

Utilities Committee Meeting Agenda October 20, 2020, 5:00 p.m.

Pursuant to the Governor's "Stay Home - Stay Safe" Order, the City is prohibited from conducting meetings unless the meeting is NOT conducted in-person and instead provides options for the public to attend through telephone access, internet or other means of remote access, and also provides the ability for persons attending the meeting (not in-person) to hear each other at the same time. Therefore;

Remote access only

Link:

<https://us02web.zoom.us/j/87058341538>

Zoom Meeting ID: 870 5834 1538

- Water System Plan 2020/2030 – Update
 - Anticipated Water Rate & CFC Adjustments
- Stormwater Program Status Report
- Next Meeting: November 17, 2020

Future Agenda Items:

- Utility Department Work Plan - Update:
- 580 Zone Water Campus - Update:
- McCormick Sewer Pump Station #1 Repairs - Update
- Cross Connection Control & FOG Programs - Discussion
- Stormwater Comprehensive Plan (2021) - Update
- 580 Transmission Main
- Marina Sewer Pump Station 80% Design
- Stormwater Program Status - Presentation
- Option to Levy Excise Taxes on W/S - Discussion
- SKWRF Nutrient Cap - Update
- McCormick Communities - Global Agreement
- 2019-2024 NPDES Permit Draft Comments - Update
- Bay Street - Street Lighting & Marquee - Update
- Touch-Read Water Meters - Update
- Water System Fluoridation - Update
- Fire Hydrant Operation and Maintenance Program - Update
- Valve Operation and Maintenance Program - Update
- Sanitary Side Sewer Policy - Discussion

Chapter 1 Financial Program

1.1 Introduction

This chapter summarizes the City of Port Orchard's water utility financial history, identifies funding sources and a plan for funding the recommended capital improvements and provides a ten-year financial plan, with the impact on rates. This chapter was prepared by Katy Isaksen & Associates.

1.2 Financial History

The City owns and operates a water system along with sewer and stormwater systems. The self-supporting water utility is accounted for separately in water fund 411 that includes water operating expenses and transfers to the water capital reserve 413 to carry out the capital improvement projects, and rate stabilization and debt funds. The ending fund balance remains to provide for future use of the water utility. Table 9-1 provides a three-year financial history of the water fund based on the City's financial reports.

Table 9-1 Three Year Financial History				
WATER OPERATING FUND 411	2017	2018	2019	Budget 2020
Operating Revenue				
Water Sales - Residential	1,801,146	2,043,348	2,238,125	2,383,300
Water Sales - Commercial	552,629	607,541	703,009	740,700
Water Sales - Irrigation	99,862	117,441	133,239	132,800
Construction Water Sales	4,533	12,975	18,075	8,800
Other Fees - Connects	21,450	33,196	22,649	12,900
Water Inspection Fees	6,556	4,749	5,040	6,700
Plan Review Fees	1,574	22,882	202	1,700
Other Planning & Development Service	1,050	2,250	1,800	1,200
Penalties	17,001	20,297	39,088	-
Investment Interest	12,351	32,793	23,256	8,600
Rents & Leases	31,464	36,983	74,371	56,500
Miscellaneous	242,063	25,372	8,473	-
Intergovernmental Loan Proceeds	-	14,342		
Transfers In for CIP	-	719,705		
Subtotal W Revenue	2,791,679	3,693,874	3,267,327	3,353,200

Table 9-1 Three Year Financial History (cont.)

WATER OPERATING FUNS 411	2017	2018	2019	Budget 2020
Expenses				
Salaries-Water Admin	516,244	558,587	598,675	630,900
Benefits-Water Admin	217,246	273,056	274,805	331,900
Supplies - Administration	14,813	35,192	12,763	5,200
Services - Administration	222,888	367,509	639,185	293,045
Intergovernmental Services & P	242,627	291,739	290,765	282,800
Supplies - Distribution	98,247	139,638	68,086	57,050
Services - Distribution	219,511	191,182	20,116	30,950
Supplies - Source	496,589	515,293	347,465	441,500
Services - Source	7,167	11,148	113,625	116,000
Supplies - Storage	3,353	4,378	1,651	300
Services - Storage	10,495	11,113	11	6,000
Refundable Deposit	-	-	9,600	-
Debt Payments LT, notes	16,615	94,202		
Salaries/Benefits - Capital Outlay	-	9,583		
Other Improvements	-	1,711,511		
Machinery & Equipment	-	4,786		
Operating Transfers - Out (412 W Stab)			100,000	290,000
Operating Transfers - Out (413 W Capital)			100,000	237,500
Operating Transfers - Out(414 W Debt))			30,128	-
Transfer - 500 ER&R O&M			24,256	35,300
Transfer - 500 ER&R Replacement			142,430	27,193
Subtotal W Expenses	2,065,796	4,218,918	2,773,561	2,785,638
Annual Increase/(Use) of Reserves	725,884	(525,043)	493,767	567,562

At the bottom of Table 9-1, the Annual Increase/ (Use) of Reserves line provides a quick view of whether the water revenue was sufficient to meet the expenditures in each year. If revenue is greater than expenses, the reserve levels are increased. If revenues are less than expenditures, the reserves are used to balance the budget for the year. This may work for a couple of years as long as capital improvement funding is higher than typical but is not sustainable in the long run. The water utility has been setting aside funds for capital improvements that are underway and under design per the 2014 gap analysis rate study and six-year financial plan. A multi-year rate schedule was adopted by the City Council for 2016-2020.

Prior to 2019 the City had a combined water/sewer operating fund. In 2019, the City split the combined utility fund into separate water and sewer funds. The water utility now includes 4 funds: operating 411, rate stabilization 412, capital reserve 413, and debt 414.

Monthly water service charges are the primary source of ongoing revenue for the water utility, including sales to residential, commercial, irrigation and construction. Other revenue includes connection and inspection fees, plan review and other development services, investment interest and rents/leases. Miscellaneous includes sale of surplus, miscellaneous, refunds and insurance recoveries. The capital facilities charges collected from new or upsized water connections are deposited directly into capital fund 413.

1.2.1 Water Utility Funds

The water operating fund balance at the beginning of 2020 was \$2,207,000 as shown in Table 9-2. One time transfers out during 2020 include \$1.2 million to capital reserve 413 for CIP and upsizing contributions, and \$319,000 to debt 414 to set up the required debt reserve on the existing DWSRF loan. The model shows \$561,000 will be available from rates after meeting operating expenses and debt payments. After subtracting a three month cash flow reserve of \$525,000, the remaining \$724,000 is available for future system investment or water fund use.

Table 9-2 Water Fund Balance - 411		
Water Operating Fund 411	2020	Comments
Beginning Fund Balance	\$2,206,979	2019 actual year end
Transfer to Capital Reserve 413 for CIP	(1,200,000)	one time
Transfer to Debt 414 for Debt Reserve	(319,000)	set up reserve for DWSRF
Annual Increase /(Use) of Reserves	523,138	
Estimated Ending Fund Balance	\$1,211,117	
Target Minimum Balance		
Cash Flow Reserve	525,000	90 days operating expense
Available Balance	\$686,117	for future investment

The water capital reserve began 2020 with a balance of \$2,365,000 as shown in Table 9-3. Anticipated 2020 income includes the \$1.2 million transfer from water operating 411, capital facilities charges of \$297,000, \$854,000 in loan proceeds from the existing DWSRF loan, and an operating transfer from rates for capital improvements of \$401,000. The 2020 planned capital expenditures are \$1,654,000. After subtracting \$500,000 for an emergency reserve, the remaining \$2,963,000 is available for water system improvements.

Table 9-3 Water Capital Fund Balance - 413		
Water Capital Fund 413	2020	Comments
Beginning Fund Balance	\$2,364,572	2019 actual year end
Transfer from Water 411 for CIP	1,200,000	one time
Capital Facilities Charges	297,500	
Existing DWSRF Loan Proceeds	853,698	
Transfer from 411 - CIP Funded by Rates	400,924	
CIP Program Expense	(1,653,698)	
Estimated Ending Fund Balance	\$3,462,746	
Target Minimum Balance		
Emergency Reserve	500,000	maintain for emergencies
Available Balance	\$2,962,746	for capital improvements

In addition to the water operating and capital reserve funds, the utility also has a water stabilization fund 412 established in 2019. The 2020 beginning balance is \$101,000, with planned contributions from rates of \$290,000 per year over 2020-22. The water utility also has a debt fund 414 used to make necessary debt payments.

1.3 Outstanding Debt

The water utility has two outstanding debt issues in the form of a note to McCormick Woods Water Company and a Drinking Water State Revolving Fund (DWSRF) low-interest loan to Washington State Department of Health.

