6

April 13. Virtual public meeting no. 2
April 20. Plan update meeting no. 7
April 30. Draft plan complete
May 11. Virtual public meeting no. 3
July 7. Washington Emergency Management Division approval of plan
July 16. Plan submitted to FEMA for review
August 25. FEMA comments received (none specific to the District)
October 20. FEMA granted *Plan Approvable Pending Adoption* status

With receipt of FEMA's *Plan Approvable Pending Adoption* status, the next step in the plan finalization process is the adoption of the plan by each of the participating agencies. Once that is completed, FEMA will grant final approval of the plan.

Due to size of the complete plan (945 pages) attached is only the District-specific section of the plan. The full plan is available for review on the project-specific page of the District's website located here:

<https://lwwsd.org/projects/natural-hazards-mitigation-plan-update-project/>

FISCAL IMPACT

No fiscal impact is anticipated with adoption of the Natural Hazards Mitigation Plan. Plan adoption would make the District eligible for receipt of FEMA grant funding supporting eligible capital projects.

APPLICABLE EFFECTIVE UTILITY MANAGEMENT ATTRIBUTE(S)

Enterprise Resiliency

RECOMMENDED BOARD ACTION

Staff recommends that the Board adopt Resolution No. 878 as presented.

PROPOSED MOTION

Recommended motion is:

"I move to adopt Resolution No. 878 as presented."

**LAKE WHATCOM WATER AND SEWER DISTRICT
RESOLUTION NO. 878**

A Resolution of the Board of Commissioners
Adopting the Whatcom County Natural Hazards Mitigation Plan Update

WHEREAS, the Lake Whatcom Water and Sewer District (“District”) is a special purpose district located in Whatcom County, Washington State authorized under Title 57 Revised Code of Washington; and

WHEREAS, the Federal Emergency Management Agency (“FEMA”) of the U.S. Department of Homeland Security encourages counties and their local governments to prepare and regularly update natural hazard mitigation plans specific to their region and operations; and

WHEREAS, the purpose of natural hazard mitigation plans is to facilitate a net reduction in the loss of life and property due to natural disasters and to enable the quick implementation of mitigation measures in the event of a natural disaster; and

WHEREAS, local governments such as the District must have a FEMA-approved local mitigation plan in place to qualify for project grants under various federal hazard mitigation assistance programs; and

WHEREAS, the Whatcom County Natural Hazards Mitigation Plan (the “Plan”), which includes a section specific to the District, was originally adopted by Whatcom County, the District and a number of other local public entities in 2005; and

WHEREAS, the specific mitigation measures addressed by the District cover a variety of potential hazards including earthquakes, flooding, wildfires, severe winter weather and windstorms; and

WHEREAS, every five years the Plan has been updated by Whatcom County and participating agencies, and resubmitted to FEMA for approval; and

WHEREAS, the Board of Commissioners have previously adopted Resolution Nos. 703, 776, and 818, which adopted updates to the Plan; and

WHEREAS, in early 2021, the Whatcom County Division of Emergency Management initiated the process of updating the Plan; and

WHEREAS, the outcome of the update effort resulted in submittal of a new revision of the Plan to FEMA, which provided its approval on October 20, 2021; and

WHEREAS, the foregoing recitals are a material part of this Resolution;

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of the Lake Whatcom Water and Sewer District, Whatcom County, Washington as follows:

Section 1. The Whatcom County Natural Hazards Mitigation Plan, dated September 30, 2021, is adopted in its entirety.

Section 2. Any resolutions or parts of resolutions in conflict herewith are hereby repealed insofar as they conflict with the provisions of this Resolution.

Section 3. If any section, subsection, sentence, clause or phrase of this Resolution is for any reason held to be invalid or unconstitutional, such decision shall not affect the validity of the remaining portions of this Resolution. The Board of Commissioners hereby declare that it would have passed this Resolution and each section, subsection, sentence, clause and phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases has been declared invalid or unconstitutional, and if, for any reason, this Resolution should be declared invalid or unconstitutional, then the original resolution or resolutions shall be in full force and effect.

Section 4. This Resolution shall be effective immediately.

ADOPTED by the Board of Commissioners of Lake Whatcom Water and Sewer District, Whatcom County, Washington, at a regular meeting thereof, on the 10th day of November, 2021.

Laura Abele, President, Board of Commissioners

Attest:

Rachael Hope, Recording Secretary

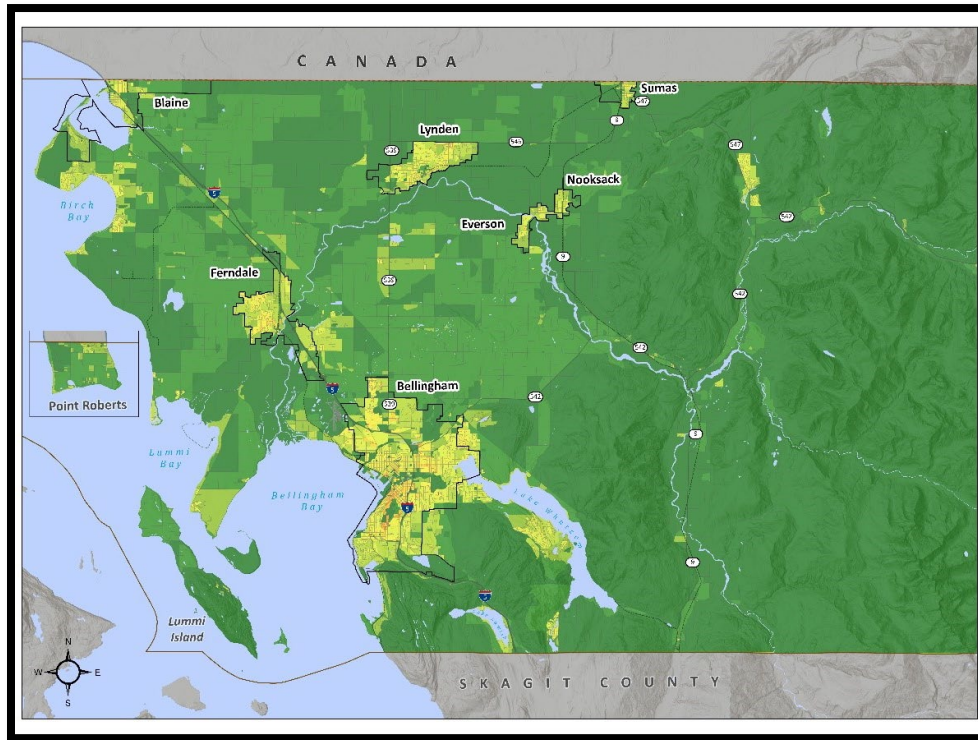
Approved as to form:

Robert Carmichael, Attorney for the District



Whatcom County

Natural Hazards Mitigation Plan



**A MULTI-HAZARD, MULTI-JURISDICTIONAL PLAN DEVELOPED FOR
THE BENEFIT OF ALL CITIZENS AND GOVERNMENTAL
JURISDICTIONS WITHIN WHATCOM COUNTY**

Prepared by:
Whatcom County Sheriff's Office Division of Emergency Management
and
The Resilience Institute of Western Washington University

Final Submission: September 30, 2021



LAKE WHATCOM WATER AND SEWER DISTRICT

Contact Information

Rich Munson
Safety Officer
1220 Lakeway Drive
Bellingham, WA 98229
360.734.9224 / 360.296.4590

Approving Authority

Board of Commissioners
Lake Whatcom Water and Sewer District
1220 Lakeway Drive
Bellingham, WA 98229
360.734.9224

Planning Process

The Lake Whatcom Water and Sewer District completed an update to the District-specific content contained in the prior (2016) Plan through District department head review and formal adoption by the Board of Commissioners. In addition, District staff participated in all coordination meetings hosted by the Whatcom County Sheriff's Office Division of Emergency Management, updated the District's critical facility information based upon facilities constructed or improved since 2016, and incorporated a 2020 asset valuation conducted on all District-owned facilities. The District performed public outreach throughout the planning process through routine staff updates on the revision progress during regularly scheduled Board meetings, inviting public participation through the District's social media accounts, and ultimately through resolution adoption by the District Board during a regularly scheduled public meeting.

Key Contributor List

- Justin Clary, General Manager
- Bill Hunter, District Engineer/Assist. General Manager
- Rich Munson, Safety Officer

The information contained in the Natural Hazards Mitigation Plan update regarding hazards, risks, vulnerability, and potential mitigation is based on the best available science and technology currently available. This information and related data on natural hazards potentially impacting the Lake Whatcom Water and Sewer District will be used as a tool when the District



updates other plans and programs, such as the following:

- Emergency Response Plan
- Comprehensive Sewer Plan
- Water System Comprehensive Plan
- Water and Sewer Utility Capital Improvement Programs

As additional information becomes available from other planning sources that can enhance this Plan, that information will be incorporated through the periodic update process.

Plan Maintenance for Lake Whatcom Water & Sewer District

For each Whatcom County-led Plan revision, the District will review and revise District-specific content, perform public outreach via applicable avenues, and undergo formal Board of Commissioner adoption of the revised Plan during a regularly scheduled public meeting.

Public Outreach and Education

Program	Yes/No, Year Adopted	Description
Nonprofit organizations or local residents groups focused on hazard mitigation, emergency preparedness, vulnerable populations, etc.	No	not applicable
Ongoing public education or information programs	Yes	Periodic posts to District Facebook and web pages providing emergency preparedness information; periodic presentation to Sudden Valley Community Assoc. board regarding capital project and operational information
School-related programs for natural hazard safety	No	not applicable
Public education or information program	Yes	Water conservation education to limit system capacity impacts; semi-annual utility bill inserts on emergency and winter weather preparedness



StormReady certification	No	not applicable
Firewise Community certification	No	not applicable
Public-Private Partnership initiatives addressing disaster-related issues	No	not applicable
Other	none	not applicable

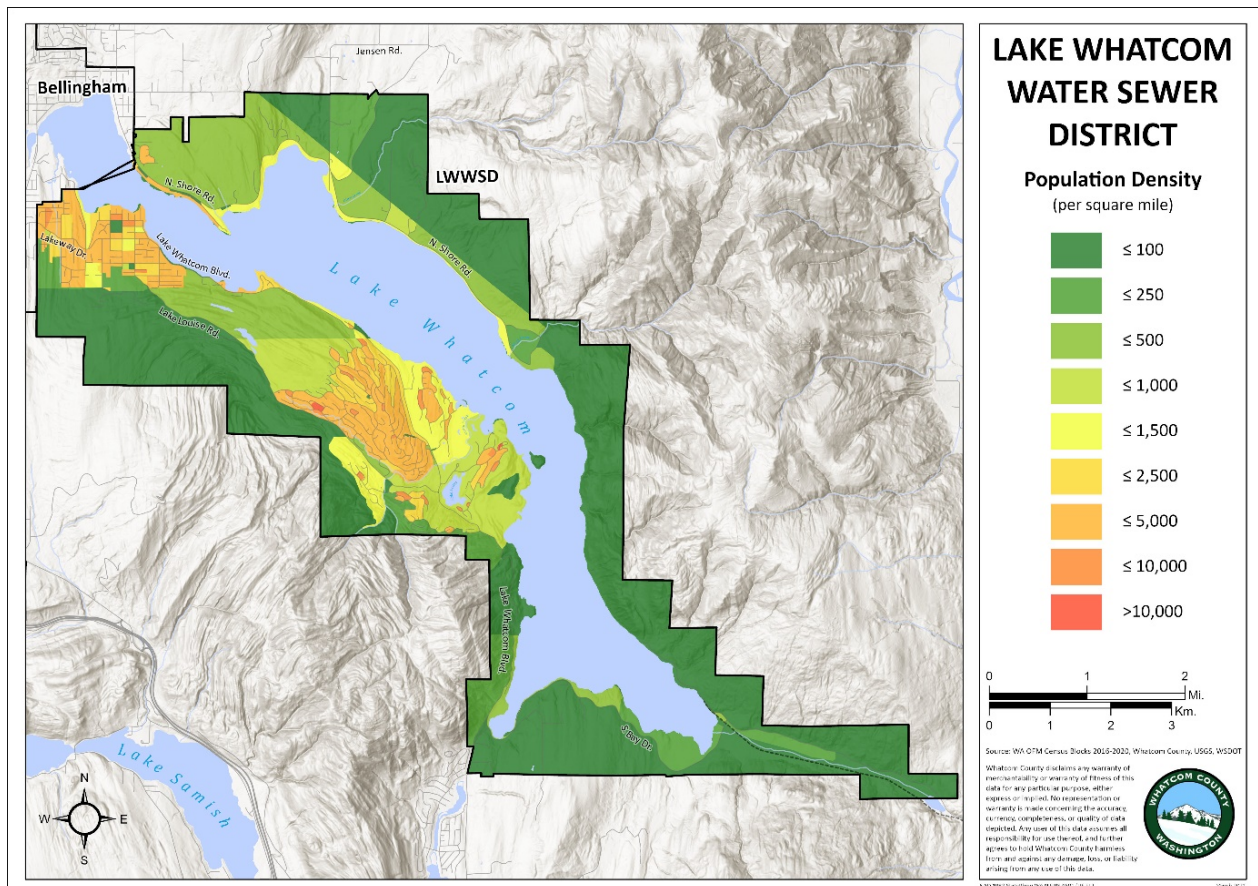


Overview of Lake Whatcom Water & Sewer District, Hazards, and Assets

Geography of Lake Whatcom Water & Sewer District

District Population	12,000 (2020 estimate)
Total area	18 sq. mi.

This map displays the service area for the Lake Whatcom Water and Sewer District, as defined in the resolution adopted by the Whatcom County Board of Commissioners on November 21, 1968, that created the District.

