
Program: Utilities/Wastewater – Capital Construction

Services Delivered:

This activity provides for the planning, engineering and construction of sewer lines, pumping stations, and treatment facilities for the Wastewater Program. The Public Works Project Specialist is shown here, but actual expenditures are spread across Wastewater, Water, and Transportation projects.

This portion of the Wastewater system receives financing from System Development Charge revenues and transfers from Wastewater operations. The Wastewater system includes the treatment plant, five pump stations, and the collection system. Major repairs and improvements are financed through this capital budget.

This budget sets aside funds to provide for the major rehabilitation of the treatment plant, pump stations and replacement of deteriorated sewer piping within the collection system.

Personnel:

	BUDGET FY'17 #	BUDGET FY'18 #	BUDGET FY'19 #	REVISED FY'19 #	MANAGER RECOMMEND FY'20 #	PROJECTED FY'21 #
Public Works Project Specialist	1.00	1.00	1.00	1.00	0.00	0.00

FY'20 Anticipated Accomplishments & Corresponding Council Gopal - Strategic Plan Item:

Maintain, Operate, and Expand our Infrastructure to Meet Community Needs

Objective 3: Ensure sewer infrastructure needs are met

Action 1: Expand Wastewater Plant (PAVE). ***

- Construction of improvements will conclude in FY'20.

Action 2: Sewer Plant: 18% contribution of URA shown in debt service. **URA

Action 3: Implement manhole I&I elimination program in the Redwood area. *

- Various means of manhole rehabilitation are to be evaluated for repair effectiveness.

Action 4: Begin Webster 2 alternatives study/design/construction. *

- Evaluate alternatives to rehabilitate or replace the Webster 2 sewer lift station as resources allow.

Action 5: Develop a pilot plan for CIPP for pipe rehabilitation projects. *

- Evaluate various rehabilitated areas for repair effectiveness.

Program: Utilities/Wastewater – Capital Construction

Budget Highlights:

The project listing shows resources across the columns. Columns show the “Actual resources through FY’18”; the re-assessed resource needs of projects using current data for the “Estimated FY’19” column, guiding our “Adopted FY’20” and resources estimated “Through FY’21”. We have “Future Years” and “Total Project” columns for each project. Refer to the Capital Budget Book for more information on individual projects.

The individual project pages describe the project, the need, future and ongoing costs, and the total project cost. The tables show when and where the money is budgeted to come from, and the expenses incurred and budgeted to incur through completion.

FY’19 Activity Review:

- Structural sewer lines were replaced in the core of the City.
- Continue implementation of an Asset Management program.
- Adopt new rates and initiate an SDC study.
- Continued construction for the Phase II upgrade.
- Purchased a reserve pump for Darneille Pump Station.
- Purchased equipment for CCTV capabilities to assist with lateral locates.
- Implemented various pipeline and manhole rehabilitation projects to evaluate repair effectiveness.
- Began design of Western Avenue sewer main replacement.