The McCormick Woods note payment is \$50,000 per year, paid from capital facilities charges collected.

The DWSRF loan was approved for a principal amount of \$6,060,000 at 1.5% interest to be repaid over 20 years. This loan is being used for the Well 13 improvements that are underway and expected to be complete in 2021. Repayment begins the October after project completion and will be based on the actual amount borrowed. Interest is accruing on the draws taken and the first payment of interest only is anticipated to be due in 2021 at \$320,000. Beginning 2022, the principal and interest payments will be made each year. It is anticipated that payments will be \$319,000 principal + 1.5% interest on the outstanding balance (\$410,000 in 2022), due each October through 2040.

The State of Washington designed the DWSRF program to be junior in lien to outstanding parity debt, typically revenue bonds. The City does not currently have any revenue bonds outstanding that pledge the revenue of the combined waterworks utility.

The City issued general obligation bonds in 2013 for the City Hall upgrades. The water utility was contributing its share each year and the bonds were paid off in 2019.

1.4 Current Rates and Charges

The City Council has authority to set rates and charges for the water utility to ensure it remains self-sufficient and meets all covenants on outstanding debt. The rates are reviewed annually during the budget process. Current water rates and fees are included in the COPO Municipal Code, Chapter 13.04.

1.4.1 Monthly Water Rates

The City reads meters and bills customers every 2 months (bimonthly) for water service. All customers pay a base fee per water meter or unit plus a volume charge based on metered water use. There are 2 levels of base fee for a 3/4" single family water meter, either 0-3,000 gallons or 3,001-5,000 gallons. Water usage is charged per 1,000 gallons for all usage above 5,000 gallons in 5 additional tiers to promote conservation: 5,001-10,000 gallons, 10,001-20,000 gallons, 20,001-30,000 gallons, 30,001-50,000 gallons, and 50,001+ gallons per two-month billing period. Larger meters pay a larger base fee with up to 5,000 gallons included, and multiple connections, where multiple units are served through one meter are on a per unit basis with meter size differential. Outside city customers pay a 50% surcharge.

The current residential base rate is \$81.50 for 2 months and includes 5,000 gallons. A reduced base rate of \$57.50 is offered for usage up to 3,000 gallons. The typical single family residence currently pays \$88.80 for 7,000 gallons per 2-month bill or \$44.40 per month for 3,500 gallons of water. Current water rates are in Table 9-4.

Table 9-4 Current Water Rates		
Water Rates - Bimonthly	Base + Water	2020
3/4" Meter, 0-3,000 gal	Base	\$53.50
3/4" Meter, 3,001-5,000 gal	Base	\$81.50

Water Usage in excess of base allowance		
5,001-10,000 gal	per 1000g	\$3.65
10,001-20,000 gal	per 1000g	\$3.85
20,001-30,000 gal	per 1000g	\$4.05
30,001-50,000 gal	per 1000g	\$4.30
50,001+ gal	per 1000g	\$4.60

1.4.2 Water Capital Facilities Charges

Water capital facilities charges (also referred to as system development fees, general facilities charges, connection charges or participation fees) are collected from each new or upgraded connection to the water system. These charges are for the right to connect into and make use of the system. All connections must obtain a water permit, pay water meter and service installation fees and inspection fees as appropriate and described in COPO Municipal Code, Chapter 13.04. The 2020 Water Capital Facilities Charge for a new single family residence inside the city limits is \$5,945 and has been in effect since 2017. Table 9-5 summarizes the current water capital facilities charge.

Table 9-5 Current Water Capital Facilities Charge	
Water Capital Facilities Charge	Current
Residential	
Per ERU	\$5,945
Nonresidential – Based on Meter Size	
3/4"	\$5,945
1"	\$9,928
1-1/2"	\$19,797
2"	\$31,687
3"	\$59,450
4"	\$99,103
Irrigation	No CFC

1.5 Capital Improvement Funding

1.5.1 Capital Funding Sources

The City has preferred to avoid taking on new utility debt when possible and has relied on low interest loan programs from Washington State when necessary, including Public Works Trust Fund (PWTF) and Drinking Water State Revolving Fund (DWSRF). The City has also worked with developers and the City of Bremerton to secure water supply and facilities when in the best interest of the City's ratepayers. In addition, local sources of capital funding include connection fees, developer extensions with latecomer agreements, monthly rates, and capital reserves. These are the primary sources of capital funding available for water. The following discussion outlines the City's major water funding source opportunities.

The Washington State Department of Health (DOH) typically has four DWSRF funding opportunities each year: grants for preconstruction or consolidation in April and May; loans for preconstruction are open year-round; construction loans in October and November; and emergency loans open year-round. The opportunities require funding from the State capital

budget and federal capital budget. Specific information is available on the DOH website (www.doh.wa.gov, DWSRF page). A 1-percent loan fee is included in a successful construction application and the standard interest rate is currently 1.75 percent for a 20-year loan term. Disadvantaged systems and consolidation projects qualify for 1.25 percent interest rate, up to 50 percent principal forgiveness (subsidy), and up to 30-year loan term. This is partially a federally funded program under the U.S. Environmental Protection Agency (EPA) (partially State funded) and there are a number of federal requirements that must be met. EPA has a new focus on asset management. Bonus points are available for attending asset management training and for submitting a completed asset inventory. The DWSRF program scores all project applications based on the health risk being addressed. The goal is to provide loans for capital improvements that increase public health protection and compliance with drinking water regulations and protect the health of people throughout the State by ensuring safe and reliable drinking water.

The Public Works Board, operating with the Washington State Department of Commerce, offers the PWTF program. The program is focused on completing necessary infrastructure projects to recirculate the funds to the next round of projects. This requires that projects be ready to proceed and thus the loans must be drawn within 36 months of approval. The program has been on hold or had very limited funds for several years with the State education budget crisis. The program relies on the State capital budget appropriation. The program will accept applications when funds are available. The legislative session in 2021 will be the next opportunity for funding into the Public Works Assistance Account. If successful, the first round submittal deadline may be in July 2021 for construction or preconstruction loans, with interest rates potentially around 1.5% for standard 6-20 year loans. Emergency loans are offered year-round as long as funds are available. More detailed information is available on the Public Works Board website (www.pwb.wa.gov).

Other funding sources include the Washington State Department of Commerce energy efficiency grants and the Community Economic Revitalization Board (CERB) program geared to infrastructure improvements for job creation.

On the federal assistance side, there is the US Department of Agriculture-Rural Development Program (USDA-RD) that provides low-interest loans with potential grant subsidy for water systems in communities up to 25,000. There is also a federal Economic Development Administration (USEDA) with a Public Works grant and loan program available.

To keep current with infrastructure funding programs, a database is provided by the Infrastructure Assistance Coordinating Council (IACC). The City can use this database to monitor available funding and contact information. The database can be accessed on the web directly on the IACC website (www.infracfunding.wa.gov).

1.5.2 Local Funding Sources

Monthly water rates can provide an on-going level of funds for planned capital repairs, system replacement, and improvements. These funds are appropriate for repair and replacement of the water system to serve existing customers. Capital facilities charges from new connections are also available to fund improvements to the water system. The water utility is able to borrow from the above-mentioned financial assistance programs and any loans will need to be repaid by monthly rates and connection charges. The water utility is able to sell revenue bonds and/or general obligation bonds to fund planned system improvements. Revenue bonds will be repaid by water rates and connection fees. General obligation bonds can be repaid by water rates and charges or general City tax revenue.

Some of the projects will be the responsibility of developers to connect their property to the system. When developers complete projects that are approved by the City, the infrastructure is deeded over to the City. The developer can negotiate a latecomer or recovery agreement with the City to be reimbursed by new development making use of the facilities constructed by the developer for a specified period of time allowed by state law. In certain instances, on a case by case basis, such as when additional capacity is provided by a developer-funded project, the City may opt to participate in a cost sharing mechanism.

The City has the option to complete area-specific projects and be reimbursed as new development occurs through a special connection charge. The City also has the option to establish a utility local improvement district (ULID), where the properties specially benefiting from an infrastructure investment would pay their share through an assessment.

1.5.3 Affordability

The EPA requires DOH to award subsidy, or principal forgiveness, of at least 20 percent of the EPA capitalization grant award. In order to determine how best to award the subsidy, communities are evaluated on affordability of water compared to the median household income (MHI). EPA defines affordable water rates as 2 percent of MHI for a community. This also reflects the test applied by DOH to determine the level of hardship in a community when applying for grants (subsidy) and loans for water improvement projects. The level of hardship can influence the financial assistance offer. If the cost of water service is higher, the community will be considered in hardship and could be eligible for some financial assistance in the offer, resulting in a grant (subsidy), a lower interest rate loan, or a combination of the two.

