

1220 Lakeway Drive Bellingham, WA 98229

REGULAR MEETING OF THE BOARD OF COMMISSIONERS AGENDA

December 26, 2019 8:00 a.m. – Regular Session

- 1. CALL TO ORDER
- 2. PUBLIC COMMENT OPPORTUNITY

At this time, members of the public may address the Board of Commissioners. Please state your name prior to making comments.

- 3. ADDITIONS, DELETIONS, OR CHANGES TO THE AGENDA
- 4. CONSENT AGENDA
- 5. SPECIFIC ITEMS OF BUSINESS
 - A. Adoption of Fiscal Year 2020 Budget
 - B. Approval of Professional Services Agreement for Sudden Valley Water Treatment Plant Facility Improvement Plan
 - C. Approval of 2020 Wilson Engineering On-call Rates
- 6. OTHER BUSINESS
- 7. STAFF REPORTS
 - A. General Manager
 - B. Engineering Department
 - C. Finance Department
 - D. Operations Department
- 8. PUBLIC COMMENT OPPORTUNITY
- 9. 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

10. ADJOURNMENT

whatcom by	ENDA BILL em 4	Consent Agenda				
DATE SUBMITTED:	December 19, 2019	MEETING DATI	E: Decembe	er 26, 2019		
TO: BOARD OF COMMI	SSIONERS	FROM: Rachael Hope				
GENERAL MANAGER APP	ROVAL	Solday				
ATTACHED DOCUMENT	ΓS	1. See below				
		2.				
		3.				
TYPE OF ACTION REQU	ESTED	RESOLUTION	FORMAL ACTION/ MOTION	INFORMATIONAL /OTHER		

BACKGROUND / EXPLANATION OF IMPACT

- Minutes for the December 11, 2019 Special Board Meeting
- Minutes for the December 11, 2019 Regular Board Meeting
- Accounts Payable Vouchers totaling \$42,995.22
- Payroll for Pay Period #25 (11/30/2019 through 12/13/2019) totaling \$46,410.76
- Payroll Benefits for Pay Period #25 totaling \$52,658.87
- Payroll Correction for Pay Period #25 totaling \$423.88
- Quarterly Payroll Tax Adjustment totaling \$70.24



1220 Lakeway Drive Bellingham, WA 98229

SPECIAL SESSION OF THE BOARD OF COMMISSIONERS Minutes

December 11, 2019

Board President Laura Abele called the S	Special Session to order at 4:15 p.m.
--	---------------------------------------

Attendees: Commissioner Laura Abele General Manager Justin Clary

Commissioner Todd Citron Commissioner John Carter Commissioner Bruce Ford

Excused Absences: Commissioner Leslie McRoberts

Commissioner Applications

The Board interviewed three candidates for the open commissioner seat: Alma Deckert, Daniel McCann, and David Holland.

With no further business, Abele adjourned the Special Session at 6:10 p.m.

Recording Secretary, Rachael Hope	Date Minutes Approved
Laura Abele	Todd Citron
Bruce R. Ford	Leslie McRoberts
John Carter	



1220 Lakeway Drive Bellingham, WA 98229

REGULAR SESSION OF THE BOARD OF COMMISSIONERS Minutes

December 11, 2019

Board President Laura Abele called the Regular Session to order at 6:30 p.m.

Attendees: Commissioner Laura Abele General Manager Justin Clary

Commissioner Todd Citron Assistant G.M./District Engineer Bill Hunter

Commissioner John Carter Operations & Maintenance Manager Brent Winters

Commissioner Bruce Ford District Legal Counsel Bob Carmichael

Recording Secretary Rachael Hope

Excused Absences: Commissioner Leslie McRoberts

Also in attendance were District customers Graham & Greta Melvin.

Consent Agenda

Action Taken

Carter moved, Citron seconded, approval of:

- Minutes for the November 13, 2019 Board Meeting
- Minutes for the November 27, 2019 Board Meeting
- Payroll for Pay Period #24 (11/16/2019 through 11/29/2019) totaling \$46,638.32
- Payroll Benefits for Pay Period #24 totaling \$51,630.15
- Accounts Payable Vouchers totaling \$109,192.93

Motion passed.

Geneva Sewer Pump Station Improvements Construction Contract Close-out

Hunter informed the Board that the Geneva Sewer Pump Station Improvements Project finished within budget, including a negative change order for some parts that weren't needed. Equity Builders LLC has completed all contract requirements and punch list items. Staff recommended accepting the Geneva Sewer Pump Station Improvements Project as complete. Discussion followed.

Action Taken

Carter moved, Citron seconded, to accept the Geneva Sewer Pump Station Improvements Project as complete and authorize staff to close-out the public works project. Motion passed.

1313 Oriental St Compulsory Sewer Connection

Clary reminded the Board that in February 2019, District staff identified three properties in District boundaries served by on-site sewage disposal systems (OSDSs) that meet the requirements for

connection to District sewer and provided legal notice of the requirement to connect by August 2020. One of those properties is located at 1313 Oriental Street, owned by Graham and Greta Melvin. This property is unique in that a prior owner paid a side sewer permit in 1978 and subsequent property owners have paid the bi-monthly sewer bills to the District while continuing to use the OSDS.

Mr. and Mrs. Melvin attended the September 11, 2019 regularly scheduled board meeting, and spoke during the public comment period, asking for Board assistance in the cost to connect. Following Board direction, the Melvins submitted a formal proposal, dated October 18, 2019, which was considered by the Board during its regularly scheduled November 13, 2019 meeting. The Board then requested that staff work with the Melvins to identify a potential means of providing some relief considering their unique situation. In consideration of the Melvins past payments of the District's monthly sewer charge without being connected to the District system, staff proposed to reimburse the Melvins for all sewer fee-related payments made by them, going back a maximum of six years, plus interest (10% annual interest rate), which equates to \$7,039.84.

Following the November 13 meeting, the Board also expressed a desire holistically analyze District policy pertaining to compulsory sewer connections. Recognizing that this is a large undertaking that may involve multiple meetings of the Board and could result in other means of providing relief to the Melvins, staff recommended that the Board grant the Melvins and other property owners under compulsory sewer connection notice that have not connected to the District system a one-year extension on the required date of connection (from August 2020 to August 2021).

Discussion followed, including a brief executive session on the advice of legal counsel.

Action Taken

Citron moved, Carter seconded, to extend the period of performance from August 2020 to August 2021 for connection to the District's sewer system for those properties notified in February 2019 of the requirement to connect, unless connection is required through order of the Whatcom County Health Department. Motion passed.

Action Taken

Citron moved, Carter seconded, that the Board recess to executive session to discuss the legal issues surrounding the recommended motions for approximately 20 minutes. Motion passed.

<u>Executive Session Per RCW 42.30.110(1)(i) To Discuss Agency Matters with Legal Counsel – 20 Minutes</u>

Abele recessed the Regular Session to Executive Session at 7:00 p.m. It was estimated that the Executive Session would take 20 minutes. The purpose of the Executive Session was to discuss with legal counsel representing the agency matters relating to agency enforcement actions. Abele recessed the Executive Session and reconvened the Regular Session at 7:12 p.m.

Action Taken

Citron moved, Carter seconded, that in order to resolve a unique case in which the sewer permit at 1313 Oriental was paid in 1978 and subsequent bi-monthly sewer fees have been paid to the District since then, that

1. Authorize payment of \$7,039.84 from the Operating Fund to Graham and Greta Melvin, which equates to the total amount in sewer fees, plus interest, paid by the Melvins since January 1, 2014 thru December 31, 2019, payable upon the Melvin's future connection to the District sewer system; and

- 2.Cease the assessment of additional sewer fees as of January 1, 2020 until the Melvin Property properly connects to District sewer; and
- 3. Vest the Melvin Property from any further sewer permit connection fees owed provided the Melvin Property connects to District sewer by August 21, 2021. Motion passed.

Commissioner Insurance Discussion

Clary re-iterated that during its 2019 session, the Washington State Legislature passed Senate Bill 5122, which revised RCW 57.08.100 removing the minimum customer base requirement (5,000 customers) for water/sewer districts to have the option of providing health insurance to commissioners. During previous board meetings, commissioners requested staff gather further information. At the November 27, 2019 regular meeting, Clary presented the board with an extended table of costs related to providing health care to commissioners consistent with full-time employees. Discussion followed, including discussion of Public Employee Benefits Board information regarding Medicare rates and retirement as related to the District's insurance plan.

2019 Budget discussion

Clary explained that earlier revisions of the budget were presented during regularly scheduled meetings of the Board held on October 9, November 11, and November 27, 2019. Comments provided by the Board during those meetings have been incorporated into the draft budget. Of note, during the November 27, 2019 meeting, the Board directed staff to provide budget summaries that accommodate various levels of providing commissioner health insurance (no insurance, commissioner-only insurance, and commissioner and qualifying partner/family members) while maintaining positive balances of both utility funds (water and sewer). A final version of the 2020 Budget is expected to be presented to the Board during its regularly scheduled December 26, 2019 meeting.

General Manager's Report

Clary updated the Board on several topics, including interviews for Commissioner Position #1, the upcoming Legislative Breakfast on December 18, 2019, and the status of the On Site Sewage Impact Assessment Interlocal Agreement and Scope of Work development with the City of Bellingham and Whatcom County. Discussion followed.

Clary and the Board also commended District Employees Tim Keener, Jonathan Lydiard, Cyrus Gates, and Jason Dahlstrom for coming in on the Thanksgiving holiday weekend to quickly and efficiently repair a water main break discovered during that time.

Changes to Agenda

Citron requested to table Item 10, Executive Session, until the next regular board meeting as the board is still working on the General Manager performance appraisal. The board agreed.

Executive Session Per RCW 42.12.070(1) To Evaluate the Qualifications of Candidates for Appointment to Elected Office – 30 Minutes

Abele recessed the Regular Session to Executive Session at 7:43 p.m. It was estimated that the Executive Session would take 30 minutes. The purpose of the Executive Session was to evaluate the qualifications of candidates for appointment to elective office. Abele recessed the Executive Session and reconvened the Regular Session at 7:58 p.m.

<u>Executive Session Per RCW 42.30.110(1)(i)(ii) To Discuss Potential Litigation – 15 Minutes</u>
Abele recessed the Regular Session to Executive Session at 7:58 p.m. It was estimated that the Executive Session would take 15 minutes. The purpose of the Executive Session was to discuss

potential litigation with legal counsel. Abele re Regular Session at 8:13 p.m.	cessed the Executive Session and reconvened the
With no further business, Abele adjourned the	Regular Session at 8:13 p.m.
Recording Secretary, Rachael Hope	Date Minutes Approved
Laura Abele	Todd Citron
Bruce R. Ford	Leslie McRoberts
 John Carter	

ACCOUNTS

PAYABILE27 Date: 12/19/2019

Page:

Lake Whatcom W-S District

MCAG #: 2330 12/26/2019 To: 12/26/2019

Trans	Date	Туре	Acct #	Chk #	Claimant	Amount	Memo
4112	12/26/2019	Claims	5	9878	BUILDERS ALLIANCE	233.68	
4113	12/26/2019	Claims	5	9879	CASCADE NATURAL GAS	13.00	
					CORP		
4114	12/26/2019	Claims	5	9880	CLEAN WATER	25.55	
4115	12/26/2019	Claims	5	9881	MORNING BEACH COMCAST	108.29	
4116	12/26/2019	Claims	5	9882	CHARLOTTE CORSENTINO	233.71	140007106 - 21 GRAND VIEW LN
4117	12/26/2019	Claims	5	9883	COWDEN GRAVEL	526.08	
4118	12/26/2019	Claims	5		DATABAR	1,742.62	
4119	12/26/2019	Claims	5		DATAPRO SOLUTIONS, INC	131.53	
4120	12/26/2019	Claims	5		EDGE ANALYTICAL INC	177.00	
4121	12/26/2019	Claims	5	9887	ENDRESS & HAUSER INC	830.04	
4122	12/26/2019	Claims	5		ENVIRONMENTAL PEST	46.66	
					CONTROL		
	12/26/2019	Claims	5	9889	GUARDIAN SECURITY	75.00	
4124	12/26/2019	Claims	5	9890	HARDWARE SALES INC	128.97	
	12/26/2019	Claims	5	9891	WILLIAM HUNTER	17.98	
	12/26/2019	Claims	5	9892	KELLEY IMAGING SYSTEMS	688.79	
4127	12/26/2019	Claims	5	9893	LAKE WHATCOM WATER &	73.52	
					SEWER PETTY CASH		
	12/26/2019	Claims	5	9894	LITHTEX NORTHWEST	246.75	
	12/26/2019	Claims	5	9895	MCI BUSINESS ACCOUNT	67.89	
	12/26/2019	Claims	5	9896	MOTOR TRUCKS	1,004.18	
4131	12/26/2019	Claims	5	9897	NATIONAL SAFETY, INC	879.01	
4132	12/26/2019	Claims	5	9898	NORTHWEST CHEVROLET OF BELLINGHAM	4,741.55	
4133	12/26/2019	Claims	5	9899	PUGET SOUND ENERGY	16,337.10	
4134	12/26/2019	Claims	5	9900		13,781.58	
4135	12/26/2019	Claims	5	9901	US BANK N.A. CUSTODY	68.00	
					TREASURY DIV/MONEY		
4136	12/26/2019	Claims	5	9902	WA ST DEPT OF ECOLOGY -	50.00	
4127	12/26/2010	Cl-:	5	0000	CASHIERING		
4137	12/26/2019	Claims	5	9903	WASHINGTON STATE DEPT OF ECOLOGY	50.00	
4138	12/26/2019	Claims	5	9904	YORKSTON OIL CO	716.74	
		401 Opera	ating Fund			28,945.15	
			m Reinvestr	nent Fund		14,050.07	
		4.00					Claims: 42,995.22
		* Transact	tion Has Mi	xed Rever	nue And Expense Accounts	42,995.22	

PAYABLE

Lake Whatcom W-S District MCAG #: 2330

12/26/2019 To: 12/26/2019

Time: 14:11:27 Date:

12/19/2019

2

Page:

Trans Date

Type

Acct #

Chk#

Claimant

Amount Memo

Sign AOO	Date 12/19/2019	
Board Authorization - As the dut payment with our signatures bel	relected board for this district we have reviewed the claims listed ow.	and approve the
Commisioner	Commisioner	
Commisioner	Commisioner	
Commisioner		

PAYROLL

Lake Whatcom W-S District MCAG #: 2330

12/19/2019 To: 12/19/2019

Time: 08:22:30 Date:

e: 12/17/2019

Page:

.. 1

Trans	Date	Туре	Acct #	Chk#	Claimant	Amount Memo
4053	12/19/2019	Payroll	5	EFT		3,971.90 11/30/2019 - 12/13/2019 PR 26
4054	12/19/2019	Payroll	5	EFT		2,982.44 11/30/2019 - 12/13/2019 PR 26
4055	12/19/2019	Payroll	5	EFT		3,440.08 11/30/2019 - 12/13/2019 PR 26
4056	12/19/2019	Payroll	5	EFT		3,515.23 11/30/2019 - 12/13/2019 PR 26
4057	12/19/2019	Payroll	5	EFT		1,599.01 11/30/2019 - 12/13/2019 PR 26
4059	12/19/2019	Payroll	5	EFT		1,078.21 11/30/2019 - 12/13/2019 PR 26
4060	12/19/2019	Payroll	5	EFT		2,687.47 11/30/2019 - 12/13/2019 PR 26
4061	12/19/2019	Payroll	5	EFT		1,891.65 11/30/2019 - 12/13/2019 PR 26
4062	12/19/2019	Payroll	5	EFT		4,181.63 11/30/2019 - 12/13/2019 PR 26
4063	12/19/2019	Payroll	5	EFT		3,391.83 11/30/2019 - 12/13/2019 PR 26
4064	12/19/2019	Payroll	5	EFT		2,016.84 11/30/2019 - 12/13/2019 PR 26
4065	12/19/2019	Payroll	5	EFT		1,911.38 11/30/2019 - 12/13/2019 PR 26
4066	12/19/2019	Payroli	5	EFT		1,991.69 11/30/2019 - 12/13/2019 PR 26
4067	12/19/2019	Payroll	5	EFT		1,407.42 11/30/2019 - 12/13/2019 PR 26
4068	12/19/2019	Payroll	5	EFT		1,460.06 11/30/2019 - 12/13/2019 PR 26
4069	12/19/2019	Payroll	5	EFT		2,013.50 11/30/2019 - 12/13/2019 PR 26
4070	12/19/2019	Payroll	5	EFT		2,706.31 11/30/2019 - 12/13/2019 PR 26
4071	12/19/2019	Payroll	5	EFT		2,426.08 11/30/2019 - 12/13/2019 PR 26
4058	12/19/2019	Payroll	5	9867		1,738.03 11/30/2019 - 12/13/2019 PR 26
		401 Opera	ating Fund			46,410.76
						46,410.76 Payroll: 46,410.76

ign oard Authorization - As the durayment with our signatures be	Date 12/17/20/9 We elected board for this district we have reviewed the claims listed and approve the low.
ommisioner	Commisioner
ommisioner	Commisioner
ommisioner	

BENEFITS

Lake Whatcom W-S District

12/19/2019 To: 12/19/2019 MCAG #: 2330

Time: 08:38:50 Date: 12/17/2019

52,658.87 Payroll:

Page:

Trans	Date	Type	Acct #	Chk#	Claimant	Amount	Memo
4077	12/19/2019	Payroll	5	EFT	UNITED STATES TREASURY	16,080.54	941 Deposit for Pay Cycle(s)
4078	12/19/2019	Payroli	5	EFT	WA ST SUPPORT ENFORCEMENT REGISTERY	208.34	12/19/2019 - 12/19/2019 Pay Cycle(s) 12/19/2019 To 12/19/2019 - SUP ENF
4079	12/19/2019	Payroll	5	9868	AFLAC	354.85	Pay Cycle(s) 12/19/2019 To 12/19/2019 - AFLAC Pre-Tax; Pay Cycle(s) 12/19/2019 To
4080	12/19/2019	Payroll	5	9869	AFSCME LOCAL	401.90	12/19/2019 - AFLAC Post-Tax Pay Cycle(s) 12/19/2019 To 12/19/2019 - Union Dues; Pay Cycle(s) 12/19/2019 To 12/19/2019 - Union Fund
4081	12/19/2019	Payroll	5	9870	DEPARTMENT OF RETIREMENT SYSTEMS	4,237.31	Pay Cycle(s) 12/19/2019 To 12/19/2019 - DCP
4082	12/19/2019	Payroll	5	9871	HRA VEBA TRUST (PAYEE)	560.00	Pay Cycle(s) 12/19/2019 To 12/19/2019 - VEBA
4083	12/19/2019	Payroll	5	9872	VANTAGEPOINT TRANSFER AGENTS - 306798	100.00	Pay Cycle(s) 12/19/2019 To 12/19/2019 - ICMA
4084	12/19/2019	Payroll	5	9873	WA ST DEPT OF ES/PFMLA	176.65	Pay Cycle(s) 12/19/2019 To 12/19/2019 - PFMLA
4085	12/19/2019	Payroll	5	9874	WA ST PUBLIC EMP RET PLAN 2	11,148.07	Pay Cycle(s) 12/19/2019 To 12/19/2019 - PERS 2
4086	12/19/2019	Payroll	5	9875	WA ST PUBLIC EMP RET PLAN 3	3,052.70	Pay Cycle(s) 12/19/2019 To 12/19/2019 - PERS 3
4087	12/19/2019	Payroll	5	9876	WASHINGTON STATE HEALTH CARE AUTHORITY	16,338.51	Pay Cycle(s) 12/19/2019 To 12/19/2019 - PEBB Medical; Pay Cycle(s) 12/19/2019 To 12/19/2019 - PEBB ADD LTD; Pay Cycle(s) 12/19/2019 To 12/19/2019 - PEBB SMK Surcharge; Pay Cycle(s) 12/19/2019 To 12/19
		401 Opera	ating Fund			52,658.87	

52,658.87

BENEFITS

Lake Whatcom W-S District MCAG #: 2330

12/19/2019 To: 12/19/2019

Time: 08:38:50 Date: Page:

12/17/2019

2

Trans Date

Type

Acct #

Chk #

Claimant

Amount Memo

Board Authorization - As the dury	Date 12/17/2019 relected board for this district we have reviewed the claims listed ow.	and approve the
Commisioner	Commisioner	
Commisioner	Commisioner	
Commisioner		

PAYROLL

Lake Whatcom W-S District

MCAG #: 2330

12/18/2019 To: 12/18/2019

Time: 09:28:01 Date:

12/19/2019

Page:

1

						g	_
Trans	Date	Type	Acct #	Chk#	Claimant	Amount Memo	
4108	12/18/2019	Payroll	5	C		423.88 Wrong empl medical deduction	_
		401 Oper	rating Fund			423.88	_
						423.88 Payroll: 423.8	8
						423.88 Payroll:	423.8

Sign <u>Utilling</u> Co At	Date 12-19-2019	
Board Authorization - As the c payment with our signatures t	duly elected board for this district we have reviewed the clain below.	ns listed and approve the
Commisioner	Commisioner	
Commisioner	Commisioner	
Commisioner		

BENEFITS

Lake Whatcom W-S District

Commisioner

12/18/2019 To: 12/18/2019

Time: 09:30:42 Date:

12/19/2019

MCAG #: 2330 Page: 1

Trans Date Type Acct #				Chk #	Claimant	Amount Memo		
4109	12/18/2019	2019 Payroll 5		EFT	UNITED STATES TREASURY	70.24 941 Deposit for Pay Cycle(s) 12/18/2019 - 12/18/2019		
		401 Oper	ating Fund			70.24		
					•	70.24 Payroll:	70.24	

Sign_ Willia Ce	9 Date 12-19-2019	
Board Authorization - As the payment with our signature:	e duly elected board for this district we have reviewed the claims listed s below.	and approve the
Commisioner	Commisioner	
Commisioner	Commisioner	



AGENDA BILL Item 5.A

Adoption of Fiscal Year 2020 Budget

DATE SUBMITTED: December 12, 2019 N		MEETING DATE: December 26, 2019			
TO: BOARD OF COMM	ISSIONERS	FROM: Debi Denton, Finance Manager/Treasurer			
GENERAL MANAGER A	PPROVAL	Sixtelley			
ATTACHED DOCUMEN	TS	1. Fiscal Year 2020 Budget			
TYPE OF ACTION REQU	ESTED	RESOLUTION	FORMAL ACTION/ MOTION	INFORMATIONAL /OTHER	

BACKGROUND / EXPLANATION OF IMPACT

Through the powers granted under <u>Revised Code of Washington Title 57</u> (Water-Sewer Districts) and codified under the District's <u>Administrative Code</u> 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 prior Board-adopted rate increases (4% and 2.5% water and sewer rates, respectively), actual 2019 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 consideration. Earlier revisions of the budget were presented during regularly scheduled meetings of the Board held on October 9, November 11, November 27, and December 11, 2019. Comments provided by the Board during those meetings have been incorporated into the attached Fiscal Year 2020 Budget.

FISCAL IMPACT

The budget for 2020 proposes a budget of approximately \$3 million for the water utility, and budget of \$4.8 million for the sewer utility, resulting in a total budget of approximately \$7.8 million.

RECOMMENDED BOARD ACTION

Staff recommends adoption of the Fiscal Year 2020 Budget.

PROPOSED MOTION

A recommended motion is:

"I move to adopt the Fiscal Year 2020 Budget, as presented."