Program: Utilities/Wastewater – Capital Construction

ACTIVE CAPITAL PROJECT RESOURCES

	Actual Through FY'18	Estimated FY'19	Recommend FY'20	Total Through FY'20	Future Years	Total Project
SE0000 Miscellaneous Projects - Fund 728	2,002,616	(670,000)	(115,000)	1,217,616	590,000	2,692,616
SE4964 WRP Phase 2 Expansion	28,682,121	1,957,724	0	30,639,845	0	30,639,845
SE5080 WRP Structural Repairs	383,000	0	0	383,000	300,000	683,000
SE6012 Western Avenue Sewer Replacement	690,000	25,000	1,500,000	2,215,000	400,000	2,615,000
SE6112 Sewer Rate Study SE & RS	70,000	0	0	70,000	0	70,000
SE6198 Collection System Maint/Repair	650,000	275,000	75,000	1,000,000	225,000	1,225,000
SE6199 Pump-Lift Station Equip. Improvement	205,000	50,000	50,000	305,000	40,000	345,000
SE6200 Spaulding Indust. Park WW Infrastructure	100,000	0	0	100,000	0	100,000
SE6237 General Engineering Services	100,000	20,000	20,000	140,000	80,000	220,000
SE6238 Effluent Mixing Zone Dye Tracer Study	50,000	0	0	50,000	0	50,000
SE6239 WRP Equipment Improvement	180,000	10,000	20,000	210,000	200,000	410,000
SE6334 Public Works Asset Management	200,000	130,000	25,000	355,000	0	355,000
SE6335 Webster Pump Station No. 2 Rehab	25,000	25,000	950,000	1,000,000	0	1,000,000
NEW PROJECTS						
SE6374 Redwood Area Pump Station & River Crossing Eval	0	0	100,000	0	0	0
SE6375 Collection System Maint./Repair	<u>0</u>	<u>0</u>	<u>200,000</u>	<u>0</u>	<u>1,600,000</u>	<u>1,600,000</u>
Total Projects	<u>33,337,737</u>	<u>1,822,724</u>	<u>2,825,000</u>	<u>37,685,461</u>	<u>3,435,000</u>	<u>42,005,461</u>
Miscellaneous Wastewater Funds						
Miscellaneous Projects - SDC Fund 722	904,537	(247,300)	97,000	754,237	3,133,292	3,887,529
Miscellaneous Projects - AFD Fund 725	<u>92,110</u>	<u>0</u>	<u>10,000</u>	<u>102,110</u>	<u>10,000</u>	<u>112,110</u>
Total Miscellaneous Funds	<u>996,647</u>	<u>(247,300)</u>	<u>107,000</u>	<u>856,347</u>	<u>3,143,292</u>	<u>3,999,639</u>
<u>CLOSED OR CANCELLED CAPITAL PROJECT RESOURCES</u>						
SE6156 Sewer Mains Related to Overlays	<u>260,000</u>	<u>(126,174)</u>	<u>0</u>	<u>133,826</u>	<u>1,765,000</u>	<u>1,898,826</u>
Total Closed Projects	<u>260,000</u>	<u>(126,174)</u>	<u>0</u>	<u>133,826</u>	<u>1,765,000</u>	<u>1,898,826</u>
Grand Total - Projects	<u>34,594,384</u>	<u>1,449,250</u>	<u>2,932,000</u>	<u>38,675,634</u>	<u>8,343,292</u>	<u>47,903,926</u>

Program: Utilities/Wastewater – Capital Construction

ACTIVE CAPITAL PROJECT SUMMARIES FOR FY'20

		Recommend FY'20 Beginning Fund Balance	Recommend FY'20 Revenue	Recommend FY'20 Capital Outlay	Recommend FY'20 Transfers Out	Recommend FY'20 Appropriated Fund Balance
SE0000	Miscellaneous Projects - General Fund 728	382,943	(115,000)	0	0	267,943
SE4964	WRP Phase 2 Expansion	2,855,541	0	2,855,541	0	0
SE5080	WRP Structural Repairs	238,692	0	238,692	0	0
SE6012	Western Avenue Sewer Replacement	523,200	1,500,000	2,023,200	0	0
SE6112	Sewer Rate Study SE & RS	1,500	0	1,500	0	0
SE6156	Sewer Mains Related to Overlays	0	0	0	0	0
SE6198	Collection System Maintenance-Repair	28,305	75,000	103,305	0	0
SE6199	Pump-Lift Station Equipment Improvement	12,934	50,000	62,934	0	0
SE6200	Spaulding Indust. Park WW Infrastructure	95,000	0	95,000	0	0
SE6237	General Engineering Services	63,349	20,000	83,349	0	0
SE6238	Effluent Mixing Zone Dye Tracer Study	45,000	0	45,000	0	0
SE6239	WRP Equipment Improvement	125,564	20,000	145,564	0	0
SE6334	Public Works Asset Management	22,036	25,000	47,036	0	0
SE6335	Webster Pump Station No. 2 Rehab	25,000	950,000	975,000	0	0
NEW PROJECTS						
SE6374	Redwood Area Pump Station & River Crossing Eval	0	100,000	100,000	0	0
SE6375	Collection System Maintenance-Repair	<u>0</u>	<u>200,000</u>	<u>200,000</u>	<u>0</u>	<u>0</u>
	Total Projects	<u>4,419,064</u>	<u>2,825,000</u>	<u>6,976,121</u>	<u>0</u>	<u>267,943</u>
MISCELLANEOUS WASTEWATER FUNDS						
	Miscellaneous Projects - SDC Fund 722	657,237	97,000	0	0	754,237
	Miscellaneous Projects - AFD Fund 725	<u>11,169</u>	<u>10,000</u>	<u>0</u>	<u>0</u>	<u>21,169</u>
	Total Miscellaneous Funds	<u>668,406</u>	<u>107,000</u>	<u>0</u>	<u>0</u>	<u>775,406</u>
	Grand Total - All Projects	<u>5,087,470</u>	<u>2,932,000</u>	<u>6,976,121</u>	<u>0</u>	<u>1,043,349</u>

