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## Program: Utilities/Wastewater – Capital Construction

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### 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'14 #	BUDGET FY'15 #	BUDGET FY'16 #	REVISED FY'16 #	ADOPTED FY'17 #	PROJECTED FY'18 #
Public Works Project Specialist	1.00	1.00	1.00	1.00	1.00	1.00

### FY'17 Anticipated Accomplishments & Corresponding Council Goal - Strategic Plan Item:

#### Maintain, Operate, and Expand our Infrastructure

##### Objective 1: Plan and develop infrastructure

###### Action 2: Complete Sewer Master Plan.

- Work on the Sewer Collection System Master plan has been initiated and will be completed in FY'17.

##### Objective 3: Ensure sewer infrastructure needs are met

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

- Initiate plant expansion per the Wastewater Treatment Facility Plan Update.

###### Action 2: Construct vector truck dumping facility.

- Vector truck dumping facility will be incorporated into the Wastewater Plant expansion.

###### Action 3: Initiate Fats, Oils and Grease education/enforcement program.

- Research and draft education/enforcement program for consideration.

###### Action 4: Implement manhole inflow/infiltration elimination program in the Redwood area.

- Identify manholes for repair/upgrade.

###### Action 5: Upgrade sewer lines.

- Upgrade sewer lines in the core of the community, per the Sewer Collection Master Plan.

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## **Program: Utilities/Wastewater – Capital Construction**

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### **FY'17 Anticipated Accomplishments & Corresponding Council Goal - Strategic Plan Item – Cont'd:**

**Action 6:** Evaluate Wastewater Treatment Plant expansion.

- Initiate plant expansion per Wastewater Treatment Facility Plan Update.

**Action 7:** Design and construct the necessary Webster Wastewater Pump Station No. 1 improvement project.

- Complete construction of improvements.

**Action 8:** Initiate upgrades to the Water Restoration Plant's SCADA.

- SCADA improvements will be incorporated into the Wastewater Plant expansion.

### **Budget Highlights:**

The project listing shows resources across the columns. Columns show the “Actual resources through FY’15”; the re-assessed resource needs of projects using current data for the “Revised FY’16” column, guiding our “Adopted FY’17” and resources estimated “Through FY’17”. 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'16 Activity Review:**

- Structural sewer lines were replaced in the core of the City.
- Continued work on the Collection System Master Plan.
- Began construction of replacement Webster pump station.
- Completed SCADA system evaluation.
- Completed construction of new UV disinfection system.

## Program: Utilities/Wastewater – Capital Construction

### ACTIVE CAPITAL PROJECT RESOURCES

	Actual Through FY'15	Revised FY'16	Adopted FY'17	Total Through FY'17	Future Years	Total Project
SE0000 Miscellaneous Projects - General Fund 728	1,286,415	398,000	(586,700)	1,097,715	(134,263)	963,452
SE4964 WRP Phase 2 Expansion	3,435,000	1,506,995	2,385,000	7,326,995	4,700,000	12,026,995
SE5080 WRP Structural Repairs	308,000	75,000	0	383,000	300,000	683,000
SE5081 Collection System Master Plan Update	275,000	30,000	0	305,000	0	305,000
SE6012 Western Avenue Sewer Replacement	10,000	0	910,000	920,000	880,000	1,800,000
SE6064 Sewer Main Structural Repairs	1,815,000	155,000	0	1,970,000	0	1,970,000
SE6112 Sewer Rate Study SE & RS	70,000	0	0	70,000	0	70,000
SE6156 Sewer Mains Related to Overlays	50,000	0	260,000	310,000	1,590,000	1,900,000
SE6198 Collection System Maintenance-Repair	225,000	75,000	175,000	475,000	400,000	875,000
SE6199 Pump-Lift Station Equipment Improvement	85,000	10,000	10,000	105,000	40,000	145,000
SE6200 Spaulding Indust. Park WW Infrastructure	100,000	0	0	100,000	0	100,000
SE6237 General Engineering Services	40,000	20,000	20,000	80,000	80,000	160,000
SE6238 Effluent Mixing Zone Dye Tracer Study	50,000	0	0	50,000	0	50,000
SE6239 WRP Equipment Improvement	50,000	50,000	50,000	150,000	200,000	350,000
SE6240 Webster PS No. 1 Rehab	750,000	0	200,000	950,000	0	950,000