Ecology publishes a convenient MHI table each year in their funding guidelines. For the City, the current MHI is \$70,598 based on the early 2020 American Community Survey (Ecology Funding Guidelines, August 2020, Appendix). The threshold for hardship at 2.0 percent of MHI would be residential water rates of \$117.66 per month. A lower threshold of 1.5 percent of MHI, with residential rates of \$88.25 per month could result in a 0.5% reduction in the interest rate. A typical residence in Port Orchard currently pays \$44.40 per month for water service. This level is considered affordable and would not be eligible for subsidy.

Another measure of affordability is what residents in local jurisdictions are paying. Table 9-6 compares 2020 water rates for a typical single-family residence, ¾-inch meter using 3,500 gallons of water per month (468 cubic feet). Using this measure, Port Orchard is clearly higher than local communities. The average cost of water in the communities listed is \$30.00 per month, or \$59.00 per 2-month bill which are less than current City rates. The comparison will vary depending on the amount of water used in a home, the rate structure (base fee and usage tiers), and timing of the next rate adjustment.

Table 9-6 Residential Water Rate Comparison 2020		
Residential Water Service	2-Month Bill @ 7,000 gallons	Per Month @ 3,500 gallons
Port Orchard	\$88.80	\$44.40
Gig Harbor	\$65.20	\$32.60
Kitsap PUD	\$64.29	\$32.14
West Sound UD	\$56.32	\$28.16
Bremerton	\$53.29	\$26.64

Poulsbo	\$52.76	\$26.38
Bainbridge Island	\$35.48	\$17.74
<i>7,000 gallons converts to 936 cubic feet of water, or 468 cf per month.</i>		

1.6 Water Capital Improvements

Chapter 8 of this WSP identifies in excess of \$52 million in recommended capital improvements for the water system during the 20-year planning horizon, \$48.8 million are recommended for the first 10 years (2020-2029) and \$3.8 million for the second 10 years (2030-2039). These cost estimates are in 2020 dollars.

It is reasonable to assume that the costs will be higher in the future when projects are scheduled for completion. The estimated costs will be escalated to make sure the funding is appropriate to match the anticipated cost escalation. The financial projections include construction cost escalation of 4.0 percent per year.

1.6.1 Ten-Year Capital Improvement Funding

The 10-year projects are displayed by year over the planning period as shown in Table 9-7. The colors are intended to indicate funding sources, although projects may have multiple sources. The estimated costs in this table have been escalated from 2020 dollars to the scheduled year at 4% per year. The total estimated planning level cost for the ten years is \$51.6 million after construction cost escalation. The average annual cost is \$5.16 million.

The 10-year CIP projects have been reviewed for potential funding sources, such as developer funding, grants, capital facilities charges, borrowing, capital reserves and rates. The City plans to schedule the projects as necessary to balance the engineering need, system capacity for growth and ability to fund the CIP. Grants will always be reviewed and pursued when appropriate.

Table 9-8 summarizes the funding sources to support the planned CIP projects. Developer-funded improvements total \$14.2 million. The existing DWSRF loan proceeds total \$3.6 million, with new borrowing of \$21.8 million. Capital reserves of \$0.7 million will be used, and rates will contribute \$8.4 million over the ten years. With the conservative growth scenario of 50 new ERU per year, capital facilities charges are projected to bring in \$2.9 million.

When the new 580 zone reservoir project is finalized and capacity is confirmed, the City will know whether further transactions with McCormick Woods are necessary, and in which direction. These are not included in this scenario.

Table 9-9 estimates the annual debt payments for the "Borrow for CIP" funding source. The model assumed standard DWRF loans with a 1.0% loan origination fee, 20-year repayment term and interest as shown, 2.0% for the 2022 loan and 2.5% for later loans.

City of Port Orchard
2020 Water System Plan

Colors attempt to indicate funding sources

Table 9-7 Water 10-Year Capital Improvement Program (CIP), 2020-2029											
2020 Cost Estimates have been Escalated to Year Shown at 4% per year											
CIP No.	Project	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
1	580 Zone Storage		2,184,000								
2	CIP No. 2 Combined	853,698	2,978,277								
2A	Well 13 Development & Treatment										
2B	Maple Ave Improvements & W Main Replacement										
2C	390 to 260 Rezone PRVs (4 each)										
3	Well 11 Development, Treatment, and Booste	300,000	700,000	7,250,000							
4	580 Zone Transmission & Distribution Main		1,284,000								
5	390 Zone Storage							3,796,000			
6	Telemetry Upgrades									137,000	
7	390 to 580 Zone Booster Station (Old Clifton)				591,000						
8	580 to 390 Zone Transmission Main (580/390 PRV to Old CliftonTank)					1,550,000					
9	Well 12 Development, Treatment, and Booster Pump Station					8,189,000					
10	Melcher Pump Station Upgrade			541,000							
11	PRV Improvements per Hydraulic Model				394,000						
12*	390 to 580 Zone Booster Station (Glenwood)		546,000								
13*	390 to 580 Zone Transmission Main (to Glenwood PS)		1,430,000				1,916,000				
14	580 to 660 Zone Booster Station								658,000		
15	660 Zone Storage								2,895,000		
16	Well 7 Treatment/Pump Station Upgrades						912,000				
17	Main Replacements per Hydraulic Model			541,000	562,000	585,000	608,000				
18*	Feasibility Study for Consolidation and Fluoridation		30,000								
19	Risk and Resiliency Study for AWIA		52,000								
20	Annual Main Replacement Program (Upsize 1"-4" main to	250,000	260,000	270,000	281,000	292,000	304,000	316,000	329,000	342,000	
21	Annual Valve Replacement Program	75,000	78,000	81,000	84,000	88,000	91,000	95,000	99,000	103,000	
22	Annual Hydrant Replacement Program	50,000	52,000	54,000	56,000	58,000	61,000	63,000	66,000	68,000	
23	Foster Pilot Mitigation Projects	500,000	540,000								
24*	390 Zone Low Pressure Booster Pumps for Existing Water Services						730,000				
25	Well 10 Rehab, Activation, and Water Main										4,400,880
	Total Ten-Year Water Improvements	\$1,653,698	\$10,119,277	\$8,722,000	\$1,952,000	\$10,745,000	\$4,604,000	\$4,252,000	\$4,027,000	\$631,000	\$4,913,880
	*Project Funding notes:										
	Project #3 cost adjusted per previously unknown well rehab - \$300k for 30% design, \$700k to get to 100% design, not enough info to adjust constr. cost at this time.										
	Project #12 is developer funded, model est. \$546k										
	Project #13 is split between 2021 & 2025; for 2021 amount, approx. \$200k to be rate contribution for upsizing from 8" (developer requirement) to 12" (city request).										
	Project #18, feasibility study has \$30k grant										
	Project #24 is developer funded, model est. \$600k, possible that an earlier project will solve this issue										

Table 9-8 Water 10-Year CIP Funding Sources, 2020-2029										
CIP Funding Sources	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
New ERU's	50	50	50	50	50	50	50	50	50	50
Capital Facilities Charges	297,250	297,250	297,250	297,250	297,250	297,250	297,250	297,250	297,250	297,250
Grants		30,000								
Developer Funded	0	5,244,000			8,189,000	730,000				
Existing DWSRF Loan	853,698	2,752,602								
Borrow for CIP			7,250,000		1,550,000	1,916,000	3,796,000	2,895,000		4,400,880
Reserves	64,326	625,675		483,500			-297,250	360,750	-263,000	-297,250
CIP Funded by Rates	438,424	1,169,750	1,174,750	1,171,250	708,750	1,660,750	456,000	474,000	596,750	513,000
Total 10-Year CIP Funding Sources	\$1,653,698	\$10,119,277	\$8,722,000	\$1,952,000	\$10,745,000	\$4,604,000	\$4,252,000	\$4,027,000	\$631,000	\$4,913,880

Colors attempt to indicate funding sources

Table 9-9 Estimated New Debt Annual Payments for CIP										
New Debt for CIP	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
DWSRF 2022 (20 yr, 2.0%)			448,000	448,000	448,000	448,000	448,000	448,000	448,000	448,000
DWSRF 2024 (20 yr, 2.5%)					100,000	100,000	100,000	100,000	100,000	100,000
DWSRF 2025 (20 yr, 2.5%)						124,000	124,000	124,000	124,000	124,000
DWSRF 2026 (20 yr, 2.5%)							246,000	246,000	246,000	246,000
DWSRF 2027 (20 yr, 2.5%)								188,000	188,000	188,000
DWSRF 2029 (20 yr, 2.5%)									begin 2030	285,000
Total New Debt for CIP	\$0	\$0	\$448,000	\$448,000	\$548,000	\$672,000	\$918,000	\$1,106,000	\$1,106,000	\$1,391,000

Estimated new debt payments - begin year after borrowing, DWSRF includes 1% loan fee

1.7 Ten Year Financial Plan

The 10-year financial plan was developed and discussed with Public Works, Finance and Planning to support the recommend capital improvements. The base year is the adopted 2020 budget.