Program: Utilities/Wastewater – Capital Construction

Financial Summary

	ACTUAL FY'17 \$	ACTUAL FY'18 \$	BUDGET FY'19 \$	REVISED FY'19 \$	MANAGER RECOMMEND FY'20 \$	PROJECTED FY'21 \$
Beginning Fund Balance	<u>6,721,889</u>	<u>7,054,125</u>	<u>12,076,335</u>	<u>12,076,335</u>	<u>5,087,470</u>	<u>1,043,349</u>
Resources						
Development Charges	573,287	509,554	448,900	448,900	245,000	245,000
Investment Interest	81,260	194,407	3,800	3,800	2,000	2,000
Advance Finance Interest	148	90	0	0	0	0
SDC Loans	4,400	-5,209	0	0	0	0
General Fund	220,000	350,000	0	0	0	0
Gas Tax	0	0	40,000	40,000	0	0
Storm Water	0	0	0	0	25,000	0
Sewer Fund	3,028,300	2,400,000	780,000	780,000	2,650,000	1,500,000
Water Fund	0	100,000	45,000	45,000	0	0
Revenue Other Agencies	0	0	132,724	132,724	0	0
Misc. Rev/Loan Proceeds	0	18,728,961	0	0	0	0
Advance Financing	<u>1,828</u>	<u>5,332</u>	<u>5,000</u>	<u>5,000</u>	<u>10,000</u>	<u>10,000</u>
Total Current Revenues	<u>3,909,223</u>	<u>22,283,134</u>	<u>1,455,424</u>	<u>1,455,424</u>	<u>2,932,000</u>	<u>1,757,000</u>
Total Resources	<u>10,631,112</u>	<u>29,337,259</u>	<u>13,531,759</u>	<u>13,531,759</u>	<u>8,019,470</u>	<u>2,800,349</u>
Requirements						
Capital Outlay	<u>3,576,987</u>	<u>12,720,567</u>	<u>12,587,480</u>	<u>12,587,480</u>	<u>6,976,121</u>	<u>1,505,000</u>
Subtotal Expenditures	<u>3,576,987</u>	<u>12,720,567</u>	<u>12,587,480</u>	<u>12,587,480</u>	<u>6,976,121</u>	<u>1,505,000</u>
Appropriated Fund Balance	<u>7,054,125</u>	<u>16,616,692</u>	<u>944,279</u>	<u>944,279</u>	<u>1,043,349</u>	<u>1,295,349</u>
Total Requirements	<u>10,631,112</u>	<u>29,337,259</u>	<u>13,531,759</u>	<u>13,531,759</u>	<u>8,019,470</u>	<u>2,800,349</u>

Program: Utilities/Wastewater – Capital Construction

Project	SE0000	Fund 728 Sewer Capital Projects – General
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Project Description

This project description is used by our accounting function to account for all funds located in the Wastewater Capital Projects Funds that are not specifically appropriated to a project. All funds from System Development Charges and all surplus from wastewater operations are deposited in the capital projects fund. When appropriations are needed in the ensuing fiscal period, or if construction scopes are altered to respond to changed conditions, this project is the source for financing for the projects.

Need for Project

The City Council has implemented a series of rate system structures to prepare for these projects, and this account is the method for accumulating all resources available to the system.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs

Objective 3: Ensure sewer infrastructure needs are met.

Estimated Total Project Cost: This project has no cost. It is an accounting entity for the purpose of accumulating resources.

Schedule

The cash financing accumulation for the wastewater expansion will be continued in this account, with interim financing for the next phase of construction augmenting cash flow to allow the single debt basis anticipated in the rate analysis

Resources

	Actual Through FY'18	FY'19 Adopted	FY'19 Estimated	FY'20 Recommended	Through FY'20	FY'21 Projected	Future	Total Projects
Wastewater Ops Fund Transfers	19,187,976	780,000	780,000	2,650,000	22,617,976	1,500,000	3,500,000	27,617,976
Wastewater Capital & SDC's to Projects	(24,440,896)	(1,575,000)	(1,450,000)	(2,765,000)	(28,655,896)	(1,505,000)	(2,905,000)	(33,065,896)
Advance Finance	745,988				745,988			745,988
Investment Interest	2,570,816				2,570,816			2,570,816
Wastewater & RSSSD SDC's	2,523,226				2,523,226			2,523,226
Other/ETO FY'16	1,415,488				1,415,488			1,415,488
Total Resources					1,217,598			1,807,598

