

## **Stormwater and the Capital Improvement Plan**

The 2017-2022 Utilities CIP devotes significant resources to improving the stormwater utility. A combination of existing and new projects will increase the capacity to meet future impervious surface projections, improve the system's ability to handle and treat stormwater runoff, and enhance efforts to protect the quality of our natural rivers and streams. Substantial capital stormwater projects include:

- The installation and upgrade of storm drainage systems along many roadways to improve the handling of stormwater runoff.
- The construction of bioretention facilities to hold and treat stormwater naturally.
- Installation of a stormwater system and street cleaning vector decant station at the water reclamation facility to comply with regulatory requirements.
- The stabilization of Snoqualmie River bank at the corner of River Street and Park Avenue, as well as Sandy Cove Park, to prevent further erosion and save CoS underground assets.
- A comprehensive update to the Stormwater Management Plan to identify system weaknesses and the improvements required to meet future CoS needs.

The cash flow model on the following page depicts the beginning fund balance, revenues, expenditures, and ending fund balance for the stormwater utility. In total, CoS will spend nearly \$11 million on capital stormwater projects and collect \$10 million in revenues over the six-year period, including the issuance of \$6 million in new debt and the collection of \$4 million in utility rate revenue. Despite the net difference between expenditures and revenues, the stormwater utility is not going to operate with a deficit over the six-year period. CoS has ample beginning fund balance (cash on hand) to cover the difference.

The debt payment schedule for the stormwater utility, on the subsequent page after the cash flow model, reveals the annual payment CoS will make to service debt if the plan is fully accomplished and no changes are made. To service the debt, CoS will use stormwater rate revenue.

The last section of 2017-2022 Utilities CIP shares the purpose, cost, status, and location of each capital stormwater project. Finding a stormwater project in this section requires locating the project identifier in the upper left-hand corner of a project form. If the project identifier is labeled with a "STM", then it is a stormwater project. Some projects however may involve more than one utility. In this case, a project labeled as "PUW" or "UTL" may contain stormwater-related capital activities.



<b>Beginning Fund Balance</b>		<b>2017</b>	<b>2018</b>		<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	
		\$ 1,631,224	\$ 1,284,828		\$ 497,419	\$ 645,961	\$ 3,899,976	\$ 2,345,973	

**Revenues**

Revenue Type	2017	2018	Total 2017-2018	2019	2020	2021	2022	Total 2017-2022
<b>STORMWATER UTILITY FEES</b>	\$ 362,476	\$ 446,588	\$ 809,064	\$ 687,569	\$ 773,022	\$ 864,856	\$ 905,788	\$ 4,040,299
<b>OTHER MISCELLANEOUS REVENUES</b>	\$ 80,018	\$ 1,149	\$ 81,167	\$ 1,181	\$ 2,073	\$ 2,094	\$ 3,748	\$ 90,263
<b>REVENUE BOND DEBT PROCEEDS</b>	\$ -	\$ 378,948	\$ 378,948	\$ -	\$ 5,417,763	\$ -	\$ -	\$ 5,796,712
<b>TOTAL REVENUES =</b>								
	\$ 442,494	\$ 826,686	\$ 1,269,180	\$ 688,750	\$ 6,192,858	\$ 866,950	\$ 909,536	\$ 9,927,274