1.7.1 Key Assumptions

Several key assumptions were used in making the 10-year projections and are shown in Table 9-10. These include the number of new connection equivalent residential units (ERU's) per year, cost escalation factors, the residential water capital facilities charge and the bimonthly single family base rate.

Table 9-10 Key Financial Assumptions	
Assumptions:	Amount
New Customer ERU's per year	50
General Cost Escalation	3.0%
Construction Cost Escalation	4.0%
Water Capital Facilities Charge	\$5,945
Single Family Base Rate (2-Months)	\$81.50

The financial outlook assumes the bimonthly water rate is held constant at \$81.50 including 5,000 gallons for a single family residence to calculate the impact on existing water rates to carry out the plan.

1.7.2 Ten-Year Outlook - Summary Growth Scenarios

The 10-year rate outlook for the water utility was developed with a conservative growth scenario of 50 new ERU's per year. After reviewing the development activity in the planning and permitting pipeline, several other growth scenarios were developed and discussed with Public Works, Finance and Community Development. A second moderate growth scenario of 100 new ERU's per year was determined achievable to provide a reasonable range for financial planning. Of course, the actual level of growth will not be known ahead of time.

Summary 10-Year Outlook – Conservative Growth @ 50 ERU per year

For the conservative growth scenario of 50 new ERU per year, the 10-year rate outlook for Water Fund 411 was developed. In order to fund the CIP with a combination of rates, water capital reserves, capital facilities charges, development activity and borrowing, the current residential bimonthly base rate of \$81.50 would need to increase \$29.00 in 2020 to \$110.00 by 2029. This represents an increase of 35% over the planning period, or an average of 3.9% per year. Table 9-11 shows the cumulative impact on rates needed to balance the Annual Increase/(Use) of Reserves. The cumulative impact on rates refers to the percentage increase over the current \$81.50 base rate for 2-months needed to fund the CIP program and bring the top line to zero. Caution, this is not the increase needed each year. The percentage rate impact is assumed to be applied to all customer classes and water rates.

Table 9-11 Summary 10-Year Outlook - Conservative Growth @ 50 ERU per year										
WATER UTILITY 10-YEAR OUTLOOK	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Annual Increase/(Use) of Reserves	523,138	(557,650)	(746,850)	(940,765)	(519,780)	(1,615,195)	(580,260)	(892,175)	(1,253,140)	(1,222,005)
Percentage Impact on Rates - cumulative		17%	23%	28%	15%	48%	17%	26%	36%	35%
2-Month Base Rate - if Balanced	\$81.50	\$95.35	\$99.91	\$104.52	\$94.13	\$120.47	\$95.40	\$102.72	\$111.10	\$110.17

This conservative growth scenario with 50 new ERU per year requires a rate adjustment of 35% over the 10-year period, an average of 3.9% per year.

Summary 10-Year Outlook – Moderate Growth @ 100 ERU per year

For the moderate growth scenario of 100 new ERU per year, the 10-year rate outlook for Water Fund 411 is summarized in Table 9-12. In order to fund the 10-year CIP with a combination of rates, water capital reserves, capital facilities charges, development activity and borrowing, the current residential bimonthly base rate of \$81.50 would need to increase \$22.00 in 2020 to \$105.00 by 2029. This represents an increase of 27% over the planning period, or an average of 3.0% per year.

Table 9-12 Summary 10-Year Outlook - Moderate Growth @ 100 ERU per year										
WATER UTILITY 10-YEAR OUTLOOK	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Annual Increase/(Use) of Reserves	523,138	(236,400)	(400,600)	(569,515)	(123,530)	(1,193,945)	(431,260)	(718,175)	(1,054,140)	(998,005)
Percentage Impact on Rates - cumulative		7%	12%	17%	4%	34%	12%	20%	29%	27%
2-Month Base Rate - if Balanced	\$81.50	\$87.33	\$91.23	\$95.14	\$84.42	\$109.29	\$91.40	\$97.76	\$105.04	\$103.49

This moderate growth scenario with 100 new ERU per year requires a rate adjustment of 27% over the 10-year period, an average of 3.0% per year.

A reminder that annual averages are helpful for comparing scenarios, but the model indicates that a larger increase is necessary in 2021 as debt payments on the DWSRF loan for Well 13 begin.

The City will manage the budget and improvements to fit as necessary and will consider rate increases as needed to complete the recommended improvements to provide safe, reliable water service to ratepayers for many years to come. The City plans to review rates following submittal of this plan and may consider another multi-year rate schedule to provide consistency to ratepayers as the current multi-year ordinance schedule runs out in 2020.

1.7.3 Water Fund 411 Revenue

The water revenue is based on the 2020 budget, including a conservative estimate for water sales and growth. The current water rates are held constant to allow the model to calculate the impact on existing rates in order to have a balanced program (yellow line equals zero). It is assumed that 50 new residential customers using 7,000 gallons per bimonthly period are added each year to the 2020 budgeted rate revenue. Other revenue is held flat throughout the 10-year outlook. Additional new customers will positively impact the water bottom line and be available to fund additional projects, or to borrow less.

1.7.4 Water Fund 411 Expenses

The operating expenses reflect 2020 budget and are generally projected to increase by cost escalation as shown in Table 9-10. With the completion of the 580-Zone storage reservoir project, the City will no longer need to purchase water from Bremerton. This shows up as a reduction in the 2020 budget amount for Supplies – Source. In addition to operations, the expenditures include estimated new loan payments for the existing DWSRF loan beginning 2021 and 3 annual contributions to the water rates stabilization fund 412.

After deducting the estimated water expense before CIP from the water revenue, the net income available for capital is shown. The rate portion of the CIP and estimated new CIP debt are included as expenses in 411.

The bottom yellow line shows the Annual (Use) of Water Reserves in every year between 2020 and 2029. For one year, this can be addressed by applying reserves. However, with multiple on-going years, the model estimates the impact on rates to bring the yellow line (Increase/ (Use) of Reserves) to zero. The City has the choice to address annual deficits by reducing expenses, increasing rates and fees, and/or new customer growth exceeding expectations.

1.7.5 Detailed 10-Year Outlook

Table 9-13 provides the detailed 10-year outlook for the conservative growth scenario of 50 new ERU's per year. Additional connections would provide additional funding for capital improvements, and additional ratepayers to share in the operating costs and debt payments.