#### NEW PROJECTS

SE6323 5th Street Sewer Main Structural Repairs	<u>0</u>	<u>0</u>	<u>400,000</u>	<u>400,000</u>	<u>800,000</u>	<u>1,200,000</u>
<b>Total Projects</b>	<b><u>8,549,415</u></b>	<b><u>2,319,995</u></b>	<b><u>3,823,300</u></b>	<b><u>14,692,710</u></b>	<b><u>8,855,737</u></b>	<b><u>23,548,447</u></b>

#### MISCELLANEOUS WASTEWATER FUNDS

Miscellaneous Projects - SDC Fund 722	413,708	125,000	(375,000)	163,708	(163,708)	0
Miscellaneous Projects - AFD Fund 725	<u>84,151</u>	<u>0</u>	<u>0</u>	<u>84,151</u>	<u>(2,903)</u>	<u>81,248</u>
<b>Total Miscellaneous Funds</b>	<b><u>497,859</u></b>	<b><u>125,000</u></b>	<b><u>(375,000)</u></b>	<b><u>247,859</u></b>	<b><u>(166,611)</u></b>	<b><u>81,248</u></b>

### CLOSED OR CANCELLED CAPITAL PROJECT RESOURCES

SE6111 Mill Street Sewer Reconstruction	125,000	(125,000)	0	0	4,215,000	4,215,000
SE6241 WRP SCADA System Evaluation	<u>50,000</u>	<u>(39,000)</u>	<u>0</u>	<u>11,000</u>	<u>0</u>	<u>11,000</u>
<b>Total Closed Projects</b>	<b><u>175,000</u></b>	<b><u>(164,000)</u></b>	<b><u>0</u></b>	<b><u>11,000</u></b>	<b><u>4,215,000</u></b>	<b><u>4,226,000</u></b>
<b>Grand Total - All Projects</b>	<b><u>9,222,274</u></b>	<b><u>2,280,995</u></b>	<b><u>3,448,300</u></b>	<b><u>14,951,569</u></b>	<b><u>12,904,126</u></b>	<b><u>27,855,695</u></b>