Requirements

Expenditures	454,780				454,780			454,780
Transfers/Contingency	494,891				494,891			494,891
Ending Balance by Year	1,052,927		382,927	267,927	267,927	262,927	857,927	857,927
Total Requirements					949,671			949,671

Program: Utilities/Wastewater – Capital Construction

Project	SE4964	WRP Phase 2 Expansion
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Project Description

This project will provide redundant aeration basin and primary clarifier capacity, thickener modifications/upgrades, seismic upgrades, replacement UV equipment, major electrical and SCADA improvements. The project will use a progressive design/build format to construct the improvements.



Need for Project

The project will upgrade and provide redundancy for the Water Restoration Plant (WRP) to meet current and anticipated treatment requirements from Department of Environmental Quality.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs
Objective 3: Ensure sewer infrastructure needs are met.

Future and Ongoing Costs

After construction of improvements, routine operation and maintenance costs.

Estimated Total Project Cost: \$30,400,000 (Revised from \$9,970,000 to reflect current costs and needs)

Resources

	Actual Through FY'18	FY'19 Adopted	FY'19 Estimated	FY'20 Recommended	Through FY'20	FY'21 Projected	Future	Total Projects
Wastewater Capital Projects	7,523,357	1,125,000	1,125,000		8,648,357			8,648,357
Wastewater SDC's	2,230,000	700,000	700,000		2,930,000			2,930,000
Loan / ETO FY'16	206,995	132,724	132,724		339,719			339,719
Wastewater Bond	18,721,769				18,721,769			18,721,769
Total Resources					30,639,845			30,639,845

Requirements

Expenditures	15,784,304	10,885,522	12,000,000	2,855,541	30,639,845			30,639,845
Transfers/Contingency					0			0
Ending Balance by Year	12,897,817		2,855,541	0	0	0	0	0
Total Requirements					30,639,845			30,639,845

Program: Utilities/Wastewater – Capital Construction

Project	SE5080	WRP Structural Repairs
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Project Description

This project will fund many minor repairs necessary for the proper operation and long-term maintenance of the Water Restoration Plant. Included items are: roof repairs, exterior painting/restoration, stairways and landings, clarifier launder troughs, etc. This project will also repair/install needed fall protection.

Need for Project

The project is needed for efficiency and for safety. It will create a fund for a large number of small capital projects to ensure the longevity of the Water Restoration Plant and its supporting structures.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs

Objective 3: Ensure sewer infrastructure needs are met.

Future and Ongoing Costs

Evaluation and repair of both known and unknown deficiencies.

Estimated Total Project Cost: \$ 75,000/year as available

Resources

	Actual Through FY'18	FY'19 Adopted	FY'19 Estimated	FY'20 Recommended	Through FY'20	FY'21 Projected	Future	Total Projects
Wastewater Capital Projects	383,000				383,000	75,000	225,000	683,000
Total Resources					383,000			683,000

Requirements

Expenditures	94,308	238,692	50,000	238,692	383,000	75,000	225,000	683,000
Transfers/ Contingency					0			0
Ending Balance by Year	288,692		238,692	0	0	0	0	0
Total Requirements					383,000			683,000

Program: Utilities/Wastewater – Capital Construction

Project	SE6012	Western Avenue Sewer Replacement
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Project Description

This project will replace and upsize old deteriorated concrete sewer pipe in Western Avenue from G Street to the Water Restoration Plant. Approximately 4,700 lineal feet of 18" diameter sewer pipe will be installed.

Need for Project

The existing concrete pipe is severely deteriorated and is structurally failing. This pipeline serves the area west of Western Avenue from North of G Street to the Rogue River. Increasing flows in the future are expected in the area due to growth. This pipeline also receives flow from the Bridge Street Pump Station. Currently the pipeline experiences surcharging during peak rainfall events. This project was ranked as the top priority for hydraulic capacity and structural improvements in the 2016 Collection System Master Plan Update.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs

Objective 3: Ensure sewer infrastructure needs are met.

Future and Ongoing Costs

Evaluation of both known and unknown deficiencies, design and construction.