WATER UTILITY 10-YEAR OUTLOOK	Budget 2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Comments
Operating Revenue											
Water Sales - Residential	2,383,300	2,408,000	2,432,000	2,456,000	2,480,000	2,504,000	2,528,000	2,552,000	2,576,000	2,600,000	add new cust
Water Sales - Commercial	740,700	741,000	741,000	741,000	741,000	741,000	741,000	741,000	741,000	741,000	flat
Water Sales - Irrigation	132,800	133,000	133,000	133,000	133,000	133,000	133,000	133,000	133,000	133,000	flat
Construction Water Sales	8,800	8,800	8,800	8,800	8,800	8,800	8,800	8,800	8,800	8,800	flat
Other Fees - Connects	12,900	12,900	12,900	12,900	12,900	12,900	12,900	12,900	12,900	12,900	flat
Water Inspection Fees	6,700	6,700	6,700	6,700	6,700	6,700	6,700	6,700	6,700	6,700	flat
Plan Review Fees	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	flat
Other Planning & Development Svcs	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	flat
Interest	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	flat
Rents & Leases	56,500	56,500	56,500	56,500	56,500	56,500	56,500	56,500	56,500	56,500	flat
Misc (surplus,misc,refund,ins recov)	-	-	-	-	-	-	-	-	-	-	flat
Subtotal W Revenue	3,353,200	3,378,400	3,402,400	3,426,400	3,450,400	3,474,400	3,498,400	3,522,400	3,546,400	3,570,400	
Expenses											
Salaries & Benefits -Water Admin	962,800	991,700	1,021,500	1,052,100	1,083,700	1,116,200	1,149,700	1,184,200	1,219,700	1,256,300	by gen'l escal.
Supplies - Administration	5,200	5,400	5,600	5,800	6,000	6,200	6,400	6,600	6,800	7,000	by gen'l escal.
Services - Administration	293,045	301,800	310,900	320,200	329,800	339,700	349,900	360,400	371,200	382,300	by gen'l escal.
Intergovernmental Services & P	282,800	291,300	300,000	309,000	318,300	327,800	337,600	347,700	358,100	368,800	by gen'l escal.
Supplies - Distribution	57,050	58,800	60,600	62,400	64,300	66,200	68,200	70,200	72,300	74,500	by gen'l escal.
Services - Distribution	30,950	31,900	32,900	33,900	34,900	35,900	37,000	38,100	39,200	40,400	by gen'l escal.
Supplies - Source (reduce Brem W purch	285,000	285,000	347,000	357,400	368,100	379,100	390,500	402,200	414,300	426,700	by gen'l escal.
Services - Source	116,000	119,500	123,100	126,800	130,600	134,500	138,500	142,700	147,000	151,400	by gen'l escal.
Supplies - Storage	300	300	300	300	300	300	300	300	300	300	by gen'l escal.
Services - Storage	6,000	6,200	6,400	6,600	6,800	7,000	7,200	7,400	7,600	7,800	by gen'l escal.
Transfer - 500 ER&R O&M/Replacement	62,493	64,400	66,300	68,300	70,300	72,400	74,600	76,800	79,100	81,500	by gen'l escal.
Subtotal Operations	2,101,638	2,156,300	2,274,600	2,342,800	2,413,100	2,485,300	2,559,900	2,636,600	2,715,600	2,797,000	
Existing DWSRF Loan - Well 13	-	320,000	409,900	405,115	400,330	395,545	390,760	385,975	381,190	376,405	estimate, int. only 2021
Transfer to Water Stabilization 412	290,000	290,000	290,000	-	-	-	-	-	-	-	20-22 per reserve polic
Subtotal W Expense Before CIP	2,391,638	2,766,300	2,974,500	2,747,915	2,813,430	2,880,845	2,950,660	3,022,575	3,096,790	3,173,405	
Net Income Available For Capital	961,562	612,100	427,900	678,485	636,970	593,555	547,740	499,825	449,610	396,995	
Water CIP Funded by Rates	438,424	1,169,750	1,174,750	1,171,250	708,750	1,660,750	456,000	474,000	596,750	513,000	see CIP20
New Debt for CIP	-	-	-	448,000	448,000	548,000	672,000	918,000	1,106,000	1,106,000	see CIP20
Subtotal CIP Program	438,424	1,169,750	1,174,750	1,619,250	1,156,750	2,208,750	1,128,000	1,392,000	1,702,750	1,619,000	
Annual Increase/(Use) of Reserves	523,138	(557,650)	(746,850)	(940,765)	(519,780)	(1,615,195)	(580,260)	(892,175)	(1,253,140)	(1,222,005)	
Percentage Impact on W Rates - cumulative		17%	23%	28%	15%	48%	17%	26%	36%	35%	over existing rates
2-Month Single Family Base Rate - if Ba	\$81.50	\$95.35	\$99.91	\$104.52	\$94.13	\$120.47	\$95.40	\$102.72	\$111.10	\$110.17	
Average Residence @ 7,000 gallons-if Ba	\$88.80	\$103.89	\$108.86	\$113.89	\$102.56	\$131.26	\$103.95	\$111.92	\$121.05	\$120.04	

1.7.6 Water Fund 411 Balance and Cash Flow Reserve

The 2020 beginning balance is based on the utility's actual year end 2019 balance. The model transfers \$1 million for CIP funding to water capital reserve 413, along with \$200,000 that has been collected from rates for upsizing contributions. A second transfer is assumed to fund the required debt reserve for the DWSRF loan of \$410,000 for one year's principal and interest payment. After the ending balance is estimated, a target minimum balance is tested. The target minimum cash flow reserve of 90 days of operating expense is set aside within the fund balance. The remainder of the funds are available to water.

WATER OPERATING FUND 411	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Comments
Beginning Fund Balance	2,206,979	1,120,217	1,120,217	1,120,217	1,120,217	1,120,217	1,120,217	1,120,217	1,120,217	1,120,217	2019 actual year end
Transfer to Capital Reserve 413 for CIP	(1,200,000)	includes \$200k collected from rates for upsizing contributions									
Transfer to Debt 414 for Debt Reserve	(409,900)										
Annual Incr/(Use) of Reserves	523,138	If rates are adjusted to balance the yellow line, then the reserves should remain.									
Ending Fund Balance	1,120,217	1,120,217	1,120,217	1,120,217	1,120,217	1,120,217	1,120,217	1,120,217	1,120,217	1,120,217	
Target Minimum Balance											
Cash Flow Reserve - 3 months operation	525,000	539,000	569,000	586,000	603,000	621,000	640,000	659,000	679,000	699,000	90 days operating expense
Available Balance	595,217	581,217	551,217	534,217	517,217	499,217	480,217	461,217	441,217	421,217	for future investment

1.7.7 Water Capital Reserve 413 Outlook

The water capital reserve revenue is based on the actual 2019 ending balance. The model assumes this fund collects revenue for future system improvements for several sources, including the one-time transfer in from 411 described above, water capital facilities charges for conservative growth at 50 ERU's per year, a grant for the feasibility study, developer funded projects, existing DWSRF loan proceeds, new borrowing for CIP and an annual transfer from Water Fund 411 for the rate-funded portion to complete the CIP. The projects funded are then shown in the Water CIP Program line as the funds are expended. An existing note to McCormick Woods has an annual payment of \$50,000 and is transferred to the debt fund 414 to make payment.

Table 9-15 Water Capital Reserve Fund 413 Balance and Cash Flow Reserve											
WATER CAPITAL RESERVE FUND 413	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Comments
Resources											
Beginning Fund Balance	2,364,572	3,450,246	2,774,571	2,724,571	2,191,071	2,141,071	2,091,071	2,338,321	1,927,571	2,140,571	2019 actual year end
Transfer from 411 for CIP (one time)	1,200,000										
Capital Facilities Charges	297,250	297,250	297,250	297,250	297,250	297,250	297,250	297,250	297,250	297,250	
Grants	0	30,000	0	0	0	0	0	0	0	0	
Developer Funded	0	5,244,000	0	0	8,189,000	730,000	0	0	0	0	
Existing DWSRF Loan Proceeds	853,698	2,752,602	0	0	0	0	0	0	0	0	
Borrow for CIP	0	0	7,250,000	0	1,550,000	1,916,000	3,796,000	2,895,000	0	4,400,880	
Transfer In (411) - CIP Funded by Rates	438,424	1,169,750	1,174,750	1,171,250	708,750	1,660,750	456,000	474,000	596,750	513,000	
Subtotal Capital Resources	5,153,944	12,943,848	11,496,571	4,193,071	12,936,071	6,745,071	6,640,321	6,004,571	2,821,571	7,351,701	
Expense											
W CIP Program	1,653,698	10,119,277	8,722,000	1,952,000	10,745,000	4,604,000	4,252,000	4,027,000	631,000	4,913,880	
Transfer Out (414) - McCW Note	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	
Subtotal Capital Expense	1,703,698	10,169,277	8,772,000	2,002,000	10,795,000	4,654,000	4,302,000	4,077,000	681,000	4,963,880	
Estimated Ending Capital Balance	3,450,246	2,774,571	2,724,571	2,191,071	2,141,071	2,091,071	2,338,321	1,927,571	2,140,571	2,387,821	
Target Minimum Balance											
Emergency Reserve	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	
Available for Future Improvements	2,950,246	2,274,571	2,224,571	1,691,071	1,641,071	1,591,071	1,838,321	1,427,571	1,640,571	1,887,821	

After accounting for the revenue sources and spending on the CIP, the ending balance is estimated. The target minimum balance includes an emergency reserve of \$500,000. The remainder is available for future improvements and system replacement.

Table 9-15 is based on the conservative growth scenario. If additional new connections are made, the City will be in a better position to fund necessary CIP.

1.8 Financial Conclusion

There are not sufficient funds available at the existing water rates to pay for the recommended 10-year capital improvements. The CIP list has been prioritized and planned for annual investment in system repair/replacement/improvement to continue to provide safe, reliable water service for future generations. The goal is to do so in an affordable manner with annual investment funded by water rates, development contributions and capital facilities charges from new connections. Of course, the City will seek grants to assist where appropriate.

The financial model estimates the impact on residential monthly water rates to complete the 10-year CIP. The model assumes that all water rates would be impacted on a similar percentage basis. The impacts are summarized as follows:

- **Conservative Growth Scenario @ 50 ERU per year** – In order to fund the 10-year CIP with a combination of rates, water capital reserves, capital facilities charges, development activity and borrowing, the current residential bimonthly base rate of \$81.50 would need to increase \$29.00 in 2020 to \$110.00 by 2029. This represents an increase of 35% over the planning period, or an average of 3.9% per year.
- **Moderate Growth Scenario @ 100 ERU per year** - In order to fund the 10-year CIP with a combination of rates, water capital reserves, capital facilities charges, development activity and borrowing, the current residential bimonthly base rate of

\$81.50 would need to increase \$22.00 in 2020 to \$105.00 by 2029. This represents an increase of 27% over the planning period, or an average of 3.0% per year.