2020 ANNUAL BUDGET

LAKE WHATCOM WATER & SEWER DISTRICT



LAKE WHATCOM WATER & SEWER DISTRICT 1220 LAKEWAY DRIVE BELLINGHAM, WASHINGTON 98229 THIS PAGE HAS BEEN INTENTIALLY LEFT BLANK.

2020 ANNUAL BUDGET



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

APPROVED December 26, 2019

BOARD OF COMMISSIONERS

Laura Abele, President, Position 1
Todd Citron, Secretary, Position 2
Bruce Ford, Commissioner, Position 3
Leslie McRoberts, Commissioner, Position 4
John Carter Commissioner Position 5

General Manager Justin Clary

2020 BUDGET LAKE WHATCOM WATER & SEWER DISTRICT

PAGE I

CONTENTS

1	GENERAL MANAGER'S MESSAGE	1
2	SUMMARY OF FUNDS 2.1 WATER UTILITY FUND (FUND 401) 2.2 SEWER UTILITY FUND (FUND 402) 2.3 BOND RESERVE FUND (FUND 460)	4 4 4 5
3	2020 REVENUE PROJECTIONS	6
4	2020 EXPENDITURES 4.1 WATER UTILITY FUND (FUND 401) 4.2 SEWER UTILITY FUND (FUND 402) 4.3 BOND RESERVE FUND (FUND 460)	7 7 10 12

APPENDIX A

2020 BUDGET

APPENDIX B

2020 CAPITAL AND IMPROVEMENT MAINTENANCE PLAN

APPENDIX C

2020 REVENUE BOND AND LOANS FUND SUMMARY

GENERAL MANAGER'S MESSAGE

The 2020 Budget represents the proposed fiscal plans for the Lake Whatcom Water & Sewer District for the 2020 calendar year (please refer to Appendix A for a comprehensive presentation of the 2020 Budget). This budget is the culmination of a collaborative effort between the Board of Commissioners and staff, and aligns with the District's mission to provide the best possible water and sewer services to District customers in a cost efficient manner, and in a way that contributes to protecting Lake Whatcom water quality. This budget was developed around touchstones of the District's financial policies, which embody the principles that guide District budgeting and long-term financial management, reinforcing the key values of fiscal prudence, pay-as-you-go funding to the extent practicable, and strong stewardship through asset management.

The 2020 Budget marks a shift from prior budgets in the overall fund structure for managing District monies. Past budgets have managed water and sewer revenues and operating expenditures under one operating fund, all water and sewer capital projects under a system reinvestment fund, all existing water and sewer debt payments under one debt service fund, water and sewer reserves under separate contingency funds, and a bond covenant-required bond reserve fund. The 2020 fund structure effectively separates all water and sewer revenues and expenditures into two separate funds—a water utility fund and a sewer utility fund. To simplify the fund structure and gain money management efficiencies, applicable water- and sewer-related funds in the prior combined system reinvestment fund and debt service fund have been rolled into the applicable utility fund. Similarly, the separate contingency funds have been integrated into the respective utility fund. As a result, the 2020 Budget is now comprised of three funds (water utility fund, sewer utility fund, and bond reserve fund) rather than the prior six separate funds. The prior debt service and contingency funds will be managed as individual budget items within each utility fund and maintained at the levels consistent with District financial policies. Separating the fund structure into specific water and sewer utility funds is consistent with the financial consultant recommendations, ensuring that cross-subsidies between water and sewer revenues/expenditures are mitigated.

Through adherence to its conservative fiscal policies and the prior adopted multi-year rate schedule, the District enters 2020 with stable revenue projections that enable continued maintenance of fully funded operational and contingency reserves. Utility rate revenues, which make up the majority of overall District revenues, have been projected in accordance with the Board-adopted, multi-year rate schedule. Though new home starts in 2019 (20) remained relatively consistent with 2018 (27), and informal communications with development partners indicate that 2020 may result in similar quantities, development-related revenue projections have been cautiously budgeted at 15 new connections. As a result, the 2020 Budget anticipates continued growth, yet also maintains a conservative approach in accounting for these revenues.

The budget includes approximately \$7.8 million in expenditures, which is comprised of budgets of approximately \$3 million and \$4.8 million for the water utility and sewer utility, respectively, and a restricted bond reserve of approximately \$772,000. The water utility budget is comprised of \$2.3 million dedicated to operations, a capital reinvestment budget of approximately \$500,000, and a debt

2020 BUDGET LAKE WHATCOM WATER & SEWER DISTRICT

PAGE 1

service budget of approximately \$232,000, as well as a contingency reserve of \$460,000 and an operating reserve of \$500,000. The sewer utility budget is comprised of \$2.6 million dedicated to operations, a capital reinvestment budget of approximately \$1.5 million, and a debt service budget of approximately \$643,000, as well as a contingency reserve of \$796,000 and an operating reserve of \$420,000.

Despite accommodating staff salary cost-of-living adjustments and benefit increases, hiring an additional utility system support specialist to overlap with the anticipated retirement of the current employee in that position later in the year, and completion of the scheduled utility rate study and State of Washington-required audit, the 2020 Budget decreases overall by approximately 3% relative to 2019. The decrease is largely attributed to the District completing two relatively expensive capital projects in 2019 (Country Club Gravity Main and Geneva Sewer Lift Station Improvement projects). To maintain the District's multi-year capital improvement programs of continued investment in our water and sewer system infrastructure, the Engineering Department will aggressively manage our full slate of projects, which includes renovation of two sanitary sewer lift stations; design associated with another sewer lift station renovation and expansion of the Agate Height water treatment plant; installation of cathodic protection systems at the Geneva and Division 22 reservoirs; and development of a 20-year facility improvement plan for the Sudden Valley water treatment plant. Additional significant expenses to ensure District responsiveness during emergency situations include purchases of a new flush/vacuum truck and a new tool truck.

The budget has been carefully crafted to emphasize the Board's service priorities while deploying resources in a manner that assures a firm foundation that maintains a positive cash balance at yearend. As a result, the 2020 Budget maintains reserves at levels defined by District financial policies, while maintaining adequate operating capital and investing in critical infrastructure improvements that are aimed at prolonging the life of our assets and protecting the environment. The 2020 capital improvement program reflects a pay-as-you-go approach funded through a combination of one-time and ongoing resources consistent with the District's asset management philosophy and the 2016 water and sewer utility rate study. The fact that the 2020 investments can be made without reliance on debt can be attributed to the ongoing commitment to disciplined fiscal policy and management.

The 2020 Budget also reaffirms the District's ongoing commitment to protecting Lake Whatcom. In 2020, the District will continue its partnership with Whatcom County and the City of Bellingham for water quality monitoring and invasive species inspection programs, and has allocated an additional \$100,000 beyond its partnership commitments (with \$40,000 to be reimbursed by the County) to supplement water quality monitoring and preservation of the lake.

Forecasting resources, preparing the budget, monitoring its implementation, and assuring accountability and transparency, all while completing day-to-day work functions, takes an exceptional group of professionals. I want to thank District staff, all of whom had a hand in development of the 2020 Budget. I also want to thank the Board of Commissioners, whose leadership and policy direction has placed the District in a position that enables many of the progressive investments found in this budget. Lastly, I thank the District's customers that make up the Lake Whatcom community, without whom we would not have a purpose.

2020 BUDGET LAKE WHATCOM WATER & SEWER DISTRICT

Sincerely,

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

2.1 Water Utility Fund (Fund 401)

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

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

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

2.2 Sewer Utility Fund (Fund 402)

This fund serves as the primary operating fund of the District's sewer utility. The majority of revenue is derived from rates charged to sewer customers. Other revenue sources are interest income, recording fees, permit fees, payments associated with an existing utility local improvement district (ULID), and miscellaneous charges and fees. All fees and charges are set by the Board.

2020 BUDGET LAKE WHATCOM WATER & SEWER DISTRICT

PAGE 4

Funds collected are used to pay for operations and maintenance, and capital improvement programrelated (system reinvestment) expenditures of the sewer utility in accordance with the Boardapproved annual budget.

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

- Operating Reserve. The operating reserve serves as a liquidity cushion providing protection from risk of short-term variation in the timing of revenue collection relative to payment of expenses and is maintained consistent with District financial policies at the cost to operate the utility for 60 days.
- Contingency Reserve. The contingency reserve ensures that unanticipated projects related to sewer system expenses will be funded, subsequent to Board approval, and is established through the District's financial policies at one percent of the sewer utility infrastructure replacement cost.
- Debt Service. The debt service allocation provides redemption of outstanding debt incurred.
 The 2016 Bond interest is paid semi-annually, and the principal is paid annually from sewer utility revenues.

2.3 Bond Reserve Fund (Fund 460)

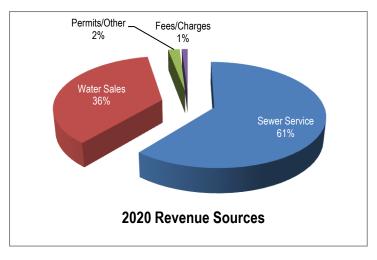
The fund was established by the covenants of the 2016 bond sale and is restricted by definition. A reserve limitation is required to be held in this fund until the outstanding 2016 bonds are paid in full.

2020 BUDGET LAKE WHATCOM WATER & SEWER DISTRICT

3 2020 REVENUE PROJECTIONS

District functions are funded primarily through revenues received through water and sewer service fees, with the relatively small remainder of revenues coming from other fees and charges, and permits and other miscellaneous revenues.

In 2016, the District engaged the services of a utility financing consultant to review the District's operational and capital programs relative to revenue projections. The outcome of the study provided a multi-year approach to



incremental increases to water and sewer rates through 2021 to ensure sufficient funding for operations, outstanding debt service, and system reinvestment through capital improvement projects. Per the Board-approved multi-year rate schedule, 2020 Budget revenues have been based upon water and sewer rate increases of 4 and 2.5 percent, respectively, over 2019 rates. This will result in approximately \$2.6 and \$4.2 million in water and sewer utility rate revenues, respectively.

The other relatively significant revenue stream is fees the District receives for the connection of new development to its water and sewer systems. These *general facility charges* have been developed based upon the new customer's proportionate share of the cost of constructing the system to which they are connecting, as well as the proportionate share for future system expansion to accommodate that connection's impact. Development within the District in 2019 (20 new homes) was relatively consistent with that witnessed in 2018 (27 new homes). Although current indications are that 2020 will witness similar levels of new development, development-related revenues have been based upon a more conservative number of 15 new homes (resulting in projections of \$90,000 and \$135,000 in associated revenues to the water utility and sewer utility, respectively).

Other revenues (totaling approximately \$180,000), comprised of latecomer and other miscellaneous fees, investment interest, and revenues associated with ULID 18, have been based upon 2019 revenues.

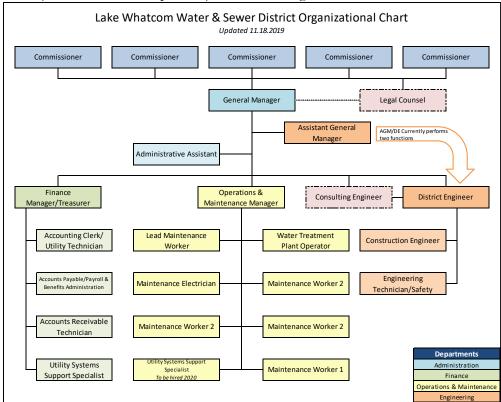
Therefore, based upon prior adopted rate increases and conservative projections of other revenues, the 2020 Budget reflects a total revenue from external sources of \$7,226,000, which is an approximate four percent increase over revenues projected in the 2019 Budget, but is within 1.5 percent of actual revenues projected through 2019 yearend.

4.1 Water Utility Fund (Fund 401)

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

4.1.1 Operating Expenses

Personnel. Being a service-oriented organization, staff salary and associated benefits make up a large portion of the Water Utility Fund budget. Salary- and benefit-related expenses are shared with the Sewer Utility Fund, with exception to the Water Treatment Plant Operator position, which is solely funded by the Water Utility Fund. In 2020, the District will add one Utility System Support Specialist position for a total of 18.5 full-time equivalent positions. The additional position is consistent with the District's staff succession plan as it will allow for overlap with that of current Utility System Support Specialist, who is anticipated to retire in 2020. Beyond the additional position, personnel-related cost increases from the 2019 Budget are primarily associated with union contract-required cost-of-living adjustments to salaries (2.2 percent) and increases to healthcare and related benefits (an increase of two percent). The 2020 Organizational Chart is:



2020 BUDGET LAKE WHATCOM WATER & SEWER DISTRICT

Professional Services. The District relies on a number of professional- and vendor-related services to efficiently and effectively carry out the business of the District. Such providers include contracting with the District's legal counsel and on-call consulting engineer, support services associated with asset management, infrastructure control, administrative systems, and general services (e.g., custodial, landscape maintenance, security, etc.). Many of these services are shared evenly between the water and sewer utilities. The combined professional services for 2020 are projected at \$281,000, which is a decrease from the 2019 Budget (\$290,000), despite anticipated costs associated related to a utility rate study and the bi-annual audit performed by the Washington State Auditor's Office.

City of Bellingham Fees. The District does not have a drinking water source that is connected to the Eagleridge residential neighborhood located on the Lake Whatcom north shore. Therefore, the District purchases water from the City of Bellingham to serve Eagleridge. The total projected cost for water fees from the City of Bellingham for 2020 is budgeted at \$45,000, which is relatively equivalent to costs projected through 2019 yearend.

Water Quality Partnerships. With Lake Whatcom as the primary source of drinking water within the District, protection of its water quality is crucial. In 2020, the District will continue its partnership with Whatcom County and the City of Bellingham for water quality monitoring and invasive species inspection programs (\$60,000), as well as invest an additional \$60,000 in associated initiatives aimed at protecting water quality within the lake (after a \$40,000 reimbursement from Whatcom County).

Utilities. Electricity to treat and distribute water to District customers, and to pump sewage to the City of Bellingham makes up a significant portion of the District's operating budget. Combined water and sewer utility electricity costs, together with other utilities, are budgeted at \$210,000 for 2020 which are slightly above those projected through 2019 yearend.

2019 Fund Carryover. Due to competing workload obligations, \$105,000 in water utility operating monies was not used under system reinvestment because the associated capital projects were not completed. As a result, these funds will be carried over to 2020 when the associated projects will be completed.

4.1.2 Operating Reserve

In accordance with District financial policies, an operating reserve is maintained equivalent to the cost of operating the water utility for 90 days (\$520,000). Also per District policies, in any year where operating reserves exceed the maximum days of operations expenses at yearend (90 days), the excess cash is to be used for system reinvestment in capital projects. For 2020, \$7,000 of excess cash is projected for reinvestment in water infrastructure.

4.1.3 System Reinvestment

The 2020 Capital Improvement and Maintenance Plan, included as Appendix B, provides a comprehensive description of the projects that will be completed using system reinvestment funds. Following are projects specific to the water utility:

2020 BUDGET LAKE WHATCOM WATER & SEWER DISTRICT

PAGE 8

Category	Project	Cost ¹
Capital Improve	ement Projects	
Water	Dead End Blowoffs	\$5,000
Water	Little Strawberry Bridge Water Main Predesign & Estimate	\$15,000
Water	Sudden Valley Water Treatment Plant 20-Year Facility Plan	\$90,000
	Subtotal	\$110,000
Maintenance P	rojects	
Water/Sewer	Johnson Well Storage Building New Siding and Paint (water portion)	\$13,750
Water/Sewer	Annual Asphalt Patching (water portion)	\$17,500
Water/Sewer	Annual Tree Trimming (water portion)	\$5,000
	Subtotal	\$36,250
System Reinve	stment Projects	
Water/Sewer	Quick Connect Fitting for CAT Backhoe (water portion)	\$2,000
Water/Sewer	Used Forklift for Shop (water portion)	\$10,000
Water/Sewer	SCADA Telemetry-Install and Configure Managed Ethernet Switches (water portion)	\$10,000
Water/Sewer	Snowplow Blade and Sander Attachment for Tool Truck (water portion)	\$7,150
Water/Sewer	Accounting & Admin Server-Replace/update hardware, security & OS (water portion)	\$12,500
Water/Sewer	Replace Tool Truck (7 tool trucks in fleet) (water portion)	\$36,000
Water	Agate Heights Water System-Phase 1 WTP Upgrade Design, Bid, SDC	\$80,000
Water	Demolish Concrete Reservoir at 1010 Lakeview Street	\$55,000
Water	Convert Eagleridge Booster to Metering Station	\$30,000
Water	PRV-AUS at Fremont and Austin-Rebuild Vault, Replace PRVs, Piping and Hardware	\$10,000
Water	Geneva and Division 22 Reservoir Impressed Current Cathodic Protection Systems	\$40,000
Water	Water Meters and Registers	\$13,000
Water	Fire Hydrant Flow Testing Kit for Hydraulic Model Calibration Testing	\$3,500
Water	Sudden Valley Water Treatment Plant Misc. Component Replacement	\$40,000
Water	Fire Hydrant Adapters	\$12,000
	Subtotal	\$361,150
	TOTAL	\$507,400

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

4.1.4 Contingency Reserve

A contingency reserve is maintained in accordance with the District's financial policies at one percent of the water utility infrastructure replacement cost (\$460,000). As this is contingency fund, no expenditures are budgeted for 2020.

4.1.5 Debt Service

The District is obligated to annually set aside sufficient funds for debt service repayment associated with prior District capital improvements, which are summarized in the *Revenue Bonds and Loan Funds Summary* (Appendix C). Water utility-related 2020 expenditures to make principal and interest payments on District low interest loans will be associated with:

- Geneva AC Pipe Mains Replacement Project (\$148,723)
- Division 22 Water Reservoir Construction Project (\$83,153)

4.2 Sewer Utility Fund (Fund 402)

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

4.2.1 Operating Expenses

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

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

City of Bellingham Fees. To protect the quality of Lake Whatcom, all sewage collected by the District is conveyed to the City of Bellingham's sanitary sewer system and treated at the City's Post Point wastewater treatment plant. As a result, the District pays the City for treatment of all sewage collected by the District. The total projected cost for sewer fees from the City of Bellingham for 2020 is budgeted at \$680,000, which is slightly above 2019 yearend projections to account for city rate increases.

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

2019 Fund Carryover. Due to competing workload obligations, \$770,000 in sewer utility operating monies was not used under system reinvestment because the associated capital projects were not completed. As a result, these funds will be carried over to 2020 when the associated projects will be completed.

4.2.2 Operating Reserve

In accordance with District financial policies, an operating reserve is maintained equivalent to the cost of operating the sewer utility for 60 days (\$420,000). Also per District policies, in any year where operating reserves exceed the maximum days of operations expenses at yearend (60 days), the excess cash is to be used for system reinvestment in capital projects. For 2020, \$190,000 of excess cash is projected for reinvestment in sewer infrastructure.

4.2.3 System Reinvestment

The 2020 Capital Improvement and Maintenance Plan, included as Appendix B, provides a comprehensive description of the projects that will be completed using system reinvestment funds. Following are projects specific to the sewer utility:

2020 BUDGET LAKE WHATCOM WATER & SEWER DISTRICT

Category	Project	Cost ¹
Capital Improve	ment Projects	
Sewer	Euclid Lift Station Design & Permitting	\$29,000
Sewer	Dellesta and Edgewater Lift Stations Design & Construction	\$597,200
Sewer	Compulsory Sewer Connections	\$20,000
Sewer	Comprehensive Sewer Plan Update	\$20,000
Sewer	AB PLC-5 Replacements and UPS Improvements	\$100,000
	Subtotal	\$766,200
Maintenance Pr	rojects	
Water/Sewer	Johnson Well Storage Building New Siding and Paint (sewer portion)	\$13,750
Water/Sewer	Annual Asphalt Patching (sewer portion)	\$17,500
Water/Sewer	Annual Tree Trimming (sewer portion)	\$5,000
	Subtotal	\$36,250
System Reinve	stment Projects	
Water/Sewer	Quick Connect Fitting for CAT Backhoe (sewer portion)	\$2,000
Water/Sewer	Used Forklift for Shop (sewer portion)	\$10,000
Water/Sewer	SCADA Telemetry-Install and Configure Managed Ethernet Switches (sewer portion)	\$10,000
Water/Sewer	Snowplow Blade and Sander Attachment for Tool Truck (sewer portion)	\$7,150
Water/Sewer	Accounting & Admin Server-Replace/update hardware, security & OS (sewer portion)	\$12,500
Water/Sewer	Replace Tool Truck (7 tool trucks in fleet) (sewer portion)	\$36,000
Sewer	Replace Flush and Vac Truck	\$525,000
Sewer	Beaver, Flat Car, SVPS Motor Lead Replacement	\$18,000
Sewer	Rehabilitation and Replacement Projects	\$40,000
	Subtotal	\$660,650
	TOTAL	\$1,463,100

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

4.2.4 Contingency Reserve

A contingency reserve is maintained in accordance with the District's financial policies at one percent of the sewer utility infrastructure replacement cost (\$796,000). As this is contingency fund, no expenditures are budgeted for 2020.

4.2.5 Debt Service

The District is obligated to annually set aside sufficient funds for debt service repayment associated with prior District capital improvements, which are summarized in the *Revenue Bonds and Loan Funds Summary* (Appendix C). Sewer utility-related 2020 expenditures to make principal and interest payments on District bond obligations are solely associated with the 2016 Bond (which consisted of re-financing of the 2009 Bond, as well as financing the renovation of two sewer lift stations and the District's portion of upgrades to the City of Bellingham's Post Point wastewater treatment plant). The 2020 sewer utility debt service will be approximately \$643,000.

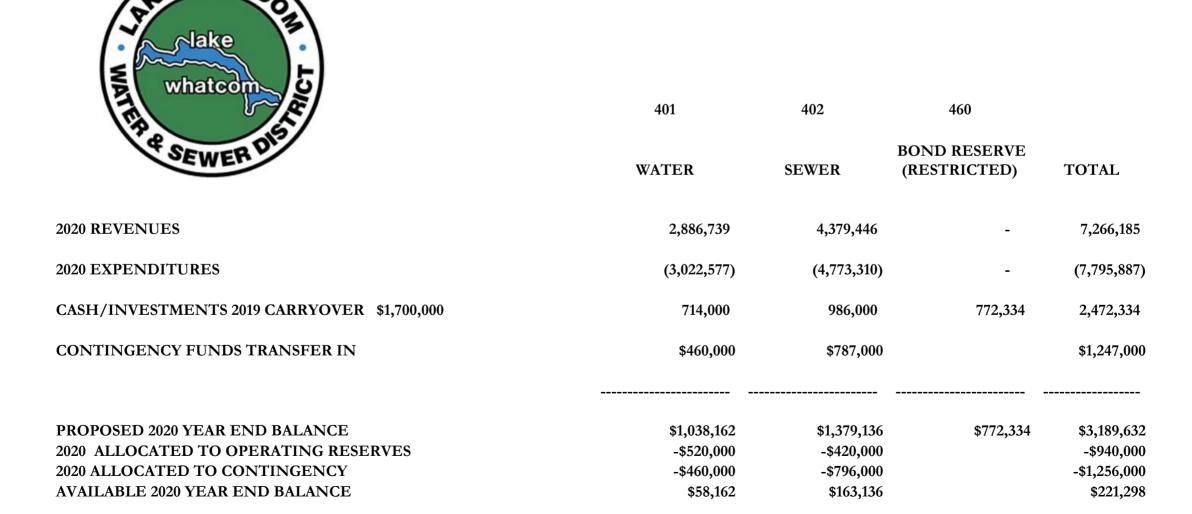
4.3 Bond Reserve Fund (Fund 460)

No expenditures are anticipated in 2020 from this fund. A fund balance of approximately \$772,000 will be carried over from 2019.