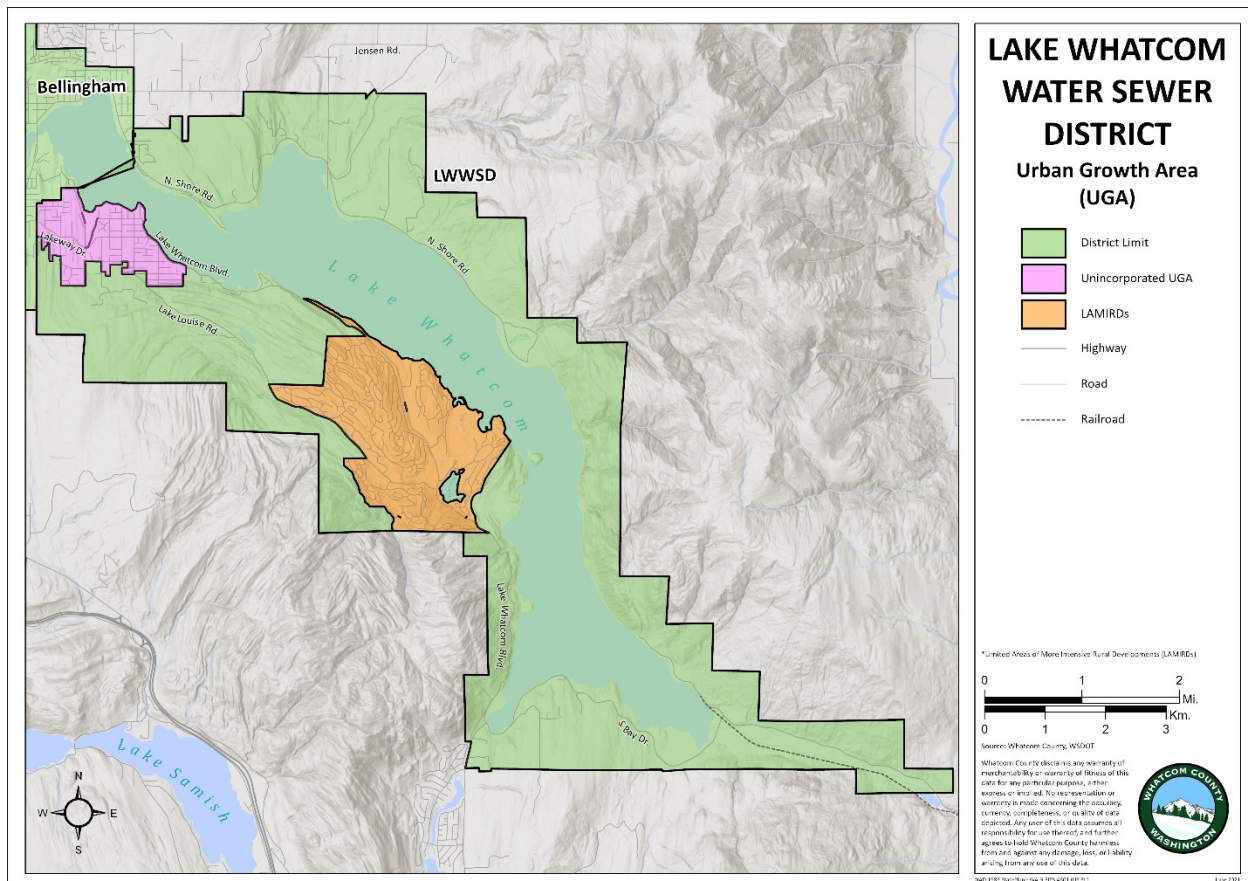


Washington State Office of Financial Management (OFM) 2020 population and housing estimates for 2010-2020 census block data. This map uses the 2016-2020 average population to show population density per square mile.



Growth Trends

The District's service area includes the City of Bellingham's Geneva Urban Growth Area, as well as the Sudden Valley LAMIRD (limited area of more intense rural development land use designation in Whatcom County Code). The majority of growth within the District since the last Plan update, as well as future growth projections, occurs in these two areas.





Presence of Hazards and their Impacts in the Lake Whatcom Water & Sewer District

Throughout its over 50-year existence, the District has had limited impact to its services and/or infrastructure caused by natural hazard-related events, with those that have occurred being landslide and riverine flooding caused by severe storm events. Of those events that have impacted District services, all have been ephemeral, lasting no more than a couple days, with most having services restored within 24 hours.

With the District wholly located within the environmentally sensitive Lake Whatcom Watershed, land use restrictions have been adopted within the Whatcom County Comprehensive Plan and Whatcom County Code to limit further development within the watershed. As a result, the District has witnessed relative low growth since issuance of the 2016 Plan, with much of the growth that has occurred being in the Sudden Valley LAMIRD (limited area of more intense rural development land use designation) and Geneva UGA. While the topography of Sudden Valley is largely comprised of lands classified as steep slopes (greater than 15%), all development has occurred on previously existing parcels served by existing District infrastructure. As a result, there has been limited need for infrastructure expansion projects that required incorporation of natural hazard-resilient measures.

In the table below is a list of the major hazards that affect Whatcom County. The second column provides the percentage of the Lake Whatcom Water and Sewer District's total area that is exposed to each hazard. The third column indicates the severity of anticipated impacts to community function, considering the credible worst-case hazard scenario. Severity of anticipated impacts considers effects on basic community function such as shelter, transportation, utilities, commerce, industry, agriculture, education, health, recreation, and cultural identity. Severity ranges from none to extreme, as shown in the key below the table. Finally, the last column of the table describes where the hazard impacts the community and which services the hazard would most significantly impact.



	Hazard	% area Exposed	Severity of Anticipated Impacts	Hazard Descriptions
Geological	Earthquake	100%	High	All land susceptible to seismic shaking. Anticipated loss of water/sewage systems for weeks to months, with potential for release of untreated sewage to Lake Whatcom.
	Liquefaction	13.5%	Mod	Areas susceptible to liquefaction are primarily limited to the areas immediately surrounding the mouths of Austin, Carpenter, Olson and Smith creeks (alluvial deposits). Infrastructure in these areas is relatively limited (water/sewer pipelines and 5 sewer lift stations), all of which could be damaged, resulting in a loss of service to some customers.
	Landslide	11.1%	Mod	Areas susceptible to landslide are primarily limited to the Sudden Valley area where slopes are predominately 15% or greater. Landslides could impact (or access to) critical infrastructure, including water/sewer pipelines, water pump stations and reservoirs, and sewer lift stations.
	Volcano	0%	Low	Unlikely that a lahar from a major eruption would enter service area; however, ash fallout could impact lake water quality (drinking water source).
	Tsunami	0%	None	Not within a tsunami inundation zone.
	Mine Hazards	0.8%	None	No known mines are located within the service area.
Hydro-logical	Flooding	34.1%	Mod	Prolonged periods of precipitation may create significant flows in Austin, Beaver, Carpenter, Olson and Smith creeks that could impact (or access to) infrastructure.



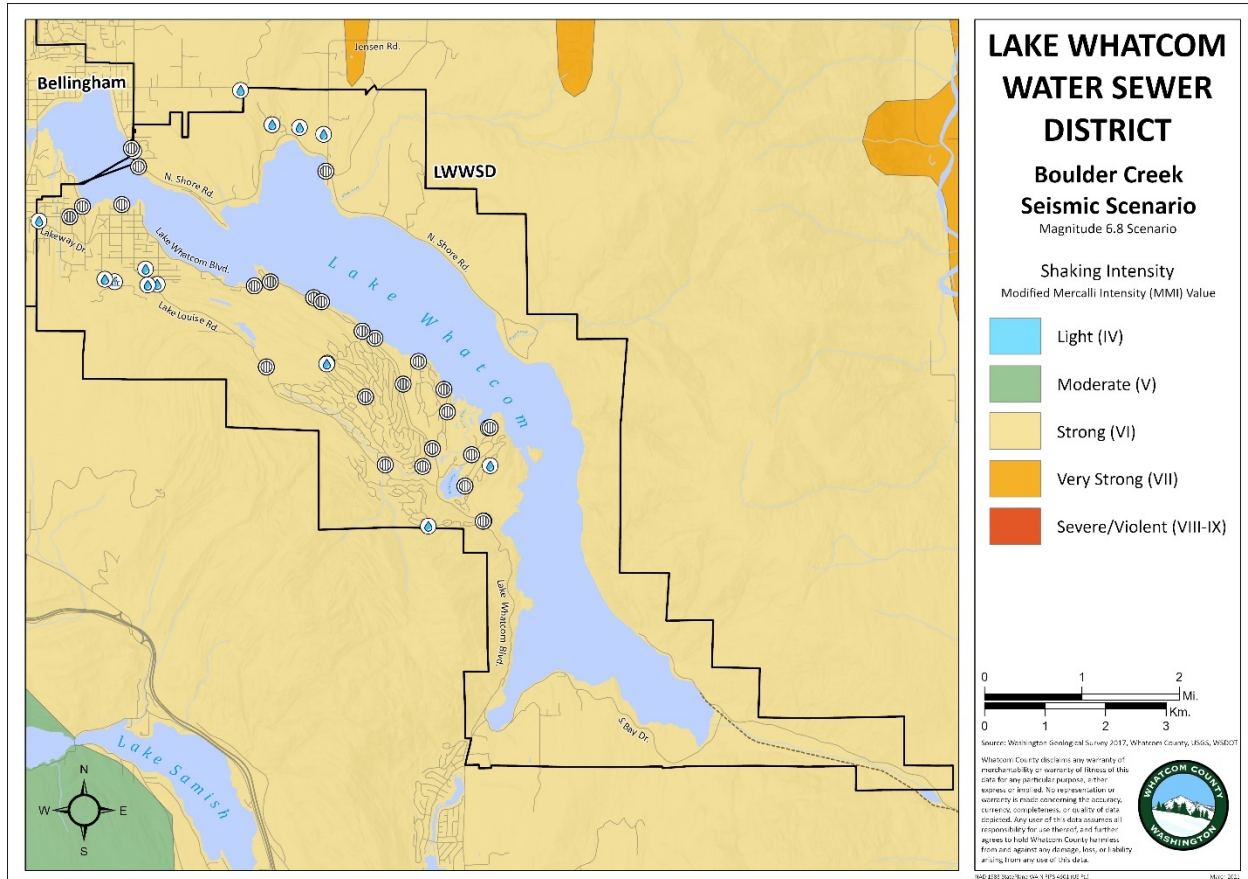
				An example includes the 1983 flood event that resulted in Austin Creek washing out bridges and a District water main.
Meteorological	Wildfire	44.3%	Mod	Much of service area is forested, including areas of development. As is indicated in the Wildland-Urban Interface map, much of the District's critical infrastructure could be impacted by wildfires.

Severity Scale: **None** = no impact to community function
Low = minor degradation of community functions, not widespread
Moderate = moderate degradation over multiple weeks or widespread
High = degradation or loss over many weeks, widespread

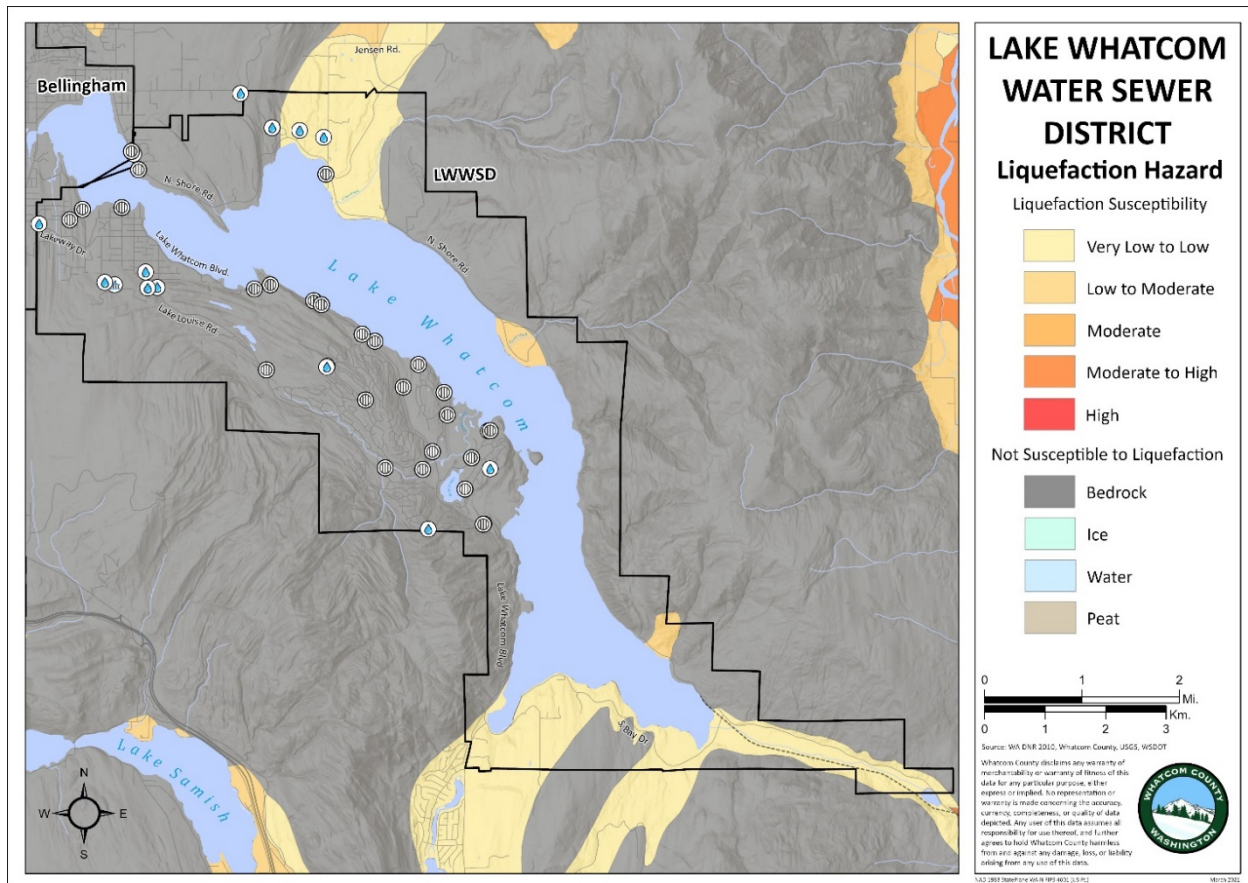


Natural Hazard Maps

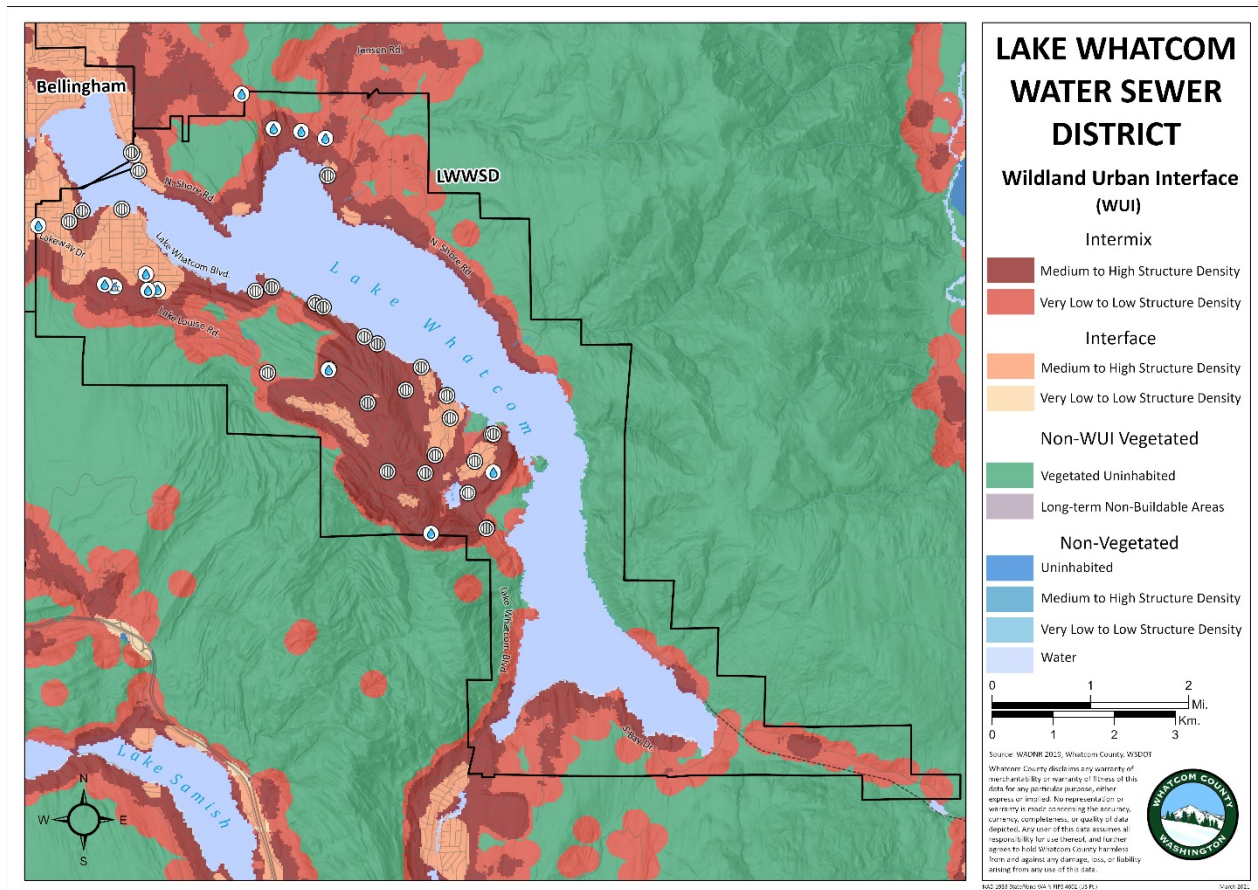
The following figures depict the natural hazards present within the jurisdiction.