A reminder that annual averages are helpful for comparing scenarios, but the model indicates that a larger increase is necessary in 2021 as debt payments on the DWSRF loan for Well 13 begin.

The City will manage the budget and improvements to fit as necessary and will consider rate increases as needed to complete the recommended improvements to provide safe, reliable water service to ratepayers for many years to come. The City plans to review rates and charges following submittal of this draft plan to be sure they are recovering the necessary costs in a fair and equitable manner. They may consider another multi-year rate schedule to provide consistency to ratepayers as the current multi-year ordinance schedule runs out in 2020.

DRAFT

WATER OPERATING FUND 411	2017	2018	2019	Budget 2020
Operating Revenue				
Water Sales - Residential	1,801,146	2,043,348	2,238,135	2,263,200
Water Sales - Commercial	552,629	607,541	703,009	740,700
Water Sales - Irrigation	99,862	117,441	133,239	132,800
Construction Water Sales	4,533	12,975	18,075	8,800
Other Fees - Connects	21,450	33,196	22,649	12,900
Water Inspection Fees	6,556	4,749	5,060	6,700
Plan Review Fees	1,574	22,882	202	1,700
Other Planning & Development Service	1,050	2,250	1,800	1,200
Penalties	17,001	20,297	39,088	-
Investment Interest	12,351	32,793	23,256	8,600
Rents & Leases	31,464	36,983	34,311	56,500
Miscellaneous	242,063	25,372	8,473	-
Intergovernmental Loan Proceeds	-	14,342	-	-
Transfers in for CIP	-	719,705	-	-
Subtotal W Revenue	2,795,679	3,693,614	3,267,327	3,353,200

WATER OPERATING FUND 411	2017	2018	2019	Budget 2020
Expenses				
Salaries-Water Admin	516,244	558,587	598,675	630,900
Benefits-Water Admin	217,246	273,056	274,805	331,900
Supplies - Administration	14,813	35,192	12,763	5,200
Services - Administration	222,888	367,509	639,185	293,045
Intergovernmental Services & P	242,627	291,279	290,765	282,800
Supplies - Distribution	98,247	139,638	68,086	92,000
Services - Distribution	219,511	191,182	20,116	30,950
Supplies - Source	496,589	515,293	347,465	441,500
Services - Source	7,167	11,148	113,625	118,000
Supplies - Storage	2,353	4,378	2,651	300
Services - Storage	10,495	11,113	11	6,000
Refundable Deposit	-	-	9,600	-
Debt Payments LT, notes	16,615	84,202	-	-
Salaries/Benefits - Capital Outlay	-	9,583	-	-
Other Improvements	-	1,713,511	-	-
Machinery & Equipment	-	4,786	-	-
Operating Transfers - Out (412 W Stab)	-	-	100,000	290,000
Operating Transfers - Out (413 W Capital)	-	-	100,000	237,500
Operating Transfers - Out (414 W Debt)	-	-	30,128	-
Transfer - 500 ER&R O&M	-	-	24,256	35,300
Transfer - 500 ER&R Replacement	-	-	142,430	27,193
Subtotal W Expenses	2,065,796	4,218,918	2,773,561	2,785,638
Annual Increase/(Use) of Reserves	729,884	(525,043)	493,767	567,562

Water Operating Fund 411	2020	Comments
Beginning Fund Balance	2,206,979	2019 actual year end
Transfer to Capital Reserve 413 for CIP	(1,200,000)	one time
Transfer to Debt 414 for Debt Reserve	(119,000)	set up reserve for DWS
Annual Increase/(Use) of Reserves	529,136	
Estimated Ending Fund Balance	1,211,117	
Target Minimum Balance		
Cash Flow Reserve	525,000	90 days operating expense
Available Balance	686,117	for future investment

Water Capital Fund 413	2020	Comments
Beginning Fund Balance	2,364,872	2019 actual year end
Transfer from Water 411 for CIP	1,200,000	one time
Capital Facilities Charges	297,500	
Existing DWSRF Loan Proceeds	853,698	
Transfer from 411 - CIP Funded by Rates	450,924	
CIP Program Expense	(1,653,698)	
Estimated Ending Fund Balance	3,462,746	
Target Minimum Balance		
Emergency Reserve	500,000	maintain for emergency
Available Balance	2,962,746	for capital improvements

Water Rates - Bimonthly	Base + Water	2020
3/4" Meter, 0-1,000 gal	Base	\$53.50
3/4" Meter, 3,001-5,000 gal	Base	\$81.50
Water Usage in excess of base allowance		
5,001-10,000 gal	per 1000g	\$3.65
10,001-20,000 gal	per 1000g	\$3.85
20,001-30,000 gal	per 1000g	\$4.05
30,001-50,000 gal	per 1000g	\$4.30
50,001+ gal	per 1000g	\$4.60

Water Capital Facilities Charge	Current
Residential	
Per ECU	\$5,945
Nonresidential - Based on Meter Size	
3/4"	\$5,945
1"	\$9,928
1-1/2"	\$19,797
2"	\$31,687
3"	\$59,450
4"	\$89,103
Irrigation	No CFC

Residential Water Service	Bill @ 7,000 gallons	Per Month @ 3,500 gallons
Port Orchard	\$88.80	\$44.40
Gig Harbor	\$65.20	\$32.60
Kitsap PUD	\$64.29	\$32.14
West Sound UD	\$56.32	\$28.16
Bremerton	\$53.29	\$26.64
Poulsbo	\$52.76	\$26.38
Bainbridge Island	\$35.48	\$17.74
7,000 gallons converts to 936 cubic feet of water, or 468 of per month average	\$59	\$30

Colors attempt to indicate funding sources

CIP No.	Project	2020 Cost Estimates have been Escalated to Year Shown at 4% per year										
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
1	S80 Zone Storage		2,184,000									
2	CIP No. 2 Combined	853,698	2,978,177									
2A	Well 11 Development & Treatment											
2B	Maple Ave Improvements & W Main Replacement											
2C	SR0 to 260 Resona PRVs (4 each)											
3	Well 11 Development, Treatment, and Boos	300,000	700,000	7,250,000								
4	S80 Zone Transmission & Distribution Main		1,284,000									
5	S80 Zone Storage							3,796,000				
6	Telemetry Upgrades									137,000		
7	SR0 to S80 Zone Booster Station (Old Clifton)				591,000							
8	S80 to SR0 Zone Transmission Main (SR0/SR0 PRVs to Old Clifton Tank)					1,550,000						
9	Well 12 Development, Treatment, and Booster Pump Station						8,189,000					
10	Melcher Pump Station Upgrade			543,000								
11	PRV Improvements per Hydraulic Model			394,000								
12*	SR0 to S80 Zone Booster Station (Glenwood)		546,000									
13*	SR0 to S80 Zone Transmission Main (to Glenwood PS)		1,430,000				1,916,000					
14	S80 to 660 Zone Booster Station									658,000		
15	S60 Zone Storage									2,885,000		
16	Well 7 Treatment/Pump Station Upgrades							912,000				
17	Main Replacements per Hydraulic Model			543,000	562,000	585,000	608,000					
18*	Feasibility Study for Consolidation and Reconfiguration		30,000									
19	Risk and Resiliency Study for AWWA		52,000									
20	Annual Main Replacement Program (Upsize 1"-4" main)	250,000	260,000	270,000	281,000	292,000	304,000	316,000	329,000	342,000		
21	Annual Valve Replacement Program	75,000	78,000	81,000	84,000	88,000	91,000	95,000	99,000	103,000		
22	Annual Hydrant Replacement Program	50,000	52,000	54,000	56,000	58,000	61,000	63,000	66,000	68,000		
23	Faster Pipe Migration Projects	500,000	540,000									
24*	SR0 Zone Low Pressure Booster Pumps for Existing Water Services						730,000					
25	Well 10 Rehab, Activation, and Water Main										4,400,000	
Total Ten-Year Water Improvements		#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####

*Project Funding notes:
 Project #3 cost adjusted per previously unknown well rehab. \$300k for 30% design, \$700k to get to 100% design, not enough info to adjust constr. cost at this time.
 Project #12 is developer funded, model est. \$546k
 Project #13 is split between 2021 & 2025; for 2021 amount, approx. \$200k to be rate contribution for upizing from 8" (developer requirement) to 12" (city reqest)
 Project #18, feasibility study has SR0 grant
 Project #24 is developer funded, model est. \$600k, possible that an earlier project will solve this issue