2020 BUDGET LAKE WHATCOM WATER & SEWER DISTRICT

APPENDIX A 2020 BUDGET

LAKE WHATCOM WATER AND SEWER FUND SUMMARY 2020



	Description	Actual 2017	Actual 2018	Budget 2019	Budget 2020
WATER - 401					
OPERATING EXPENDITURES					
401-534-10-10	Admin Payroll (2.2% cola plus step increases - 2020)	320,350	301,648	337,135	353,900
401-534-10-10	Admin Personnel Benefits (123,078	133,169	142,195	149,250
401-534-10-31	Gen Admin Supplies/Equipment (Master Meter Software)	13,289	11,170	15,000	35,000
401-534-10-31	Meetings/Team building	1,594	1,178		2,000
401-534-10-40	Web pay/Bank Fees	16,695	20,199	20,000	10,000
401-334-10-40	Interlocal - Invasive Species (City) (8% increase)	10,073	20,177	20,000	55,000
	Interlocal - Lake Whatcom Tributary Monitor (County)				
	North Shore Sampling (County Interlocal Agreement)				5,000 100,000
	Mutt Mits				
401-534-10-41	Water Quality Assurance Programs (TOTAL)	8,856	55,119	90,000	5,000 165,000
401-334-10-41	- · · · · · · · · · · · · · · · · · · ·	6,630	33,119		3,000
	County Auditor Filing Fees			3,250	12,500
	Statement processing			12,500	750
	Answering Service			1,000	750
	Time clock system			1,000	
	Financial Software Maintenance			5,000	5,000
	Web Check services			2,500	2,500
	CPA (Financial statements)			3,000	3,000
	Rate Study			-	15,000
	State Audit			-	5,000
	Docuware maintenance and upgrade			7,500	7,500
	Legal Counsel			30,000	20,000
	Computer support			12,500	15,000
	Anti virus subscription			500	500
	Building security			1,000	1,000
	Building custodial			5,000	5,000
	Pest control			250	500
	Landscaping service			2,000	3,000
	South Whatcom Fire (hydrant maintenance)			1,000	1,000
	Scada System Software Maintenance - Operations			3,750	3,750
	Engineering Consultant			10,000	5,000
	Cyber Security AWIA Assessment			-	5,000
	SCADA/PLC Support - Engineering/Operations			2,500	5,000
	Cartegraph - Engineering/Operations			15,000	2,500
	Auto Desk - Engineering			500	500
	GIS Partnership (County)			500	500
	Rockwell - Engineering/Operations			250	250
	IT Pipes			750	750

	Description	Actual 2017	Actual 2018	Budget 2019	Budget 2020
	Description	Actual 2017	ACIUAI 2010	Duaget 2019	Duaget 2020
	ESRI - ARC GIS			750	750
	Innovyze - Engineering			1,250	1,250
	Master Meter			2,000	2,000
	Cyberlock software			500	500
	Whatcom County Emergency Management			10,000	10,000
	Misc (Bid notices etc.)			2,500	2,500
401-534-10-41-01	Professional Services (TOTAL)	259,151	296,727	145,000	141,250
401-534-10-42	Communication	24,732	25,601	25,000	30,000
401-534-10-45	Admin Lease (copy/printers)	910	4,198	3,500	5,000
401-534-10-46	Property Insurance	67,595	66,404	67,000	72,000
401-534-10-49	Admin Misc.	682	795	500	500
401-534-10-49-01	Memberships/Dues/Permits	8,317	9,443	10,000	10,000
401-534-10-49-02	WA State Dept of RevenueTaxes/County Stormwater fees	104,678	113,994	110,000	115,000
401-534-40-43	Training & Travel	12,539	16,743	17,500	17,500
401-534-40-43-01	Tuition reimbursement	184	,	500	500
401-534-50-31	Operations/Maintenance Supplies	95,454	117,834	75,000	75,000
401-534-50-31-01	Small Assets/tools	-	2,158	35,000	25,000
401-534-50-48	Operations Repair/Maint contracted work	32,225	75,421	60,000	60,000
401-534-50-49	Insurance Claims	-	1,183	2,500	2,500
401-534-60-41	Operations Contracted (water testing)	12,110	5,418	7,500	7,500
401-534-60-47	Water City of Bellingham	40,386	61,592	45,000	45,000
401-534-80-10	Operations Payroll (2.2% cola plus step increases - 2020)	513,248	546,976	533,190	575,561
401-534-80-20	Operations Personnel Benefits (Medical, Retirement etc)	223,200	238,647	251,500	247,590
401-534-80-32	Fuel	13,663	14,814	15,000	15,000
401-534-80-35	Safety Supplies (Ergonomic Assessment)	6,149	8,668	5,000	10,000
401-534-80-35-01	Safety Supplies Boots	971	928	1,250	1,250
401-534-80-35-02	Emergency Preparedness	149	319	5,000	5,000
401-534-80-47	General Utilities (Electric, gas, water, garbage)	98,911	111,942	120,000	110,000
401-534-80-49	Laundry	1,951	2,053	2,000	2,000
	WATER OPERATING EXPENDITURES	2,001,067	2,244,341	2,142,770	2,288,301

	Description	Actual 2017	Actual 2018	Budget 2019	Budget 2020
	Description	Tictual 2017	Hetual 2010	Dauget 2017	Budget 2020
DEBT SERVICE					
401-591-34-77-01	Redemption of Long Term Debt Geneva AC Mains	119,938	119,938	119,937	119,938
401-591-34-77-02	Redemption of Long Term Debt Div 22 Reservoir	-	53,831	53,831	65,475
401-591-34-77-73	Redemption of Long Term Debt Loan 064	47,252	236,260	-	-
401-592-34-83-01	Debt Service Interest Geneva AC Mains	34,182	32,383	30,584	28,785
401-592-34-83-02	Debt Service Interest Div 22 Reservoir	-	30,982	15,342	17,678
401-592-34-83-03	Debt Service Interest Loan 064	5,670	3,321	-	-
SYSTEM REINVESTMENT					
	2019 System Reinvestment Projects				105,000
	2020 System Reimvestment Projects	337,296	470,687	425,000	397,400
TRANSFERS					
	Transfers out to Water Contingency Fund				-
WATER FUND	TOTAL WATER REVENUES	2,493,061	2,787,652	2,787,652	2,886,739
	TOTAL WATER EXPENDITURES	(2,545,405)	(3,191,743)	(2,787,464)	(3,022,577)
	2019 BALANCE CARRYOVER (42%) of \$1,700,000				714,000
	2019 FUND 426 TRANSFER IN				460,000
	2020 ALLOCATED TO OPERATING RESERVES				(520,000)
	2020 ALLOCATED TO WATER CONTINGENCY				(460,000)
	PROPOSED AVAILABLE 2020 YEAR END BALANCE				58,162

	Description	Actual 2017	Actual 2018	Budget 2019	Budget 2020
SEWER - 402					
OPERATING EXPENDITURES					
402-535-10-10	Admin Payroll (2.2% cola plus step increases - 2020)	320,349	301,897	337,135	353,900
402-535-10-20	Admin Personnel Benefits	123,075	132,376	142,195	149,250
402-535-10-31	Gen Admin Supplies/Equipment	13,889	12,535	15,000	20,000
402-535-10-31-01	Meetings/Team building	1,469	1,693	1,500	2,000
402-535-10-40	Web pay/Bank Fees	16,625	20,195	20,000	10,000
	County Auditor Filing Fees			3,250	3,000
	Statement processing			12,500	12,500
	Answering Service			1,000	750
	Time clock system			1,000	750
	Financial Software Maintenance			5,000	5,000
	Web Check services			2,500	2,500
	CPA (Internal audit and Financial statements)			3,000	3,000
	Rate study			-	15,000
	State audit			_	5,000
	Docuware maintenance and upgrade			7,500	7,500
	Legal Counsel			30,000	20,000
	Computer support			12,500	15,000
	Cyber Security AWIA Assessment				5,000
	Anti virus subscription			500	500
	Building security for offices			1,000	1,000
	Building custodial			5,000	5,000
	Pest control			250	500
	Landscaping service			2,000	3,000
	Scada System Software Maintenance - Operations			3,750	3,750
	Engineering Consultant			10,000	5,000
	Camera Van Software			1,500	1,500
	SCADA/PLC Support - Engineering/Operations			2,500	5,000
	Cartegraph - Engineering/Operations			15,000	2,500
	Auto Desk - Engineering			500	500
	GIS Partnership (County)			500	500
	Rockwell - Engineering/Operations			250	250
	IT Pipes			750	750
	ESRI - ARC GIS			750	750
	Innovyze - Engineering			1,250	1,250
	Cyberlock software			500	500
	Whatcom County Emergency Management			10,000	10,000
	Misc (Bid notices etc.)			2,500	2,500

	Description	Actual 2017	Actual 2018	Budget 2019	Budget 2020
402-535-10-41-01	Professional Services (TOTAL)	108,695	224,840	145,000	139,750
402-535-10-42	Communication	24,731	25,600	25,000	30,000
402-535-10-45	Admin Lease (copy/printers)	910	4,200	3,500	5,000
402-535-10-46	Property Insurance	67,595	66,403	67,000	72,000
402-535-10-49	Admin Misc.	510	353	500	500
402-535-10-49-01	Memberships/Dues/Permits	5,898	6,545	7,000	8,000
402-535-10-49-02	WA State Dept of Revenue Taxes/County Sormwater fees	97,504	108,063	105,000	115,000
402-535-40-43	Training & Travel	7,924	9,549	17,500	17,500
402-535-40-43-01	Tuition reimbursement	102	-	500	500
402-535-50-31	Operations/Maintenance Supplies	51,805	52,213	75,000	75,000
402-535-50-31-01	Small Assets/tools	-	2,544	35,000	25,000
402-535-50-48	Operations Repair/Maint contracted work	144,487	74,355	60,000	60,000
402-535-50-49	Insurance Claims	-	1,183	2,500	2,500
402-535-60-41	Operations Contracted (generator load testing)	6,869	-	15,000	15,000
402-535-60-47	Sewer City of Bellingham Treatment Fee	643,912	589,677	650,000	680,000
402-535-80-10	Operations Payroll (3% cola plus step increases - 2020)	413,138	442,355	533,190	483,494
402-535-80-20	Operations Personnel Benefits (Medical, Retirement etc)	179,101	191,170	251,500	247,590
402-535-80-32	Fuel	13,759	14,770	13,000	13,000
402-535-80-35	Safety Supplies (Ergonomic Assessment)	6,280	8,686	5,000	10,000
402-535-80-35-01	Safety Supplies Boots	1,048	887	1,250	1,250
402-535-80-35-02	Emergency Preparedness	279	467	5,000	5,000
402-535-80-47	General Utilities (Electric, gas, water, garbage)	92,793	101,163	110,000	100,000
402-535-80-49	Laundry	1,950	2,052	2,000	2,000
	SEWER OPERATING EXPENDITURES	2,344,697	2,395,771	2,645,270	2,643,234

Description	Actual 2017	Actual 2018	Budget 2019	Budget 2020
2009 Bond Principal Payments	265,000	275,000	285,000	
2016 Bond Principal Payments	125,000	130,000	130,000	425,000
2009 Bond Interest Payments	30,900	20,300	10,332	
2016 Bond Interest Payments	227,175	224,675	222,074	218,176
2019 System Reinvestment Projects				770,000
Sewer System Reinvestment Projects	337,296	470,687	2,600,000	191,900
2020 Sewer Equipment (Flush/Vac Truck)				525,000
Transfers Out to Sewer/Storm Water Contingency Fund 425	149,000	25,000	15,000	-
TOTAL SEWER REVENUES	4,062,980	4,277,536	4,246,102	4,379,446
TOTAL SEWER EXPENDITURES	(3,479,068)	(3,541,433)	(5,907,676)	(4,773,310)
2019 BALANCE CARRYOVER (58%) of \$1,700,000				986,000
2019 FUND 425 TRANSFER IN				787,000
2020 ALLOCATED TO SEWER OPERATING RESERVES				(420,000)
2020 ALLOCATED TO SEWER CONTINGENCY				(796,000)
PROPOSED AVAILABLE 2020 YEAR END BALANCE				163,136
	2016 Bond Principal Payments 2009 Bond Interest Payments 2016 Bond Interest Payments 2019 System Reinvestment Projects Sewer System Reinvestment Projects 2020 Sewer Equipment (Flush/Vac Truck) Transfers Out to Sewer/Storm Water Contingency Fund 425 TOTAL SEWER REVENUES TOTAL SEWER EXPENDITURES 2019 BALANCE CARRYOVER (58%) of \$1,700,000 2019 FUND 425 TRANSFER IN 2020 ALLOCATED TO SEWER OPERATING RESERVES 2020 ALLOCATED TO SEWER CONTINGENCY	2016 Bond Principal Payments 2009 Bond Interest Payments 30,900 2016 Bond Interest Payments 227,175 2019 System Reinvestment Projects Sewer System Reinvestment Projects 337,296 2020 Sewer Equipment (Flush/Vac Truck) Transfers Out to Sewer/Storm Water Contingency Fund 425 TOTAL SEWER REVENUES TOTAL SEWER REVENUES 4,062,980 TOTAL SEWER EXPENDITURES (3,479,068) 2019 BALANCE CARRYOVER (58%) of \$1,700,000 2019 FUND 425 TRANSFER IN 2020 ALLOCATED TO SEWER OPERATING RESERVES 2020 ALLOCATED TO SEWER CONTINGENCY	2016 Bond Principal Payments 125,000 130,000	2016 Bond Principal Payments 2009 Bond Interest Payments 30,900 20,300 20,300 10,332 2016 Bond Interest Payments 227,175 224,675 222,074 2019 System Reinvestment Projects Sewer System Reinvestment Projects 337,296 2020 Sewer Equipment (Flush/Vac Truck) Transfers Out to Sewer/Storm Water Contingency Fund 425 TOTAL SEWER REVENUES 4,062,980 4,277,536 4,246,102 TOTAL SEWER EXPENDITURES (3,479,068) 2019 BALANCE CARRYOVER (58%) of \$1,700,000 2019 FUND 425 TRANSFER IN 2020 ALLOCATED TO SEWER OPERATING RESERVES 2020 ALLOCATED TO SEWER CONTINGENCY

	Description	Actual 2017	Actual 2018	Budget 2019	Budget 2020
BOND RESERVE - 460					
460-361-11-00	Investment Interest (to Operating Fund)	9,870		_	-
460-397-10-00-60	Transfers In from Operating Fund 401	-		-	-
	TOTAL REVENUES	9,870		0	0
460-535-10-41	Investment Service Charges	765		-	-
	TOTAL EXPENDITURES	765		0	0
BOND RESERVE FUND	REVENUES	9,870		-	0
	EXPENDITURES	(765)			0
	CASH/INVESTMENTS BALANCE CARRYOVER				772,334
	PROPOSED 2020 YEAR END BALANCE				772,334

APPENDIX B

2020 CAPITAL AND IMPROVEMENT MAINTENANCE PLAN

Lake Whatcom Water and Sewer District

2020 Capital Improvement Plan

District Administrative Code Section 2.3 – Capital Improvement Plan Policy provides a policy framework to plan and implement capital policies and programs that preserve, maintain, and improve capital facilities, equipment, and assets with the goal of avoiding fiscal emergencies and unplanned capital costs.

The 6-year capital improvement plan (CIP) is updated annually during budgeting efforts for the following year. The CIP coordinates projects identified in the current Water System Comprehensive Plan and Sewer Comprehensive Plan with facility, equipment, and asset needs identified during the trailing 12 months. The current Water System Comprehensive Plan was approved by the Washington State Department of Health on October 3, 2018 and is valid until October 3, 2028 (10-years). The current Comprehensive Sewer Plan was approved by the Washington State Department of Ecology on June 6, 2014.

Capital projects are financed to the greatest extent possible through user fees when direct benefit to users results from the construction of the project. The District utilizes revenue bonds and applicable state and federal loans and grants to assist in capital funding whenever necessary. Each capital project that may be funded by a loan is evaluated within the context of the District's capital improvement program and the capital budget. The funding strategy is reviewed and updated approximately every two to three years as part of the District's period rate study that considers revenues, expenses, CIP needs, and debt. Projects are scheduled to fit within the funding strategy contained in the most current rate study.

Projects are prioritized and scheduled considering the following criteria:

- Impact on the operating budget through increases or reductions in revenues and expenses.
- Identified and scheduled in the water and sewer comprehensive plans.
- Can be realistically accomplished during the year that they are scheduled.
- Implement previous Board-approved reports and strategies.
- Renewal and replacement schedules identified in the asset management system's comprehensive inventory of all capital assets which includes estimates of actual value, replacement cost and remaining useful life.
- Business risk exposure index that factors consequence of failure and probability of failure of the subject asset.

Capital projects that are not completed during the fiscal year are carried over to the next fiscal year. These projects are listed on the page titled "Active Capital Improvement Project".