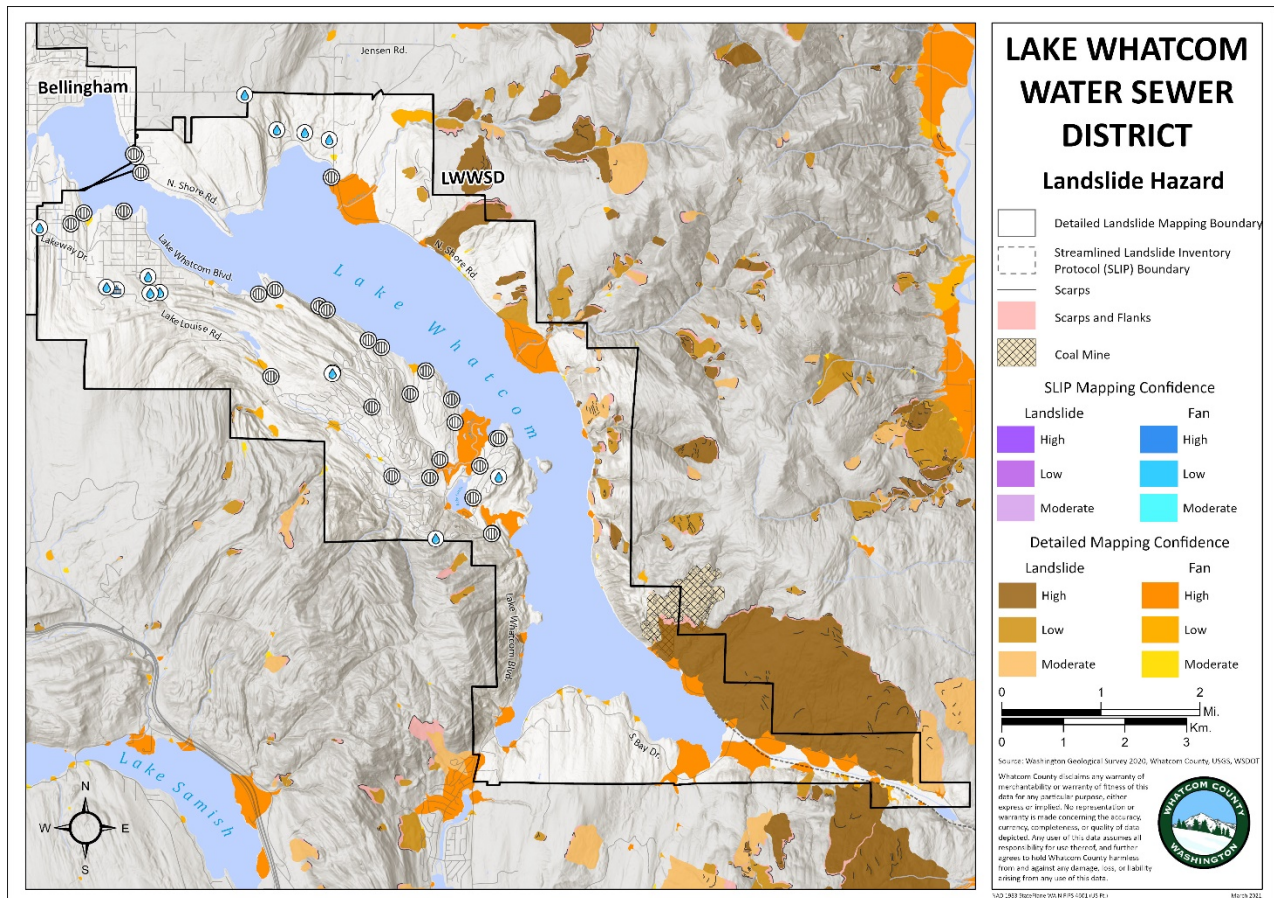
Washington Department of Natural Resources (WA DNR) 2017 Boulder Creek Fault Zone seismic scenario of magnitude 6.8 data. Displays extent and severity of the modeled earthquake in the Modified Mercalli Intensity (MMI) scale.



Washington Department of Natural Resources (WA DNR) 2010 liquefaction susceptibility data. This feature class is part of a geodatabase that contains statewide ground response data for Washington State.



Washington Department of Natural Resources (WA DNR) 2019 mapped data of Washington's Wildland Urban Interface (WUI). The WUI displays areas of WA where structures and wildland overlap with specific structure densities.



Washington Geological Survey (WGS) 2020 Washington landslide inventory data compiled following streamline landslide mapping protocol (SLIP). SLIP was developed by the WGS's Landslide Hazards Program to help geologists rapidly map landslide landforms from lidar. This data shows both detailed mapping and SLIP landslide data.



Lake Whatcom Water & Sewer District Critical Facility List

Facility Name	Facility Type	Significance	Location	Assessed Dollar Value (2020)	Notes
Administration Building	EF	1	1220 Lakeway Dr, Bellingham, WA	\$964,000	Functions as District headquarters and EOC; located outside District
Post Point Wastewater Treatment Plant	EF	3	200 McKenzie Ave, Bellingham, WA	\$6,254,284	City of Bellingham-owned facility that treats District-generated wastewater under an interlocal agreement
Maintenance Facility	EF	2	1010 Lakeview St, Bellingham, WA	\$1,271,800	Stores all equipment, materials and spare parts, serves as backup EOC
Sudden Valley Water Treatment Plant/Chlorine Contact Reservoir	EF	3	26 Morning Beach Dr, Bellingham, WA	\$3,194,700	Produces drinking water for South Shore System (3,880 connections)
Sudden Valley WTP Booster Station	EF	3	26 Morning Beach Dr, Bellingham, WA	\$1,327,200	Pumps treated water from SVWTP to South Shore System
Agate Heights Water Treatment Plant/Well Site	EF	3	3320 Sunny Cove Ct, Bellingham, WA	\$365,200	Produces drinking water for Agate Heights System (50 connections)
Johnson Well Site	EF	1	3471 Agate Bay Ln, Bellingham, WA	\$139,200	Drinking water source for 2 connections
Eagleridge Booster Station	EF	1	1708 Northshore Rd, Bellingham, WA	\$423,500	Intertie with City of Bellingham providing drinking water to Eagleridge System (70 connections)
Coronado Booster Station	EF	1	4826 Lookout St, Bellingham, WA	\$58,300	Drinking water pump station



**SECTION 3. JURISTITION PROFILES AND MITIGATION
STRATEGIES –LAKE WHATCOM WATER & SEWER DISTRICT**

Geneva Intertie	EF	3	3914 Lakeway Dr, Bellingham, WA	\$116,100	Intertie with City of Bellingham for emergency water supply
Agate Heights Booster Station	EF	2	3363 Opal Terrace, Bellingham, WA	\$119,900	Drinking water pump station
Beecher Booster Station	EF	1	4748 Columbus Ave, Bellingham, WA	\$69,300	Drinking water pump station
South Geneva Booster Station	EF	1	1765 Lake Louise Rd, Bellingham, WA	\$109,100	Drinking water pump station
Division 30 Booster Station	EF	3	1744 Lake Whatcom Blvd, Bellingham, WA	\$294,400	Drinking water pump station
Agate Heights Reservoir	EF	3	3363 Opal Terrace, Bellingham, WA	\$383,200	0.08 MG water reservoir
LWRTC Reservoir	EF	3	2145 Academy Rd, Bellingham, WA	\$544,800	0.1 MG water reservoir
Division 7 Reservoir	EF	3	3 Grand View Circle, Bellingham, WA	\$1,448,300	1.0 MG water reservoir
Division 22 Reservoir No. 1	EF	3	10 Water Tower Ct, Bellingham, WA	\$965,200	0.5 MG water reservoir
Division 22 Reservoir No. 2	EF	3	10 Water Tower Ct, Bellingham, WA	\$1,074,500	0.6 MG water reservoir
Division 30 Reservoir	EF	3	30 Loganberry Ln, Bellingham, WA	\$640,600	0.15 MG water reservoir
Geneva Reservoir	EF	3	1010 Lakeview St, Bellingham, WA	\$937,100	0.5 MG water reservoir
Afternoon Beach Lift Station	EF	3	22 Morning Beach Dr, Bellingham, WA	\$393,000	Sewer pump station with backup generator
Agate Bay Lift Station	EF	3	3187 Agate Bay Ln, Bellingham, WA	\$240,200	Sewer pump station with backup generator



**SECTION 3. JURISTITION PROFILES AND MITIGATION
STRATEGIES –LAKE WHATCOM WATER & SEWER DISTRICT**

Airport Lift Station	EF	2	2316 Lake Whatcom Blvd, Bellingham, WA	\$173,900	Sewer pump station with backup generator
Austin Lift Station	EF	1	8 Acorn Pl, Bellingham, WA	\$125,200	Sewer pump station with backup generator
Beaver Lift Station	EF	3	2271 Lake Louise Rd, Bellingham, WA	\$930,600	Sewer pump station with backup generator
Boulevard Lift Station	EF	1	2586 Lake Whatcom Blvd, Bellingham, WA	\$172,600	Sewer pump station
Cable Street Lift Station	EF	3	2900 Lake Whatcom Blvd, Bellingham, WA	\$818,700	Sewer pump station with backup generator
Camp Firwood Lift Station	EF	1	1744 Lake Whatcom Blvd, Bellingham, WA	\$190,400	Sewer pump station
Dellesta Lift Station	EF	1	2127 Northshore Dr, Bellingham, WA	\$94,300	Sewer pump station
Edgewater Lift Station	EF	1	1725 Edgewater Ln, Bellingham, WA	\$85,200	Sewer pump station
Euclid Lift Station	EF	2	1602 Euclid Ave, Bellingham, WA	\$207,200	Sewer pump station
Flat Car Lift Station	EF	3	2800 Lake Louise Rd, Bellingham, WA	\$920,700	Sewer pump station with backup generator
Geneva Lift Station	EF	2	1545 Geneva St, Bellingham, WA	\$476,100	Sewer pump station with backup generator
Lakewood Lift Station	EF	1	2462 Lake Whatcom Blvd, Bellingham, WA	\$147,500	Sewer pump station
Lake Louise Lift Station	EF	2	7 Larkspur Park Dr, Bellingham, WA	\$138,600	Sewer pump station with backup generator
Lowe Lift Station	EF	1	1525 Lowe Ave, Bellingham, WA	\$98,700	Sewer pump station
Marina Lift Station	EF	2	2 Marina Circle, Bellingham, WA	\$146,800	Sewer pump station with backup generator

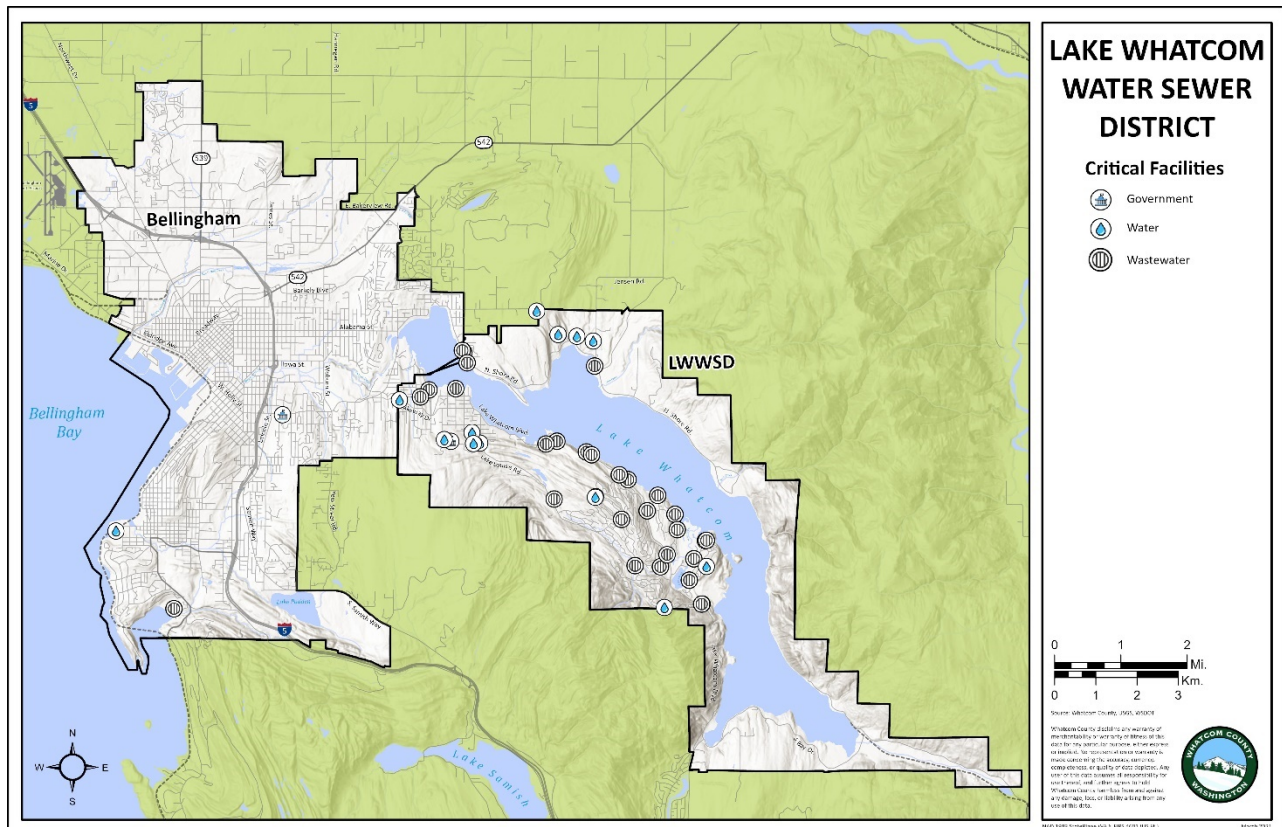


**SECTION 3. JURISTITION PROFILES AND MITIGATION
STRATEGIES –LAKE WHATCOM WATER & SEWER DISTRICT**

North Point Lift Station	EF	3	10 Clear Lake Ct, Bellingham, WA	\$531,000	Sewer pump station with backup generator
Par Lift Station	EF	1	18 Park Ln, Bellingham, WA	\$229,100	Sewer pump station
Plum Lift Station	EF	2	15 Autumn Vista Pl, Bellingham, WA	\$164,700	Sewer pump station
Ranch House Lift Station	EF	3	10 Marigold Dr, Bellingham, WA	\$630,500	Sewer pump station with backup generator
Rocky Ridge Lift Station	EF	1	2566 Woodcliff Ln, Bellingham, WA	\$108,300	Sewer pump station
Strawberry Canyon Lift Station	EF	2	12 Strawberry Canyon Ct, Bellingham, WA	\$218,600	Sewer pump station with backup generator
Strawberry Point Lift Station	EF	1	2642 Lake Whatcom Blvd, Bellingham, WA	\$208,000	Sewer pump station
Sudden Valley Lift Station	EF	3	2018 Lake Whatcom Blvd, Bellingham, WA	\$2,651,700	Sewer pump station with backup generator and sewage detention basin
Tomb Lift Station	EF	1	16 Marina Ct, Bellingham, WA	\$219,000	Sewer pump station with backup generator

Facility Type: EF = Essential Facility; HMF = Hazardous Materials Facility; HPL = High Potential Loss; LUS = Lifeline Utility System

Significance to community function: 1=Moderate; 2= High; 3 =Very High



Map of critical facilities identified by the Lake Whatcom Water & Sewer District. Across Whatcom County, critical facilities fell into 15 categories. Unique categories developed for this plan update include mass shelter, assisted living, and recovery resources. Mass shelter includes facilities such as fairgrounds and community centers. Recovery resources are facilities that are required post-hazard event, for example public works and private construction companies. Not all jurisdictions identified or included critical facilities in each category.