\$51,619,855

\$5,161,986

CIP Funding Sources	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
New ERU's	50	50	50	50	50	50	50	50	50	50
Capital Facilities Charges	297,250	297,250	297,250	297,250	297,250	297,250	297,250	297,250	297,250	297,250
Grants	30,000									
Developer Funded	0	5,248,000			8,189,000	730,000				
Existing DWSP Loans	853,698	2,978,177								
Reserves for CIP				7,250,000	1,500,000	1,916,000	3,796,000	2,895,000		4,400,000
Reserves	64,326	625,675		483,500			297,250	360,750	263,000	297,250
CIP Funded by Rates	438,424	1,169,750	1,174,750	1,171,250	708,750	1,660,750	456,000	474,000	596,750	513,000
Total 10 Year CIP Funding Sources	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####

Colors attempt to indicate funding sources

\$8,363,424

New Debt for CIP	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
DWSPF 2022 (20 yr, 2.0%)			448,000	448,000	448,000	448,000	448,000	448,000	448,000	448,000
DWSPF 2024 (20 yr, 2.5%)					100,000	100,000	100,000	100,000	100,000	100,000
DWSPF 2025 (20 yr, 2.5%)						124,000	124,000	124,000	124,000	124,000
DWSPF 2026 (20 yr, 2.5%)							246,000	246,000	246,000	246,000
DWSPF 2027 (20 yr, 2.5%)								188,000	188,000	188,000
DWSPF 2029 (20 yr, 2.5%)									begin 2030	285,000
Total New Debt for CIP	50	50	\$448,000	\$448,000	\$548,000	\$672,000	\$918,000	#####	#####	#####

Estimated new debt payments - begin year after borrowing, DWSPF includes 1% loan fee

Assumptions	Amount
New Customer ERUs per year	50
General Cost Escalation	3.0%
Construction Cost Escalation	4.0%
Water Capital Facilities Charge	\$5.945
Single Family Base Rate (2-Months)	\$81.50

WATER UTILITY 10-YEAR OUTLOOK	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Annual Increase(Use) of Reserves	523,138	(567,650)	(746,850)	(940,765)	(519,780)	#####	(580,260)	(692,175)	#####	#####
Percentage Impact on Rates - cumulative		17%	23%	28%	35%	48%	17%	26%	36%	35%
2-Month Base Rate - If Balanced	\$81.50	\$95.35	\$99.91	\$104.52	\$94.13	\$120.47	\$95.40	\$102.72	\$111.10	\$110.17

This conservative growth scenario with 50 New ERU per year requires a rate adjustment of 35% over the 10-year period, an average of 3.9% per year.

\$28.67

WATER UTILITY 10-YEAR OUTLOOK	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Annual Increase(Use) of Reserves	523,138	(236,400)	(400,600)	(569,515)	(123,230)	#####	(431,250)	(718,175)	#####	(986,005)
Percentage Impact on Rates - cumulative		7%	12%	17%	4%	34%	12%	20%	29%	27%
2-Month Base Rate - If Balanced	\$81.50	\$87.33	\$91.23	\$95.14	\$84.42	\$109.29	\$91.40	\$97.76	\$105.04	\$103.49

\$21.99



2020 STORMWATER PROGRAM STATUS REPORT

Zack Holt, Stormwater Program Manager





Overview

- Highlights of New Permit Requirements
- NPDES Permit Activities in 2020
- Infrastructure Status and Comprehensive Planning
- Capital Improvement Program Status
- Looking Ahead Through 2025



2019 Permit Highlights

Permit





Summary of Additional Requirements in 2019 Permit

- Evaluate/update construction site runoff ordinance/code – due Dec. 31, 2020
- Evaluate LID code sections to identify if there are deficiencies – due Dec. 31, 2020
- 2013-2018 permit cycle - WQ/Watershed Protection Assessment – due March 31, 2021
- Receiving water assessment – due March 31, 2022
- Receiving water prioritization – due June 30, 2022
- Implement a program to manage, inspect and enforce local business/private property pollution management – due Aug. 1, 2022
- 2019-2024 permit cycle - WQ/Watershed Protection Assessment – due January 1, 2023
- Stormwater Management Action Plan for Blackjack Creek – due March 31, 2023
- Map all private stormwater interties to City MS4 – due Aug. 1, 2023



2020 NPDES Permit Activity



Port
ORCHARD



Operations and Maintenance

- 952 catch basins inspected and maintained
- 28 ponds and swales inspected, 16 required maintenance
- 324 feet of ditch maintained
- Over 1100 feet of pipe jetted





Construction Inspection Program

- 554 site inspections conducted as of September 2020:
 - 101 Land Disturbing Activity related
 - 453 Utility/erosion related
- Drone program has significantly increased efficiency with inspection, reporting and enforcement
- Of 136 permitted active development projects in 2020:
 - 15 Land Disturbing Activity Permits
 - 121 Building/Utility Permits

Only 2 have had compliance issues in 2020



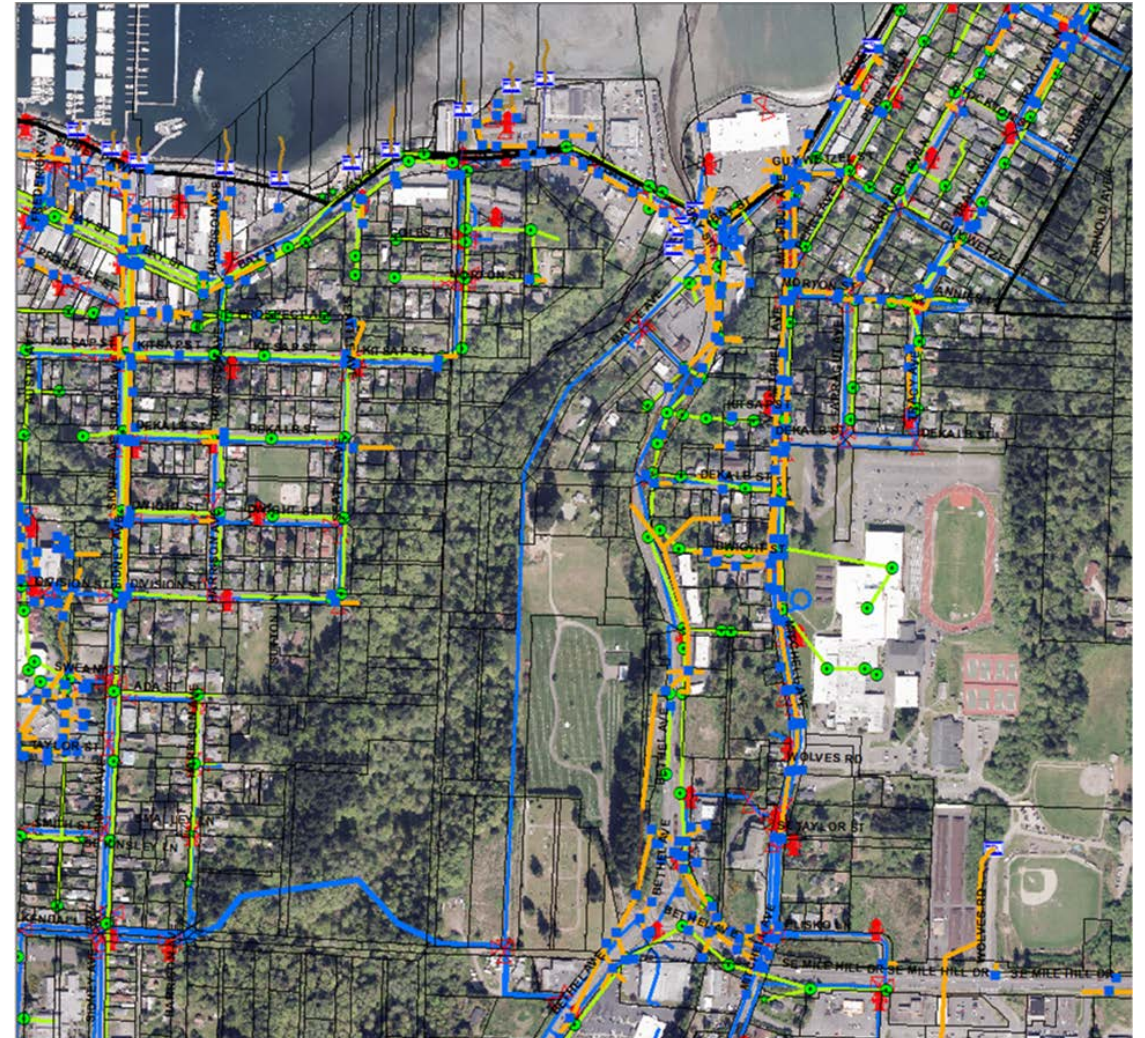
Illicit Connection Investigation/IDDE/ Spill Response Program

- Currently in compliance for 2020 with our outfall and illicit connection screening program requirements
- Continued staff training for Illicit Discharge Detection and Elimination (IDDE) program
- Quickly located and managed local and multi-jurisdictional spill response efforts
 - So far, less than 35 combined reports have been filed in 2020
- We will be upgrading to the new IC/IDDE Manual in 2021



Mapping and Features Inventory

- Continue to update our GIS database with new assets as development continues
- Update our features data (pipe size material, condition, etc.) during O&M inspections
- Use this information to schedule maintenance, repairs, replacements of assets.