Estimated Total Project Cost: \$2,100,000 (Updated from \$1,800,000 to reflect water and storm drain needs)

Resources

	Actual Through FY'18	FY'19 Adopted	FY'19 Estimated	FY'20 Recommended	Through FY'20	FY'21 Projected	Future	Total Projects
Wastewater Capital Projects	20,000	25,000	25,000	1,350,000	1,395,000			1,395,000
Wastewater SDC's	235,000			150,000	385,000			385,000
General Fund - Policy & Legislation	435,000				435,000			435,000
Total Resources					2,215,000			2,215,000

Requirements

Expenditures	66,800	427,314	125,000	2,023,200	2,215,000			2,215,000
Transfers/Contingency					0			0
Ending Balance by Year	623,200		523,200	0	0	0	0	0
Total Requirements					2,215,000			2,215,000

Program: Utilities/Wastewater – Capital Construction

Project	SE6112	Sewer Rate & SDC Study
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Project Description

This project will evaluate and recommend appropriate service area sewer rates and System Development Charges (SDC) after the Wastewater System Master Plans are all updated.

Need for Project

Once the Urban Growth Boundary is adjusted, wastewater system master plans will need to be updated. As part of the plan updates, new Capital Improvement Plans (CIPs) will be developed. With new CIPs, wastewater rate and SDC methodology will need to be updated to ensure adequacy. Accurate methodology helps to ensure new system users pay an appropriate share of costs.

Council Strategic Goal

Provide Cooperative, Shared Leadership Involving Council, Staff and Community
 Objective 1: Evaluate/ensure financial stability of Utility Funds.

Future and Ongoing Costs

Not applicable

Estimated Total Project Cost: \$70,000

Resources

	Actual Through FY'18	FY'19 Adopted	FY'19 Estimated	FY'20 Recommended	Through FY'20	FY'21 Projected	Future	Total Projects
Wastewater Capital Projects	70,000				70,000			70,000
Total Resources					70,000			70,000

Requirements

Expenditures	47,241	4,388	21,259	1,500	70,000			70,000
Transfers/Contingency					0			0
Ending Balance by Year	22,759		1,500	0	0	0	0	0
Total Requirements					70,000			70,000

Program: Utilities/Wastewater – Capital Construction

Project	SE6198	Collection System Maintenance/Repair
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Project Description

This project will replace badly deteriorated sewer mains or appurtenances, typically prior to paving due to new development or alley repairs. In addition, this project will repair collection system deficiencies related to Inflow and Infiltration (I & I).

Need for Project

The maintenance is needed to repair severely structurally defective sewer mains or appurtenances, when encountered. Replacement prior to paving avoids the need to cut new or recently replaced paving due to sewer line failure. Recent storm events resulted in high flows from the Darneille Pump Station. The flows increased rapidly in correlation to the amount of rainfall indicating a large amount of I & I. This project will correct areas of excessive I & I related to manholes identified with the recent flow monitoring information.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs
Objective 3: Ensure sewer infrastructure needs are met.

Future and Ongoing Costs

Evaluation and repair of unanticipated problems.

Estimated Total Project Cost: The target is **\$75,000** per year when funds are available.

Resources

	Actual Through FY'18	FY'19 Adopted	FY'19 Estimated	FY'20 Recommended	Through FY'20	FY'21 Projected	Future	Total Projects
Wastewater Capital Projects	650,000	275,000	275,000	75,000	1,000,000			1,000,000
Wastewater SDC's					0			0
Total Resources					1,000,000			1,000,000

Requirements

Expenditures	521,695	305,559	375,000	103,305	1,000,000			1,000,000
Transfers/ Contingency					0			0
Ending Balance by Year	128,305		28,305	0	0	0	0	0
Total Requirements					1,000,000			1,000,000

Program: Utilities/Wastewater – Capital Construction

Project	SE6199	Pump/Lift Station Equipment Improvement
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Project Description

This is the replacement or rebuild project for miscellaneous equipment such as pumps, motors and emergency generators located at the various pump and lift stations.

Need for Project

Each year pieces of equipment fail due to age and/or mechanical fault. This project will allow the funding to replace or overhaul equipment when needed.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs

Objective 3: Ensure sewer infrastructure needs are met.

Future and Ongoing Costs

Replacement or repair of equipment as potential failure is identified. The next large piece of equipment will be a Darneille Pump Station pump/motor assembly.