Critical Facility Rankings for the Lake Whatcom Water & Sewer District

The table below indicates whether each critical facility falls within known hazard zones for earthquake, liquefaction, landslide, tsunami, volcano, riverine flooding, coastal flooding and wildfire zones. A rank assessment in the last column indicates how the relative risk of community impact. This ranking considers the significance of the facility to the community and the number of hazard zones the facility is within. The frequency of each hazard is also considered, such that being in a low frequency hazard zone would receive a lower ranking than that same facility being in a high frequency hazard zone. Ranking is on a scale of 1 to 10, with 1 being the facility with the highest-ranking score, and 10 being a facility with the lowest ranking score in the jurisdiction.

$$\text{Rank} = \text{Significance} * \left[\frac{\text{EQ_Zone}}{\text{EQ_Freq}} + \frac{\text{LQ_Zone}}{\text{LQ_Freq}} + \frac{\text{LS_Zone}}{\text{LS_Freq}} + \dots + \frac{\text{WF_Zone}}{\text{WF_Freq}} \right]$$

Significance: 1=moderate; 2=high; 3=very high, as assessed in the critical facilities list in the previous section

Zone: 0=facility not in hazard zone; 1 = facility in the hazard zone

Frequency (e.g. EQ_Freq, LQ_Freq) is the most difficult variable to which to assign a value. Frequency varies based upon the magnitude of a hazard event and varies from one place to another. It was not possible within the time constraints to assess frequency of hazard at each critical facility location. Instead, a qualitative assessment of the hazard frequency across the entire county was made, as shown in the chart below.

Description	Freq Value used in formula	Hazards
Frequent, occurring on the order of decades	3	Riverine flooding (FL); Coastal flooding (COA)
Rare, occurring on the order of centuries	2	Earthquake (EQ); Liquefaction (LQ); Landslide (LS); Wildfire (WF)
Very rare, occurring on the order of millennia	1	Tsunami (TSU); Volcano (VOL)

Note: Severe storm, a very frequent hazard, was omitted because it is ubiquitous and because no hazard map of storm severity was available.



Critical Facilities Ranking Table

Facility Name	Facility Type	Significance	EQ	LQ	LS	TSU	VOL	FL	COA	WF	Rank Assessment
Administration Building	EF	1	1	1	0	0	0	0	0	1	0.21
Post Point Wastewater Treatment Plant	EF	3	1	0	0	0	0	0	0	1	0.43
Maintenance Facility	EF	2	1	0	0	0	0	0	0	1	0.29
Sudden Valley Water Treatment Plant/Chlorine Contact Reservoir	EF	3	1	0	0	0	0	1	0	0	0.36
Sudden Valley WTP Booster Station	EF	3	1	0	0	0	0	1	0	0	0.36
Agate Heights Water Treatment Plant/Well Site	EF	3	1	1	0	0	0	0	0	1	0.64
Johnson Well Site	EF	1	1	1	0	0	0	0	0	1	0.21
Eagleridge Booster Station	EF	1	1	0	0	0	0	0	0	1	0.14
Coronado Booster Station	EF	1	1	0	0	0	0	0	0	1	0.14
Geneva Intertie	EF	3	1	0	0	0	0	0	0	1	0.43
Agate Heights Booster Station	EF	2	1	0	0	0	0	0	0	1	0.29
Beecher	EF	1	1	0	0	0	0	0	0	1	0.14



**SECTION 3. JURISTITION PROFILES AND MITIGATION
STRATEGIES –LAKE WHATCOM WATER & SEWER DISTRICT**

Booster Station											
South Geneva Booster Station	EF	1	1	0	0	0	0	0	0	1	0.14
Division 30 Booster Station	EF	3	1	0	0	0	0	0	0	1	0.43
Agate Heights Reservoir	EF	3	1	0	0	0	0	0	0	0	0.21
LWRTC Reservoir	EF	3	1	0	0	0	0	0	0	1	0.43
Division 7 Reservoir	EF	3	1	0	0	0	0	0	0	1	0.43
Division 22 Reservoir No. 1	EF	3	1	0	0	0	0	0	0	1	0.43
Division 22 Reservoir No. 2	EF	3	1	0	0	0	0	0	0	1	0.43
Division 30 Reservoir	EF	3	1	0	0	0	0	0	0	1	0.43
Geneva Reservoir	EF	3	1	0	0	0	0	0	0	1	0.43
Afternoon Beach Lift Station	EF	3	1	0	0	0	0	0	0	1	0.43
Agate Bay Lift Station	EF	3	1	1	1	0	0	1	0	1	1
Airport Lift Station	EF	2	1	0	0	0	0	0	0	1	0.29
Austin Lift Station	EF	1	1	0	0	0	0	0	0	1	0.14
Beaver Lift Station	EF	3	1	0	0	0	0	0	0	1	0.43
Boulevard Lift Station	EF	1	1	0	0	0	0	1	0	0	0.12
Cable Street Lift Station	EF	3	1	0	0	0	0	0	0	1	0.43
Camp Firwood Lift Station	EF	1	1	0	0	0	0	0	0	1	0.14



**SECTION 3. JURISTITION PROFILES AND MITIGATION
STRATEGIES –LAKE WHATCOM WATER & SEWER DISTRICT**

Dellesta Lift Station	EF	1	1	0	0	0	0	0	0	1	0.14
Edgewater Lift Station	EF	1	1	0	0	0	0	0	0	1	0.14
Euclid Lift Station	EF	2	1	0	0	0	0	0	0	1	0.29
Flat Car Lift Station	EF	3	1	0	0	0	0	0	0	1	0.43
Geneva Lift Station	EF	2	1	0	0	0	0	0	0	1	0.29
Lakewood Lift Station	EF	1	1	0	0	0	0	0	0	1	0.14
Lake Louise Lift Station	EF	2	1	0	0	0	0	0	0	1	0.29
Lowe Lift Station	EF	1	1	0	0	0	0	0	0	1	0.14
Marina Lift Station	EF	2	1	0	0	0	0	0	0	1	0.29
North Point Lift Station	EF	3	1	0	0	0	0	0	0	1	0.43
Par Lift Station	EF	1	1	1	0	0	0	0	0	1	0.21
Plum Lift Station	EF	2	1	0	0	0	0	0	0	1	0.29
Ranch House Lift Station	EF	3	1	0	0	0	0	0	0	1	0.43
Rocky Ridge Lift Station	EF	1	1	0	0	0	0	0	0	0	0.07
Strawberry Canyon Lift Station	EF	2	1	0	0	0	0	0	0	1	0.29
Strawberry Point Lift Station	EF	1	1	0	0	0	0	1	0	0	0.12
Sudden Valley Lift Station	EF	3	1	0	0	0	0	0	0	1	0.43
Tomb Lift Station	EF	1	1	0	0	0	0	0	0	1	0.14

Notes: **EQ** = Earthquake; **LQ** = Liquefaction; **LS** = Landslide; **TSUN** = Tsunami; **VOL** = Volcano; **FL** = Riverine Flooding; **COA** = Coastal Flooding; **WF** = Wildland Fire



Areas and Assets Exposed, Per Hazard

	Lake Whatcom Water & Sewer District Exposure to Natural Hazards					
	Hazard Susceptibility	Asset County (% of Total)				Critical Facilities Appraised Value (Million)
		Area (sq.mi.)	Population	Parcels	Critical Facilities	
Geological Hazards	Earthquake, Shaking Intensity					
	MMI V	-	-	-	2.1%	\$0.2 ¹
	MMI VI	100%	99.9%	99.9%	97.9%	\$31 ¹
	MMI VII	-	-	-	-	-
	MMI VIII - IX	-	-	-	-	-
	TOTAL	100%	99.9%	99.9%	100%	\$31.2
	Liquefaction					
	Very Low to Low	12.4%	5.8%	8.9%	8.5%	\$2 ¹
	Low to Moderate	1%	0.5%	1%	-	-
	Moderate	-	-	-	-	-
	Moderate to High	-	-	-	2.1%	\$0.2 ¹
	High	-	-	-	-	-
	TOTAL	13.5%	6.3%	9.9%	10.6%	\$2.2
	Landslide					
	Landslide Low	0.6%	0.1%	0.04%	-	-
	Landslide Moderate	0.6%	0.1%	0.1%	-	-
	Landslide High	4.9%	0.3%	0.7%	-	-
	Fan Low	0.1%	0.2%	0.2%	-	-



Hydrological	<i>Fan Moderate</i>	0.5%	0.3%	0.3%	-	-
	<i>Fan High</i>	4.4%	4%	4.8%	2.1%	\$0.2 ¹
	<i>Mine Hazard</i>	0.8%	0.02%	0.03%	-	-
	TOTAL	11.9%	5.02%	6.17%	2.1%	\$0.2
	Volcanic Eruption					
	<i>Case 1 Debris Flows</i>	-	-	-	-	-
	<i>Case 2 Debris Flows</i>	-	-	-	-	-
	<i>Case M Flows</i>	-	-	-	-	-
	<i>Pyroclastic Flows, Lava Flows, and Ballistic Debris</i>	-	-	-	-	-
	<i>Lateral Blast Hazard Zone</i>	-	-	-	-	-
	TOTAL	-	-	-	-	-
	Tsunami, Inundation Zone					
	<i>Low to Moderate Inundation Potential</i>	-	-	-	2.1%	\$0.2 ¹
	<i>Moderate to High Inundation Potential</i>	-	-	-	-	-
	<i>High Inundation Potential</i>	-	-	-	2.1%	\$6 ¹
	TOTAL	-	-	-	4.2%	\$6.2
	Flooding					
	<i>100-year Flood</i>	31.4%	5.1%	6.4%	12.8%	\$5 ¹
	<i>500-year Flood</i>	2.7%	3.2%	4.3%	4.3%	\$0.4 ¹
	<i>Floodway</i>	-	-	-	-	-
	<i>Undetermined (Zone D)</i>	-	-	-	-	-
	TOTAL	34.1%	8.3%	10.7%	17.1%	\$5.4



Meteorological	Wildfire Zones					
	Interface Very Low-Low Structure Density	-	-	0.2%	-	-
	Interface Medium-High Structure Density	5.5%	32.2%	25.1%	25.5%	\$12 ¹
	Intermix Very Low-Low Structure Density	16.9%	5.8%	3.7%	8.5%	\$2 ¹
	Intermix Medium-High Structure Density	21.9%	48.4%	65.5%	55.3%	\$12 ¹
	TOTAL	44.3%	86.4%	94.5%	89.3%	\$26

¹ Shows the assessed dollar value provided by the community in their critical facilities list. Does not include the appraised total value.



Status of Lake Whatcom Water & Sewer District's 2016-2020 and Ongoing Hazard Mitigation Actions

This section describes the status of mitigation actions that were proposed in the 2016 Mitigation Plan and are now 1) currently being implemented and are ongoing, 2) are now completed, or 3) are now discontinued because they are no longer needed. The actions are organized by hazard and indicate the lead agency, funding source, and status.

Lead Agency	May be more than one lead agency indicating shared responsibility and coordination
Funding Source	Local; State; FEMA; Private; Other
Current Status	Action Discontinued / Action Completed / Action ongoing and expected completion date

General: All Hazards

G-a. Emergency Plan Updates – The Lake Whatcom Water and Sewer District updated a prior (2008) revision to its Emergency Management Plan in 2019. A subsequent revision that meets the requirements of the federal America's Water Infrastructure Act of 2018 (AWIA) is underway with anticipated adoption by the Board of Commissioners by the December 31, 2021 deadline.

Lead Agency	Lake Whatcom Water and Sewer District
Funding Source	Local
Current Status	Ongoing

G-b. Provide for an increased level of protection for public infrastructure – As owner/operator of water and sewer systems providing essential public services, the Lake Whatcom Water and Sewer District annually allocates funding toward system reinvestment projects that enhance system resiliency and/or redundancy in preparation for unforeseen events. Improvements completed since issuance of the 2016 Plan include: construction of new Division 22 reservoir meeting current seismic standards and outfitted with the ShakeAlert earthquake early detection system, installing an emergency water intertie with the City of Bellingham's system in Geneva, and installation of standby generators at three sewer lift stations.

Lead Agency	Lake Whatcom Water and Sewer District
Funding Source	Local sources, and state and federal grants



Current Status	Perpetual
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Education and Outreach

EO-a. Utility bill inserts – On a semi-annual basis, the District includes educational materials related to emergency preparedness and winter-weather preparedness within bi-monthly utility bills.

Lead Agency	Lake Whatcom Water and Sewer District
Funding Source	Local
Current Status	Annual

Drought/heat wave

D-a. Monitor water supply – As required under its water system operating permits, the Lake Whatcom Water and Sewer District daily records volumes of water treated, distributed, consumed and lost within each of its three Group A water systems.

Lead Agency	Lake Whatcom Water and Sewer District
Funding Source	Local
Current Status	Perpetual

D-b. Educate residents on water saving techniques – The District maintains water conservation tips on its website, and regularly provides water conservation information via posts to its social media account, messages on the District office reader board, and via utility bill inserts. The District is an active member of the Whatcom Water Alliance, whose mission is to promote standardized water conservation messaging countywide.

Lead Agency	Lake Whatcom Water and Sewer District
Funding Source	Local
Current Status	Perpetual

Earthquake

EQ-a. Seismic retrofit of critical infrastructure – seismic retrofit of the District’s Maintenance Office.

Lead Agency	Lake Whatcom Water and Sewer District
Funding Source	Local sources
Current Status	Complete



EQ-b. Protect critical facilities and infrastructure – complete minor improvements to various facilities and infrastructure.

Lead Agency	Lake Whatcom Water and Sewer District
Funding Source	Local sources, other
Current Status	Complete

EQ-c. Seismic resistant water reservoirs – Constructed 0.6 MG water reservoir in 2018 (Div. 22 No. 2) and planning replacement of existing Division 7 water reservoir with two reservoirs that meet current seismic standards.