**Expenditures**

Expenditure Type	CIP Project ID	Inception To Date Through 2016	2017	2018	Total 2017-2018	2019	2020	2021	2022	Total 2017-2022
<b>DEBT EXPENDITURES</b>										
2008 Revenue Bond	PUW08001CIP	\$ 923,114	\$ 102,918	\$ 102,608	\$ 205,525	\$ 102,888	\$ 103,048	\$ 102,088	\$ 103,048	\$ 616,595
2011 LTGO Bond	PUW11001CIP	\$ 268,502	\$ 50,170	\$ 50,650	\$ 100,820	\$ 50,050	\$ 50,410	\$ 50,690	\$ 49,890	\$ 301,860
2017 Bond Anticipation Note and 2018 Revenue Bond	PUW18001CIP	\$ -	\$ -	\$ 8,526	\$ 8,526	\$ 23,264	\$ 23,264	\$ 23,264	\$ 23,264	\$ 101,583
2020 Revenue Bond	PUW20001CIP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 416,497	\$ 416,497	\$ 416,497	\$ 1,249,490
<b>Debt Expenditures Subtotal</b>		\$ 1,191,616	\$ 153,088	\$ 161,784	\$ 314,871	\$ 176,202	\$ 593,218	\$ 592,538	\$ 592,698	\$ 2,269,528
<b>EXISTING PROJECT EXPENDITURES</b>										
Infrastructure Improvement Program	PUW16001CIP	\$ 250,000	\$ 8,914	\$ 997,034	\$ 1,005,948	\$ -	\$ 1,408,121	\$ -	\$ -	\$ 2,414,069
Railroad Place, Newton Street, and Delta Street Project	PUW16002CIP	\$ 3,559	\$ 1,000	\$ 75,232	\$ 76,232	\$ -	\$ -	\$ -	\$ -	\$ 76,232
2016/2017 Northern Street Project	PUW16003CIP	\$ 85,368	\$ 625,888	\$ -	\$ 625,888	\$ -	\$ -	\$ -	\$ -	\$ 625,888
<b>Existing Project Expenditures Subtotal</b>		\$ 338,927	\$ 635,802	\$ 1,072,266	\$ 1,708,068	\$ -	\$ 1,408,121	\$ -	\$ -	\$ 3,116,189
<b>NEW PROJECT EXPENDITURES</b>										
Street Preservation Program	PUW20002CIP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,828,415	\$ 1,752,314	\$ 3,580,729
Stormwater Management Plan Update	STM18001CIP	\$ -	\$ -	\$ 100,000	\$ 100,000	\$ 145,272	\$ -	\$ -	\$ -	\$ 245,272
Vector Decant Station	STM19001CIP	\$ -	\$ -	\$ 280,045	\$ 280,045	\$ -	\$ -	\$ -	\$ -	\$ 280,045
River Street and Park Avenue Bank Stabilization	STM19002CIP	\$ -	\$ -	\$ -	\$ -	\$ 109,367	\$ 468,752	\$ -	\$ -	\$ 578,119
Sandy Cove Park	STM19003CIP	\$ -	\$ -	\$ -	\$ -	\$ 109,367	\$ 468,752	\$ -	\$ -	\$ 578,119
<b>New Project Expenditures Subtotal</b>		\$ -	\$ -	\$ 380,045	\$ 380,045	\$ 364,006	\$ 937,504	\$ 1,828,415	\$ 1,752,314	\$ 5,262,284
<b>TOTAL EXPENDITURES =</b>			\$ 1,530,543	\$ 788,890	\$ 1,614,095	\$ 2,402,984	\$ 540,208	\$ 2,938,843	\$ 2,420,953	\$ 10,648,001

<b>Ending Fund Balance</b>		<b>2017</b>	<b>2018</b>		<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	
		\$ 1,284,828	\$ 497,419		\$ 645,961	\$ 3,899,976	\$ 2,345,973	\$ 910,496	

**2017-2022 UTILITIES CAPITAL IMPROVEMENT PLAN**

<b>STORMWATER DEBT PAYMENT SCHEDULE</b>			
<b>30-Year Perspective</b>			
<b>Year</b>	<b>Principal</b>	<b>Interest</b>	<b>Annual Payment</b>
2017	\$ 93,169	\$ 59,919	\$ 153,088
2018	\$ 96,677	\$ 65,107	\$ 161,784
2019	\$ 106,785	\$ 69,417	\$ 176,202
2020	\$ 284,267	\$ 308,952	\$ 593,218
2021	\$ 295,825	\$ 296,713	\$ 592,538
2022	\$ 308,833	\$ 283,865	\$ 592,698
2023	\$ 322,090	\$ 270,253	\$ 592,343
2024	\$ 336,622	\$ 256,034	\$ 592,656
2025	\$ 351,571	\$ 240,880	\$ 592,451
2026	\$ 367,860	\$ 225,116	\$ 592,976
2027	\$ 384,575	\$ 208,371	\$ 592,946
2028	\$ 298,767	\$ 190,819	\$ 489,586
2029	\$ 313,357	\$ 177,179	\$ 490,536
2030	\$ 326,566	\$ 163,126	\$ 489,692
2031	\$ 291,271	\$ 148,490	\$ 439,761
2032	\$ 304,378	\$ 135,383	\$ 439,761
2033	\$ 318,075	\$ 121,686	\$ 439,761
2034	\$ 332,388	\$ 107,373	\$ 439,761
2035	\$ 347,346	\$ 92,415	\$ 439,761
2036	\$ 362,976	\$ 76,785	\$ 439,761
2037	\$ 379,310	\$ 60,451	\$ 439,761
2038	\$ 396,379	\$ 43,382	\$ 439,761
2039	\$ 414,216	\$ 25,545	\$ 439,761
2040	\$ 16,359	\$ 6,905	\$ 23,264
2041	\$ 17,095	\$ 6,169	\$ 23,264
2042	\$ 17,865	\$ 5,400	\$ 23,264
2043	\$ 18,668	\$ 4,596	\$ 23,264
2044	\$ 19,508	\$ 3,756	\$ 23,264
2045	\$ 20,386	\$ 2,878	\$ 23,264
2046	\$ 21,304	\$ 1,960	\$ 23,264
2047	\$ 22,262	\$ 1,002	\$ 23,264
2048	\$ 6,212	\$ -	\$ 6,212
<b>TOTAL</b>	<b>\$ 7,192,964</b>	<b>\$ 3,659,925</b>	<b>\$ 10,852,889</b>