Estimated Total Project Cost: \$10,000/year as available

Resources

	Actual Through FY'18	FY'19 Adopted	FY'19 Estimated	FY'20 Recommended	Through FY'20	FY'21 Projected	Future	Total Projects
Wastewater Capital Projects	205,000	50,000	50,000	50,000	305,000	10,000	30,000	345,000
Wastewater SDC's					0			0
Total Resources					305,000			345,000

Requirements

Expenditures	117,066	127,489	125,000	62,934	305,000	10,000	30,000	345,000
Transfers/Contingency					0			0
Ending Balance by Year	87,934		12,934	0	0	0	0	0
Total Requirements					305,000			345,000

Program: Utilities/Wastewater – Capital Construction

Project	SE6200	Spaulding Industrial Park Wastewater Infrastructure Study
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Project Description

This project will evaluate and propose wastewater infrastructure for the Spaulding Industrial Park. Potential wastewater infrastructure would include a basic collection system, a new pump station and associated force main. The initial evaluation will be to determine the extent of the service area (in addition to the Industrial Park) to serve the eastern end of the Urban Growth Boundary. The service area determination will be required to appropriately size the infrastructure.

Need for Project

Additional development in the eastern end of the Urban Growth Boundary, both residential and industrial, will need to rely on a new pump station for sewer service.

Council Strategic Goal

Encourage Economic Opportunities

Objective 1: Facilitate an environment to encourage business prosperity and economic opportunities.

Future and Ongoing Costs

Once the infrastructure components are properly sized and located, an estimated project cost to install can be developed to reflect required design and construction costs.

Estimated Total Project Cost: **\$100,000** (Revised from \$2,500,000 to reflect study/evaluation only)

Resources

	Actual Through FY'18	FY'19 Adopted	FY'19 Estimated	FY'20 Recommended	Through FY'20	FY'21 Projected	Future	Total Projects
Wastewater Capital Projects	100,000				100,000			100,000
Wastewater SDC's					0			0
Total Resources					100,000			100,000

Requirements

Expenditures	0	95,000	5,000	95,000	100,000			100,000
Transfers/Contingency					0			0
Ending Balance by Year	100,000		95,000	0	0	0	0	0
Total Requirements					100,000			100,000

Program: Utilities/Wastewater – Capital Construction

Project	SE6237	General Engineering Services
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Project Description

This project will fund the process to obtain a Wastewater Master Services Agreement for Professional Engineering and Permitting Services (MSA). With this MSA, a number of individual task orders will be assigned, negotiated and executed to undertake a variety of assignments on the City’s wastewater facilities.

Need for Project

Given the nature of these individual assignments, it is desired for our MSA consultant to provide general engineering support and guidance for the overall wastewater program to develop the specific individual tasks.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs
Objective 3: Ensure sewer infrastructure needs are met.

Future and Ongoing Costs

General support for Wastewater Fund (known and unknown).

Estimated Total Project Cost: \$20,000 per year as funds are available.

Resources

	Actual Through FY'18	FY'19 Adopted	FY'19 Estimated	FY'20 Recommended	Through FY'20	FY'21 Projected	Future	Total Projects
Wastewater Capital Projects	100,000	20,000	20,000	20,000	140,000	20,000	60,000	220,000
Wastewater SDC's					0			0
Total Resources					140,000			220,000

Requirements

Expenditures	41,651	58,349	15,000	83,349	140,000	20,000	60,000	220,000
Transfers/ Contingency					0			0
Ending Balance by Year	58,349		63,349	0	0	0	0	0
Total Requirements					140,000			220,000

Program: Utilities/Wastewater – Capital Construction

Project	SE6238	Effluent Mixing Zone Dye Tracer Study
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Project Description:

The Water Restoration Plant has a permitted effluent mixing zone in the Rogue River. The allowable mixing zone is that portion of the Rogue River contained within a band extending out 50 feet from the north bank and extending from a point 10 feet upstream of the effluent outfall to a point 300 feet downstream from the outfall. Dye will be injected into the effluent and samples will be collected over time in the river to confirm and calibrate the mixing zone model. The model will be used to determine dilution ratios within the mixing zone and evaluate the reasonable potential to exceed receiving water quality criteria in the Rogue River.

Need for Project

To meet NPDES permit renewal requirements.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs

Objective 3: Ensure sewer infrastructure needs are met.

Future and Ongoing Costs

May require upgrades to treatment processes.