Lead Agency	Lake Whatcom Water and Sewer District
Funding Source	Local and Federal, including FEMA
Current Status	Ongoing

EQ-d. Seismic vulnerability assessment – In 2016, the District hired a consultant to assess the seismic vulnerability of all of its water reservoirs and develop a prioritization plan for retrofit/replacement.

Lead Agency	Lake Whatcom Water and Sewer District
Funding Source	Local
Current Status	Complete

EQ-e. Seismic resilient reservoir system – Constructed a second reservoir adjacent to original Division 22 water reservoir in 2018 (including ShakeAlert system), and plan to replace existing single Division 7 reservoir with two reservoirs that will have ShakeAlert-controlled valving to shut it off during high seismic shaking (to preserve water from loss due to anticipated main breaks).

Lead Agency	Lake Whatcom Water and Sewer District
Funding Source	Local and Federal, including FEMA
Current Status	Ongoing

Extreme Temp

No actions ongoing, discontinued, or completed for this hazard.

Flooding



No actions ongoing, discontinued, or completed for this hazard.

Landslide/erosion

ER-a. Vulnerability assessment – Mapped and assessed the vulnerability of system elements to landslide/erosion events.

Lead Agency	Lake Whatcom Water and Sewer District
Funding Source	Local sources
Current Status	Ongoing

Landslide Subsidence

No actions ongoing, discontinued, or completed for this hazard.

Lightening

No actions ongoing, discontinued, or completed for this hazard.

Severe Storm

No actions ongoing, discontinued, or completed for this hazard.

Severe Wind

No actions ongoing, discontinued, or completed for this hazard.

Tornadoes

No actions ongoing, discontinued, or completed for this hazard

Tsunami

No actions ongoing, discontinued, or completed for this hazard.

Wildfire

No actions ongoing, discontinued, or completed for this hazard.

Winter storms/Freezes

No actions ongoing, discontinued, or completed for this hazard.

Multiple Hazards

No actions ongoing, discontinued, or completed for this hazard.



Lake Whatcom Water & Sewer District 2021-2025 Hazard Mitigation Strategy

Whatcom County Hazard Mitigation Goals

Whatcom County has identified five overarching hazard mitigation goals, which represent what a community seeks to achieve through mitigation actions.

- Goal 1.** Protect Life, Property and Public Welfare
- Goal 2.** Increase Public Awareness
- Goal 3.** Preserve and Enhance Natural Systems
- Goal 4.** Encourage Partnership for Implementation
- Goal 5.** Ensure Continuity of Emergency Services

These countywide goals help guide any prioritization and implementation of mitigation actions, ensuring that the actions contribute to a community's vision for the future.

Lake Whatcom Water & Sewer District-Specific Hazard Mitigation Goals

Lake Whatcom Water and Sewer District adds to these county-wide goals, the following community-specific mitigation planning goals:

- LWWSD Goal A:** Ensure continuity of water and sewer services
- LWWSD Goal B:** Harden infrastructure to mitigate impact from seismic hazards

Mitigation Action Options

Appendix E of the Whatcom County Natural Hazard Mitigation Plan provides a list of mitigation options. Lake Whatcom Water and Sewer District considered mitigation options related to earthquake, liquefaction, landslide, volcanic, riverine flooding, and wildfire hazards, especially those related to earthquakes because this hazard has the potential to cause the greatest loss and damage. Not all mitigation options in Appendix E were relevant or a strong priority for the District. Some options have already been implemented or are ongoing in the District, as documented in the section above on the status of 2016-2020 and ongoing hazard mitigation actions.



Mitigation Action Prioritization

The mitigation actions in this section are new actions that the Lake Whatcom Water and Sewer District has prioritized for the 2021-2025 planning period and beyond. Mitigation options were prioritized based upon review of the following two criteria: 1) The action's Overall Feasibility based on engineering, environmental, financial and political considerations, 2) The Criticality of the action, based upon a consideration of which actions had the greatest potential to protect life, property and public welfare. The District is working in cooperation with the County and other participating communities and special districts to develop a systematic methodology that would use multiple evaluation criteria to determine mitigation action prioritization. This new methodology will be used in future updates of this Plan.

In the following Identified Mitigation Actions 2021-2025 table, each priority action is listed by hazard. Each action is followed by planning goals, lead agency, the priority evaluation, timeline, funding source and estimated cost, where such information is available. This information can be used by local decision makers in pursuing strategies for implementation.

Goals	Indicates the hazard mitigation planning goal or goals this action addresses; countywide and/or community-specific
Lead Agency	May be more than one lead agency indicating shared responsibility and coordination
Priority:	H (High); M (Medium); L (Low)
Timeline:	Short-Range (less than 2 years); Mid-Range (2-5 years); Long-Range (more than 5 years); Ongoing
Funding Source:	Local; State; FEMA; Private; Other
Estimated Cost:	Actual; Estimated



Lake Whatcom Water & Sewer District Identified Mitigation Actions 2021-2025

Lake Whatcom Water & Sewer District IDENTIFIED MITIGATION ACTIONS 2021-2025							
MITIGATION ACTIONS		(1) Goals	(2) Lead Responsibility for Carrying out Measure	(3) Priority	(4) Timeline	(5) Funding Source	(6) Estimated Cost
Hazard	Action Items						
GENERAL: ALL HAZARDS Education and Awareness Actions	These are actions that inform and educate citizens, elected officials, and property owners about hazards and ways to mitigate them.						
	<i>G-a. Emergency Plan Updates</i>	1	Lake Whatcom Water and Sewer District	M	O	Local	
	<i>G-b. Provide for an increased level of protection for public infrastructure</i>	1	Lake Whatcom Water and Sewer District	M	O	Local, State, Federal	
Education and Outreach	<i>EO-a Ongoing -- Utility bill inserts</i>	1, 2	Lake Whatcom Water and Sewer District	M	O	Local	
Hazard Specific	Actions communities should consider to identify and evaluate a range of potential mitigation actions for reducing risk to natural hazards and disasters.						
Dam/Levee Failures (See: Flooding)	No applicable action items	-	-	-	-	-	-
Droughts/Heat	<i>D-a Ongoing -- Monitor water supply</i>	1	Lake Whatcom Water and Sewer	M	O	Local	

Priority:
H (High); M (Medium); L (Low)

Timeline:
Short-Range (less than 2 years); Mid-Range (2-5 years); Long-Range (more than 5 years); Ongoing

Funding Source:
Local; State; FEMA; Private; Other

Estimated Cost:
Actual; Estimated

Whatcom County Sheriff's Department, Division of Emergency Management

Original Submission: June 15, 2021

FEMA Approval:

LWWSD- 32



Lake Whatcom Water & Sewer District IDENTIFIED MITIGATION ACTIONS 2021-2025							
MITIGATION ACTIONS		(1) Goals	(2) Lead Responsibility for Carrying out Measure	(3) Priorit y	(4) Timeline	(5) Funding Source	(6) Estimated Cost
Hazard	Action Items						
Waves			District				
	<i>D-b Ongoing -- Educate residents on water saving techniques</i>	2	LWWSD	M	O	Local	
	D-1 Require water conservation during drought conditions	3, A	LWWSD	L	O	Local	\$10,000
	D-2 Raw water bypass for low reservoir level	1, A	LWWSD	L	L	Local, State, FEMA, Other	\$200,000
Earthquakes	<i>EQ-c Ongoing -- Seismic resistant water reservoirs</i>	1	LWWSD	L	O	Local, Federal, FEMA	
	<i>EQ-e Ongoing -- Seismic resilient reservoir system</i>	1	LWWSD	L	O	Local, Federal, FEMA	
	EQ-1 Seismic retrofit of existing water reservoirs	1, 5, A, B	LWWSD	H	O	Local, State, FEMA, Other	\$8,000,000
	EQ-2 Replace water mains with seismically resistant piping	1, 5, A, B	LWWSD	L	L	Local, State, FEMA, Other	\$50,000,000
	EQ-3 Seismic retrofit of existing pumping stations; install ShakeAlert system controls	1, 5, A, B	LWWSD	H	S	Local, State, FEMA, Other	\$1,500,000

Priority: H (High); M (Medium); L (Low)	Timeline: Short-Range (less than 2 years); Mid-Range (2-5 years); Long-Range (more than 5 years); Ongoing	Funding Source: Local; State; FEMA; Private; Other	Estimated Cost: Actual; Estimated
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SECTION 3. JURISTITION PROFILES AND MITIGATION
STRATEGIES –LAKE WHATCOM WATER & SEWER
DISTRICT

Lake Whatcom Water & Sewer District IDENTIFIED MITIGATION ACTIONS 2021-2025							
MITIGATION ACTIONS		(1) Goals	(2) Lead Responsibility for Carrying out Measure	(3) Priorit y	(4) Timeline	(5) Funding Source	(6) Estimated Cost
Hazard	Action Items						
	EQ-4 Anchorage of critical facilities: pumps, electronics, communications	1, 5, A, B	LWWSD	H	M	Local, State, FEMA, Other	\$3,000,000
Extreme Temperatures	No applicable action items	-	-	-	-	-	-
Flooding	F-1 Protect Infrastructure Harden infrastructure at bridge and dam crossings	1, 5, A	LWWSD	L	L	Local, State, FEMA, Other	\$1,000,000
	F-2 Protect Critical Facilities Dry proof pumping stations	1, 5, A	LWWSD	L	L	State, FEMA	\$150,000
Landslide/Erosion	ER-a Ongoing -- Vulnerability assessment	1	LWWSD	L	O	Local	
	ER-1 Protect Division 30 Reservoir	1, 5, A, B	LWWSD	L	L	Local, State, FEMA, Other	\$1,000,000
Land Subsidence	LS-1 Protect Critical Facilities	1, 5, A	LWWSD	L	L	Local, State, FEMA, Other	\$2,000,000
Lightning	No applicable action items	-	-	-	-	-	-
Severe Storms	SS-1 Install backup generators at	1, 5, A	LWWSD	H	O	Local, State,	\$2,000,000

Priority:
H (High); M (Medium); L (Low)

Timeline:
Short-Range (less than 2 years); Mid-Range (2-5 years); Long-Range (more than 5 years); Ongoing

Funding Source:
Local; State; FEMA; Private; Other

Estimated Cost:
Actual; Estimated



Lake Whatcom Water & Sewer District IDENTIFIED MITIGATION ACTIONS 2021-2025							
MITIGATION ACTIONS		(1) Goals	(2) Lead Responsibility for Carrying out Measure	(3) Priorit y	(4) Timeline	(5) Funding Source	(6) Estimated Cost
Hazard	Action Items						
	facilities					FEMA, Other	
Severe Wind	No applicable action items	-	-	-	-	-	-
Tornadoes	No applicable action items	-	-	-	-	-	-
Tsunami	No applicable action items	-	-	-	-	-	-
Wildfires	WF-1 Firewise critical facilities	1, 5, A	LWWSD	M	M	Local, State, FEMA, Other	\$1,000,000
Winter Storms/ Freezes (Severe Winter Weather)	WS-1 Install backup generators at facilities	1, 5, A	LWWSD	H	O	Local, State, FEMA, Other	\$2,000,000
Multiple Hazards	No applicable action items	-	-	-	-	-	-
Advanced Mitigation Projects (Dream List)	No applicable action items	-	-	-	-	-	-

Priority: H (High); M (Medium); L (Low)	Timeline: Short-Range (less than 2 years); Mid-Range (2-5 years); Long-Range (more than 5 years); Ongoing	Funding Source: Local; State; FEMA; Private; Other	Estimated Cost: Actual; Estimated
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Lake Whatcom Water & Sewer District Annual Review and Progress for Hazard-Specific Mitigation Actions 2021-2025

Progress monitoring means tracking the implementation of the hazard specific mitigation actions over time. Each jurisdiction must identify how, when, and by whom action items will be monitored. The responsible agency assigned to each mitigation action is responsible for tracking and reporting on each of their actions.

Annual review and progress reporting includes the following:

- Step One:** Identify mitigation actions that your planning team has identified for the annual review. The planning team has the option to address ALL action items, or only those that should be acted on during each review cycle.
- Step Two:** Use the table below to track annual progress. For each action item selected for annual review insert the appropriate letter that indicates the status of that action item.
- Step Three:** Complete a progress report form as illustrated in Appendix G for each mitigation action item selected for annual review
- Step Four:** Submit the completed form(s) to the Whatcom County DEM.



Lake Whatcom Water and Sewer District Hazard-Specific Action Items 2021-2025 – Annual Review and Progress						
Action Items	Status (Choose One & Enter Letter): A. Completed; B. In Progress (on schedule); C. In Progress (delayed); D. Delayed Until Funding Available; E. Canceled					
	2021	2022	2023	2024	2025	Notes on yearly progress
GENERAL: ALL HAZARDS						
G-a. Update District-specific emergency response plan	B					Plan updated in 2019 and is on track for update in compliance with AWIA-requirements in 2021.
G-b. Provide for an increased level of protection for public infrastructure	B					Six-year water/sewer capital improvement plans includes projects each year assoc. with this task.
Add Additional Actions as Needed						
EDUCATION AND OUTREACH						
EO-a. Utility bill inserts	B					Completed annually.
Add Additional Actions as Needed						
DAM/LEEVE FAILURES						
none	-	-	-	-	-	
DROUGHTS/HEAT WAVES						
D-a. Monitor water supply	B					Conduct daily.
D-b. Educate residents on water saving techniques	B					Conduct via utility bill fact sheets, social media posts, and Lakeway Drive reader board messages.
D-1 Require water conservation during drought conditions	B					To be implemented, if necessary.
D-2 Install raw water bypass for low lake level conditions	D					Improvement planned beyond current planning horizon.
Add Additional Actions as Needed						
EARTHQUAKES						
EQ-c. Seismic resistant water reservoirs	B					Replacement of existing Div. 7 reservoir planned for 2023.
EQ-e. Seismic resilient reservoir	B					Installation of ShakeAlert controls on



Lake Whatcom Water and Sewer District Hazard-Specific Action Items 2021-2025 – Annual Review and Progress						
Action Items	Status (Choose One & Enter Letter): A. Completed; B. In Progress (on schedule); C. In Progress (delayed); D. Delayed Until Funding Available; E. Canceled					Notes on yearly progress
	2021	2022	2023	2024	2025	
system						water system components planned for 2023.
EQ-1 Seismic retrofit of existing water reservoirs	D					Improvements dependent upon external funding.
EQ-2 Replace water mains with seismically resistant piping	D					Improvements dependent upon external funding.
EQ-3 Seismic retrofit of existing pumping stations; install ShakeAlert system controls	D					Improvements dependent upon external funding.
EQ-4 Anchorage of critical facilities: pumps, electronics, communications	D					Improvements dependent upon external funding.
<i>Add Additional Actions as Needed</i>						
FLOODING						
F-1 Protect infrastructure (harden infrastructure at bridge and dam crossings)	D					Improvements dependent upon external funding.
F-2 Protect critical facilities (dry proof pumping stations)	D					Improvements dependent upon external funding.
<i>Add Additional Actions as Needed</i>						
LANDSLIDES/EROSION						
ER-1 Protect Division 30 reservoir	D					Improvements dependent upon external funding.
<i>Add Additional Actions as Needed</i>						
LAND SUBSIDENCE						
LS-1 Protect Critical Facilities	D	-	-	-	-	Improvements dependent upon external funding.