Sewer C1705 Geneva and Par Sewer Pump Stations Permits, PSE, Advertisements, Printing, Testing, Etc. \$ 419,019.00	Active	Capi	tal Improvement Projects							
Category Project & Project Pro	2020 Budget W	Vorksheet								
Project # Project Proj										
Rate Funded Projects	10/23/2019									
Sewer										
Sewer C1811 Country Club Sewer Pump Station - HDD Pemits, Advertisements, Printing, Testing, Etc. \$ 9,333.44 \$	Category F	Project #	Project Litle / Lasks	to	Completion	(as of 10/23/2019))	Thru 2019	2020 Budget	Notes
Sewer C1811 Country Club Sewer Pump Station - HDD Pemits, Advertisements, Printing, Testing, Etc. \$ 9,333.44 \$	Poto Fund	lad Dra	ianto							
Permits, Advertisements, Printing, Testing, Etc. \$ 9,333.44 \$ 9,434.65 \$ 9,400.00 \$ 6,000.00 \$ 6,										
BHC Design, Permiting, Bidding	Sewer	CIGIT		Φ.	0.222.44	Φ 0.222.44	Φ.	0.222.44	Φ.	
BHC Services During Construction \$ 72,000.00 \$ 5,000.00 \$ 683,170.36 \$				-				,	•	
Construction Contract \$ 683,170.36 \$ 683,170.36 \$ 683,170.36 \$ 6				-				,		
Sewer C1705 Geneva and Par Sewer Pump Stations Permits, PSE, Abvertements, Printing, Testing, Etc. \$ 439,019.00 \$ 388,497.80 \$ 419,019.00 \$ 388,497.80 \$ 419,019.00 \$ \$ - \$					683 170 36	\$ 513.047.68				original construction contract price \$760,585
Permits, PSE, Advertisements, Printing, Testing, Etc. \$ 59,310.74 \$ 19,310.74 \$ 19,109.00 \$ 388,497.89 \$ 4190.90 \$ 19,109.00 \$ 19,109.00 \$ 18,867.00 \$ 18,867.00 \$ 19,109.00 \$ 18,867.00 \$ 19,109.00 \$	Sewer	C1705		Ψ	003,170.30	φ 515,047.00	Ψ	003,170.30	Ψ -	original construction contract price \$700,303
RH2	Oewei	01700		\$	59 310 74	\$ 59 310 74	\$	59 310 74	\$ -	
Part Construction Contract								,		thru amendment #5
Sewer				-				,		the enterent no
Sewer C1708 Ball Check Valves at Austin and Beaver Sewer Pump Stations \$ 8,518.57 \$ 8,518.57 \$ 8,518.57 \$ 8,518.57 \$ 8,518.57 \$ 8,518.57 \$ 8,518.57 \$ 8,518.57 \$ 8,518.57 \$ 8,518.57 \$ 8,518.57 \$ 8,518.57 \$ 8,518.57 \$ 8,518.57 \$ 8,518.57 \$ 8,518.57 \$ 8,518.57 \$ 9,500.00 \$ 9,000.00 \$ 9,								,		
Water C1716B Dead End Bloworfs \$ 20,000.00 \$ 13,311.47 \$ 15,000.00 \$ 5,000.00	Sewer	C1708		-						
Water C1716B Geneva Booster Station - PRVs, Backflow, Roof \$ 40,000.00 \$ 16,916.79 \$ 40,000.00 \$				-						
Sewer C1802 Dellesta, Edgewater & Euclid Sewer Pump Stations										
Euclid RH2 Design, Permitting, Bidding \$ 93,512.00 \$ 71,520.37 \$ 21,991.63 original agreement, phate amendment 2, phase 1a Permits, Advertisements, Printing, Testing, Etc. \$ 25,000.00 \$ 16,897.00 \$ 18,867.00 \$ 7,000.00 includes deflest 8 edgewer Parmits, Advertisements, Printing, Testing, Etc. \$ 25,000.00 \$ 16,890.66 \$ 18,000.00 \$ 7,000.00 includes deflest 8 edgewer Parmits, Advertisements, Printing, Testing, Etc. \$ 25,000.00 \$ 16,990.66 \$ 18,000.00 \$ 7,000.00 includes deflest 8 edgewer Parmits, Advertisements, Printing, Etc. \$ 25,000.00 \$ 3,393.0					-,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Ť	.,	·	
RH2 Euclid Mitigation Plan			·							
RH2 Euclid Mitigation Plan			RH2 Design, Permitting, Bidding	\$	93,512.00	\$ 71,520.37	\$	71,520.37	\$ 21,991.63	original agreement, phase 1a
Dellesta & Edgewater										amendment 2, phase 1a
Dellesta & Edgewater			Permits, Advertisements, Printing, Testing, Etc.	\$	25,000.00	\$ 16,690.66	\$	18,000.00	\$ 7,000.00	includes dellest & edgewater & euclid
RH2 Edgewater Supplemental Surveying			Dellesta & Edgewater							
RH2 Design, Permitting, Bidding			RH2 Predesign, Shoreline Permitting	\$	99,490.00	\$ 99,490.00	\$	99,490.00	\$ -	original agreement, phase 1b
RR12 Services During Construction - Estimate			RH2 Edgewater Supplemental Surveying	\$	3,393.00	\$ 3,393.00	\$	3,393.00	\$ -	amendment 1, phase 1b
Construction - Estimate				\$	62,210.00	\$ -	\$	40,000.00		
PSE Electrical Service Changes \$ 25,000.00 \$ - \$ \$ 25,000.00			RH2 Services During Construction - Estimate	\$		\$ -	\$	-		estimate based on par and geneva ps
Sewer C1810										based on planning level estimate from RH2 9/30/2019
Sewer M1811 North Shore Sewer FM Stream Crossing Protection Wilson Design, Permitting, Services During Construction \$ 49,254.33								-		
Wilson Design, Permitting, Services During Construction \$ 38,703.25 \$ 38,703.25 \$ 38,703.25 \$ 49,254.33				\$	57,692.93	\$ 57,692.93	\$	57,692.93	\$ -	
Construction Contract \$ 49,254.33 \$ 49,254.34 \$ 49	Sewer	M1811	North Shore Sewer FM Stream Crossing Protection							
Water C1813 Div 7 Reservoir - Seismic FEMA Grant Application \$ 17,569.00 \$ 17,569.00 \$ 17,569.00 \$ 17,569.00 \$ - Water C1814 Agate Heights WTP and Opal Booster Upgrades Wilson Predesign, Pilot Test, Permitting, DOH Project Report \$ 45,546.00 \$ 34,268.00 \$ 45,546.00 \$ - wilson task order #2018 A 1901 Whatcom County Region GIS Imagery Partnership 2019 Flight \$ 1,000.00 \$ - \$ 1,000.00 \$ - \$ 20,000.00 \$ 20,000.00 <										
Water C1814 Agate Heights WTP and Opal Booster Upgrades Wilson Predesign, Pilot Test, Permitting, DOH Project Report \$ 45,546.00 \$ 34,268.00 \$ 45,546.00 \$ - 4,000.00 \$,		
Wilson Predesign, Pilot Test, Permitting, DOH Project Report \$ 45,546.00 \$ 34,268.00 \$ 45,546.00 \$ 5,000.00 \$ 20,000				\$	17,569.00	\$ 17,569.00	\$	17,569.00	\$ -	
A 1901 Whatcom County Region GIS Imagery Partnership 2019 Flight \$ 1,000.00 \$ - \$ 20,000.00 \$ \$ 20,000.00 \$ 20	Water	C1814			45.540.00			45 540 00	•	"
Sewer A1902 Compulsory Sewer Connections \$ 20,000.00 \$ - \$ 20,000.00		A 1001	Wilson Predesign, Pilot Test, Permitting, DOH Project Report							wilson task order #2018-01
C1903 District Office Misc Facility Improvements (\$60k budget) Irrigation System, Front Concrete Steps \$ 13,478.80 \$ 13,478.80 \$ 2019 Asphalt Patching - WRS Contract \$ 43,093.00 \$ - \$ 440,000.00 \$ - \$ 40,000.00 \$ 40,000.00 \$ - \$ 40,000.00 \$ - \$ 40,000.00 \$ - \$ 40,000.00 \$ - \$ 40,000.00 \$ - \$ 40,000.00 \$ - \$ 40,000.00 \$ 40,000.00 \$ 40,000.00 \$ 40,000.00 \$ 40,000.00 \$ 40,000.00 \$ 4										
Irrigation System, Front Concrete Steps \$ 13,478.80 \$ 13,478.80 \$ 2019 Asphalt Patching - WRS Contract \$ 43,093.00 \$ - \$ 43,093.00 \$ - \$ will increase due to more sewer \$ 69,950.00 \$ 5,926.50 \$ 50,000.00 \$ 19,950.00	Sewer		Compulsory Sewer Connections District Office Mice Facility Improvements (COO) builting	\$	20,000.00	-	\$	-	\$ 20,000.00	
Sewer C1904 Comprehensive Sewer Plan Update \$ 69,950.00 \$ 5,926.50 \$ 50,000.00 \$ 19,950.00 wilson task order #2015 \$ 28,539.83 \$ 40,000.00 \$ 28,539.83 \$ 28,539.24 \$ 28,539.		C1903		•	12 470 00	¢ 12.470.00	¢	12 470 00	¢	
Sewer C1904 Comprehensive Sewer Plan Update \$ 69,950.00 \$ 5,926.50 \$ 50,000.00 \$ 19,950.00 wilson task order #2019 Sewer C1905 Sewer Rehabilitation and Replacement Projects \$ 40,000.00 \$ 28,539.83 \$ 40,000.00 \$ - Water C1906 Water Meters and Replacement Registers \$ 19,177.89 \$ 19,177.89 \$ 19,177.89 \$ - Water C1907 Fire Flow Improvements - Remove FH #22-122 \$ 2,000.00 \$ - \$ 2,000.00 \$ - Water C1908 Fire Flow Improvements - Hydraulic Model Calibration \$ 15,000.00 \$ 4,284.50 \$ 15,000.00 \$ - wilson task order #2019 Water C1909 Little Strawberry Bridge Water Main Predesign & Estimate \$ 20,000.00 \$ 5,000.00 \$ 5,000.00 \$ 15,000.00 \$ 15,000.00 \$ 72,000.00 \$ 72,000.00 \$ 72,000.00 \$ 72,000.00 \$ 72,000.00 \$ 72,000.00 \$ 72,000.00 \$ 72,000.00 \$ 72,000.00 \$ 72,000.00 \$ 72,000.00 \$ 72,000.00 \$ 72,000.00 \$ 72,000.00 \$ 72,000.00 \$ 72,000.00 \$ 72,000.00 \$ 72,000.00 <										will increase due to more patching areas
Sewer C1905 Sewer Rehabilitation and Replacement Projects \$ 40,000.00 \$ 28,539.83 \$ 40,000.00 \$ - Water C1906 Water Meters and Replacement Registers \$ 19,177.89 \$ 19,177.89 \$ 19,177.89 \$ - Water C1907 Fire Flow Improvements - Remove FH #22-122 \$ 2,000.00 \$ - \$ 2,000.00 \$ - Water C1908 Fire Flow Improvements - Hydraulic Model Calibration \$ 15,000.00 \$ 4,284.50 \$ 15,000.00 \$ - wilson task order #2019 Water C1909 Little Strawberry Bridge Water Main Predesign & Estimate \$ 20,000.00 \$ - \$ 5,000.00 \$ 15,000.00 \$ 15,000.00 \$ 15,000.00 \$ 15,000.00 \$ - wilson task order #2019 Wilson task order #2019 \$ 29,588.91 \$ 72,000.00 \$ - \$ 5,000.00 \$ - \$ 5,000.00 \$ - \$ 5,000.00 \$ - \$ 5,000.00 \$ - \$ 5,000.00 \$ - \$ 5,000.00 \$ - \$ 5,000.00 \$ - \$ 5,000.00 \$ - \$ 5,000.00 \$ - \$ 5,000.00 \$ - \$ 5,000.00 \$ - \$ 5,000.00	Sower	C1004								will increase due to more patching areas wilson task order #2019-001 (target by November 2019)
Water C1906 Water Meters and Replacement Registers \$ 19,177.89 \$ 19,177.89 \$ - 2,000.00 \$ -										wilson task order #2019-001 (target by November 2019)
Water C1907 Fire Flow Improvements - Remove FH #22-122 \$ 2,000.00 \$ - \$ 2,000.00 \$ - Wison task order #2019 Water C1908 Fire Flow Improvements - Hydraulic Model Calibration \$ 15,000.00 \$ 4,284.50 \$ 15,000.00 \$ - wilson task order #2019 Water C1909 Little Strawberry Bridge Water Main Predesign & Estimate \$ 20,000.00 \$ - \$ 5,000.00 \$ 15,000.00 \$ 15,000.00 Water C1910 SVWTP and AHWTP Misc Component Replacement \$ 72,000.00 \$ 29,588.91 \$ 72,000.00 \$ - Water C1911 Field CL2 Injection System \$ 5,000.00 \$ - \$ 5,000.00 \$ - Water C1913 SVWTP 20-Year Facility Plan \$ 100,000.00 \$ - \$ 10,000.00 \$ 90,000.00 Water C1914 Water Rehabilitation and Replacement Projects \$ 62,493.59 \$ 62,493.59 \$ 62,493.59 \$ - svwtp xfmr fire, svwtp in po #475 \$28,583.24 Sewer M1916 Flat Car Impellers, Volutes, and Wear Rings \$ 28,583.24 - \$ 28,583.24 - po #475 \$28,583.24								,		
Water C1908 Fire Flow Improvements - Hydraulic Model Calibration \$ 15,000.00 \$ 4,284.50 \$ 15,000.00 \$ - wilson task order #2019 Water C1909 Little Strawberry Bridge Water Main Predesign & Estimate \$ 20,000.00 \$ - \$ 5,000.00 \$ 15,				-				,		
Water C1909 Little Strawberry Bridge Water Main Predesign & Estimate \$ 20,000.00 \$ - \$ 5,000.00 \$ 15,000.00 Water C1910 SVWTP and AHWTP Misc Component Replacement \$ 72,000.00 \$ 29,588.91 \$ 72,000.00 \$ - Water C1911 Field CL2 Injection System \$ 5,000.00 \$ - \$ 5,000.00 \$ - Water C1913 SVWTP 20-Year Facility Plan \$ 100,000.00 \$ 62,493.59 \$ 90,000.00 Water C1914 Water Rehabilitation and Replacement Projects \$ 62,493.59 \$ 62,493.59 \$ 62,493.59 \$ - svwtp xfmr fire, svwtp in po #475 \$28,583.24 Sewer M1916 Flat Car Impellers, Volutes, and Wear Rings \$ 28,583.24 - \$ 28,583.24 - po #475 \$28,583.24										wilson task order #2019-002 (target by October 2019)
Water C1910 SVWTP and AHWTP Misc Component Replacement \$ 72,000.00 \$ 29,588.91 \$ 72,000.00 \$ - Water C1911 Field CL2 Injection System \$ 5,000.00 \$ - \$ 5,000.00 \$ - Water C1913 SVWTP 20-Year Facility Plan \$ 100,000.00 \$ - \$ 10,000.00 \$ 90,000.00 Water C1914 Water Rehabilitation and Replacement Projects \$ 62,493.59 \$ 62,493.59 \$ - svwtp xfmr fire, svwtp in power fire, svwt										wilson lask older #2013-002 (larger by October 2019)
Water C1911 Field CL2 Injection System \$ 5,000.00 \$ - \$ 5,000.00 \$ - \$ 5,000.00 \$ - \$ 90,000.00 \$ 90,000.00 Water C1914 Water Rehabilitation and Replacement Projects \$ 62,493.59 \$ 62,493.59 \$ 62,493.59 \$ - svwtp xfmr fire, svwtp ir Sewer M1916 Flat Car Impellers, Volutes, and Wear Rings \$ 28,583.24 - \$ 28,583.24 - po #475 \$28,583.24				-				,		
Water C1913 SVWTP 20-Year Facility Plan \$ 100,000.00 \$ - \$ 10,000.00 \$ 90,000.00 Water C1914 Water Rehabilitation and Replacement Projects \$ 62,493.59 \$ 62,493.59 \$ - svwtp xfmr fire, svwtp ir Sewer M1916 Flat Car Impellers, Volutes, and Wear Rings \$ 28,583.24 \$ - \$ 28,583.24 \$ - po #475 \$28,583.24			' '							
Water C1914 Water Rehabilitation and Replacement Projects \$ 62,493.59 62,493.59 62,493.59 - svwtp xfmr fire, svwtp ir Sewer M1916 Flat Car Impellers, Volutes, and Wear Rings \$ 28,583.24 - \$ 28,583.24 - po #475 \$28,583.24				-						
Sewer M1916 Flat Car Impellers, Volutes, and Wear Rings \$ 28,583.24 \$ - \$ 28,583.24 \$ - po #475 \$28,583.24				-						svwtp xfmr fire, svwtp intake check valve
			' '	-						
The first to the place in the p								,	•	
			7. 2. 2. Tropiacomonio and of o improvemente	Ψ	100,000.00	¥	Ψ		, 100,000.00	
Total \$ 4,364,108.48 \$ 2,858,549.40 \$ 3,487,956.85 \$ 876,151.63			Total	\$	4,364,108.48	\$ 2,858,549.40	\$	3,487,956.85	\$ 876,151.63	

Page 1 11/5/2019 Page 43 of 114

Lake Whatcom Water and Sewer District - Capital Improvement Plan 2020 thru 2025

Program Are	ea / CIP Project # / CIP Project Name	Fund Total	2020	2021	2022	2023	2024	2025
Maintenanc	ce - General							
0210	8 Johnson Well Storage Building - New Siding and Paint	27,500	27,500					
A0011	1 Annual Aphalt Patching	210,000	35,000	35,000	35,000	35,000	35,000	35,000
A0012	2 Annual Tree Trimming	60,000	10,000	10,000	10,000	10,000	10,000	10,000
	Subtotal	297,500	72,500	45,000	45,000	45,000	45,000	45,000
Maintenanc	ce - Water							
W0005	35 Reservoirs - Inspection & Maintenance	31,827				31,827		
	Subtotal	31,827				31,827		
System Rein	nvestment - General							
0207	1 Quick connect fitting kit for new CAT backhoe	4,000	4,000					
0208	1 Used Fork Lift for Shop	20,000	20,000					
0209	SCADA Telemetry - Install and Configure Managed Ethernet Switches	20,000	20,000					
0218	Snowplow Blade and Sander Attachment for Tool Truck	14,300	14,300					
A0005	50 Accounting & Administration Server - Replace/Update Hardware, Network Security, & OS	50,000	25,000			25,000		
E0002	10 Replace 5-yard Dump Truck	131,127					131,127	
E0007	12 Replace Mini Excavator	71,027						71,027
E0008	18 Replace Flush and Vac Truck	525,000	525,000					
V0001	18 Replace Tool Truck (7 tool trucks in fleet)	216,000	72,000		72,000		72,000	
V0002	9 Replace Administrative Staff Vehicle (4 cars in fleet)	55,167		27,583				27,583
	Subtotal	1,106,621	680,300	27,583	72,000	25,000	203,127	98,611
System Rein	nvestment - Sewer							
0032a	36 Agate Bay Sewer Pump Station - Predesign and Shorelines Permitting	103,000			103,000			
0032b	36 Agate Bay Sewer Pump Station - Design and Bidding	128,750				128,750		
0032c	36 Agate Bay Sewer Pump Station - Construction	540,750					540,750	
0055a	30 Rocky Ridge Pump Station - Predesign and Shorelines Permitting (with Lakewood)	51,500		51,500				
0055b	30 Rocky Ridge Pump Station - Design and Bidding	103,000			103,000			
0055c	30 Rocky Ridge Pump Station - Construction	300,000				300,000		
0056a	30 Lakewood Pump Station - Predesign and Shorelines Permitting (with Rocky Ridge)	51,500		51,500				
0056b	30 Lakewood Pump Station - Design and Bidding	103,000			103,000			
0056c	30 Lakewood Pump Station - Construction	300,000			-	300,000		
0124a	42 Flat Car Reverse Flow to SVPS Piping and Valves - Design & Permitting	50,000		50,000				
0124b	42 Flat Car Reverse Flow to SVPS Piping and Valves - Construction	100,000			100,000			
0157	12 Install Ball Check Valves at Cable, Ranch House, Flat Car, Beaver	112,551			112,551			
					,	225,102		
0161	30 Stationary Generator Closed Loop Cooling Retrofit - North Point, SV, Flat Car, Beaver	225,102						
0161 0163	Euclid Electrical Controls Replacement and New Stationary Generator	225,102 415,090		415,090		223,102		

Page 1 of 2 11/6/2019 Page 44 of 114

Program Are	ea / CIP Project # / CIP Project Name	Fund Total	2020	2021	2022	2023	2024	2025
0172	16 Flat Car Sewer Pump Station - Recondition Electrical Controls	168,826						168,826
0193	100 COB Post Point WWTP Biosolids Handling (LWWSD Cost Share 4.8%) - Construction 2023	10,000,000				10,000,000		
0206a	18 Beaver, Flat Car, SVPS Motor Leads (replace 3 at \$6k/each)	18,000	18,000					
0206b	18 Beaver, Flat Car, SVPS Motor Leads (replace 2 at \$6k/each)	12,000		12,000				
A0010	35 Update Sewer Comprehensive Plan (Current Plan under revision as of 11/6/2019)	87,550						87,550
E0003	14 Replace Sewer Camera Vehicle	82,340			82,340			
E0004	8 Replace Camera Equipment	41,524			41,524			
S0001a	15 Sewer System Rehab and Replacement Projects	60,000	60,000					
S0001b	15 Sewer System Rehab and Replacement Projects	660,000		165,000	165,000	165,000	165,000	
S0001c	15 Sewer System Rehab and Replacement Projects	600,000						600,000
	Subtotal	14,483,309	78,000	745,090	810,415	11,118,852	874,576	856,376
System Reir	nvestment - Water							
0084a	40 Agate Heights Water System - Phase 1 WTP Upgrade 1/3 capacity (from 30gpm to 60gpm)	- 80,000	80,000					
-	Design, Bid, SDC	<u> </u>						
0084b	40 Agate Heights Water System - Phase 1 WTP Upgrade 1/3 capacity (from 30gpm to 60gpm) - Construction	190,000		190,000				
0144a	70 South Shore Water System - 1992 SVWTP 0.235MG Chlorine Contact Tank Seismic Retrofit	- 84,413			84,413			
	Priority 2 - Design							
0144b	70 South Shore Water System - 1992 SVWTP 0.235MG Chlorine Contact Tank Seismic Retrofit	- 175,579				175,579		
	Priority 2 - Construction							
<u>0145a</u>	70 South Shore Water System - 1971 Division 7 1.0MG Reservoir Seismic Retrofit and Coatings Priority 1 - Design & Permitting	5 - 200,000					200,000	
0164	30 Demolish Old Concrete Reservoir at 1010 Lakeview Street	55,000	55,000					
0166	South Shore Water System - SVWTP - Convert from Chlorine Gas to Liquid	103,000			103,000			
0201	2 Convert Eagleridge Booster to Metering Station	30,000	30,000					
0203	36 PRV-AUS at Fremont and Austin - Rebuild Vault, replace 3inch and 1.5inch PRVs, Piping, and	10,000	10,000					
	Hardware							
0204	36 Geneva and Division 22 Reservoir Impressed Current Cathodic Protection Systems	40,000	40,000					
0205	Water Meters and Registers	13,000	13,000					
0211	1 Fire Hydrant Flow Testing Kit for Hydraulic Model Calibration Testing	3,500	3,500					
0212	6 SVWTP Misc Component Replacement	40,000	40,000					
0213	Dutch Harbor Water Meter - Add to Telemetry/SCADA Historian	20,000		20,000				
0214	4 SVWTP Raw Water Intake - Emergency Pumps (water only portable pump)	50,000				50,000		
0215	6 1237 Lakeview St - Replace 2" PVC with 2" HDPE	50,000			50,000			
0216	Fire Hydrant Adapters	12,000	12,000					
W0002a	18 Water System Rehab and Replacement Projects	40,000		40,000				
W0002b	18 Water System Rehab and Replacement Projects	50,000					50,000	
W0002c	18 Water System Rehab and Replacement Projects	226,600						226,600
W0003	35 SVWTP Filter 3&4 Media - Replace	25,714						25,714
	Subtotal	1,498,807	283,500	250,000	237,413	225,579	250,000	252,314
* Note: Co	ost Estimates in 2020 Dollars Grand Total	17,418,064	1,114,300	1,067,673	1,164,828	11,446,258	1,372,704	1,252,301

Project Name: Demolish Old Concrete Reservoir at 1010 Lakeview Street	
CIP #:	0164

Asset Register:	LWWSD → Water	LWWSD → Water → Reservoirs					
Failure Mode:	Capacity	Level of Service <u>Mortality</u> Efficiency				ficiency	
Business Risk Exposure:	n/a	= _ x _ x _ (PoF x CoF x Redundancy)					
Remaining Life:	n/a	Consumed Life:		_	ctive fe:		

PURPOSE and DESCRIPTION OF THE PROJECT

Demolish old concrete reservoir across the street from the Shop at 1010 Lakeview Street. The concrete structure was built in the 1930's and has been out of service since the late 1940's. The reservoir is weathered, structurally deteriorating and does not meet current building codes, and is not suitable for reuse or salvage by the District.

The District owns the 100' x 50' parcel at this site. The District may be able to repurpose this site as a gravel parking or staging area, as was once envisioned by the Board of Commissioners. As this project is developed, the desired site restoration will also need to be determined.

Work will require a Whatcom County Demolition Permit. The District hired CAZ Environmental in October 2019 to test and report on whether the existing structure contains asbestos. The report concluded that materials tested did not detect asbestos and therefore the project is not expected to fall under regulations governing the handling of building materials containing asbestos beyond allowable limits. The CAZ Environmental report will be provided with the Whatcom County Demolition Permit application.

Budget Estimate: \$55,000

Cost estimate in 2020 dollars.

Estimate is based on information from WRS in November 2019. The estimate includes reservoir removal and haul away of materials and an estimate for replacement of fencing, landscape restoration caused by damage to neighboring property during the demolition process and any final site restoration to accommodate a possible parking area.

For further information about this project contact Kristin Hemenway.

Revision History

- Created 11/17/2017 by BH.
- Edited 11/5/2019 by KH.

Project Name: Convert Eagleridge Booster to Metering Station	
CIP #:	0201

Asset Register:	LWWSD → Wate	.WWSD → Water → Distribution System				
Failure Mode:	Capacity	Level of Serv	vice Mor	<u>Mortality</u>		ficiency
Business Risk Exposure:	2	= 7 x	= 7 x 3 x 0.1 (PoF x CoF x Redundancy)			
Remaining Life:	10	Consumed Life:	30	_	ctive fe:	40

PURPOSE and DESCRIPTION OF THE PROJECT

The purpose of this project is to convert the Eagleridge Booster Station to a Metering Station. The 2018 Water System Comprehensive Plan determined that the 3 smaller residential flow pumps are no longer needed since the City source water pressure has increased from when the booster station was put into service in 1989.

If the residential pumps were decommissioned, the District will benefit by eliminating ongoing operational and maintenance costs as well as avoiding replacement costs for the 30-year old pump system and controls. However, without the pumps home owners experience approximately 15 to 19 psi less pressure than they are used to, but still be delivered the District's minimum standard 30 psi at the meter. Neighborhood and customer outreach will be important to convey the benefits to the system as a whole, and avoid a surprise by the drop in normal operating pressure.

Preliminary analyses performed as part of the 2018 Water System Comprehensive Plan indicate that the fire suppression pumps may no longer be needed, but a more detailed investigation is needed.

A phased approach is proposed for this project as follows:

Phase A – 2020: \$30,000

Detailed hydraulic analysis and field verification to determine whether the fire suppression pumps can be decommissioned. Begin public outreach to neighborhood for plan to decommission residential flow pumps that will result in less pressure than the community is accustomed to.

Develop Project Report (design) for submittal and review by Department of Health

Phase B – 2021 or 2022 Cost to be determined in Phase A

Construction. Probable that work can be performed by District field crew. This will depend on workload and the final scope of construction work.

Information from 2018 Water System Comprehensive Plan:

It has recently been found that the pressure from the City source has increased since the pump station was constructed. Now the City source has a pressure that is only slightly less than that of the Eagleridge system. The City source pressure at the pump station was measured by the District on a chart recorder for one week starting October 30, 2017. The pressure varied from approximately 86-90 psi. The pumps currently increase the pressure to approximately 105 psi. A pressure of 86 psi at the pump station elevation is sufficient to provide greater than 30 psi to all connections under peak hour demand, which suggests that the residential pumps may be taken out of service and that the City source pressure could serve residential demand. Analysis indicates that the two large pumps to provide fire suppression flow may not be necessary but require a more detailed investigation before decommissioning.

The Eagleridge water system model includes all pipes and pumps. The model demands were updated to reflect a MDD of 800 gpd/ERU and a system PHD of 150 gpm (based on MDD, build-out of 85 ERUs). Pump curves were updated based on available information. Elevations were updated to all be based on NAVD88 (current datum adopted by the City of Bellingham).

The source from the City of Bellingham was updated to reflect current operating conditions. The connection from the City is at a hydraulic grade of 519 ft.

Summary Analysis Results

The model was analyzed based on the existing configuration with domestic and fire flow pumps. Results indicate that the existing system can provide sufficient pressure and flow to meet Peak Hour Demand for the projected build-out while maintaining the required minimum system pressure of 30 psi. Results also indicate that the existing system can provide 750 gpm at all fire hydrants under MDD while maintaining the required minimum system pressure of 20 psi.

Because of the increase in the source (City) pressure from the previous analysis, the possibility of bypassing or eliminating the pump station was investigated. The model indicates that with the three residential flow pumps bypassed and served by the pressure of the City source, 30 psi can be provided to all connections under peak hour demand.

Additional data is needed to analyze whether the City pressure can provide sufficient fire flow without the fire flow pumps.

Cost estimate in 2020 dollars.

For further information about this project call Bill Hunter.