Estimated Total Project Cost: \$50,000

Resources

	Actual Through FY'18	FY'19 Adopted	FY'19 Estimated	FY'20 Recommended	Through FY'20	FY'21 Projected	Future	Total Projects
Wastewater Capital Projects	50,000				50,000			50,000
Wastewater SDC's					0			0
Total Resources					50,000			50,000

Requirements

Expenditures	0	45,000	5,000	45,000	50,000			50,000
Transfers/Contingency					0			0
Ending Balance by Year	50,000		45,000	0	0	0	0	0
Total Requirements					50,000			50,000

Program: Utilities/Wastewater – Capital Construction

Project	SE6239	WRP Equipment Improvement
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Project Description

This is the replacement/refurbishment fund for miscellaneous equipment such as gas blender, aeration basin mixers, small heat exchangers, various pumps, valves, compressors and motors.

Need for Project

Each year pieces of equipment fail due to age and/or mechanical failure. This project will allow the funding of replacement or refurbished equipment as needed.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs
Objective 3: Ensure sewer infrastructure needs are met.

Future and Ongoing Costs

Evaluation and repair of unanticipated problems.

Estimated Total Project Cost: \$50,000 per year as funds are available.

Resources

	Actual Through FY'18	FY'19 Adopted	FY'19 Estimated	FY'20 Recommended	Through FY'20	FY'21 Projected	Future	Total Projects
Wastewater Capital Projects	180,000	10,000	10,000	20,000	210,000	50,000	150,000	410,000
Wastewater SDC's					0			0
Total Resources					210,000			410,000

Requirements

Expenditures	14,436	140,564	50,000	145,564	210,000	50,000	150,000	410,000
Transfers/ Contingency					0			0
Ending Balance by Year	165,564		125,564	0	0	0	0	0
Total Requirements					210,000			410,000

Program: Utilities/Wastewater – Capital Construction

Project	SE6334	Public Works Asset Management
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Project Description

This project will purchase software and assist staff with the implementation of asset management.

Need for Project

The recent PAVE audit identified asset management as a necessary program to implement throughout Public Works. With the current upgrade to the Water Restoration Plant (WRP) it is imperative to initiate the program implementation prior to the new equipment and SCADA installation. The work at the WRP will create the template for implementation during the Water Treatment Plant replacement project.

Council Strategic Goal

Provide Cooperative, Shared Leadership Involving Council, Staff and Community

Objective 3: Ensure efficiency and effectiveness in City operations.

Future and Ongoing Costs

Final cost estimates will be developed after detailed project scoping is complete. Ongoing costs would be routine maintenance, updates and licensing fees.

Estimated Total Project Cost: \$330,000 revised after proposals from \$200,000

Resources

	Actual Through FY'18	FY'19 Adopted	FY'19 Estimated	FY'20 Recommended	Through FY'20	FY'21 Projected	Future	Total Projects
Wastewater Capital Projects	100,000	45,000	45,000		145,000			145,000
Water Ops	100,000	45,000	45,000		145,000			145,000
Gas Tax		40,000	40,000		40,000			40,000
Stormwater Ops				25,000	25,000			25,000
Total Resources					355,000			355,000

Requirements

Expenditures	127,964	180,000	180,000	47,036	355,000			355,000
Transfers/Contingency					0			0
Ending Balance by Year	72,036		22,036	0	0	0	0	0
Total Requirements					355,000			355,000

Program: Utilities/Wastewater – Capital Construction

Project	SE6335	Webster Pump Station No. 2 Rehab
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Project Description

This project will evaluate whether to replace or rehabilitate Webster Pump Station No. 2. The improvements will be designed to meet current industry standards. During the predesign effort, a determination will be made whether to construct a new pump station above ground or to rehabilitate the existing. This pump station is currently located below ground, within the Webster Road right of way cul-de-sac (adjacent to Rogue Lea Estates). Prior to the predesign effort, upgraded communication and portable generator power will be provided.

Need for Project

The pump station is over 50 years old and does not meet current service standards. The new pump station will be built to meet current industry standards.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs
Objective 3: Ensure sewer infrastructure needs are met.

Future and Ongoing Costs

Routine and periodic maintenance. Cost estimate revised to account for property acquisition.