Lake Whatcom Water and Sewer District Hazard-Specific Action Items 2021-2025 – Annual Review and Progress						
Action Items	Status (Choose One & Enter Letter): A. Completed; B. In Progress (on schedule); C. In Progress (delayed); D. Delayed Until Funding Available; E. Canceled					Notes on yearly progress
	2021	2022	2023	2024	2025	
<i>Add Additional Actions as Needed</i>						
TORNADOES						
none	-	-	-	-	-	
TSUNAMI						
none	-	-	-	-	-	
WILDFIRES						
WF-1 Firewise critical facilities	D					Improvements dependent upon external funding.
<i>Add Additional Actions as Needed</i>						
WINTER STORMS/FREEZES (SEVERE WINTER WEATHER)						
WS-1 Power generation at critical facilities	B					Completed per current capital improvement plan.
<i>Add Additional Actions as Needed</i>						
EXTREME TEMPERATURES						
none	-	-	-	-	-	
LIGHTNING						
none	-	-	-	-	-	
SEVERE WIND						
none	-	-	-	-	-	
MULTIPLE HAZARDS						
none	-	-	-	-	-	



**AGENDA
BILL
Item 7.B**

Rate Study Discussion

DATE SUBMITTED:	November 4, 2021	MEETING DATE:	November 10, 2021
TO: BOARD OF COMMISSIONERS		FROM: Justin Clary, General Manager	
GENERAL MANAGER APPROVAL			
ATTACHED DOCUMENTS		1. none	
TYPE OF ACTION REQUESTED	RESOLUTION <input type="checkbox"/>	FORMAL ACTION/ MOTION <input type="checkbox"/>	INFORMATIONAL /OTHER <input checked="" type="checkbox"/>

BACKGROUND / EXPLANATION OF IMPACT

The Lake Whatcom Water and Sewer District (District) is a special purpose district authorized under Title 57 Revised Code of Washington. Though not required by its enabling statutes, as a local government entrusted with appropriately managing and investing its customers' monies, the District has a long history of projecting operational, capital and debt service expenditures multiple years into the future, and setting rates and fees at levels appropriate for ensuring its financial viability.

With the final increase of its most recent multi-year rate increase program in effect, the District earlier this year embarked on completion of a rate study that would allow for creation of its next 5-year rate program. While an initial revision of the rate study was developed using recent operational cost trends, known debt service obligations, and policy-defined system reinvestment allocations, it was also recognized that there are a number of other large-scale and long-range policy and capital considerations at play that will have a direct impact on the rate study. These considerations include, but are not limited to:

- Sudden Valley Water Treatment Plant Master Plan phased improvements
- City of Bellingham Post Point Wastewater Treatment Plant resource recovery project
- District sewer system rehabilitation (inflow and infiltration [I&I] reduction) program and improvements
- Six year strategic business plan (and associated goals proposed by each department)

Due to magnitude and complexity of discussion, each of these considerations had been presented individually to the Board due to meeting/work session time constraints. To discuss all of the topics and their impacts on rates holistically, the Board conducted a half-day retreat on October 25 to provide direction on the prioritization of incorporating their financial impacts into the multi-year rate study.

Though clear consensus of the Board on each topic was not obtained, following are key objectives that management took away from the retreat (in no particular order of priority/importance):

- Keep water/sewer utility rate increases as low as practicable

- Plan to aggressively pursue external funding sources (grants and low interest loans)
- Consider means of debt service structuring for the Post Point WWTP project in a way that limits rate impacts
- Consider funding the Sudden Valley WTP at the Minimum alternative, but pursue improvements consistent with the Medium alternative by using external funding (grants) to offset the difference
- Maintain the current District system reinvestment policy (and associated funding)
- Create capital reserves with excess rate revenues between 2022 and 2025 for financing the SVWTP and Post Point WWTP projects to minimize the total costs of the projects requiring bonding/low interest loans
- Consider ways to pursue the departmental goals presented in the draft Six-year Strategic Business Plan while limiting the projected costs

Since the October 25 Board retreat, the Investment Committee met with Jim Nelson of DA Davidson to discuss alternatives for bond debt service structuring associated with the Post Point WWTP project that would mitigate rate impacts. At the time of issuing this agenda bill, DA Davidson is developing the financing associated with these alternatives. Similarly, the management team has identified means of paring back the cost impacts of the Six-year Strategic Business Plan and the impacts of planning for the Minimum alternative for the SVWTP. The management team is scheduled to meet with FCS Group on Monday (November 8) to incorporate these revisions into the rate model, and determine the rate increases necessary over the five year planning horizon to finance all objectives. The outcome will be presented to the Board during the November 10 meeting with the goal of gaining final direction on rate projections that can be integrated into the draft 2022 Budget and the District's Master Fees and Charges Schedule for Board adoption.

FISCAL IMPACT

Dependent upon the ultimate direction provided by the Board.

APPLICABLE EFFECTIVE UTILITY MANAGEMENT ATTRIBUTE(S)



Financial Viability

RECOMMENDED BOARD ACTION

No action is recommended at this time.

PROPOSED MOTION

Not applicable.

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;">  <p>AGENDA BILL Item 7.C</p> </div> <div style="text-align: center;"> <p>Draft 2022 Budget Presentation</p> </div> </div>			
DATE SUBMITTED:	November 4, 2021	MEETING DATE:	November 10, 2021
TO: BOARD OF COMMISSIONERS		FROM: Jenny Signs, Finance Manager/Treasurer	
GENERAL MANAGER APPROVAL			
ATTACHED DOCUMENTS		1. Draft 2022 Budget Narrative 2. Draft 2022 Budget	
TYPE OF ACTION REQUESTED		RESOLUTION <input type="checkbox"/>	FORMAL ACTION/ MOTION <input type="checkbox"/>
		INFORMATIONAL /OTHER <input checked="" type="checkbox"/>	

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):

The General Manager shall develop an operating and capital improvement budget annually for both the water and sewer systems. The annual budget shall provide for the forecasting of revenues and expenditures for the following 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 budget year.

Using projected revenues based upon rate increases recommended in the preliminary rate study (6% and 5% water and sewer rates, respectively), actual 2021 operating expenses and projects defined in the District's water and sewer capital improvement plans, District staff have developed the attached draft budget for Board discussion.

FISCAL IMPACT

The draft budget for 2022 proposes a budget of approximately \$3.3 million for the water utility, and budget of approximately \$4.6 million for the sewer utility, resulting in a total budget of approximately \$7.9 million.

RECOMMENDED BOARD ACTION

No action is recommended at this time.

PROPOSED MOTION

Not applicable.



➤ Revenue Assumptions

- **Since October 13, 2021 Meeting**
 - The only thing that has changed as far as revenue projections is in regards to the Water Fund. The updated budget draft accounts for \$239,000 in grant revenue for the Division 7 Reservoir Hazard Mitigation
- October 13, 2021 Meeting
 - Water rate revenues were based on an increased 6% to align with the preliminary rate study should the board elect the Medium Scenario as presented by FCS Group
 - Sewer rate revenues were based on an increased 5% to align with the preliminary rate study should the board elect the Scenario 2 as presented by FCS Group
 - Building permits for both water and sewer were based conservatively on 10 new connections at fees defined in Resolution 860
 - Late fees were increased from the 2021 budget to reflect historical collection trends prior to 2020
 - Interest revenues were budgeted conservatively in both the water and sewer funds to account for continued low-interest rates

➤ Expenditure Assumptions

- **Since October 13, 2021 Meeting**
 - Expenditure projections for 2021 were updated to reflect actual spending through October 31, 2021 and projections for November and December of 2021
 - \$25,000 was budgeted in professional expenses in both the water and sewer funds to reflect the costs associated with implementing and updating the records management system for the District as outlined in goal 4 of Executive section of the 6-year Strategic Business Plan
 - Both the water and sewer funds expenditures for operations payroll and benefits were updated to reflect the addition of one Maintenance Worker entry level position being added mid-year. Due to time associated with recruitment, position was budgeted at 0.5 FTE for 2022 which will then be budgeted at one additional FTE in 2023
 - Capital Outlay expenditures in the water fund were increased from \$250,000 to \$522,830 of which \$239,000 has an offsetting grant. Should we not be successful in obtaining the grant, the District won't expend the additional money budgeted for those expenditures associated with grant funds. Along with this there is an additional \$34,000 that wasn't originally budgeted for in the 2022 Capital Outlay budget. The board will

need to consider if we should move forward with that additional \$34,000 or hold off until a later year.

- October 13, 2021 Meeting
 - Payroll & Benefits
 - Payroll in both water and sewer funds budgeted for a 3% COLA plus step increases. This is subject to change based on the outcome of the final AFSCME contract being negotiated
 - Benefits were budgeted at a 5% increase to account for the increased cost of medical premiums. All other benefits remained and current levels of contributions
 - No additional positions have been budgeted for in 2022
 - Operating expenditures in most cases were increased by 3% over 2021 to account for inflation
 - Water Fund System Reinvestment Capital Expenditures in the amount of \$250,000 and Project Carryover from 2021 in the amount of \$167,900
 - Sewer Fund System Reinvestment Capital Expenditures in the amount of \$810,000 and Project Carryover from 2021 in the amount of \$828,788

➤ Fund Balance Summaries

- System reinvestment funded per rate study recommendations
- **Since October 13, 2021 Meeting**
 - System reinvestment was increased in the water fund to reflect additional costs associated with grant revenue and \$34,000 of additional capital projects in the water fund and a decrease in the sewer fund due project redesign
 - Water - \$522,830
 - Sewer - \$805,880
- October 13, 2021 Meeting
 - The District has a policy of setting aside a certain amount of rate revenue each year for system reinvestment. Funding depreciation expense meets several standards for reasonable rates: financial integrity, rate equity, and adequacy of capital.
 - Water - \$250,000
 - Sewer - \$810,000
 - Operating reserves maintained per rate study recommendations at the following:
 - An operating reserve is designed to provide a liquidity cushion; it protects the utility from the risk of short-term variation in the timing of revenue collection or payment of expenses. Like other types of reserves, operating reserves also serve another purpose; they help smooth rate increases over time. In the 2022 budget our operating reserve goal is \$1,060,000. This is on the conservative end

of the industry standard of 45-60 days for sewer utilities and 60-90 days for water utilities. In any year where operating reserves exceed the maximum days of O&M expenses at year-end, the excess cash is “swept” into the capital account to help pay for capital projects.

- Water - \$590,000
- Sewer - \$470,000

- Contingency funds maintained per rate study recommendations 1% of fixed asset replacement value.
 - In addition to protecting against variations in the timing of operating costs and revenues, it is prudent to maintain a capital contingency reserve to meet unexpected emergency capital outlays. We have used replacement costs to derive the targeted reserve dollar amount which equates to 1% of the replacement cost of fixed assets. In the 2022 budget we have \$815,000 sewer reserve and \$460,000 water reserve.
 - Water - \$460,000
 - Sewer - \$815,000
- Rate Study Operating Surplus Recommendations
 - In the 2021 Rate Study conducted by FCS Group, recommendations are made to grow the operating surplus in the first 8 years of the new rates for the water fund to account for debt funding to begin in 2031 and in the first 3 years of the new rates for the sewer fund to account for debt funding to begin in 2025.
 - Water - \$136,000
 - Sewer - \$277,000



LAKE WHATCOM WATER AND SEWER FUND SUMMARIES 2022

DRAFT

	401	402		460
	WATER	SEWER	TOTAL	BOND RESERVE (RESTRICTED)
2022 Projected Beginning Fund Balance	\$984,806	\$1,992,448	\$2,977,254	\$772,334
2022 Revenues	\$3,367,562	\$4,607,673	\$7,975,235	-
2022 Expenditures	(\$3,473,001)	(\$5,510,917)	(\$8,983,918)	-
2022 Projected Year End Balance	\$879,367	\$1,089,204	\$1,968,571	\$772,334
2022 Allocated to Operating Reserve	-\$590,000	-\$470,000	-\$1,060,000	
2022 Allocated to Contingency Fund	\$0	\$0	\$0	
2022 Rated Study Surplus Assigned	-\$136,000	-\$277,000	-\$413,000	
2022 Projected Unassigned Year End Fund Balance	\$153,367	\$342,204	\$495,571	\$772,334
2022 Contingency Reserve Funds 1%	\$460,000	\$815,000	\$1,275,000	-