Revision History

Project Name: Replace PRV-AUS Pressure Reducing Valve Station	
CIP #:	0203

Asset Register:	LWWSD → Water → Distribution System					
Failure Mode:	Capacity	acity Level of Service <u>Mortality</u> Efficiency				
Business Risk Exposure:	NA	= x x 1 (PoF x CoF x Redundancy)				
Remaining Life:	NA	Consumed NA Effective NA Life: NA				

PURPOSE and DESCRIPTION OF THE PROJECT

Replace aging pressure reducing valve station (PRV-AUS) located at the intersection of Austin and Fremont. The station currently has 3" and 1.5" pressure reducing valves. The vault needs to be reconfigured and all the hardware including the valves needs replacing.

Piping and site constraints at the intersection require a topographic survey on which to base a replacement design. The project will be phased.

Phase A – Survey/Design: 2020 \$10,000

Phase B - Construction: 2021 Cost to be determined following design

Cost estimate in 2020 dollars.

For further information about this project call Bill Hunter.

Revision History

Project Name:	Geneva and Division 22 Reservoirs Impressed Current Cathodic Protection Systems
CIP #:	0204

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

PURPOSE and DESCRIPTION OF THE PROJECT

This project includes installation of impressed current cathodic protection system at both the Geneva Reservoir and original of the two Division 22 Reservoirs.

Norton Corrosion's 2019 reservoir cathodic protection inspection noted that the level of corrosion in the Geneva Reservoir exceeds what the galvanic cathodic protection system can provide. Geneva has 60-75% coating failure (interior floor and walls). The options are to: 1) recoat the structure, 2) change from galvanic cathodic protection to an impressed system (estimated \$17,000 to \$19,000 each system) or 3) continue operation without sufficient cathodic protection in place.

Norton Corrosion's report also notes that measurements taken at Division 7, 22 and 30 were *close* to not meeting the NACE requirement to satisfy the criteria for adequate protection.

Budget Estimate: \$40,000

Cost estimate in 2020 dollars.

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

Revision History

Project Name	Water Meters and Registers
CIP#	0205

Asset Register:	LWWSD → Water → Distribution System → Services					
Failure Mode:	Capacity	Level of Service Mortality Efficiency				
Business Risk Exposure:	')	= 2 x 1 x 1 (PoF x CoF x Redundancy)				
Remaining Life:	15	Consumed Life:	5	_	ctive fe:	20

PURPOSE and DESCRIPTION OF THE PROJECT

Over the last several years there was a wave in the number of water meter registers that came up on their 10-year battery life. These were replaced with newer model registers that have a 20-year battery life. It is anticipate that there will be another wave of older 10-year battery life registers that were installed in 2011-2013. This next wave will probably start around 2022.

The number of register replacements for 2020 is anticipated to be minimal.

Staff is estimating about 30 new meters should be stocked for new development.

Budget Estimate

\$5,250	30 New Registers x \$175/ea
\$6,7 <u>50</u>	3 <u>0 New Meters x \$225/ea</u>
\$12,000	Subtotal
\$1,044	8.7% Sales Tax
\$13,000	Total

Cost estimate in 2020 dollars.

For further information about this project call Bill Hunter.

Revision History

- Created 8/2/2006.
- Revised 1/5/2010 by BH: Adjusted materials cost to closer match recent brass bids.
 Deleted labor since it is already in the general budget.
- Revised 10/26/2011 by BH: Reduced annual budget from \$30k (85 rebuilds/year) to 15k (40-50 rebuilds/year) to better match available District labor resources.
- Revised 11/20/2013 by BH. Updated number of remaining rebuilds and annual budget.
- Revised 10/25/2017 by RM: Updated purpose, description and budget estimate
- Revised 11/6/2018 by BH. Updated description and budget estimate.
- Revised 11/4/2019 by BH. Updated description and budget estimate.

Project Name:	Beaver, Flat Car, SVPS Motor Leads
CIP #:	0206

Asset Register:	LWWSD → Sewer → Pump Stations						
Failure Mode:	Capacity	pacity Level of Service <u>Mortality</u> <u>Efficiency</u>					
Business Risk Exposure:	1 20	= 10 x 2 x 1 (PoF x CoF x Redundancy)					
Remaining Life:	2 years	Consumed Life:	18 years	_	ctive fe:	20 years	

PURPOSE and DESCRIPTION OF THE PROJECT

Five motor leads, from the soft start to the motor in the wet well, tested low on wire insulation resistance (low megger value).

Staff recommends replacement should begin soon with 3 cables budgeted for 2020, and 2 more in 2021.

Budget Estimate:

Phase A

2020 Replace 3 cables x \$6,000 each = \$18,000

Phase B

2021 Replace 2 cables x \$6,000 each = \$12,000

Estimate from verbal budget quote from pump vendor.

Cost estimate in 2020 dollars.

Revision History

Project Name:	Quick Connect Kit for CAT Backhoe
CIP #:	0207

Asset Register:	LWWSD → Resources → Equipment						
Failure Mode:	Capacity	Level of Service Mortality <u>Efficiency</u>					
Business Risk Exposure:	NA	= x x 1 (PoF x CoF x Redundancy)					
Remaining Life:	NA	Consumed NA Effective NA Life:				NA	

PURPOSE and DESCRIPTION OF THE PROJECT

Purchase bucket quick connect kit for Caterpillar backhoe. The kit will make changing different width buckets safer and quicker.

Estimate is \$4,000

Cost estimate in 2020 dollars.

For further information about this project call Bill Hunter.

Revision History

Project Name:	Used Forklift for Shop
CIP #:	0208

Asset Register:	LWWSD → Resources → Equipment						
Failure Mode:	Capacity	y Level of Service Mortality <u>Efficiency</u>					
Business Risk Exposure:	NA	= x x 1 (PoF x CoF x Redundancy)					
Remaining Life:	NA	Consumed NA Effective NA Life: NA				NA	

PURPOSE and DESCRIPTION OF THE PROJECT

Purchase a used forklift for 1010 Lakeview Street facility (Shop). Staff is looking for a unit that is capable of operating on pavement and gravel surfaces to move, load, and unload supplies and equipment in the yard.

The District's safety committee discussed the pros and cons of a forklift. There was consensus that a forklift would improve safety for moving, loading, and unloading various materials and heavy components. The District will need to add a Forklift Safety Program as well as provide operator training for certification that are ongoing operational expenses.

Once a forklift is available for use at the Shop, the District will surplus the old backhoe fitted with forks on the front bucket.

Estimate is \$20,000

Cost estimate in 2020 dollars.

For further information about this project call Bill Hunter.

Revision History

Project Name:	SCADA Telemetry – Install & Configure Managed Ethernet Switches
CIP #:	0209

Asset Register:	LWWSD → General Facilities						
Failure Mode:	<u>Capacity</u>	<u>Capacity</u> Level of Service Mortality Efficiency					
Business Risk Exposure:	1	= 2 x 4 x 0.1 (PoF x CoF x Redundancy)					
Remaining Life:	2 years	Consumed Life:	8 years	_	ctive fe:	10 years	

PURPOSE and DESCRIPTION OF THE PROJECT

The District's telemetry system is comprised of multiple communications mediums: Fiber, Leased Phone Lines, Radio, and Internet VPN's. As more and more devices are brought online, there is more and more bandwidth that is utilized. At the central hub of the telemetry system are Ethernet switches that connect everything together.

Managed Ethernet switches are needed which can be configured to isolate network devices from others. The goal is to utilize existing bandwidths as efficiently as possible by limiting unnecessary network traffic between devices and network segments.

The estimated budget is \$20,000. This will allow for procurement of the hardware as well as assistance from consultants for configuration and deployment.

Revision History

Project Name:	Johnson Well Storage Building – New Siding and Paint
CIP #:	0210

Asset Register:	LWWSD → General Facilities						
Failure Mode:	Capacity	Capacity Level of Service Mortality Efficiency					
Business Risk Exposure:	10	= 10 x 1 x 1 (PoF x CoF x Redundancy)					
Remaining Life:	0 Years	Consumed Life:	30 Yea	are	ctive fe:	30 Years	

PURPOSE and DESCRIPTION OF THE PROJECT

The Johnson Well storage building is an existing plywood-sided building that is used for Operations & Maintenance Dept. storage. The plywood siding is directly exposed to the weather and is showing signs of warping and deteriorating. The purpose of this project is to extend the building life by removing and replacing the existing plywood, adding a weatherproofing underlayment and replacing the siding with either metal or cement board siding. A secondary purpose is to improve the ability to store and access materials and equipment within the building by installing a roll-up garage door.

Budget Estimate: \$27,500.00

Cost estimate in 2020 dollars.

Estimate based on an engineer's estimate of a contractor's labor costs, material costs and projected overhead and markup.

For further information about this project contact Kristin Hemenway.

Revision History

Project Name:	Fire Hydrant Flow Testing Kit
CIP #:	0211

Asset Register:	LWWSD → Water → Equipment					
Failure Mode:	Capacity	Capacity Level of Service Mortality Efficiency				ficiency
Business Risk Exposure:	NA	= x x 1 (PoF x CoF x Redundancy)				
Remaining Life:	NA	Consumed Life:	NA	_	ctive fe:	NA

PURPOSE and DESCRIPTION OF THE PROJECT

The water model shows fire hydrant flows that need to be confirmed due to unusually high flow. The District needs to procure fire hydrant flow testing equipment to confirm the model numbers.

Budget Estimate: \$3,500

Cost estimate in 2020 dollars.

For further information about this project call Rich Munson.

Revision History

• Created 11/5/2019 by RM.

Project Name:	SVWTP Misc Component Replacement
CIP #:	0212

Asset Register:	LWWSD → Water → Water Treatment Plants					
Failure Mode:	Capacity Level of Service Mortality Efficiency					
Business Risk Exposure:	18	= 9 x 2 x 1 (PoF x CoF x Redundancy)				
Remaining Life:	NA	Consumed Life:	NA	_	ctive fe:	NA

PURPOSE and DESCRIPTION OF THE PROJECT

Replace worn out components at Sudden Valley Water Treatment Plant (SVWTP).

Norton Corrosion's 2019 reservoir cathodic protection inspection noted that the level of corrosion in the chlorine contact reservoir exceeds what the galvanic cathodic protection system can provide. The steel interior ladder and cage seem to be the issue. A budget item is included to remove the steel ladder/cage and replace it with a fiberglass system.

Planned replacements include:

\$17k	Chlorine Contact Reservoir R	eplace Steel Ladder	with Fiberglass Ladder

\$4k Spare 300 Amp Breakers (2 spares x \$2k each)

\$8k Division 22 Finish Water Flow Meter Replacement

\$6k Raw Water Flow Meter Replacement

\$2k Differential Pressure Transmitter (Chlorine Contact Reservoir Water Level)

\$3k Intake Pipe Anchorage Warning Signs on Morning Beach

\$40k Total Budget

Cost estimate in 2020 dollars.

For further information about this project call Kevin Cook or Bill Hunter.

Revision History

Project Name:	Fire Hydrant Adapters
CIP #:	0216

Asset Register:	LWWSD → Wate	LWWSD → Water → Distribution System					
Failure Mode:	Capacity	Capacity Level of Service Mortality Efficiency					
Business Risk Exposure:	NA	= x x 1 (PoF x CoF x Redundancy)					
Remaining Life:	NA	Consumed Life:	NA	_	ctive fe:	NA	

PURPOSE and DESCRIPTION OF THE PROJECT

South Whatcom Fire Authority had a fire at Wall St. and Lakewood Lane that needed mutual aid from the city of Bellingham. The city fire department engines could not connect to the hydrant at that location. SWFA discovered that the hydrant threads where not a common type.

During SWFA's annual maintenance they did an inventory of hydrants with this non-standard thread and found 57 of them throughout the District.

Staff recommends replacing all 57 hydrants with a 5" Storz to 4" PCT adapter.

Budget Estimate is \$ 12,000 including tax

Cost estimate in 2020 dollars.

For further information about this project call Rich Munson.

Revision History

• Created 11/5/2019 by RM.

Project Name:	Snowplow Blade and Sander Attachment for Tool Truck
CIP #:	0218

Asset Register:	LWWSD → Resources → Equipment						
Failure Mode:	Capacity	Level of Service Mortality <u>Efficiency</u>					
Business Risk Exposure:	NA	= x x 1 (PoF x CoF x Redundancy)					
Remaining Life:	NA	Consumed Life:	NA	Effect Life		NA	

PURPOSE and DESCRIPTION OF THE PROJECT

During last year's winter snow storms, the road leading to the 1010 Lakeview Street Shop Facility was not plowed by Whatcom County public works until many days into the storms. If we had an emergency and needed use of our heavy equipment and generators, staff would have been unable to drive down Lakeview Street due to snow and ice.

Staff recommends the purchase of a snow plow and sander for Truck #24.

Estimate is \$ 14,300 including tax and labor to install

Cost estimate in provided by Northend Truck

For further information about this project call Rich Munson.

Revision History

Created 11/5/2019 by RM.

Project Name:	Accounting & Administrative Server – Replace/Update Hardware, Network Security, & OS
	A0005

Asset Register:	LWWSD → General Facilities						
Failure Mode:	Capacity	acity <u>Level of Service</u> <u>Mortality</u> Efficiency					
Business Risk Exposure:	.3()	= 10 x 3 x 1 (PoF x CoF x Redundancy)					
Remaining Life:	0 years	Consumed Life: 3 years Effective Life:				3 years	

PURPOSE and DESCRIPTION OF THE PROJECT

Replace/update accounting and administrative server, network security firewalls, and operating systems. Information technology professionals typically recommend a server hardware refresh cycle every 3 to 4 years as best practice.

The District currently utilizes a single server running several virtualized servers. The servers are essential to daily operations including accounting and customer service (BIAS), electronic document management of district archive files (Docuware), computerize maintenance management system (Cartegraph), geographic information system (GIS), data files, and shared calendars.

District customers, Board of Commissioners, and management expect a very high level of service delivered by the server. Continuous service with no more than one 4-hour or longer unplanned outage during business hours per year is management's level of service goal. To meet this level of service, replacement of server hardware should follow industry best practice of a 3-year replacement cycle.

Microsoft will no longer update or support the Windows 7 operating system after January 14, 2020. The District has several workstations that are running Windows 7. This project will replace Windows 7 workstations.

Budget Estimate: \$25,000

Cost estimate in 2020 dollars.

For further information about this project call Bill Hunter.

Revision History

- Created 7/19/2006.
- Update 8/2/2006.
- Update description 11/7/2012. Bill Hunter.
- Updated 12/5/2016 by BH. Updated budget estimate.
- Updated 11/4/2019 by BH. Updated description and budget estimate.

Lake Whatcom Water & Sewer District Capital Improvement Plan

Project Name:	Annual Asphalt Patching
CIP #:	A0011

Asset Register:	LWWSD → General Facilities						
Failure Mode:	Capacity	Level of Service Mortality Efficiency					
Business Risk Exposure:	NA	= x x 1 (PoF x CoF x Redundancy)					
Remaining Life:	NA	Consumed Life:	NA	_	ctive fe:	NA	

PURPOSE and DESCRIPTION OF THE PROJECT

During the course of regular maintenance and repair the District excavates underground infrastructure at numerous locations. Many of these locations are within asphalt pavement owned by Whatcom County, Sudden Valley Community Association, or private parties.

A temporary "cold" patch applied until a permanent "hot" patch is installed. To minimize cost, the District contracts all the patching work in one contract each fall.

2020 Budget Estimate: \$35,000

With a \$20/SF unit price that is equivalent to 1,750 square feet. Less asphalt patching area is projected for 2020 since both 2018 and 2019 had unusual extra areas.

Cost estimate in 2020 dollars.

The 2018 Asphalt Patching project was about \$20 per square foot (including tax) for excavation and disposal of asphalt, prep with crushed rock and compaction, 2" of asphalt and hot asphalt seal at edges (not including saw cutting). The total area was 2,100 square feet of patched asphalt area.

The 2019 Asphalt Patching project was about \$16 per square foot for the same and included saw cutting. The total area was 3,576 square feet of patched asphalt area

For further information about this project call Bill Hunter

Revision History

Project Name:	Annual Tree Trimming
CIP #:	A0012

Asset Register:	LWWSD → General Facilities						
Failure Mode:	Capacity	Level of Service Mortality Efficiency					
Business Risk Exposure:	NA	= x x 1 (PoF x CoF x Redundancy)					
Remaining Life:	NA	Consumed Life:	NA	_	ctive fe:	NA	

PURPOSE and DESCRIPTION OF THE PROJECT

During the course of regular maintenance and repair the District routinely finds trees that need to be trimmed or cut down to protect District infrastructure.

2020 Budget Estimate: \$10,000

Cost estimate in 2020 dollars.

For further information about this project call Bill Hunter

Revision History

Project Name:	Replace Flush and Vac Truck
CIP#:	E0008

Asset Register:	LWWSD → Resources → Equipment						
Failure Mode:	Capacity	ty <u>Level of Service</u> <u>Mortality</u> Efficiency					
Business Risk Exposure:	Ι Χ	8 = 4 x 2 x 1 (PoF x CoF x Redundancy)					
Remaining Life:	2	Consumed Life:	18	_	ctive fe:	20	

PURPOSE and DESCRIPTION OF THE PROJECT

The District's 2005 Vac-Con Vacuum Truck is reaching the end of its effective life. The vehicle has needed several major repairs. The function of a vac truck is essential to the District's operations and maintenance program.

The District's vacuum truck has 3 main uses:

- Flushing and vacuuming sewer mains.
- Exposing underground utilities
- Excavation of water and sewer main breaks
- Cleanup of sewer spills

Staff recommends purchasing a full size replacement vacuum truck.

Budget Estimate:

New Truck	\$482k
Sale Tax	\$43k
Net Total Expense	\$525k

Revision History

- Created 9/20/2010. BH.
- Revised 11/8/2012. BH. Added truck descriptions and adjusted total budget.
- Revised 10/24/2017 by RM: Modified purpose and description and project cost.
- Revised 11/5/2019 by RM: Updates with 2020 prices. Exact quote will be available 11/6/19

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

Asset Register:	LWWSD → Sewer → Collection System						
Failure Mode:	<u>Capacity</u>	Level of Service Mortality <u>Efficiency</u>					
Business Risk Exposure:	15	= 3 x 5 x 1 (PoF x CoF x Redundancy)					
Remaining Life:		Consumed Effective Life:					

PURPOSE and DESCRIPTION OF THE PROJECT

Combines several separate District projects into one annual project. The goal is to find and repair inflow and infiltration (I&I) sources. District crews camera sewer mains during wet season months searching for I&I.

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

Engineering (Plans, Specs & Est.): District Staff
Bid & Contract Administration: District Staff

Construction: \$165,000 (annual target)

2020 budget includes \$60,000 for minor sewer system rehab and replacement projects that are not identified as specific CIP projects. Some of the work identified to date includes:

- Flow monitoring of gravity pipe basins
- Sewer camera high I&I areas
- Manhole / wet well grouting
- Pipe slip lining and spot repairs (Ream and slip line last 200 LF of LWB Interceptor at gravity transition)
- Misc repairs and I&I

Cost estimate in 2020 dollars.

For further information about this project call Bill Hunter.

Revision History

- 10/26/2011. Combined separate I&I related projects into one annual project budget. Bill Hunter. Footnote: October 2011 Pro-Vac Estimate (Hank) for Smoke Testing: \$0.65/LF and can test approximately 10,000 LF per day.
- 11/18/2013. Minor budget updates. Bill Hunter.
- 12/6/2016. Updated budget for year 2017. BH.

- 11/6/2018. Updated budget for year 2019. BH.
- 11/4/2019. Updated budget for year 2020. BH.

Project Name:	Replace Tool Trucks
CIP #:	V0001

Asset Register:	LWWSD → Resources→ Equipment					
Failure Mode:	Capacity	<u>Level of Service</u> <u>Mortality</u> Efficiency				
Business Risk Exposure:	N/A	= _ x _ x _ (PoF x CoF x Redundancy)				
Remaining Life:	N/A	Consumed Life:	N/A	_	ctive fe:	N/A

PURPOSE and DESCRIPTION OF THE PROJECT

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

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

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

	Age	Mileage as of 11/5/2019	Average Annual Mileage
1998 VEH23 Ford F-250	21	180,648	8,602
1999 VEH24 Ford F-350	20	158,157	7,908
2006 VEH31 Chevrolet 3500	13	146,306	11,254
2010 VEH41 Ford F-350	9	65,905	7,323
2012 VEH47 Chevrolet 3500	7	71,291	10,184
2017 VEH51 Ford F-350	2	17,445	8,723
2018 VEH52 Ford F-350	1	7,360	7,360

Budget Estimate: \$72,000 Including Tax (2019 dollars)

Revision History

- Updated 12/5/2016 by BH. Updated description and budget estimate based on current state bid prices.
- Updated 10/24/2017 by RM. Updated description and vehicle mileages.
- Updated 11/5/2019 by RM: Updated vehicle age, mileage and annual mileage and 2020 estimated budget cost

Project Name:	Water System Rehabilitation and Replacement Projects
CIP #:	W0002

Asset Register:	LWWSD → Water → Distribution System					
Failure Mode:	Capacity	<u>Level of Service</u> <u>Mortality</u> Efficiency				
Business Risk Exposure:	18	= 9 x 2 x 1 (PoF x CoF x Redundancy)				
Remaining Life:		Consumed Life:			ctive fe:	

PURPOSE and DESCRIPTION OF THE PROJECT

Combines several separate District projects into one recurring annual project. The intent is to rehabilitate or replace aging water distribution system mains, service lines, hydrants, and valves.

As infrastructure is assessed and found nearing end of useful life, it will be scheduled for renewal using this annual project budget. The annual project scope and focus will vary based on the type of high priority items discovered during the previous year.

Target Water System Reinvestment (per 2016 Water & Sewer Rate Update dated 1/24/2017)

201	7 \$200k	
201	8 \$210k	
201	9 \$220k	**Note that the 2019 budget includes \$259k of capital water projects, of
		which \$25k is set aside for the miscellaneous water system rehab and
		replacement projects (CIP #W0002a) identified below
202	0 \$230k	
202	1 \$240k	
202	2 \$250k	

Miscellaneous water system rehab and replacement projects identified for 2019 include:

 Installing PRV vault drains at 5 PRV sites (Cascade, Rock Ridge, Hillside, Dutch Harbor, & Frement

Cost estimates in 2019 dollars.

For further information about this project call Bill Hunter.

Revision History

- Created 8/2/2006.
- 11/20/2013. Combined separate water related projects into one recurring annual project budget. Bill Hunter.
- Updated 12/5/2016 by BH. Revised target amounts and updated scope for 2017.
- Updated 11/17/2017 by BH.
- Updated 11/5/2018 by BH.

APPENDIX C 2020 REVENUE BOND AND LOANS FUND SUMMARY

REVENUE BONDS AND LOANS SUMMARY

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

Project Title	Remaining /2020	Funding Source	Agency	End Date	Rate
Geneva AC Mains	\$ 1,919,000	Rates	Drinking Water State Revolving Fund	2035	1.5%
Division 22 Reservoir	\$ 1,178,545	Rates	Drinking Water State Revolving Fund	2037	1.5%
2016 Revenue Bonds Outstanding	\$ 6,030,000	Rates		2035	2.25%
Total Debt Outstanding - 1/1/2020	\$ 9,127,545				



AGENDA BILL Item 5.B

Sudden Valley Water Treatment Plant Facility Improvement Plan Architectural/Engineering Agreement

DATE SUBMITTED:	December 18, 2019	MEETING DATE:	December 26	5, 2019		
TO: BOARD OF COMMI	SSIONERS	FROM: Bill Hunter, Assist. GM/District Engineer				
GENERAL MANAGER A	PPROVAL	Stolly				
ATTACHED DOCUMEN	TS	1. Exhibit A - Scope of Services				
		2. Exhibit B – Estimated Cost				
	_	RESOLUTION	FORMAL ACTION/	INFORMATIONAL		
TYPE OF ACTION REQU	ESTED		MOTION 🖂	/OTHER		

BACKGROUND / EXPLANATION OF IMPACT

On November 11, 2019 the Board authorized the General Manager to enter into negotiations of a professional services agreement with Gray & Osborne, Inc. (G&O) for development of the Sudden Valley Water Treatment Plant Facility Improvement Plan.