Estimated Total Project Cost: \$1,000,000 (Revised from \$800,000)

Resources

	Actual Through FY'18	FY'19 Adopted	FY'19 Estimated	FY'20 Recommended	Through FY'20	FY'21 Projected	Future	Total Projects
Wastewater Capital Projects	25,000	25,000	25,000	950,000	1,000,000			1,000,000
Total Resources					1,000,000			1,000,000

Requirements

Expenditures	0	25,000	25,000	975,000	1,000,000			1,000,000
Transfers/ Contingency					0			0
Ending Balance by Year	25,000		25,000	0	0	0	0	0
Total Requirements					1,000,000			1,000,000

Program: Utilities/Wastewater – Capital Construction

Project	SE6374 Redwood Area Pump Station and River Crossing Evaluation
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Project Description

An evaluation of additional pumping options, and a redundant river crossing for wastewater from the Redwood area. This is a capacity driven project.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs

Objective 3: Ensure sewer infrastructure needs are met.

Need for Project

The Redwood Service Area I/I Reduction Study completed in May 2018 recommends pump station capacity improvements as well as a redundant river crossing. These improvements are necessary, in addition to reduction of inflow and infiltration (I/I).

Future and Ongoing Costs

The evaluation will refine options for pumping improvements and location/type of redundant river crossing, as well as project cost estimates.

Estimated Total Project Cost: \$100,000

Resources								
	Actual Through FY'18	FY'19 Adopted	FY'19 Estimated	FY'20 Recommended	Through FY'20	FY'21 Projected	Future	Total Projects
Wastewater Capital Projects				100,000	100,000			100,000
Total Resources					100,000			100,000
Requirements								
Expenditures				100,000	100,000			100,000
Transfers/Contingency					0			0
Ending Balance by Year	0		0	0	0	0	0	0
Total Requirements					100,000			100,000

Program: Utilities/Wastewater – Capital Construction

Project	SE6375	Collection System Maintenance & Repair FY20
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Project Description

This project will replace badly deteriorated sewer mains or appurtenances; typically, prior to paving, due to new development or alley repairs. In addition, this project will repair collection system deficiencies related to Inflow and Infiltration (I & I).

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs

Objective 3: Ensure sewer infrastructure needs are met.

Need for Project

The maintenance & repair is needed to upgrade severely structurally defective sewer mains or appurtenances, when encountered. Replacement prior to paving avoids the need to cut new or recently replaced paving due to sewer line failure. Recent storm events resulted in high flows from the Darneille Pump Station. The flows increased rapidly in correlation to the amount of rainfall, indicating a large amount of I & I. This project will address areas of excessive I & I related to manholes identified with the recent flow monitoring information.

Future and Ongoing Costs

Evaluation and repair of unanticipated problems.

Estimated Total Project Cost: \$1,800,000

Resources								
	Actual Through FY'18	FY'19 Adopted	FY'19 Estimated	FY'20 Recommended	Through FY'20	FY'21 Projected	Future	Total Projects
Wastewater Capital Projects				200,000	200,000	1,350,000	250,000	1,800,000
Total Resources					200,000			1,800,000
Requirements								
Expenditures				200,000	200,000	1,350,000	250,000	1,800,000
Transfers/Contingency					0			0
Ending Balance by Year	0		0	0	0	0	0	0
Total Requirements					200,000			1,800,000

Project Closed – FY 2019

Program: Utilities/Wastewater – Capital Construction

Project	SE6156	Sewer Mains Related to Overlays
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Project Description

This project will replace old structurally deficient sewer pipe in streets prior to scheduled overlay work. This project will also affect wastewater spot repairs identified during street overlay work.

Need for Project

The majority of the sewer lines are old, have structural defects (cracks, holes and broken pipe) and extensive root encroachment which requires frequent and difficult cleaning and maintenance. This project will assist completion of underground infrastructure work prior to scheduled street overlays.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs
 Objective 3: Ensure sewer infrastructure needs are met.

Future and Ongoing Costs

Design and construction of deficient mains:

Estimated Total Project Cost: \$1,900,000

Resources

	Actual Through FY'18	FY'19 Adopted	FY'19 Estimated	FY'20 Recommended	Through FY'20	FY'21 Projected	Future	Total Projects
Wastewater Capital Projects	125,000		(125,000)		0			0
General Fund - Policy & Legislation	135,000		(1,174)		133,826			133,826
Total Resources					133,826			133,826

Requirements

Expenditures	130,107	54,603	3,719		133,826			133,826
Transfers/Contingency					0			0
Ending Balance by Year	129,893		0	0	0	0	0	0
Total Requirements					133,826			133,826