Lake Whatcom Water and Sewer District
Draft 2022 Budget
Water Fund

Fund	Dept.	Account	Title	2019 Actual	2020 Actual	2021 Budget	2021 Projected	2022 Proposed
Intergovernmental Revenue								
401	330	331 40 10 00	Federal Grants	\$ -	\$ -	\$ -	\$ -	\$ 239,000
Charges For Services								
401	340	343 40 10 00	Water Sales Metered	\$ 2,502,734	\$ 2,677,336	\$ 2,770,313	\$ 2,803,843	\$ 2,936,532
401	340	343 40 20 01	DEA Permits - Water	\$ -	\$ (9,311)	\$ -	\$ (9,311)	\$ -
401	340	343 41 10 01	Building Permits - Water	\$ -	\$ 212,678	\$ 96,000	\$ 320,536	\$ 84,030
Fines & Penalties								
401	350	359 81 10 00	Combined Fees	\$ 27,908	\$ 16,064	\$ 17,500	\$ 11,590	\$ 28,000
401	350	359 90 00 00	Late Fees	\$ 55,332	\$ 14,597	\$ 27,500	\$ 6,000	\$ 58,000
Miscellaneous Revenues								
401	360	361 11 00 00	Investment Interest	\$ -	\$ 15,501	\$ 20,000	\$ 48,447	\$ 20,000
401	360	369 10 00 00	Sale Of Surplus	\$ 9,680	\$ 115	\$ 1,000	\$ 4,176	\$ 1,000
401	360	369 10 01 00	Miscellaneous	\$ 21,588	\$ 916	\$ 1,000	\$ 186	\$ 1,000
401	360	369 40 00 00	Project Reimbursement	\$ -	\$ -	\$ -	\$ -	\$ -
401	360	369 80 00 00	Over/Under	\$ (10)	\$ -	\$ -	\$ -	\$ -
Other Financing Sources								
401	390	395 10 00 00	Sale Of Capital Assets	\$ 11,220	\$ -	\$ -	\$ -	\$ -
401	390	395 20 00 00	Deposits	\$ 1,500	\$ -	\$ -	\$ -	\$ -
401	390	395 20 00 01	Insurance Recoveries	\$ -	\$ -	\$ -	\$ 137,564	\$ -
401	390	398 20 00 01	Insurance Recoveries	\$ 11,221	\$ -	\$ -	\$ -	\$ -
Total Water Fund Revenues				\$ 2,641,173	\$ 2,982,212	\$ 2,933,313	\$ 3,323,031	\$ 3,367,562
Water Fund Expenditures								
401	534	534 10 10 00	Water - Gen Admin Payroll	\$ 331,296	\$ 365,351	\$ 355,000	\$ 362,647	\$ 367,538
401	534	534 10 20 00	Water - Gen Admin Personnel Benefits	\$ 141,907	\$ 149,641	\$ 163,000	\$ 153,371	\$ 171,611
401	534	534 10 31 00	Water - Gen Admin Supplies	\$ 15,430	\$ 18,847	\$ 25,000	\$ 26,993	\$ 25,000
401	534	534 10 31 01	Water - Meetings/Team building	\$ 2,493	\$ 1,011	\$ 2,000	\$ 2,221	\$ 2,000
401	534	534 10 40 00	Water - Merchant Services Fees	\$ 20,522	\$ 11,804	\$ 10,000	\$ 10,275	\$ 11,500
401	534	534 10 40 01	Water - Bank Fees	\$ -	\$ 635	\$ 750	\$ 789	\$ 800
401	534	534 10 41 00	Water - Quality Assurance Programs	\$ 59,184	\$ 224,401	\$ 65,000	\$ 58,320	\$ 81,300
401	534	534 10 41 01	Water - Gen Admin Prof Srvc	\$ 158,742	\$ 107,796	\$ 136,350	\$ 162,015	\$ 167,000
401	534	534 10 41 02	Water - Engineering Srvc	\$ -	\$ 19,075	\$ 20,000	\$ 12,980	\$ 20,000
401	534	534 10 41 03	Water - Legal Srvc	\$ -	\$ 15,752	\$ 20,000	\$ 19,847	\$ 22,000
401	534	534 10 41 04	Water - DEA Expenditures	\$ -	\$ 2,200	\$ -	\$ -	\$ -
401	534	534 10 41 20	Water - 20 Year SVWTP Plan	\$ -	\$ 69,199	\$ 64,350	\$ 53,541	\$ -
401	534	534 10 42 00	Water - Admin Communication	\$ 26,706	\$ 29,948	\$ 30,000	\$ 30,252	\$ 31,000
401	534	534 10 45 00	Water - Gen Admin Lease	\$ 5,078	\$ 5,371	\$ 5,000	\$ 5,501	\$ 5,500
401	534	534 10 46 00	Water - Gen Admin Insurance	\$ 71,480	\$ 89,029	\$ 90,000	\$ 101,300	\$ 103,500
401	534	534 10 49 00	Water - Gen Admin Misc.	\$ 40	\$ 134	\$ 500	\$ 150	\$ 200
401	534	534 10 49 01	Water - Memberships/Dues/Permits	\$ 8,601	\$ 15,177	\$ 15,000	\$ 16,716	\$ 17,250
401	534	534 10 49 02	Water - Taxes	\$ 115,871	\$ 114,117	\$ 115,000	\$ 143,086	\$ 147,500
401	534	534 40 43 00	Water - Admin Training & Travel	\$ 17,744	\$ 5,934	\$ 10,000	\$ 3,655	\$ 10,000
401	534	534 40 43 01	Water- Tuition Reimbursement	\$ -	\$ -	\$ 500	\$ -	\$ 500
401	534	534 50 31 00	Water - Maintenance Supplies	\$ 104,079	\$ 117,107	\$ 120,000	\$ 110,593	\$ 135,000
401	534	534 50 31 01	Water- Small Assets	\$ 21,346	\$ 43,351	\$ 40,000	\$ 62,395	\$ 40,000
401	534	534 50 48 00	Water - Repair & Maint	\$ 58,687	\$ 30,983	\$ 177,063	\$ 189,116	\$ 60,000
401	534	534 50 49 00	Water - Insurance Claims	\$ -	\$ -	\$ 2,500	\$ -	\$ 2,500
401	534	534 60 41 00	Water - Operations Contracted (Edge Analytical)	\$ 6,619	\$ 10,933	\$ 12,500	\$ 8,081	\$ 15,500
401	534	534 60 47 00	Water - City of Bellingham	\$ 42,224	\$ 24,936	\$ 40,000	\$ 46,574	\$ 52,000
401	534	534 80 10 00	Water - Operations Payroll	\$ 580,184	\$ 607,240	\$ 570,500	\$ 584,046	\$ 614,084
401	534	534 80 20 00	Water - Operations Personnel Benefits	\$ 255,323	\$ 253,255	\$ 245,000	\$ 247,625	\$ 261,014
401	534	534 80 32 00	Water - Operations Fuel	\$ 13,584	\$ 10,682	\$ 10,000	\$ 12,402	\$ 12,500
401	534	534 80 35 00	Water - Safety Supplies	\$ 11,340	\$ 12,551	\$ 10,000	\$ 3,885	\$ 10,000
401	534	534 80 35 01	Water - Safety Boots	\$ 816	\$ 767	\$ 1,250	\$ 917	\$ 1,250
401	534	534 80 35 02	Water - Emergency Preparedness	\$ 5,169	\$ 3,189	\$ 5,000	\$ 3,200	\$ 5,000
401	534	534 80 43 00	Water - Operation Training/Travel/Certifications	\$ -	\$ 560	\$ 10,000	\$ 6,960	\$ 10,000
401	534	534 80 47 00	Water - Ops Utilities	\$ 101,725	\$ 113,979	\$ 115,000	\$ 119,366	\$ 121,200
401	534	534 80 49 00	Water - Operations Laundry	\$ 1,943	\$ 1,579	\$ 2,000	\$ 1,336	\$ 2,000
Total Water Fund Expenditures				\$ 2,178,134	\$ 2,476,534	\$ 2,488,263	\$ 2,560,155	\$ 2,526,247

Lake Whatcom Water and Sewer District
Draft 2022 Budget
Water Fund

Fund	Dept.	Account	Title	2019 Actual	2020 Actual	2021 Budget	2021 Projected	2022 Proposed
Debt Service								
401	591	591 34 77 01	Geneva AC Mains Principal	\$ -	\$ 119,938	\$ 119,937	\$ 119,937	\$ 119,938
401	591	591 34 77 02	Div. 22 Reservoir Principal	\$ -	\$ 65,475	\$ 65,475	\$ 65,475	\$ 65,475
401	591	592 34 83 01	Geneva AC Mains Interest	\$ -	\$ 28,785	\$ 26,986	\$ 26,986	\$ 25,187
401	591	592 34 83 02	Div. 22 Reservoir Interest	\$ -	\$ 17,678	\$ 16,696	\$ 16,696	\$ 15,714
Total Water Fund Debt Service					\$ 231,875	\$ 229,094	\$ 229,094	\$ 226,314

System Reinvestments

Capital Expenditures								
401	594	594 34 60 01	Capital Outlay - Budget Only	\$ -	\$ -	\$ 606,650		\$ 522,830
401	594	594 34 62 01	Capital Projects - Water Structures	\$ -	\$ 145,513	\$ -	\$ 379,281	
401	594	594 34 63 01	Capital Projects - Water System	\$ -	\$ 60,869	\$ -	\$ 171,349	
401	594	594 34 64 01	Capital Outlay - Water Equipment	\$ -	\$ 13,991	\$ -	\$ 40,410	
401	594	594 34 65 01	Capital Outlay - Small Water Projects	\$ -	\$ -	\$ -	\$ -	
			Capital Outlay 2021 Carryover Projects	\$ -	\$ -	\$ -	\$ -	\$ 197,610
Total Water Fund Capital Expenditures					\$ 220,373	\$ 606,650	\$ 591,040	\$ 720,440

Other Financing Sources								
401	597	597 10 00 20	Transfers Out To Fund 420	\$ 830,235	\$ -	\$ -	\$ -	\$ -
401	597	597 10 00 25	Transfers Out To Fund 425	\$ 359,408	\$ -	\$ -	\$ -	\$ -
401	597	597 10 00 26	Transfers Out To Fund 426	\$ 20,000	\$ -	\$ -	\$ -	\$ -
401	597	597 10 00 40	Transfer Out To Fund 440	\$ -	\$ -	\$ -	\$ -	\$ -
401	597	597 10 00 50	Transfers Out To Fund 450	\$ 660,988	\$ -	\$ -	\$ -	\$ -
401	597	597 10 00 70	Transfers Out To Fund 450	\$ 219,694	\$ -	\$ -	\$ -	\$ -
Total Water Fund Other Financing Sources				\$ 2,090,325	\$ -	\$ -	\$ -	\$ -

Total Water Fund Expenditures								\$ 3,473,001
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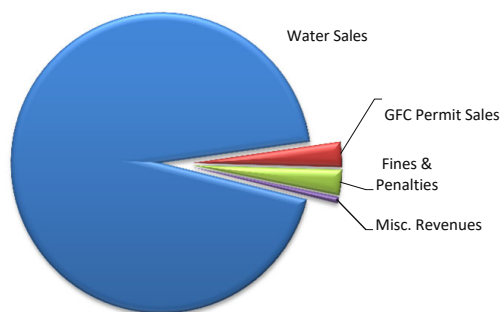
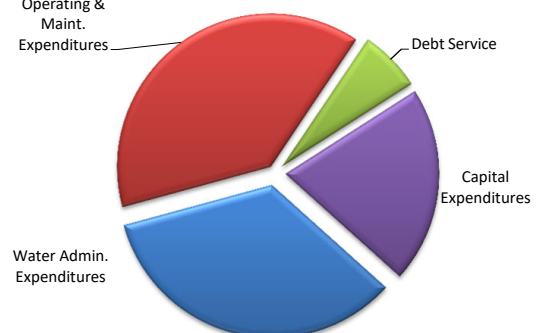
Fund Gain/Loss						\$ (390,694)	\$ (57,258)	\$ (105,439)
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Fund Balance Summary

2021 Beginning Fund Balance	\$ 1,042,064
2021 Projected Gain/Loss	\$ (57,258)
2021 Projected Fund Balance	\$ 984,806
2022 Projected Gain/Loss	\$ (105,439)
2022 Projected Fund Balance	\$ 879,367

Water Contingency Fund Balance Summary

2021 Beginning Fund Balance	\$ 460,000
2021 Projected Gain/Loss	\$ -
2021 Projected Fund Balance	\$ 460,000
2022 Projected Gain/Loss	\$ -
2022 Projected Fund Balance	\$ 460,000

2022 Budgeted Water Fund Revenues**2022 Budgeted Water Fund Expenditures**

Lake Whatcom Water and Sewer District
Draft 2022 Budget
Sewer Fund

Fund	Dept.	Account	Title	2019 Actual	2020 Actual	2021 Budget	2021 Projected	2022 Proposed
Charges For Services								
402	340	343 40 20 02	DEA Permits - Sewer	\$ -	\$ -	\$ -	\$ -	\$ -
402	340	343 50 11 00	Sewer Service Residential	\$ 4,068,571	\$ 4,174,271	\$ 4,256,228	\$ 4,265,364	\$ 4,478,632
402	340	343 50 19 00	Sewer Service Other	\$ 4,550	\$ 4,714	\$ 4,500	\$ 4,745	\$ 4,500
402	340	343 50 80 00	Latecomers Fee ULID #18	\$ -	\$ -	\$ -	\$ 250	\$ -
402	340	343 51 10 02	Building Permits - Sewer	\$ 350,323	\$ 253,484	\$ 142,500	\$ 295,181	\$ 88,600
Miscellaneous Revenues								
402	360	361 11 00 02	Investment Interest	\$ 70,763	\$ 13,749	\$ 20,000	\$ 48,447	\$ 20,000
402	360	361 40 00 02	ULID 18 Interest/Penalties	\$ 4,822	\$ 7,264	\$ 2,500	\$ 2,387	\$ 1,800
402	360	368 10 00 02	ULID 18 Principal Payments	\$ 17,407	\$ 16,272	\$ 8,000	\$ 9,840	\$ 8,000
402	360	369 10 00 02	Sale Of Surplus	\$ -	\$ 96	\$ 1,000	\$ 1,009	\$ 1,000
402	360	369 10 01 02	Miscellaneous	\$ -	\$ 436	\$ 1,000	\$ 1,125	\$ 1,000
402	360	369 40 00 02	Project Reimbursement	\$ -	\$ 8,282	\$ 4,141	\$ 4,141	\$ 4,141
Other Financing Sources								
402	390	395 10 00 02	Sale Of Capital Assets	\$ -	\$ -	\$ -	\$ -	\$ -
402	397	397 10 00 02	Transfers In	\$ -	\$ -	\$ -	\$ -	\$ -
Total Sewer Fund Revenues				\$ 4,516,435	\$ 4,478,567	\$ 4,439,869	\$ 4,632,489	\$ 4,607,673
Sewer Fund Expenditures								
402	535	535 10 10 00	Sewer - Admin Payroll	\$ 331,295	\$ 365,350	\$ 355,000	\$ 355,957	\$ 367,538
402	535	535 10 20 00	Sewer - Gen Admin Personnel Benefits	\$ 142,020	\$ 149,637	\$ 155,000	\$ 150,489	\$ 162,942
402	535	535 10 31 00	Sewer - Gen Admin Supplies	\$ 16,069	\$ 22,360	\$ 25,000	\$ 16,262	\$ 16,800
402	535	535 10 31 01	Sewer - Meetings/Team Building	\$ 2,833	\$ 1,461	\$ 2,000	\$ 2,327	\$ 2,000
402	535	535 10 40 00	Sewer -Merchant Services Fees	\$ -	\$ 11,111	\$ 10,000	\$ 11,037	\$ 11,500
402	535	535 10 40 01	Sewer - Bank Fees	\$ 20,546	\$ 525	\$ 750	\$ 789	\$ 750
402	535	535 10 41 01	Sewer - Gen Admin Prof Svc	\$ 130,953	\$ 95,914	\$ 128,850	\$ 147,274	\$ 187,500
402	535	535 10 41 02	Sewer - Engineering Svc	\$ -	\$ 14,892	\$ 20,000	\$ 14,495	\$ 20,000
402	535	535 10 41 03	Sewer - Legal Svc	\$ -	\$ 19,643	\$ 20,000	\$ 21,197	\$ 22,000
402	535	535 10 41 04	Sewer - DEA Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -
402	535	535 10 41 25	Sewer Comp Plan	\$ -	\$ 23,076	\$ -	\$ -	\$ -
402	535	535 10 42 00	Sewer - Admin Communication	\$ 26,705	\$ 29,985	\$ 30,000	\$ 30,251	\$ 31,000
402	535	535 10 45 00	Sewer - Gen Admin Lease	\$ 5,078	\$ 5,370	\$ 5,000	\$ 5,501	\$ 5,500
402	535	535 10 46 00	Sewer - Gen Admin Insurance	\$ 71,480	\$ 89,029	\$ 90,000	\$ 101,300	\$ 103,500
402	535	535 10 49 00	Sewer - Gen Admin Misc.	\$ 417	\$ 129	\$ 500	\$ 75	\$ 200
402	535	535 10 49 01	Sewer - Memberships/Dues/Permits	\$ 6,045	\$ 9,037	\$ 10,000	\$ 9,202	\$ 10,000
402	535	535 10 49 02	Sewer - Taxes	\$ 109,349	\$ 114,928	\$ 115,000	\$ 118,375	\$ 122,000
402	535	535 40 43 00	Sewer - Gen Admin Training & Travel	\$ 13,602	\$ 4,286	\$ 10,000	\$ 3,289	\$ 10,000
402	535	535 40 43 01	Sewer - Tuition Reimbursement	\$ -	\$ -	\$ 500	\$ -	\$ 500
402	535	535 50 31 00	Sewer - Maintenance Supplies	\$ 40,332	\$ 33,281	\$ 50,000	\$ 25,437	\$ 45,000
402	535	535 50 31 01	Sewer - Small Assets	\$ 16,505	\$ 25,618	\$ 30,000	\$ 37,124	\$ 30,000
402	535	535 50 48 00	Sewer - Repair & Maint	\$ 57,617	\$ 68,915	\$ 95,000	\$ 111,513	\$ 125,000
402	535	535 50 49 00	Sewer - Insurance Claims	\$ 5,000	\$ 1,480	\$ 2,500	\$ 5,440	\$ 2,500
402	535	535 60 41 00	Sewer - Operations Contracted	\$ -	\$ 24,654	\$ 25,000	\$ 25,000	\$ -
402	535	535 60 47 00	Sewer - City of Bellingham	\$ 614,936	\$ 705,188	\$ 750,000	\$ 748,900	\$ 816,000
402	535	535 80 10 00	Sewer - Operations Payroll	\$ 472,156	\$ 488,337	\$ 476,500	\$ 470,462	\$ 517,271
402	535	535 80 20 00	Sewer - Operations Personnel Benefits	\$ 206,813	\$ 202,057	\$ 232,000	\$ 197,411	\$ 248,010
402	535	535 80 32 00	Sewer - Operations Fuel	\$ 11,898	\$ 12,066	\$ 13,000	\$ 15,512	\$ 13,400
402	535	535 80 35 00	Sewer - Safety Supplies	\$ 9,552	\$ 12,623	\$ 10,000	\$ 4,675	\$ 10,000
402	535	535 80 35 01	Sewer - Safety Boots	\$ 964	\$ 767	\$ 1,250	\$ 917	\$ 1,250
402	535	535 80 35 02	Sewer - Emergency Preparedness	\$ 374	\$ 2,878	\$ 5,000	\$ -	\$ 5,000
402	535	535 80 43 00	Sewer - Operations Training/Travel/Certification	\$ -	\$ 940	\$ 10,000	\$ 1,640	\$ 10,000
402	535	535 80 47 00	Sewer - Ops Utilities	\$ 92,329	\$ 101,943	\$ 105,000	\$ 109,571	\$ 110,000
402	535	535 80 49 00	Sewer - Operations Laundry	\$ 2,144	\$ 2,377	\$ 2,000	\$ 2,035	\$ 2,500
Total Sewer Fund Expenditures				\$ 2,407,012	\$ 2,639,861	\$ 2,784,850	\$ 2,743,457	\$ 3,009,661
Debt Service								
402	591	591 35 77 02	Bond 2016 Principal	\$ -	\$ 425,000	\$ 435,000	\$ 435,000	\$ 445,000
402	591	591 35 83 02	Bond 2016 Interest	\$ -	\$ -	\$ 205,425	\$ 205,425	\$ 192,376
402	591	592 35 83 02	Bond 2016 Interest	\$ -	\$ 218,175	\$ -	\$ -	\$ -
Total Sewer Fund Debt Service				\$ -	\$ 643,175	\$ 640,425	\$ 640,425	\$ 637,376
Capital Expenditures								
402	594	594 35 60 02	Capital Outlay - Budget Only	\$ -	\$ -	\$ 1,623,000	\$ -	\$ 805,880
402	594	594 35 62 02	Capital Projects - Sewer Structures	\$ -	\$ 384,377	\$ -	\$ 626,524	\$ -
402	594	594 35 63 02	Capital Projects- Sewer System	\$ -	\$ 113,529	\$ -	\$ 84,695	\$ -