Attached is a scope of work and fee estimate for the initial phase of work. The work will be divided into three phases.

Phase 1 is a detailed conditions assessment of all components and systems by the G&O project manager, project engineer, electrical engineer, architectural/HVAC engineer, and structural engineer. At the conclusion of the assessment, G&O will make a presentation to the Board of the overall methodology, findings, and recommendations on what alternatives and ideas to explore in Phase 2.

Future Phase 2 will include alternatives analysis, cost estimates, sequencing and scheduling to develop a 20-year Facility Improvement Plan. The scope of work and fee estimate will be developed towards the end of Phase 1 and be brought to the Board for discussion and approval.

Future Phase 3 would include design of selected alternatives.

In late 2020, the District plans to begin a rate study that will consider operations, maintenance, and capital improvement needs over the next decade. The goal is to have a 20-year Facility Improvement Plan for Sudden Valley Water Treatment Plant completed for use as the rate study begins.

FISCAL IMPACT

The proposed scope of work and fee estimate is \$45,360 and is within the District's approved 2019 Budget of \$50,000 for this project.

The proposed 2020 Budget adds another \$50,000 to this project for a total project budget of \$100,000.

RECOMMENDED BOARD ACTION

Staff recommends approval of the proposed scope of work and fee as presented.

PROPOSED MOTION

A recommended motion is:

"I move to authorize the General Manager to execute an Architecture/Engineering Professional Services Agreement for the Sudden Valley Water Treatment Plant Facility Improvement Plan with Gray and Osborne, Inc. for Task 1 - Water Treatment Plant Conditions Assessment for time and materials not to exceed \$45,360 as presented."

EXHIBIT A

SCOPE OF SERVICES

LAKE WHATCOM WATER AND SEWER DISTRICT SUDDEN VALLEY WATER TREATMENT PLANT FACILITY IMPROVEMENT PLAN TASK 1 – WTP CONDITION ASSESSMENT

PROJECT UNDERSTANDING

The Lake Whatcom Water & Sewer District (District) is utility district that provides water and sewer services near Bellingham in Whatcom County, Washington. The District operates three separate, Group A Water Systems, one of which (the South Shore System) is completely served by water produced from the Sudden Valley Water Treatment Plant (WTP). The facilities that serve this system include raw water intake facilities, a water treatment plant, a storage reservoir, a finished water pumping system, and distribution system piping that conveys water to its customers.

The existing WTP is located along Morning Beach Drive near the shores of Lake Whatcom. The WTP was constructed in 1972 and has been upgraded several times since that date. The treatment plant utilizes chemical coagulation, flocculation, rapid media filtration, chemical pH adjustment, and gas chlorine disinfection prior to storage in the 225,000 gallon reservoir also located at the WTP site.

The District is interested in assessing the condition of the existing WTP processes, facilities, and equipment in order to identify operation, maintenance, renewal, and replacement needs for the 20-year planning period. This assessment and the subsequent summary report will help the District select and prioritize specific short- and long-term improvements to the treatment equipment and processes currently in use at the Sudden Valley WTP.

This assessment is part of a larger project that includes a holistic analysis of the South Shore Water System and its components, including treatment, distribution systems, and water sources. The first step in this process is to complete a condition assessment of the existing treatment plant system. Following this assessment, the District, along with their selected engineer, will perform an alternatives analysis based on the findings and recommendations within the assessment report. Using this alternatives analysis report, the District can then select the most cost-effective alternative(s) and proceed with the selected modifications. The following scope of work provides a description for the condition assessment portion of the project (Task 1), and work for the subsequent alternatives analysis (Task 2) and design of selected modifications (Task 3) will be provided under separate scope documents.

Gray & Osborne is pleased to provide this scope of work and budget proposal to complete an assessment of the Sudden Valley WTP for the District. The scope of work to be provided by Gray & Osborne would include the following components.

SCOPE OF WORK

Task 1.1 – Project Management

Services shall include overall project management and oversight of the project work by the Project Manager, including the following:

- Procure sufficient staff resources to dedicate to the project;
- Manage and control project budget and schedule;
- Manage and provide monthly progress reports and invoices; and
- Coordinate the project with the District.

Deliverables

Monthly progress reports and invoices.

Assumptions

N/A

Task 1.2 – WTP Condition Assessment

Gray & Osborne will assess the current condition of the WTP and associated treatment processes and equipment. This investigation will include the following:

- WTP visit by the Project Manager, Project Engineer, Electrical Engineer, Architectural/HVAC Engineer, and Structural Engineer to assess the following components:
 - Existing WTP building condition assessment
 - Including structural integrity and seismic stability components.
 - Existing finished water pump building condition assessment
 - Including structural integrity and seismic stability components.

- Existing Sudden Valley reservoir (CT Basin) condition assessment
 - Including structural integrity and seismic stability components.
- Condition assessment of treatment processes and equipment including, but not limited to:
 - o Raw water pumping;
 - o Pre-filtration;
 - Flocculation;
 - o Rapid sand filters;
 - o Backwash facilities;
 - Chlorination equipment;
 - o Disinfection process and calculations;
 - o Chemical addition equipment;
 - o Laboratory and facility space;
 - o Finished water pumping;
 - o Tanks and storage units within the WTP building;
 - Assessment will include collection of metal thickness measurements;
 - Building heating, ventilation, and air conditioning equipment;
 - o Electrical loads and capacity;
 - Communications/telemetry system;
 - o Process piping, valves, appurtenances, and operation;
 - o Redundancy; and
 - o Operations and maintenance.
- Photographic documentation of existing conditions.

<u>Deliverables</u>

N/A.

<u>Assumptions</u>

- WTP operations staff will be available for the duration of the site visit to answer questions, provide information, and provide access to all facilities associated with the WTP.
- Assessment will be completed via site visits, discussions with WTP staff, photographic documentation, and review of record drawings.
- All available record drawings will be provided to G&O by the District.

- Water system modelling is not included in this scope.
- The current Water System Plan (*Wilson Engineering, 2018*) will be used to identify historical and projected demands, if necessary.

Task 1.3 – WTP Assessment Report

Gray & Osborne will present the findings of the WTP Condition Assessment in a report.

- The report will include the following items:
 - Executive Summary
 - Summarize the findings of the report and highlight specific conclusions of notable importance.
 - Introduction
 - State the purpose and goals for the report.
 - Background Information
 - o Briefly describe the District's water treatment facilities.
 - Facility Assessment
 - Describe and assess each individual component in the water treatment process.
 - Assess the condition of all existing physical and treatment facilities, and note any special conditions which warrant replacement or modification.
 - Estimate the remaining useful life of each individual component, the probability of failure, and the consequence of failure as a method to rank each item's risk exposure (importance) to the District.
- Gray & Osborne project team members will attend up to three onsite
 meetings (in addition to the condition assessment meeting) with District
 personnel/District Board members to discuss recommendations listed in
 the report and/or to discuss the most cost effective path forward for
 modifications.

<u>Deliverables</u>

- Draft WTP Assessment Report.
- Summary Powerpoint presentation for Board informational meeting.
- Final WTP Assessment Report.

Assumptions

- WTP operations staff will be available for the duration of the site visit to answer questions, provide information, and provide access to all facilities associated with the WTP.
- Assessment will be completed via site visits, discussions with WTP staff, photographic documentation, and review of record drawings.
- Water system modelling is not included in this scope.
- The current Water System Plan (*Wilson Engineering, 2018*) will be used to identify historical and projected demands, if necessary.
- Additional recommendations, alternatives analysis, development of predesign criteria, and cost estimates will occur under an additional scope to be determined later.

Task 1.4 – Quality Assurance/Quality Control (QA/QC)

Oversee one, in-house, quality assurance/quality control (QA/QC) meeting at our Seattle office during the course of the project. The meeting will include senior project staff and District staff (as required and/or desired).

- QA/QC meeting will take place after completion of the Draft WTP Assessment Report.
- Ensure incorporation of relevant recommendations and suggestions into the final version of the assessment report.

De.	livera	bles
-----	--------	------

N/A.

Assumptions

N/A.

SCHEDULE FOR COMPLETION

To complete the work detailed in the scope listed above in a timely fashion, the following schedule is proposed:

Scoping and Project Award	December 2019
Contract Execution	January 2020
Notice to Proceed (NTP)	January 2020
Complete WTP Condition Assessment	February 2020
Complete DRAFT WTP Assessment Report	April 2020
District/Board Revision Meeting	May 2020
Complete FINAL WTP Assessment Report	

Adjustments to the schedule above may be required based on document review times, availability of water quality data, District staff availability, and WTP assessment scheduling. The District will be notified immediately if any deviations from the schedule above will be required.

PROPOSED FEE SCHEDULE

Based on the Scope of Work described above, the estimated cost is \$45,360 as shown in attached Exhibit "B."

EXHIBIT "B"

ENGINEERING SERVICES SCOPE AND ESTIMATED COST

LAKE WHATCOM WATER & SEWER DISTRICT - SUDDEN VALLEY WATER TREATMENT PLANT FACILITY IMPROVEMENT PLAN TASK 1 - WTP ASSESSMENT

Tasks	Principal Hours	Project Manager Hours	Project Engineer Hours	Architectural/ HVAC Engineer Hours	Structural Engineer Hours	Electrical Engineer Hours	Engineer-In- Training Hours
Task 1.1 - Project Management							
Project Management		16					
Task 1.2 - WTP Condition Assessment							
Condition Assessment		8	12	8	8	8	
Task 1.3 - WTP Assessment Report							
Assessment Report	4	4	72	16	16	16	16
Preliminary Review Meeting	1	8	12				
District Board Meeting	1	8	12				
Project Planning and Strategy Meeting	1	8	12				
Task 1.4 - Quality Assurance/Quality Control							
Quality Assurance/Quality Control	4	4	8	4	4	4	16
Hour Estimate:	11	56	128	28	28	28	32
Fully Burdened Billing Rate Range:*	\$135 to \$200	\$119 to \$200	\$119 to \$148	\$105 to \$148	\$110 to \$167	\$120 to \$190	\$85 to \$133
Estimated Fully Burdened Billing Rate:*	\$175	\$165	\$140	\$116	\$165	\$160	\$100
Fully Burdened Labor Cost:	\$1,925	\$9,240	\$17,920	\$3,248	\$4,620	\$4,480	\$3,200

Total Fully Burdened Labor Cost: \$ 44,633

Direct Non-Salary Cost:

Mileage & Expenses (Mileage @ current IRS rate) \$ 727

TOTAL ESTIMATED COST: \$ 45,360

Page 1 of 1

^{*} Actual labor cost will be based on each employee's actual rate. Estimated rates are for determining total estimated cost only. Fully burdened billing rates include direct salary cost, overhead, and profit.



AGENDA BILL Item 5.C

2020 Wilson Engineering Rates

DATE SUBMITTED:	December 17, 2019	MEETING DATE: December 26, 2019			
TO: BOARD OF COMMISSIONERS		FROM: Justin Clary, General Manager			
GENERAL MANAGER APPROVAL		Sixt Clay			
ATTACHED DOCUMENTS		1. Wilson Engine	eering letter dated	d December	
		17, 2019			
		RESOLUTION	FORMAL ACTION/	INFORMATIONAL	
TYPE OF ACTION REQU	JESTED		MOTION	/OTHER	
			\boxtimes		

BACKGROUND / EXPLANATION OF IMPACT

Wilson Engineering provides on-call engineering services to the District through a professional services agreement executed on August 8, 2016, and effective through June 31, 2021. Per Section 7.4 of the agreement, Wilson Engineering may annually request revision to the approved rates to accommodate inflation and market conditions. Attached is a letter from Wilson Engineering dated December 17, 2019, requesting revision to its rates and fees for 2020.

FISCAL IMPACT

The proposed rates are anticipated to increase modestly and relatively consistent with inflationary and marketplace values. Because specific services to be performed have not been fully defined at this time, actual budgetary impacts are not known at this time.

RECOMMENDED BOARD ACTION

Staff recommends that the Board approve the Wilson Engineering-proposed 2020 rate and fee schedule.

PROPOSED MOTION

A recommended motion is:

"I move to approve rates and fees to be effective January 1, 2020, for professional services performed by Wilson Engineering under the existing on-call professional services contract with the District, as presented in the December 17, 2019 letter from Wilson Engineering."



December 17, 2019

Justin Clary, General Manager Lake Whatcom Water and Sewer District 1220 Lakeway Drive Bellingham, WA 98229

Re:

On-Call Engineering Services Contract

Rate Increase Request for 2020

Dear Justin:

Wilson Engineering, LLC respectfully submits the following rate increase request in accordance with Section 7.4 of the On-Call Engineering Services Contract and an extension of the period of performance through December 31, 2020 (Section 1.2). The proposed rates for 2020 are presented in the attached 2020 Rate Schedule.

We are also providing a revised list of Key Personnel per Section 2.2 D. The changes include adding a new survey technician, Simon Marks-Franks, and licensure upgrades for Kenna Wurden-Foster, PE and Julia Rice, EIT. We are also welcoming Rhett Winter, PE back after a short absence.

A comparison of the old and new rates is attached. These rates reflect a modest escalation to cover our increased costs to retain experienced staff and maintain a competitive benefits package.

We very much enjoy working with the District Board and staff and value our long-term relationship. We look forward to continuing to serve the District with its future engineering needs.

If you have any questions or require any additional information, please don't hesitate to call.

Very Truly Yours,

WILSON ENGINEERING, LLC

Andrew Law, PE

Managing Principal

Encl. 2020 Billing Rates

2020 Staff List

2019-2020 Rate Comparison

cc: Bill Hunter, PE, Assistant General Manager / District Engineer

Melanie Mankamyer, PE

Principal

Billing rates for work performed January 1 - December 31, 2020:

Principal Engineer	\$170
Senior Engineer	\$164
Engineer IV	\$154
Engineer III	\$142
Engineer II	\$132
Engineer I	\$120
Environmental / Permit Technician	\$90
Senior CAD Design Technician	\$107
CAD Design Technician	\$86
Inspector	\$94
Clerical	\$76
Senior Professional Land Surveyor	\$162
Hydrographer	\$174
Professional Land Surveyor	\$155
Senior Survey Technician	\$118
Survey Technician	\$94
1-Person Survey Crew	\$140
2-Person Survey Crew	\$206
3-Person Survey Crew	\$260
3-D Scanning Survey Crew	\$265
Hydrographic Survey Crew	\$306
1-Person Survey Crew Prevailing Wage	\$170
2-Person Survey Crew Prevailing Wage	\$265
3-Person Survey Crew Prevailing Wage	\$350

Sub-consultants – reimbursed at cost plus 8%

Reimbursable direct expenses – reimbursed at cost plus 8% - include (but are not limited to) the following:

Project application fees and project permit fees

Publication of notices

Reproduction of drawings and construction documents

Postage and shipping

Direct expenses for travel, meals and lodging outside of Whatcom and Skagit Counties

Mileage at project-current IRS mileage rate

Specialized Equipment Rental, at rental rate

KEY PERSONNEL LIST
Lake Whatcom Water and Sewer District



General Engineering Services

CIVIL ENGINEERING

Andrew Law, P.E. Managing Member, Principal Engineer

Elizabeth Sterling, P.E. **Principal Engineer** Melanie Mankamyer, P.E. **Principal Engineer** Jeff Christener, P.E. **Principal Engineer** Michael Matthes, P.E. Principal Engineer Danielle Johnston, P.E. Senior Engineer Curt Schoenfelder, P.E. **Engineer IV** Rhett Winter, P.E. **Engineer IV** Scott Wilson, P.E. **Engineer IV** Jenifer Ramsey, P.E. **Engineer III** Brian Smith, P.E. **Engineer III** Kenna Wurden-Foster, P.E. Engineer II Julia Rice, E.I.T. Engineer I

Jeffery G. Smith

Senior CAD Design Technician /Inspector

Ria Nickerson

Senior CAD Design Technician /Inspector

Joseph Ford

Senior CAD Design Technician /Inspector

Cheri Pendarvis CAD Design Technician

Anthony Cavender Environmental/Permit Technician

STRUCTURAL ENGINEERING

Charles Waugh, P.E., S.E, Senior Project Engineer

LAND AND HYDROGRAPHIC SURVEY

J. Thomas Brewster, PLS, CFM Manager, Survey Department, Professional Land Surveyor

Paul Darrow, PLS Crew Chief / Professional Land Surveyor

Bruce Raper Senior Survey Technician
Alan Mooers, LSIT Senior Survey Technician
Colette McNabb Senior Survey Technician
Alger Beal Senior Survey Technician
Colin Hopps Survey Technician / Inspector

Simon Marks-Franks Survey Technician

Administrative Staff

Diana McLean Bookkeeper Janice Clayton Clerical



Rate Comparison between 2019 and 2020:

Billing Category	2019 Rate	2020 Rate	Approx. Increase
Principal Engineer	\$162	\$170	4.94%
Senior Engineer	\$156	\$164	5.13%
Engineer IV	\$146	\$154	5.48%
Engineer III	\$136	\$142	4.41%
Engineer II	\$126	\$132	4.76%
Engineer I	\$116	\$120	3.45%
Environmental /Permit Technician	\$89	\$90	1.12%
Senior CAD Design Technician	\$102	\$107	4.90%
CAD Design Technician	\$86	\$86	0.00%
Inspector	\$90	\$94	4.44%
Clerical	\$73	\$76	4.11%
Senior Professional Land Surveyor	\$156	\$162	3.85%
Hydrographer	\$166	\$174	4.82%
Professional Land Surveyor	\$148	\$155	4.73%
Senior Survey Technician	\$114	\$118	3.51%
Survey Technician	\$90	\$94	4.44%
1-Person Survey Crew	\$135	\$140	3.70%
2-Person Survey Crew	\$198	\$206	4.04%
3-Person Survey Crew	\$250	\$260	4.00%
3-D Scanning Survey Crew	\$255	\$265	3.92%
Hydrographic Survey Crew	\$296	\$306	3.38%
1-Person Survey Crew Prevailing Wage	\$160	\$170	6.25%
2-Person Survey Crew Prevailing Wage	\$248	\$265	6.85%
3-Person Survey Crew Prevailing Wage	\$325	\$350	7.69%





LAKE WHATCOM WATER AND SEWER DISTRICT

AGENDA BILL

DATE SUBMITTED:	November 30, 2017			
TO BOARD OF COMMISSIONERS				
FROM: Patrick Sorensen	MANAGER APPROVAL			
MEETING AGENDA DATE:	December 13, 2	December 13, 2017		
AGENDA ITEM NUMBER:	5.B.			
SUBJECT:	Non-union Staff COLA for 2018			
LIST DOCUMENTS PROVIDED ⇒	1.			
NUMBER OF PAGES INCLUDING AGENDA BILL:	2.			
	3.			
TYPE OF ACTION REQUESTED	RESOLUTION	FORMAL ACTION/ MOTION ⊠	INFORMATIONAL/ OTHER	

BACKGROUND / EXPLANATION OF IMPACT

Traditionally the non-represented employees have received the same annual COLA increase as the represented (union) employees. Non-union employees include the District Engineer/Assistant General Manager, Finance Manager/Treasurer, General Manager, Administrative Assistant and the Maintenance Supervisor. For 2018 the represented employee's COLA will be 3.0%.

FISCAL IMPACT

Based upon the proposed 3.0% COLA increase for the five non-represented employees the cost is \$16,218. This amount like the COLA for the represented employees is allowed for in the 2018 Budget.

RECOMMENDED BOARD ACTION

That the five non-represented employees receive the same COLA increase for 2018 as the represented employees will receive, which is 3.0%.

PROPOSED MOTION

To authorize a 3.0% COLA for the five non-represented employees, effective January 1, 2018.

Whatcom Jo	ENDA BILL Gen m 7.A.	eral Manage	er's Report	
DATE SUBMITTED:	December 19, 2019	MEETING DATE: December 26, 2019		
TO: BOARD OF COMMISSIONERS		FROM: Justin Clary		
GENERAL MANAGER APPROVAL		Soldley		
ATTACHED DOCUMENTS		General Manager's Report		
TYPE OF ACTION REQUESTED		RESOLUTION	FORMAL ACTION/ MOTION	INFORMATIONAL /OTHER

BACKGROUND / EXPLANATION OF IMPACT

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

FISCAL IMPACT

None.

RECOMMENDED BOARD ACTION

None required.

PROPOSED MOTION

None.



LAKE WHATCOM WATER AND SEWER DISTRICT

General Manager's Report

Upcoming Dates & Announcements

Regular Meeting – Wednesday, December 20, 2019 – 8:00 a.m.

Important Upcoming Dates

Lake Whatcom Water & Sewer	Lake Whatcom Water & Sewer District				
Board Work Session	Wed Jan 8, 2020	5:30 p.m.	Board Room		
Regular Board Meeting	Wed Jan 8, 2020	6:30 p.m.	Board Room		
Employee Staff Meeting	Thu Jan 9, 2020	8:00 a.m.	Board Room Commissioner Carter to Attend		
Investment Comm Meeting	Wed Jan 29, 2020	9:00 a.m.	Small Conference Room		
Safety Committee Meeting	Mon Dec 30, 2019	8:00 a.m.	Small Conference Room		
Lake Whatcom Management P	rogram				
Data Group Meeting	Thu Jan 9, 2020	9:00 a.m.	City of Bellingham PW Offices 2221 Pacific Street		
Policy Group Meeting	Mon Feb 3, 2020	3:00 p.m.	City of Bellingham Fireplace Room 625 Halleck Street		
Joint Councils Meeting	Wed Mar 25, 2020	6:30 p.m.	Bellingham City Council Chamber 210 Lottie Street		
Other Meetings					
WASWD Section III Meeting	Tue Jan 14, 2020	6:15 p.m.	Bob's Burgers, 8822 Quil Ceda Pkwy, Tulalip, WA		
Whatcom Water Districts Caucus Meeting	Wed Jan 15, 2020	1:00 p.m.	Board Room		
Whatcom County Council of Governments Board Meeting	Wed Jan 15, 2020	3:30 p.m.	Council of Governments Offices 314 E Champion Street		

Committee Meeting Reports

Safety Committee:

No meeting has been held since the last board meeting.

Investment Committee:

No meeting has been held since the last board meeting.

Upcoming Important Agenda Topics and Meetings

- Annual election of officers and appointment of board representatives (January 8)
- Approval of contract for Lake Whatcom On-site Sewage Impact Assessment (January 8)

2019 Initiatives Status

Administration and Organizational Document Review/Revision

Personnel Policies Manual

- Workplace Violence Policy Update Approved by the Board during February 27 meeting.
- Drug Testing Policy Update Approved by the Board during February 27 meeting.
- Paid Family & Medical Leave Act Policy Addition Approved by the Board during February 27 meeting.

Administrative Code

- Board Meeting Dates/Times Adopted by the Board during January 30 meeting (Resolution No. 854).
- Purchasing Policy Adopted by the Board during March 13 meeting (Resolution No. 857).
- ➤ Master Fees and Charges Schedule
 Adopted by the Board during September 11 meeting (Resolution No. 860).
- Fiscal Management Policies Adopted by the Board during September 25 meeting (Resolution No. 861).
- Bonded Side Sewer Contractor Policies
 Adopted by the Board during October 30 meeting (Resolution No. 862).