Public Outreach, Education, Stormwater Policy and Reporting

- Continued informing the public of our activities and operations, allowing ample opportunity for comments and feedback
- Maintain our position with the West Sound Stormwater Outreach Group (WSSOG) for education and outreach purposes
- Continue work with regional policy groups (Stormwater Work Group, Local Jurisdiction Caucus, WSPER, etc.) to advocate for City benefit
- Continue refining and improving our Stormwater Management Program to incorporate new mandates and updates to procedure

Community Visitors Businesses News Events Govern

eed to the public, however we continue to serve the citizens of Port Orchard via telephone and email, Monday through Friday 8am to 4:30pm. Emergency services are a

Public Works Department

Public Works Department: Stormwater Management

Bay Street Pedestrian Pathway

Bethel Road and Sedgwick Road Corridor Study

Forms and Applications

Parks

Publications

Stormwater Management

Water and Conservation

Water and Sewer Rates

(509) 875-4991

(509) 875-4900 (FAX)

publicworks@cityofportor...

216 Prospect Street
Port Orchard, WA 98366

8:00am to 4:30pm
Monday through Friday

Puget Sound Starts Here

Puget Sound Starts Here Month has been temporarily moved to SEPTEMBER due to the global pandemic. You can still participate by accessing the PSSH website at: <https://pugetsoundstartsHere.org/>

Publications and Information

2019 Final Annual Report
Posted on March 21, 2020

2020 Stormwater Management Program Plan
Posted on March 28, 2020

Charity Car Wash Guide (PDF)
Posted on September 30, 2016

Declaration of Covenant Associated with Maintenance and Operations of Storm Drainage Facilities (PDF)
Posted on September 30, 2016

Declaration of Covenant Associated with Performance of



A residential street is shown under construction. A yellow skid steer loader with 'CAS' and '465' on its side is parked on the road. A worker in an orange safety vest and grey pants is walking on the sidewalk. Several orange traffic cones are placed along the road and sidewalk. A white mailbox is visible on the left. The background shows houses and trees.

Section 2 Infrastructure Status and Comprehensive Planning

State of the Utility – Appurtenances and structures

The state of our storm MS4 is... Improving.

We have clear guidelines from Ecology on what needs to be done each year for our inspection and cleaning of catch basins, pipes and structures. Ecology bases maintenance and repair needs on the following criteria:

1. Fix a Catch basin that is broken or damaged within six months of inspection
2. Fix a facility within 1 year of inspection
3. If maintenance costs exceed \$25,000 for a facility or system (capital construction), the fix must be conducted within 2 years of inspection.



State of the Utility- Surface Water Management

- Maintenance activities are often required for non-stormwater infrastructure related projects that affect surface waters and shorelines
- In 2020 the City repaired storm related failures along:
 - Bay Street pedestrian pathway
 - McCormick Village Park @ Bridge
 - Horstman Heights @ intersection of Henry Hanson Rd.

Before repair...



After repair...





State of the Utility – Dam Safety Program

- McCormick Ridge Dam was inherited by annexation in 2009 from Kitsap County
- Bremerton has developed downstream of the dam requiring us to revise our Emergency Action Plan and re-evaluate the dam for resiliency
- Our consultant team is nearly finished with this task. Work will be completed by mid December 2020.



Stormwater Comprehensive Planning

- Currently out for contract to hire consultant team to develop Stormwater and Watersheds Comprehensive Plan in 2021.
- Plan will be tailored to meet the requirements of the NPDES permit and to incorporate retrofit plans for aging infrastructure, surface water management, financial planning, new development and utility/asset management





Section 3

Capital Improvement Program

Port
ORCHARD

Whispering Firs Stormwater Park, Silverdale

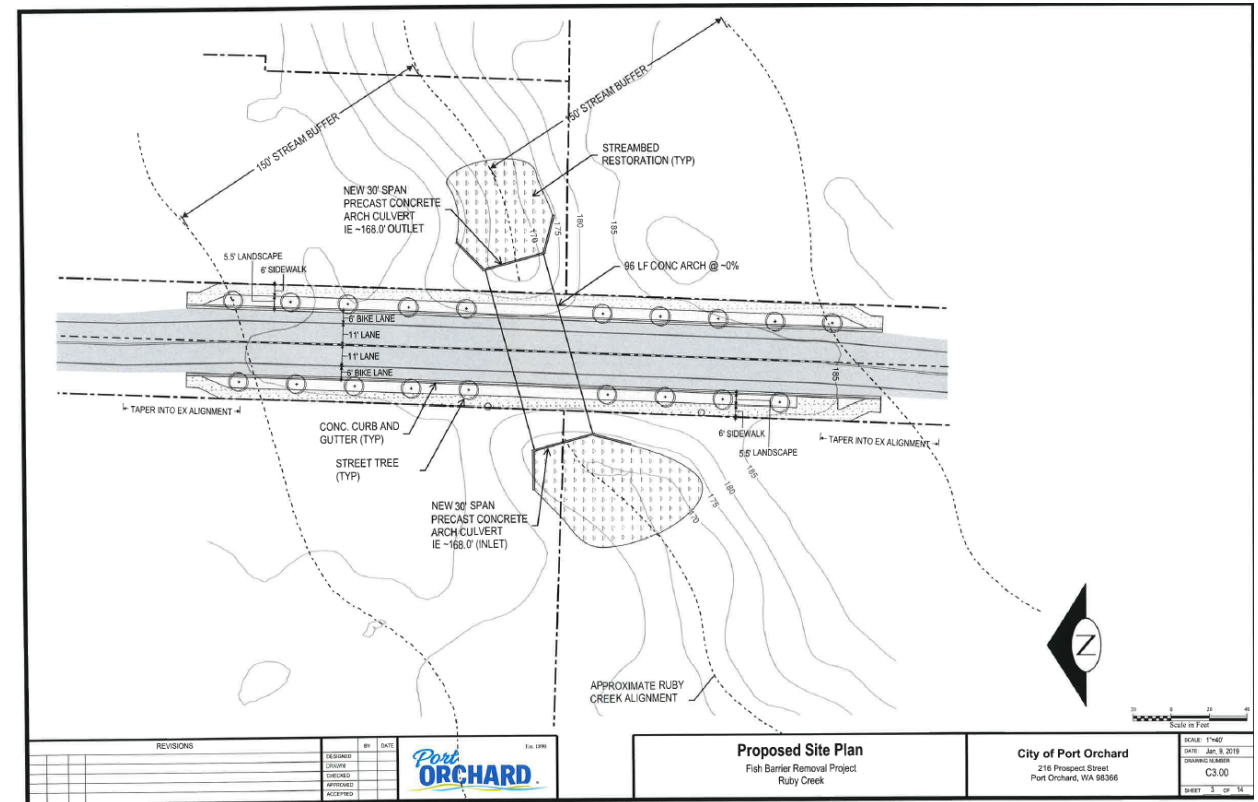
Current Capital Activities in 2019-2020 Biennium

- Tremont Stormwater Improvements
- Downtown Stormwater Basin Study
- Annapolis Creek Culvert, 30% Design



Future Capital Activities

- South Sidney Regional Stormwater Park (pending grant funding for design in 2022)
- Annapolis Creek 100% Design (pending grant funding from RCO in 2021)
- Johnson Creek Daylighting Project (in design via WSDOT & City)
- Ruby Creek Culvert Removal at Sidney Rd. Crossing (pending grant funding from RCO in 2021)
- Bethel corridor acquisitions (commencing in 2021, funded by Storm Capital dollars)





Section 4

Looking Ahead Through 2024



Port
ORCHARD

Upcoming Infrastructure Needs

- Upon assessment via Storm Comp Plan we will be prioritizing infrastructure retrofits and water quality improvements throughout the City, informing future CIP process
- Goals include integrated stormwater management systems that promote citizen interaction with treatment/management practices (walking storm treatment parks, informative/interactive systems, etc.)
- Mapping and prioritizing watersheds and streams within City jurisdiction for protection/enhancement
- Incorporating shoreline management practices into stormwater and watersheds program

Port

ORCHARD



Questions?