**Lake Whatcom Water and Sewer District
Draft 2022 Budget
Sewer Fund**

Fund	Dept.	Account	Title	2019 Actual	2020 Actual	2021 Budget	2021 Projected	2022 Proposed
402	594	594 35 64 02	Capital Outlay - Sewer Equipment	\$ -	\$ 536,945	\$ -	\$ 41,083	
402	594	594 35 65 02	Capital Outlay - Small Sewer Projects	\$ -	\$ -	\$ -	\$ -	
402	594	594 35 65 02	Capital Outlay - 2021 Carry Over Projects	\$ -	\$ -	\$ -	\$ -	\$ 1,058,000
Total Sewer Fund Capital Expenditures				\$ -	\$ 1,034,851	\$ 1,623,000	\$ 752,302	\$ 1,863,880
Other Financing Sources								
402	597	597 10 00 25	Transfer Out To Sewer Contingency	\$ -	\$ 9,000	\$ 19,000	\$ 18,912	
Total Other Financing Sources				\$ -	\$ 9,000	\$ 19,000	\$ 18,912	\$ -
Total Sewer Fund Expenditures								\$ 5,510,917
Fund Gain/Loss						\$ (627,406)	\$ 477,393	\$ (903,244)

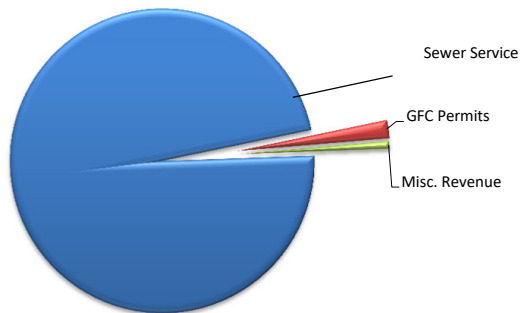
Fund Balance Summary

2021 Beginning Fund Balance	\$ 1,515,055
2021 Projected Gain/Loss	\$ 477,393
2021 Projected Ending Fund Balance	\$ 1,992,448
2022 Projected Gain/Loss	\$ (903,244)
2022 Projected Ending Fund Balance	\$ 1,089,204

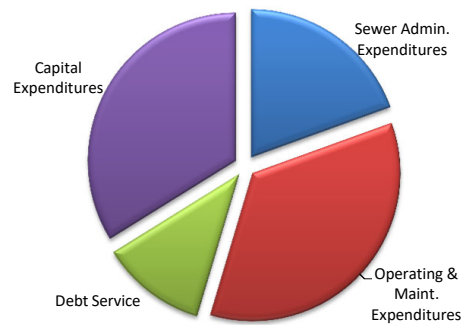
Sewer Contingency Fund Balance Summary

2021 Beginning Fund Balance	\$ 796,088
2021 Projected Gain/Loss	\$ 18,912
2021 Projected Ending Fund Balance	\$ 815,000
2022 Projected Gain/Loss	\$ -
2022 Projected Ending Fund Balance	\$ 815,000

**2022 Budgeted Sewer Fund
Revenues**



**2022 Budgeted Sewer Fund
Expenditures**



Lake Whatcom Water and Sewer District
Draft 2022 Budget
Sewer Contingency Fund

Fund	Dept.	Account	Title	2019 Actual	2020 Actual	2021 Budget	2021 Projected	2022 Proposed
Miscellaneous Revenues								
425	360	361 11 00 25	Investment Interest	\$ -	\$ -	\$ -	\$ -	\$ -
Other Financing Sources								
425	397	397 10 00 25	Transfer In From Sewer Fund	\$ 359,408	\$ 9,000	\$ 19,000	\$ 18,912	\$ -
Total Fund Revenue				\$ 359,408	\$ 9,000	\$ 19,000	\$ 18,912	\$ -
Fund Expenditures								
425	535	535 10 42 25	Misc. Inv Service Charges	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Expenditures								
425	594	594 38 63 25	North Shore Sampling	\$ 122	\$ -	\$ -	\$ -	\$ -
Other Financing Sources								
425	597	597 10 20 00	Transfers Out To Fund 420	\$ 344,408	\$ -	\$ -	\$ -	\$ -
Total Fund Expenditures				\$ 344,530	\$ -	\$ -	\$ -	\$ -
Fund Gain/Loss				\$ 14,879	\$ 9,000	\$ 19,000	\$ 18,912	\$ -

Sewer Contingency Fund Balance Summary

2021 Beginning Fund Balance	\$ 796,088
2021 Projected Gain/Loss	\$ 18,912
2021 Projected Ending Fund Balance	\$ 815,000
2022 Projected Gain/Loss	\$ -
2022 Projected Ending Fund Balance	\$ 815,000

**Lake Whatcom Water and Sewer District
Draft 2022 Budget
Water Contingency Fund**

Fund	Dept.	Account	Title	2019 Actual	2020 Actual	2021 Budget	2021 Projected	2022 Proposed
Miscellaneous Revenues								
426	360	361 11 00 26	Investment Interest	\$ -	\$ -	\$ -	\$ -	\$ -
Other Financing Sources								
426	397	397 10 00 26	Transfers In From Fund 401	\$ 20,000	\$ -	\$ -	\$ -	\$ -
Total Fund Revenue				\$ 20,000	\$ -	\$ -	\$ -	\$ -
Capital Expenditures								
426	594	594 38 63 26	Water Tank Stabilization Grant Matching	\$ -	\$ -	\$ -	\$ -	\$ -
Total Fund Expenditures				\$ -	\$ -	\$ -	\$ -	\$ -

Water Contingency Fund Balance Summary

2021 Beginning Fund Balance	\$ 460,000
2021 Projected Gain/Loss	\$ -
2021 Projected Fund Balance	\$ 460,000
2022 Projected Gain/Loss	\$ -
2022 Projected Fund Balance	\$ 460,000

Lake Whatcom Water and Sewer District
Draft 2022 Budget
Bond Reserve Fund

Fund	Program	Dept.	Sub Dept.	Account	Title	2019 Actual	2020 Actual	2021 Budget	2021 Projected	2022 Proposed
Miscellaneous Revenues										
460	0	360		0 361 11 00 60	Investment Interest	\$ -	\$ -	\$ -	\$ -	\$ -
Total Fund Revenue						\$ -	\$ -	\$ -	\$ -	\$ -
Fund Expenditures										
460	0	535		0 535 10 41 60	Misc. Inv Service Charges	\$ -	\$ -	\$ -	\$ -	\$ -
Other Financing Sources										
460	0	597		0 597 10 00 60	Transfers Out	\$ -	\$ -	\$ -	\$ -	\$ -
Total Fund Expenditures						\$ -	\$ -	\$ -	\$ -	\$ -


Bond Reserve Fund Balance Summary

2021 Beginning Fund Balance	\$ 772,334
2021 Projected Gain/Loss	\$ -
2021 Projected Fund Balance	\$ 772,334
2022 Projected Gain/Loss	\$ -
2022 Projected Fund Balance	\$ 772,334



**AGENDA
BILL
Item 9.A**

**General Manager's
Report**

DATE SUBMITTED:	November 4, 2021	MEETING DATE:	November 10, 2021
TO: BOARD OF COMMISSIONERS	FROM: Justin Clary, General Manager		
GENERAL MANAGER APPROVAL			
ATTACHED DOCUMENTS	1. General Manager's Report		
TYPE OF ACTION REQUESTED	RESOLUTION <input type="checkbox"/>	FORMAL ACTION/ MOTION <input type="checkbox"/>	INFORMATIONAL /OTHER <input checked="" type="checkbox"/>

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, November 10, 2021 – 6:30 p.m.

Important Upcoming Dates

Lake Whatcom Water & Sewer District			
Regular Board Meeting	Wed Nov 24, 2021	8:00 a.m.	Remote Attendance
Employee Staff Meeting	Mon Nov 15, 2021	8:00 a.m.	Remote Attendance Commissioner McRoberts to attend
Investment Comm. Meeting	Wed Dec 29, 2021	10:00 a.m.	Remote Attendance
Safety Committee Meeting	Thu Nov 18, 2021	8:00 a.m.	Remote Attendance
Lake Whatcom Management Program			
Policy Group Meeting	Wed Dec 1, 2021	3:00 p.m.	Remote Attendance
Joint Councils Meeting	March 2022	TBD	TBD
Other Meetings			
WASWD Section III Meeting	Tue Dec 14, 2021	7:00 p.m.	Remote Attendance
Whatcom Water Districts Caucus Meeting	Wed Nov 17, 2021	2:00 p.m.	Remote Attendance
Whatcom County Council of Governments Board Meeting	Wed Dec 8, 2021	3:00 p.m.	Remote Attendance

Committee Meeting Reports

Safety Committee:

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

Investment Committee:

- The Investment Committee met on October 24 to review the District's current investment portfolio and to discuss options for investments scheduled to mature in March. The Investment Committee also met with Jim Nelson of DA Davidson on October 28 to discuss steps to prepare for a potential bond issuance to finance anticipated large capital projects over the next four years.

Upcoming Board Meeting Topics

- Department of Health 20-year TOP Award presentation
- Rocky Ridge/Lakewood Sewer Lift Stations Improvement Project design contract approval
- Division 7 Reservoir Replacement Project design contract approval
- 2022 Budget adoption
- Water Use Efficiency Plan update adoption
- Master Fees and Charges Schedule update

2021 Initiatives Status

Administration and Operations

Six-Year Strategic Business Plan

- Develop department-specific business plans that define staffing, facility, and equipment needs necessary to meet level-of-service standards over the six-year planning horizon.
The Board conducted a work session on the first revision of the strategic plan on September 8, as well as a retreat on October 25 to discuss the strategic plan, rate study, and capital improvement program priorities.

Rate Study

- Conduct a rate study for the water and sewer utilities for the six-year planning horizon, including funding strategies related to significant capital improvements anticipated during and beyond the planning horizon.
A presentation on progress was provided during the May 26 board meeting; the rate study is scheduled for discussion during the November 10 Board meeting.

Investment Policy Review

- Conduct a comprehensive review of the District's investment policy aimed at optimizing return on investments while sufficiently protecting District funds.
Resolution No. 473, which revised and incorporated the investment policy into the administrative code, was adopted by the board during its April 28, 2021 meeting.

Capital Improvement Program Support

- Support the Engineering Department through management of specific capital improvement project(s).
The general manger is managing the Eagleridge Water Booster-Metering Station Conversion project (District Project No. C2011), the Water Use Efficiency Plan update (District Project No. A2115), and the Commissioner Boundary Update project (District Project No. A2116).

Fill Anticipated Finance Manager Position Vacancy

- With the retirement of the District's Finance Manager anticipated in July 2021, engage in a recruitment and hiring process that allows for seamless transition of leadership in the Finance Department.
Jennifer Signs joined the District as the new Finance Manager on June 28.

Negotiate Successor District-AFSCME Agreement

- With the current labor agreement scheduled to expire December 31, 2021, negotiate a successor agreement that aligns with District financial capacity and Board goals.
A negotiations kick-off meeting was held July 20, 2021, and subsequent meetings were held on August 2 and 24, and November 1. The next meeting is scheduled for November 10.

Emergency Response/System Security

America's Water Infrastructure Act-compliant Risk Management Program

- Conduct a USEPA-compliant risk and resilience assessment by June 30, 2021.
Sewer and water utility assessments are complete and were certified on February 8.
- Develop a USEPA-compliant emergency response plan by December 31, 2021.
The District's emergency response plan update was certified on September 21.

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 and LinkedIn pages regularly; Nextdoor is regularly monitored for District-related posts.
- Press Releases
Press releases were issued on February 24 (public notification of daytime road closures assoc. with Division 30 water main repairs), March 1 (EnviroStars certification), July 8 (Jenny Signs hire) August 20 (Justin Clary appointment to Public Works Board), and September 27 (TOP Award receipt).

Intergovernmental Relations

- *J Clary attended the WASWD general managers' meeting on November 3.*
- *J Clary scheduled to attend Water Water Alliance meeting on November 9.*
- *J Clary scheduled to attend a tour of the Birch Bay Water & Sewer District with Representative Alicia Rule and Public Works Board Chair Kathryn Gardow on November 9.*
- *J Clary scheduled to attend WASWD Section III meeting on November 9.*

Public Works Board

- Pursue appointment as WASWD representative on the Washington State Public Works Board.
J Clary appointed to the Washington State Public Works Board by Governor Inslee on August 17.

Lake Whatcom Water Quality

Management Program

- Participate in meetings of Lake Whatcom Management Program partners.
No Lake Whatcom Management Program-related meetings have been held since the last board meeting.

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.