<u>Commissioner Protocol</u> Manual

Work session to review/revise Adopted by the Board during April 10 meeting.

Health & Safety Program

Review programs

Ongoing. Safety Committee has updated the District's Employee Safety Manual, and Return to Work, Respirator, Chlorine Safety, Confined Space, Vehicle Operation, Fire Safety, Hazardous Communications, and Meter Reader Safety programs.

File Management System

- Electronic file management structure revision

 File management structure has been revised and migration of documents is complete.
- Digitize applicable hard copies and file in DocuWare Staff attended DocuWare training on June 13; R Hope developing process for ensuring digitalization of applicable documents in accordance with State regulations.

Community/Public Relations Enhancement

Website

- Reconfigured the layout of the About dropdown menu to make more user friendly.
- > Expanded content for the *Board of Commissioners* page (commissioner bios and photos).
- > Routinely providing alerts, as appropriate, on page (e.g., water main flushing notice).

Intergovernmental Relations

- > J. Clary provided a District update to the Sudden Valley Community Association board on December 12.
- > J. Clary attended Whatcom Water Alliance steering committee meeting on December 17.
- ➤ The District hosted Legislative Breakfast on December 18.

Social Media Program

- Develop/implement social media program Program implemented February 14.
- Create/manage District LinkedIn account LinkedIn account is live (<u>www.linkedin.com/company/lake-whatcom-water-and-sewer-district</u>) with new information posted regularly.
- Create/manage District Facebook account Facebook account is live (<u>https://www.facebook.com/Lake-Whatcom-Water-Sewer-District-455872278278848</u>) with new information posted regularly.
- Create/manage District NextDoor account NextDoor currently limits public agency pages to only emergency response agencies, J. Clary registered individually to monitor "neighborhoods" within District service area.

Press Releases

- District staff recognition press release issued on January 14.
- ShakeAlert implementation press release issued on July 23.
- Department of Health Treatment Optimization Program Platinum Award press release issued on November 5.

50-Year Anniversary

Press release/logo

Release issued November 21, 2018; logo developed November 20, 2018.

Banner

Installed January 10.

- Commissioner/employee jackets with 50th anniversary logo Jackets distributed to staff during March 14 staff meeting.
- Celebration
 Completed during the annual employee banquet on January 11.

Fact Sheets

Develop District fact sheets

General informational fact sheet on the District created on April 15.

Water conservation fact sheet created in June and distributed with July/August utility bills.

Winter Readiness fact sheet under development to be distributed with the November/December utility bills.

Lake Whatcom Water Quality

Management Program

Attend organized meetings; initiate additional meetings/discussions outside of program

J. Clary participating on the Interjurisdictional Coordinating Team (ICT) in the development of the Lake Whatcom Management Program 2020-2024 Work Plan.

Onsite Septic System Impact Assessment

North shore monitoring

One proposal (Herrera) was received for conducting the on-site sewage impact assessment (proposals were due December 2). The District, County, and City are working with the consultant on development of a scope of work for the effort (to be completed winter 2020).

Onsite Septic System Conversion Program

- > Identify applicable lots
 - Staff identified lots to pursue connection to District collection system.
- Implement conversion notification process
 - Notice of requirement to connect to District sewer system sent to three property owners on February 21. District staff issued a reminder to each property owner on September 4.
- Complete conversion
 - Of the three properties, one has been issued a requirement to connect by the Whatcom County Health Department (scheduled for January 7), one has been in contact with the District, and one has not responded to-date.

Watershed Stormwater Utility

Participate in utility development process

J Clary attended multiple meetings of the citizen advisory committee, the April 30 public meeting; and multiple County Council meetings.

County Council held a public hearing and adopted (vote of 5-2) the rate structure during its July 23 meeting; the utility will become effective (begin assessing rates) January 1, 2020.

Board Technology Upgrades

Board-issued Tablets

Identify/implement appropriate systems to board Tablets have been issued to each commissioner.

Electronic Board Packets

Implement electronic-only packet production process District has converted to electronic-only packet production.

Asset Management

Asset Location

GPS District infrastructure in Sudden Valley The project has largely been completed.

Preventative Maintenance

Develop/refine automatic work order notification process in Cartegraph

District staff have developed the hierarchy of assets for the system with Cartegraph and are testing the system on a pilot scale. Anticipate full implementation by the end of year.

O&M Workload Capacity Analysis

- ➤ Implement process in Cartegraph for tracking resource use Engineering and operations staff are tracking resources specific to utilities.
- Analyze resource allocation data Staff are analyzing data.

New Development Process Refinement

Revise/implement new development permit/inspection/approval process

The District issued a letter in May to all individuals that have obtained a Water Availability determination from the District over the past 12 months, notifying them of District limited resources for side sewer inspections and water service installations, and first come-first serve policy relative to the Lake Whatcom land disturbance window (June 1 – September 30). This letter is also being issued with water/sewer availability requests received since May.



AGENDA BILL Item 7.B

Engineering Department Report

DATE SUBMITTED:	December 19, 2019	MEETING DATE:	December 20	6, 2019	
TO: BOARD OF COMMISSIONERS		FROM: Bill Hunter			
GENERAL MANAGER APPROVAL					
ATTACHED DOCUMENTS		1. Summary of Existing District Projects			
		2. District Projects Staff Report			
		3.			
		RESOLUTION	FORMAL ACTION/	INFORMATIONAL	
TYPE OF ACTION REQU	ESTED		MOTION	/OTHER	

BACKGROUND / EXPLANATION OF IMPACT

Staff presentation of Summary of Existing District Projects and priorities

FISCAL IMPACT

Not applicable at this time.

RECOMMENDED BOARD ACTION

Review and discuss.

PROPOSED MOTION

Not applicable at this time.



Lake Whatcom Water & Sewer District Summary of Existing District Projects

Prepared for the December 26, 2019 Board Meeting Data Compiled 12/19/2019 by RH, BH, RM, KH

Status of Water and System Capacities					
	South Shore	Eagleridge	Agate Heights	Johnson Well	
	ID# 95910	ID# 08118	ID# 52957	ID# 04782	
DOH Approved ERUs	**	85	57	2	
Connected ERUs	3863	70	44	2	
Remaining Capacity (ERUs)	**	15	13	0	
Permitted ERUs Under Construction	26	0	0	0	
Pre-paid Connection Certificates & Expired Permit	15	0	5	0	
Water Availabilities (trailing 12 months)	50	0	0	0	
Subtotal - Commitments not yet connected	91	0	5	0	
Available ERUs	**	15	8	0	

^{**} Per DOH, water system capacity is sufficient for buildout. Oct 2018

	Completed District Projects in 2019				
Proj #	Project Name				
C1504	Reservoir Site Security				
C1611	Country Club Sewer Pump Station				
C1705	PAR Sewer Pump Station Improvements				
C1705-G	Geneva Sewer Pump Station Improvements				
C1801	Shake Alert Pilot Program				
C1803	Camp Firwood Automatic Transfer Switch				
C1809	Replace Backhoe				
C1810	Airport Pump Station Stationary Generator & Lakewood Pump Station Access Easement				
C1813	Division 7 Reservoir FEMA Seismic and Shake Alert Grant Application				
C1903	District Office Miscellaneous Facility Imiprovements				
C1906	Water Meters & Replacement Registers				
C1907	Fire Flow Improvements - Remove FH #22-112				
C1911	Field Chlorine Injection System				
C1912	Procure Boom Lift for Reservoir Access				
C1914	SVWTP Rain Water Intake Check Valve				
M1811	North Shore Sewer Force Main Stream Crossing Protection				
M1915	Vehicle 42 - 5 Yard Dump Truck Tire Replacement				
M1916	Flat Car Impellers, Volutes & Wear Rings				

S	tate Required Report Statu	S											
	Monthly Reports												
Name Of Report	•	Completed											
Chlorination Report Agate Heights Prepared by: Kevin	Postmarked by the 10th of month	x Jan	x Feb	x Mar	x Apr	× May	× June	x July	× Aug	× Sept	× Oct	x Nov	× Dec
Surface Water Treatment Rule Report (SVWTP) Prepared by: Kevin	Postmarked by the 10th of month	x Jan	x Feb	x Mar		х Мау	x June	x July	x Aug		x Oct		× Dec
Department of Revenue Prepared by: Debi	Due end of following month	x Jan	x Feb	x Mar	x Apr	х Мау	× June	x July	x Aug	× Sept	x Oct	X Nov	Dec
Community Right to Know (Hazardous Materials) Prepared by: Rich	March 31	February 28, 2019											
	Annual Reports												
Name Of Report	Deadline					Co	mp	lete	ed				
WA State Cross Connection Report Prepared by: Rich	May		April 3, 2019										
OSHA 300 Log Prepared by: Rich	February 1	January 28, 2019											
Water Use Efficiency Performance Report Prepared by: Kevin	July 1				N	Лar	ch í	1, 20	019				
Consumer Confidence Reports Prepared by: Kevin	June 30		ene			SV 5/19)		agle 6/19			ate 5/19	
Report Number of Sewer ERUs to City of Bellingham Prepared by:	January 15				Fel	bru	ary	20,	201	.9	•		
	Other Reports	•											
Name Of Report	Deadline					Со	mp	lete	d				
Water Right Permit No. G1-22681 Development Extension	Due Every 5 Years Next Due Feb 15, 2023				M	1arc	ch 2	0, 2	018	3			
Water Right Permit No. S1-25121 Development Extension	Due Every 5 Years Next Due March 30, 2023				M	1arc	h 2	0, 2	:018	3			
CPR/First Aid Training Coordinated by: Rich	Due Biennially Next Due 2021		March 23, 2019										
Flagging Card Training Coordinated by: Rich	Due Triennially Next Due 2022					Jun	e 6	, 20	19				

Safety Program Summary Completed by Rich Munson **Summary of Annual Safety Training** 2019 Testing Period - Jan 1, 2019 to May 30, 2019 Enrollments Completions % Complete Engineering - Managers 52 52 100% 23 23 100% Engineering - Staff 243 Field Crew 243 100% Office - Managers 16 16 100% Office - Staff 48 48 100% Overall 382 382 100%

Safety meetings for the field crew take place every Friday at 7 a.m.

Safety meetings for the field crew	take place every Friday at 7 a.m.							
D	ates of Completed Safety Comn	nitte	ee Meeti	ngs				
Wednesday, January 9, 2019		Monday, September 30, 2019						
Monday, February 11, 2019	Thursday, June 20, 2019		W	ednesda	ay, Octo	ber 17	, 2019	
Monday, March 11, 2019	Tuesday, July 23, 2019		Tu	iesday, N	Novemb	oer 19,	2019	
Wednesday, April 10, 2019	Tuesday, August 20, 2019		Sc	hed Mo	nday, D	ecemb	er 30, 2	019
	Summary of Work-Related Injur	ies (& Illness	es				
			Current					
			Month	2019	2018	2017	2016	2015
Total Number of Work Related Inj	uries							
Defined as a work related injury or illness that results in:								
· Death								
 Medical treatment beyond fine 	rst aid							
 Loss of consciousness 			0	0	0	1	0	1
 Significant injury or illness dia 	ignosed by a licensed							
health care professional								
· Days away from work (off wo	rk)							
 Restricted work or job transfe 	er							
Total Number of Days of Job Trans	fer or Restriction							
(light duty or other medical restric	ction)		0	0	0	13	0	0
Total Number of Days Away from Work								
(at home, in hospital, not at work)			0	0	0	4	0	0
Near Misses			0	2	2	1		
	Safety Coordinator Un	date	P	•		•	•	

Safety Coordinator Update

Between November 19 & December 18 there have been 2 L&I Claims, one for tendonitis in the elbow (tennis elbow) and one for a shoulder injury (pulled muscle). These were both **no time loss** injuries.

	Developer Exter	nsion Agreements
D1801	Sudden Valley Community Association - Are	ea Z Fire Hydrant
Scope	Installation of Fire Hydrant	
Sign Dat	•	Expiration Date 8/16/2021 (3 years)
	Prior to Commencing Construction	Prior to Final Acceptance
	District Engineer approves design	1. District inspects & approves facilities as complete
\boxtimes	2. Reimbursement of District Engineer review costs	N/A 2. District receives water meters for each service
\boxtimes	3. Copy of insurance policy	3. District accepts record drawings
\boxtimes	4. Copies of recorded easement n/a: to be recorded prior to Jinai acceptance,	4. District accepts easements & title insurance
	property owned by Sudden Valley Community Association	5. District receives warranty bond or like security
\boxtimes	5. Copies of permits	6. District receives maintenance bond
\boxtimes	6. Pay Developer Conformance Deposit	7. District receives and approves Bill of Sale
\boxtimes	Receipt #16291 8/14/18 7. Developer delivers performance bond	N/A 8. District receives a copy of recorded plat or legal description
	Assignment of savings account received in the amount of \$135,798 and dated 8/14/2018.	9. District receives legal description of property
	This will cover up to \$90,532 of constructed facilities	N/A 10. District receives Latecomers Reimbursement fees due to otherDevelopers (if applicable)
\boxtimes	8. Pays 25% of total amount of general facilities connection fees due to District n/a: no new connection	11. Developer pays any applicable Supplemental DEA Processing/General Administrative fees
\boxtimes	9. Pays District Administration, Legal Services, and Inspection Deposit	N/A 12. District receives signed and notarized Latecomers Reimbursement Agreement (when applicable)
	Receipt #16291 8/14/18	13. Developer has reimbursed the District for all incurred costs associated with DEA
	10. District Issues Notice to Proceed w/Construction	14. Developer has met and completed all local, state, and federal permit requirements
		15. Copies of recorded easement on file with District
Tasks/N	lotes	
•	7/3/2018 DEA Application Received 7/25/2018 Board Authorizes DEA with Conditions 8/7/2018 SVCA Submits Hydraulic Analysis	
	8/14/2018 SVCA submits drawings, DEA, assignment of	of savings. insurance certificate, check for
		tion, \$1,000 conformance deposit, and \$750 for
	processing fee), and shallow pipe depth me	·
•	9/5/2018 District completes review of hydraulic analy	
		d until SVCA makes another deposit of \$5,329.66 to cover
	legal and engineering review.	
•	12/17/2018 Deposit of \$5,329.66 received	
	Continued e	on next page

Developer Extension Agreements (cont'd)

D1801 Sudden Valley Community Association - Area Z Fire Hydrant

Tasks/Notes (cont'd)

- 1/23/2019 Meeting with SVCA to review revised plans received 1/9/2019
- 2/26/2019 SVCA submits revised plans
- 3/20/2019 District returns plan review comments to Wilson Engineering
- 4/1/2019 Deposit of \$2031.91 received.
- 4/9/2019 District approves plans and issues notice to proceed.
- 6/3/2019 Preconstruction meeting with SVCA, contractor, and Wilson to coordinate construct and inspections.

 Contractor will be starting work soon.
- 8/5/2019 Punch list inspection
- 8/15/2019 Final acceptance checklist/punch list sent to SVCA
- 9/19/2019 Deposit of \$13,842.73 received.
- 10/22/2019 District Preparing Bill of Sale, Easement, and Supplemental Conditions agreemnt
- 11/18/2019 Supplemental conditions and municipal utility easement sent to SVCA
- 11/18/2019 Deposit of \$2,136.39 received.
- 12/16/2019 District reviewing SVCA's proposed changes to bill of sale and supplemental conditions and municipality utility easement agreement received 12/16/19



District Projects Staff Report

12/18/2019

A1901 Whatcom County Region GIS Imagery Partnership 2019 Flight

An inter-local agreement with Whatcom County and a sub-agency license agreement with vendor, Pictometry International Corporation, in order to take receipt of the entire western Whatcom County imagery dataset and issuance of a Pictometry Connect license.

01 Administration	
	Pictometry reached a milestone in the flight capture by completing the "Neighborhood" imagery portion of the project along with a portion of the Community level imagery. Flights for the remaining lowland, Nooksack River, and partner areas are next on the list.
6/6/2019	Pictometry has finished flight capture. It took them a little while to wrap up the 9" capture with additional snow in the upper portions of the watershed that were identified in the contract as flexible areas (for leaves). Pictometry will now begin performing QA/QC on the imagery and will let us know when the capture is complete.
8/26/2019	Whatcom County has taken full delivery of the 2019 image library on behalf of the partnership. Members are evaluating the image library over the next 30 days. County will be sending out inter-local agreements to partners to review and sign soon.
9/25/2019	The County rejected the orthophotographs due to areas missing data, processing bands, color irregularity, and blurred imagery in the 6" pixel data set. The vendor is reprocessing the imagery. The County plans to provide inter-local agreements for review and approval in the coming weeks.
11/7/2019	County received the re-delivery of Pictometry Ortho. The first impression is a much improved product after spot checking a number of marked areas. County is continuing evaluation of data on behalf of the partnership.
11/14/2019	County working with partners to execute Interlocal Cooperative Agreements.
11/27/2019	Board authorized execution of interlocal agreement with Whatcom County for licensed Pictometry Imagery and Software.
12/6/2019	County and Pictometry working on correcting few more imagery issues. Pictometry plans to deliver updated ortho images by end of year. County is beginning to copy data to drives for distribution to partners.

A1902 Compulsory Sewer Connections

Compel property owners on private septic systems to connect to adjacent public sewer mains.

01 Administration	
2/19/2019	Staff is looking at properties on Lake Louise Road and Older Lane that are on septic and are in nearby proximity to a public sewer. This group of properties have topographic, environmental or property ownership/easement barriers that block access to nearby public sewer. Staff is working on draft policies to present to the board for consideration and discussion.
2/21/2019	Staff identified 3 properties where sewer is readily available adjacent to the property. Sites include 1313 Oriental Ave, 1125 Geneva St, and 2326 Northshore Rd. Notifications are being mailed via certified mail to these properties, requiring connection within 18-months.
9/2/2019	2nd notice mailed to 3 properties reminding owners that connection must be made 18- months from initial notification.

Board moved to give 3 identified parcels one extra year to connect unless compelled by County Health Department. Staff will prepare and send letters to property owners notifying them of the time extension.

C1708 **Ball Check Valves at Austin and Beaver Sewer Pump Stations.**

Install 2 ball check valves at Austin and 1 ball check valve at Beaver.

1/18/2017 District crew verified measurements of existing swing check valves. Proposed ball check valves will fit. Staff will order new ball check valves. 01 Administration 6/22/2017 District solicited quotes from 3 vendors. A purchase order has been issued for the ball check valves. They should arrive soon. 7/20/2017 District received ball check valves, District crews to install valves, 10/23/2018 Check valve position switches have been ordered that were needed. Valves will be installed and in service by end of 2018. 9/9/2019 Crews doing preliminary wiring checks to get ready for installation of one ball check valve at Beaver Sewer Pump Station.

10 Construction

8/20/2019 Both ball checks were installed at Austin PS today and tested working great. Jason

C1716A **Dead End Blowoffs**

Installing new blowoffs on dead end mains

01 Administration

1/19/2017 Staff researching each site to determine detailed scope of work for each location.

5/25/2017 Crews continue to pick away at blow-off installation. 8 of 41 done.

6/22/2017 Crews installed a few more. 12 of 41 done.

7/20/2017 14 done.

11/20/2017 15 of 41 done. 12/18/2017 16 done.

3/21/2018 19 done.

4/19/2018 22 done.

5/21/2018 25 done.

6/19/2018 32 done.

7/17/2018 32 done.

9/19/2018 33 done.

2/19/2019 34 done.

3/20/2019 37 done.

4/16/2019 39 done out of 54 on the current list.

6/18/2019 42 done.

7/23/2019 44 done.

8/19/2019 45 done.

9/18/2019 46 done.

C1716B Geneva Booster Station - PRV's and Backflow Assembly

Replace pumps at Geneva Booster Station at Scenic Ave with pressure reducing valves following hydraulic modeling verification. Replace old backflow assembly at City intertie. Replace building roof.

01 Administration

2/27/2017	Wilson prepared engineer's brief sheet that includes details PRV sizing and configuration. Staff will begin preparing a bill of materials and order parts. It is anticipated District crews will perform the work.
6/22/2017	Staff coordinating with City on what they need for a backflow assembly.
7/20/2017	Staff considering COB suggestion to move intertie to top of ridge on Parkstone at COB/District boundary.
9/20/2017	District considered moving PRV station per City suggestion. There are more benefits to the District to keep the Geneva Booster building and infrastructure. District staff is preparing the design report and construction drawings for submittal to DOH for installation of a PRV. Project will be coordinated with the water comp plan update in progress. We still need to coordinate with the City before going too much further in design/planning.
10/23/2018	Staff asking Wilson for Task Order proposal to submit DOH design report for approval and to assist in coordination with COB.
6/12/2019	Met with City of Bellingham staff and Wilson to go over coordination details. Wilson working on DOH project report which will be submitted to DOH for review and approval.
7/8/2019	Project report submitted to DOH for review and approval.
8/27/2019	DOH approves design / project report. Staff will begin procurement of parts.
8/30/2019	Roofing contractor finishes roof replacement.
10/17/2019	New coat of paint applied to exterior walls, trim, and door.
10/22/2019	Staff obtaining quotes for mechanical piping materials and will issue purchase order

C1802 Edgewater, Dellesta, Euclid Sewer Pump Station Improvements

12/18/2019 Parts have been received. Crews will begin installation soon.

soon.
11/18/2019 Parts have been ordered.

Replace/renew Edgewater and Dellesta sewer pump stations that were installed in the 1970's. Replace/renew electrical controls and install permanent standby generator at Euclid sewer pump station.

01 Administration	
1/25/2018	Staff developing RFP for selection of engineering consultant. 1st phase will includes predesign and shorelines permitting in 2018.
2/10/2018	Request for Proposals published Bellingham Herald.
3/7/2018	RFP submittals due at 1pm. Distribute RFP's to selection committee by end of week.
	Consultant selection committee meets to review and rank consultant proposals.
	Board selects RH2 as the most qualified consultant for projects to board. Staff will be scope/fee negotiations with the consultant.
5/21/2018	Staff working with RH2 on initial scope of work. Intent is to have board authorize scope/fee at 5/30/2018 board meeting.
6/14/2018	Agreement executed with RH2.
11/13/2019	Board authorized design through bidding scope of work for Dellesta and Edgewater. Staff working to execute AE Agreement Amendment 3.
02 Predesign	
6/18/2018	Surveyors beginning site survey at Euclid.
	Survey of Euclid 80-percent complete. Flow testing of Dellesta and Edgewater complete.
8/20/2018	RH2 prepared 3 alternatives for generator and pump station control panel placement. Engineering staff is reviewing with District field crews.
9/19/2018	Staff reviewed conceptual design layouts for Edgewater and Dellesta stations. RH2 making a few minor revisions before preparing pre-application meeting packet for County. RH2 finalizing permit application package for Euclid sewer pump station.
10/24/2018	Dellesta & Edgewater PS. Design criteria review with District staff and RH2.
	5
03 Permitting	

11/20/2018 RH2 preparing permit applications based on information from pre-application meeting with County. 12/18/2018 Euclid PS. Whatcom County is requiring an Environmental Site Assessment. Staff will be discussion options with RH2. 1/3/2019 Whatcom County pre-application meeting for both Dellesta and Edgewater pump 2/19/2019 Shoreline development permit applications submitted to Whatcom County for Edgewater and Dellesta. 2/20/2019 Eulclid PS. Staff and RH2 trying to setup meeting with County regarding critical areas assessment and mitigation options. Euclid PS. District staff and RH2 still actively pursuing County for critical areas meeting -3/20/2019 County staff has been non-responsive. 4/16/2019 Euclid PS. District staff and RH2 received confirmation from County staff that a critical areas assessment can be waived by assuming all areas are buffer areas. This will save the expense of doing an assessment. Staff is preparing documents for submittal to County. 5/21/2019 Euclid PS. Early May 2019 crews performed routine maintenance and wet well cleaning with the vac truck. The vac truck got stuck due to wet grass growing through gravel access road and soft muddy area near the pump station. District staff working with RH2 to include access road improvements to project scope for an all season traction surface for routine maintenance and emergency response readiness. This will result is a larger mitigation area and construction cost. Construction costs will be updated in worked into the 2020 capital improvement planning process. 6/11/2019 Euclid PS. Several design options were investigated with cost estimates for access road improvements. All the options were extremely expensive. District staff and management all agreed to try and re-establish the existing access road. RH2 is proceeding with the final permit application documents to be submitted to County soon. 7/29/2019 Euclid PS. Substantial shoreline development permit application submitted to Whatcom County. 8/21/2019 Dellesta and Edgewater Shoreline Development Permit Hearing at 130pm at Whatcom County Courthouse. 9/23/2019 Dellesta & Edgewater. Substantial shoreline development permits complete. No additional approval/notice is required, per County staff, to begin construction. 05 Design 9/12/2019 Euclid PS. District reviewed 90% plans and returned comments to consultant. 12/5/2019 RH2, District staff, and Whatcom County storm water staff met to coordinate sewer pump station and storm water treatment improvements at Edgewater which are in very close proximity to each other. District and County are working with property owners to secure utility easements for storm and new sewer force main - County is taking the lead role in securing an easement. 12/18/2019 RH2 working on detailed design and contract documents for Edgewater and Dellesta

C1814 Agate Heights WTP and Opal Booster Upgrades

Increase treatment and pumping capacity from 30gpm to 60 gpm.

01 Administration	
	Staff asked Wilson to prepare Task Order to assist with preliminary design and permitting.
	Staff and Wilson toured two treatment plants that have "Atec" iron/manganese remov package treatment plant systems at Pole Road Water Association. Tour facilitated project scope development with staff and Wilson.
4/19/2018	Task order scope of work is being developed by staff and Wilson. Once a draft is complete it will be presented to the Board for authorization.
7/25/2018	Wilson task order reviewed and authorized by board.
7/26/2018	Task order executed. Wilson is beginning work.

pump stations with target to advertise for bids by end of February 2020.

- 1/15/2019 District staff met with Wilson Engineering to review several different package treatment plant and package booster station vendors. Preliminary layouts indicate the existing building footprint is sufficient to install the larger capacity equipment this significantly reduces the permitting requirements and overall project costs. Wilson will develop a preselection criteria to advertise, evaluate, and select specific equipment to be used to complete the design and reports to be submitted to DOH for review and approval. Selection criteria will be presented to the board for input prior to advertisement.
- 2/21/2019 Staff meeting with Wilson to explore and discuss new option of increasing capacity of existing Filtronics system.
- 5/29/2019 Wilson completed predesign report. Wilson will be presenting findings and recommendations at 5/29/2019 Board meeting.
- 6/18/2019 Future board discussion will be scheduled to determine where funding for this project will come from (i.e. existing rate payers, special benefit area, etc).
- 9/18/2019 Wilson preparing final tech memo with new alternatives based on board comments.
- 10/9/2019 Board presentation of phased approach to treatment plant and booster station upgrades. Wilson preparing DOH project report for 1st phase of project (to increase package treatment system from 30 to 60 gpm).
- 11/21/2019 Final predesign report issued that includes backup documentation and history regarding the bacteria hits 18 years ago per board direction.

03 Permitting

12/18/2019 Wilson working on DOH project report that will be submitted for review and approval for Phase 1 improvements.

04 Predesign and Permitting

- 9/19/2018 ATEC treatment system pilot testing scheduled for October 2018.
- 10/18/2018 Pilot testing of ATEC treatment system finished.

C1904 Comprehensive Sewer Plan Update

The current plan was approved by Washington State Department of Ecology on June 6, 2014. The District updates the plan every 6-years. The purpose of the sewer comprehensive plan is to provide an overview of the existing sewage installations and treatment facilities operated and maintained by Lake Whatcom Water and Sewer District. In addition, it addresses potential future facilities development and projected population growth.

01 Administration

- 3/29/2019 District received draft task order proposal. District staff is reviewing.
- 4/24/2019 Board authorized Wilson task order. Task order executed and Wilson beginning work.
- 9/18/2019 Wilson working on plan update.
- 11/13/2019 Draft sewer comp plan distributed to staff and commissioners for review.
 - 1/8/2020 Work session scheduled with Board at 530pm to review/discuss draft document.

C1905 Sewer Rehabilitation and Replacement Projects

Annual project to find and reduce inflow and infiltration (I&I) of surface and ground water entering the public sewer system. Work includes: sewer main slip lining (spot repairs and full lengths), pressure grouting service tees, pressure grouting manhole leaks/voids, rebuild/seal manholes, smoke testing, and other efforts to reduce I&I.

01 Administration

- 2/19/2019 District crews begin video inspection of sewer pipe and manholes in Flat Car sub-basin. Sections identified as high infiltration risk are being prioritized.
- 12/18/2019 Approximately \$12k budget remaining. Proposed 2020 budget includes \$60 for I&I and sewer system repairs. Combined there will be a budget of \$72k for 2020. Staff is working on compiling list of I&I repairs to bid and complete early 2020.

C1905A - CABLE ST

BASIN

C1905A System I&I Investigation & Repairs

Investigate sewer mains to identify repairs to reduce/eliminate system I&I. Project includes camera and physical inspections to develop permanent repair tasks.

01 Administration

11/18/2019 9 of 61 inspection tasks complete.

C1905A - FLAT CAR BASIN

System I&I Investigation & Repairs

Investigate sewer mains to identify repairs to reduce/eliminate system I&I. Project includes camera and physical inspections to develop permanent repair tasks.

01 Administration

11/18/2019 113 of 130 inspection tasks complete. 12/18/2019 128 of 169 inspection tasks complete.

C1908 Fire Flow Improvements - Hydraulic Model Calibration

Project includes additional field testing for hydraulic model calibration to determine the appropriate friction factor (C factor) to use in the model. The C factor was reduced globally based on limited field tests which had a significant negative impact on available fire flow in the higher elevation areas. If the current C factor is correct and these are "real" (not modeling) deficiencies, the District will explore options to eliminate the deficiencies. 4 to 8 areas will be analyzed in the water system.

01 Administration

5/20/2019 Wilson task order executed.

5/23/2019 Coordination meeting scheduled with Wilson and crews. Goal is to perform flow tests and data collection 1st week of June.

6/18/2019 Testing was delayed to pressure data recorder equipment failure. Rescheduling flow testing for later in June.

7/31/2019 3 flow test were conducted this summer that indicate District water mains are in good condition. More flow testing is being planned this fall in a few more areas to confirm these good results.

C1910 SVWTP and AHWTP Misc Component Replacement

Replace worn out components at Sudden Valley Water Treatment Plant (SVWTP) and Agate Height Water Treatment Plant (AHWTP). Replacements include: SVWTP Raw Water pH Probe, SVWTP Transmission Pump Control Valves (4 valves), SVWTP Transmission Pipeline Surge Valves (2 valves), SVWTP Raw Water Flow Meter, SVWTP CL2 Contact Tank Pressure Transmitter (used to measure tank level), SVWTP Spare Transfer Pump, and AHWTP Finish Water Flow Meter.

01 Administration

4/23/2019 Purchase order issued for 4 pump control valves at SVWTP. Delivery time is around 8 weeks

9/9/2019 Procured spare SVWTP pH probe.

9/18/2019 Staff working with vendors and obtaining quotes for remaining components.

11/18/2019 Everything has been ordered except for the SVWTP Surge Valves. Staff working to place order for last components on the list.

12/18/2019 Quote solicitations sent to 6 vendors for Surge Anticipator Valves. Staff plans to review quotes and place purchase order on January 2, 2020.

C1913 SVWTP 20-Year Facility Plan

The purpose of this project is to: Identify and document specific operational, maintenance, renewal, and replacement needs for the next 20-years which includes everything (concrete building structure, underground vaults, motors, pumps, piping, valves, electrical, controls, heating and ventilation, chemical handling, lab space, etc.), prioritize the improvements, analyze physical space requirements for identified improvements, develop several conceptual plans that could accommodate all the components (it is likely that additional floor space is needed).

01 Administration

2/20/2019 Staff pulling together background information in preparation for RFQ.

9/18/2019 Staff finalizing request for qualifications documents and background information. Tentative publication date for Seattle DJC and Bellingham Herald is September 30th.

9/30/2019 RFQ advertisement in Seattle DJC and Bellingham Herald.

10/28/2019 Submittal due date.

11/13/2019 Selection committee recommended G&O as the most qualified consultant. Board authorized staff to begin scope and fee negotiations with G&O. Scope and fee will be brought back to the Board for review and approval.

12/26/2019 Phase 1 scope of work and fee presented to Board for review and approval. G&O and staff coordinating AE Agreement with hope to execute agreement January 2020.

C1914 Water Rehabilitation and Replacement Projects

Miscellaneous water system rehab and replacement projects identified for 2019 include installing PRV vault drains at 5 PRV sites (Cascade, Rock Ridge, Hillside, Dutch Harbor, & Fremont.

01 Administration

1/3/2019 Slip lining Sanwick Court water main added to this project list. This will re-establish a looped system in this area. Recall that this water main had a break and that the main had to be shut down and is no longer looped. Wilson did a hydraulic analysis that indicates fire flows requirements are still met even when not looped. However, staff recommends that the loop be re-established to maintain system redundancy and resiliency.

1/16/2019 District staff is coordinating with SWFA on old hydrants in the Geneva area that have smaller 3.5", 4", or 4.5" threaded front ports, and several that have 4" stortz adapters. SWFA has standardized on the 5" stortz. These smaller font ports and 4" stortz adapters need to be fitted with 5" stortz. SWFA requested that the 4.5" National Hose thread (Dresser brand hydrants) and 4" stortz are the priority for conversion to 5" stortz.

M1917 AB PLC-5 Replacements and UPS Improvements

The District has several sites that use these older style PLC's: Sudden Valley Sewer Pump Station, Flat Car Sewer Pump Station, Beaver Sewer Pump Station, and Division 30 Booster Station.

This project is intended to begin the replacement process of discontinued PLC's as well as make uninterruptable power supply (UPS) improvements for better facility reliability. The scope of work and budget to complete the project is not known at this time. A budget amount of \$100k was approved to select a general electrical/control engineering consultant through the Request for Qualifications (RFQ) selection process and to develop an initial scope to plan the migration at each site to the new PLC's and determine what UPS improvements can be made to increase facility reliability. With the remaining 2019 budget, prepare bid documents, bid the work, contract with a contractor to begin the migration, and lastly to develop future CIP budgets to finish the work.

01 Administration

9/18/2019 Staff decided to utilize MRSC consultant roster to select qualified firm. Once firm is selected scope of work and fee estimate will be developed.

A WATER &	lake whatcom	MCT . W

AGENDA BILL Item 7.C

Finance Department Report

DATE SUBMITTED:	December 19, 2019	MEETING DATE:	December 26	5, 2019			
TO: BOARD OF COMMI	SSIONERS	FROM: Debi Denton					
GENERAL MANAGER APP	ROVAL						
ATTACHED DOCUMENT	rs	1. Monthly Budget Analysis					
		2. November 2019 Adjustment Report					
		3.					
		RESOLUTION	FORMAL ACTION/	INFORMATIONAL			
TYPE OF ACTION REQU	ESTED		MOTION	/OTHER			

BACKGROUND / EXPLANATION OF IMPACT

Information only.

FISCAL IMPACT

N/A

RECOMMENDED BOARD ACTION

N/A

PROPOSED MOTION

N/A



LAKE WHATCOM WATER AND SEWER FUND SUMMARY 2019

	401	420	425	426	431	450	460	
	OPERATING	SYSTEM REINVESTMENT	SEWER/ STORM WATER CONTINGENCY	WATER CONTINGENCY	2016 BOND FUND	DEBT SERVICE	BOND RESERVE (RESTRICTED)	TOTAL
2019 REVENUES AND TRANSFERS IN	6,846,328	1,275,809	359,408	20,000	-	880,682	-	9,382,227
2019EXPENDITURES AND TRANSFERS OUT	(6,636,207)	(2,364,800)	(344,530)	-	(114,092)	(882,063)	-	(10,341,692)
CASH/INVESTMENTS 2018 CARRYOVER	1,868,506	1,092,805	772,210	440,000	114,092	1,381	772,334	5,061,328
ALLOCATED TO OPERATING RESERVES	\$2,078,627 -\$800,000 \$1,278,627	\$3,814	\$787,088	\$460,000	\$0	\$0	\$772,334	\$4,101,863

LAKE WHATCOM WATER AND SEWER REVENUE

	Description	Budget 2019	ACTUAL 12/15/2019	
OPERATING FUND - 401				
REVENUES				
401-343-40-10	Water Sales Metered (4.0% base rate increase) *	2,526,043	2,393,679	95%
401-343-41-10	Permits (10 new connection permits)	210,000	350,323	167%
401-343-50-11	Sewer Service Residential (2.5% rate increase) *	4,058,102	3,878,895	96%
401-343-50-19	Sewer Service Other	4,000	4,258	106%
401-343-50-80	Latecomer's Fees	-	-	
401-343-81-10	Combined Fees	30,000	27,273	91%
401-359-90-00	Late fees	50,000	54,145	108%
401-361-11-00	Investment Interest	50,000	71,547	143%
401-361-40-00-80	ULID 18 Interest/Penalties	5,000	4,822	96%
401-368-10-00-80	ULID 18 Principal Payments	30,000	17,407	58%
401-369-10-00	Sale of scrap metal and surplus	2,000	9,680	484%
401-369-10-01	Miscellaneous	-	21,588	
401-369-80-00	Over/Under		(10)	
401-395-10-00	Sale of Capital Assets	_	· -	
401-395-20-00	Deposits		1,500	
401-398-20-00-01	Insurance recovery	-	11,221	
	TOTAL REVENUES	6,965,145	6,846,328	98.3%

LAKE WHATCOM WATER AND SEWER

INVESTMENTS/CASH AS OF 12/15/2019

Petty Cash Cash Public Funds Account			\$ \$ \$	1,600 206,745 101,775		0.45% 1.56%
LGIP			\$	1,028,122		1.83%
			\$	1,338,242		
			F	PAR VALUE		YIELD
FFCB - ProEquity	Callab	ole	\$	751,406	Aug-20	1.10%
RFCO-ProEquity	Non-c	allable	\$	1,071,817	Jan-21	
FHLB - Pro equity	Callab	ole	\$	1,002,619	Nov-22	1.55%
US Bank			\$	2,825,842		
TOTAL			\$	4,164,084		
USE OF FUNDS:						
Reserved	\$	772,334				
Contingency	\$	1,247,088				
Unrestricted	\$	2,144,662	_			
			\$	4,164,084		

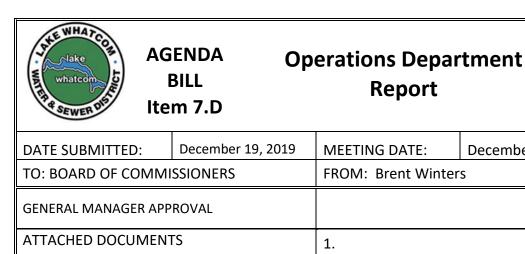
	LAKE WHATCOM WATER AND SEWER EXPENDITURES			
	Description	BUDGET 2019	12/15/2019	
OPERATING FUND - 401		BODGET 2013	12/13/2013	
0.2.00				
EXPENDITURES				
401-53X-10-10	Admin Payroll (3% cola plus step increases - 2019)	674,270	662,591	98%
401-53X-10-20	Admin Personnel Benefits (Medical, Retirement etc)	284,390	283,927	100%
401-53X-10-31	Gen Admin Supplies/Equipment	30,000	31,226	104%
401-53X-10-31-01	Meetings/Team building	3,000	5,296	177%
401-53X-10-40	Web pay/Bank Fees	40,000	41,116	103%
	Interlocal - Lake Whatcom Management Program (City)			
	Interlocal - Invasive Species (City)			
	Interlocal - Lake Whatcom Tributary Monitor (County)			
401-534-10-41	Water Quality Assurance Programs (TOTAL)	90,000	59,184	
	Simplifile (County Auditor Filing Fees)	6,500		
	Data Bar (Statement processing)	25,000		
	Answering Service	2,000		
	Data Pro (Time clock system)	2,000		
	BIAS Financial Software Maintenance	10,000		
	Web Check services	5,000		
	CPA (Internal audit and Financial statements)	6,000		
	Docuware/Web site maintenance and upgrade	15,000		
	Legal Counsel	60,000		
	3D - Computer support	25,000		
	3D - Firewall renewal	15,000		
	3D - Anti virus subscription	1,000		
	Building security for offices	2,000		
	Building custodial	10,000		
	Pest control	500		
	Landscaping service	4,000		
	South Whatcom Fire (hydrant maintenance)	1,000		
	GE Scada System Software Maintenance - Operations	7,500		
	Wilson Engineering	20,000		
	Camera Van Software	1,500		
	SCADA/PLC Support - Engineering/Operations	5,000		
	Cartegraph - Engineering/Operations	30,000		
	Auto Desk - Engineering	1,000		
	GIS Partnership	1,000		
	Rockwell - Engineering/Operations	500		
	IT Pipes	1,500		

	LAKE WHATCOM WATER AND SEWER EXPENDITURES			
	Description	BUDGET 2019	12/15/2019	
	ESRI - ARC GIS	1,500		
	Innovyze - Engineering	2,500		
	Master Meter	2,000		
	Cyberlock software	1,000		
	Whatcom County Emergency Management	20,000		
	Misc	5,000		
401-53X-10-41-01	Professional Services (TOTAL)	290,000	287,632	99%
401-53X-10-42	Communication	50,000	53,235	106%
401-53X-10-45	Admin Lease (new copy machines now leased)	7,000	9,468	135%
401-53X-10-46	Property Insurance	134,000	142,960	107%
401-53X-10-49	Admin Misc.	1,000	457	46%
401-53X-10-49-01	Memberships/Dues	17,000	14,604	86%
401-53X-10-49-02	WA State Dept of RevenueTaxes/Permits	215,000	225,120	105%
401-53X-40-43	Training & Travel	35,000	31,327	90%
401-53X-40-43-01	Tuition reimbursement	1,000	-	0%
401-53X-50-31	Maintenance Supplies	280,000	142,961	51%
40153X-50-31-01	Small assets	20,000	37,851	189%
401-53X-50-48	Operations Repair/Maint	40,000	110,558	276%
401-53X-50-49	Insurance Claims	5,000	5,000	100%
401-53X-60-41	Operations Contracted	22,500	6,442	29%
401-534-60-47	Water City of Bellingham	45,000	42,224	94%
401-535-60-47	Sewer City of Bellingham Treatment Fee	650,000	614,936	95%
401-53X-80-10	Operations Payroll (3% cola plus step increases - 2019)	1,066,380	1,051,916	99%
401-53x-80-10-01	Operations Capital Projects Payroll	-	-	
401-53X-80-20	Operations Personnel Benefits (Medical, Retirement etc)	503,000	462,101	92%
401-53X-80-32	Fuel	28,000	24,765	88%
401-53X-80-35	Safety Supplies (VIVID)	10,000	20,013	200%
401-53X-80-35-01	Safety Supplies Boots	2,500	1,780	71%
401-53X-80-35-02	Emergency Preparedness	10,000	5,543	55%
401-53X-80-47	General Utilities	230,000	177,420	77%
401-53X-80-49	Laundry	4,000	4,087	102%
401-589-99-99	Payroll liabilities	-	377	
	OPERATING EXPENDITURES	4,788,040	4,556,117	95.2%

	LAKE WHATCOM WATER AND SEWER EXPENDITURES		
	Description	BUDGET 2019	12/15/2019
TRANSFERS	Transfers Out to System Reinvestment Fund 420	1,600,000	820,000
	Transfers Out to Sewer/Storm Water Contingency Fund 425	15,000	15,000
	Transfer Out to Sewer/Storm Water Contingency Fund 425 for Geneva/Country Club		344,408
	Transfers Out to Water Contingency Fund 426	20,000	20,000
	Transfers Out to Debt Service Fund 450	647,406	660,988
	Transfers Out to Debt Service Fund 450	219,694	219,694
	TOTAL EXPENDITURES AND TRANSFERS	7,290,140	6,636,207
OPERATING FUND	OPERATING REVENUES	6,965,145	6,846,328
	EXPENDITURES AND TRANSFERS	(7,290,140)	(6,636,207)
	2018 BALANCE CARRYOVER	1,200,000	1,868,506
	ALLOCATED TO OPERATING RESERVES	(800,000)	(800,000)
		75,005	1,278,627

LAKE WHATCOM WATER AND SEWER EXPENDITURES			
Description	BUDGET 2019	12/15/2019	

Nov-19	ADJUSTMENTS	
130001548	16.34	Late fee reversal
200004038	23.55	Late fee reversal
80001323	55.78	Late fee reversal
60000307	10.6	Late fee reversal
130111417	16.34	Late fee reversal
100001458	26.84	Late fee reversal
40000017	20.14	Late fee reversal
240008049	25.62	Late fee reversal
40000398	65.42	Late fee reversal
60001501	29.36	Late fee reversal
20000471	14.02	Late fee reversal
TOTAL	\$ 304.01	



BACKGROUND / EXPLANATION OF IMPACT

Placeholder for the Operations & Maintenance manager to give a departmental update.

2.

3.

RESOLUTION

FISCAL IMPACT

Not applicable at this time.

TYPE OF ACTION REQUESTED

RECOMMENDED BOARD ACTION

Review and discuss.

PROPOSED MOTION

Not applicable at this time.

December 26, 2019

INFORMATIONAL /OTHER

 \boxtimes

FORMAL ACTION/

MOTION



AGENDA BILL Item 9

Executive Session General Manager Annual Performance Evaluation

DATE SUBMITTED:	December 12, 2019	MEETING DATE: December 26, 2019			
TO: BOARD OF COMMISSIONERS		FROM: Justin Clary, General Manager			
GENERAL MANAGER A	PPROVAL	Soldly			
ATTACHED DOCUMENT	ΓS	1. none			
TYPE OF ACTION REQUESTED		RESOLUTION	FORMAL ACTION/ MOTION	INFORMATIONAL /OTHER	

BACKGROUND / EXPLANATION OF IMPACT

The District entered into an employment agreement on August 29, 2018, with Justin Clary to serve as the District's general manager. Mr. Clary's first day of employment with the District was October 1, 2018. Per Section 10, Performance Evaluation, of the agreement, the Board of Commissioners is to evaluate Mr. Clary's performance annually, on or about the anniversary of appointment. During its September 25 meeting, the Board defined an approach and schedule for conducting the performance evaluation. The Board also requested that Mr. Clary submit an annual report summarizing District achievements over the past year, as well as proposed initiatives for 2020. The requested document was included in the packet of the Board's October 9th regularly scheduled meeting.

This Executive Session is for the purposes of evaluating the performance of a public employee per $\frac{RCW}{42.30.110(1)(g)}$ and is expected to last 30 minutes.

FISCAL IMPACT

No impact is anticipated.

RECOMMENDED BOARD ACTION

No action is recommended at this time.

PROPOSED MOTION

Not applicable.