## Program: Utilities/Wastewater – Capital Construction

### ACTIVE CAPITAL PROJECT SUMMARIES FOR FY'17

	Adopted FY'17 Beginning Fund Balance	Adopted FY'17 Revenue	Adopted FY'17 Capital Outlay	Adopted FY'17 Transfers	Adopted FY'17 Appropriated Fund Balance
SE0000 Miscellaneous Projects - General Fund 728	734,743	(586,700)	0	0	148,043
SE4963 Update WRP Facility Plan	0	0	0	0	0
SE4964 WRP Phase 2 Expansion	2,993,200	2,385,000	5,378,200	0	0
SE5080 WRP Structural Repairs	209,610	0	209,610	0	0
SE5081 Collection System Master Plan Update	4,568	0	4,568	0	0
SE6012 Western Avenue Sewer Replacement	4,879	910,000	914,879	0	0
SE6064 Sewer Main Structural Repairs	99,354	0	99,354	0	0
SE6111 Mill Street Sewer Reconstruction	0	0	0	0	0
SE6112 Sewer Rate Study SE & RS	65,000	0	65,000	0	0
SE6156 Sewer Mains Related to Overlays	0	260,000	260,000	0	0
SE6198 Collection System Maintenance-Repair	4,743	175,000	179,743	0	0
SE6199 Pump-Lift Station Equipment Improvement	25,000	10,000	35,000	0	0
SE6200 Spaulding Indust. Park WW Infrastructure	75,000	0	75,000	0	0
SE6237 General Engineering Services	28,682	20,000	48,682	0	0
SE6238 Effluent Mixing Zone Dye Tracer Study	25,000	0	25,000	0	0
SE6239 WRP Equipment Improvement	50,000	50,000	100,000	0	0
SE6240 Webster PS No. 1 Rehab	112,691	200,000	312,691	0	0
SE6241 WRP SCADA System Evaluation	0	0	0	0	0
<b>NEW PROJECTS</b>					
SE6323 5th Street Sewer Main Structural Repairs	<u>0</u>	<u>400,000</u>	<u>400,000</u>	<u>0</u>	<u>0</u>
<b>Total Projects</b>	<b><u>4,432,470</u></b>	<b><u>3,823,300</u></b>	<b><u>8,107,727</u></b>	<b><u>0</u></b>	<b><u>148,043</u></b>
<b>MISCELLANEOUS WASTEWATER FUNDS</b>					
Miscellaneous Projects - SDC Fund 722	538,708	(375,000)	0	0	163,708
Miscellaneous Projects - AFD Fund 725	<u>3,211</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3,211</u>
<b>Total Miscellaneous Funds</b>	<b><u>541,919</u></b>	<b><u>(375,000)</u></b>	<b><u>0</u></b>	<b><u>0</u></b>	<b><u>166,919</u></b>
<b>Grand Total - All Projects</b>	<b><u>4,974,389</u></b>	<b><u>3,448,300</u></b>	<b><u>8,107,727</u></b>	<b><u>0</u></b>	<b><u>314,962</u></b>

## Program: Utilities/Wastewater – Capital Construction

### Financial Summary

	ACTUAL FY' 14 \$	ACTUAL FY' 15 \$	BUDGET FY' 16 \$	REVISED FY' 16 \$	ADOPTED FY' 17 \$	PROJECTED FY' 18 \$
Beginning Fund Balance	<u>3,465,824</u>	<u>4,180,610</u>	<u>4,024,896</u>	<u>4,024,896</u>	<u>4,974,389</u>	<u>314,962</u>
<b>Resources</b>						
Development Charges	289,987	291,403	200,000	200,000	200,000	150,000
Investment Interest	25,321	33,015	0	0	0	0
Advance Finance Interest	265	271	0	0	0	0
SDC Loans	8,171	5,857	0	0	0	0
General Fund	150,000	150,000	155,000	155,000	220,000	185,000
Sewer Fund	959,000	1,647,392	1,719,000	1,719,000	3,028,300	2,400,000
Equipment Replacement	0	550,000	0	0	0	0
RSSSD	0	279	0	0	0	0
Advance Financing						
	<u>1,432,744</u>	<u>2,678,217</u>	<u>2,074,000</u>	<u>2,074,000</u>	<u>3,448,300</u>	<u>2,735,000</u>
<i>Total Current Revenues</i>						
	<u>4,898,568</u>	<u>6,858,827</u>	<u>6,098,896</u>	<u>6,098,896</u>	<u>8,422,689</u>	<u>3,049,962</u>
<b>Total Resources</b>						
<b>Requirements</b>						
	<u>717,958</u>	<u>1,280,818</u>	<u>5,579,303</u>	<u>5,579,303</u>	<u>8,107,727</u>	<u>2,735,000</u>
Capital Outlay	<u>717,958</u>	<u>1,280,818</u>	<u>5,579,303</u>	<u>5,579,303</u>	<u>8,107,727</u>	<u>2,735,000</u>
<i>Subtotal Expenditures</i>						
	<u>4,180,610</u>	<u>5,578,009</u>	<u>519,593</u>	<u>519,593</u>	<u>314,962</u>	<u>314,962</u>
Appropriated Fund Balance						
	<u>4,898,568</u>	<u>6,858,827</u>	<u>6,098,896</u>	<u>6,098,896</u>	<u>8,422,689</u>	<u>3,049,962</u>
<b>Total Requirements</b>	<u>3,465,824</u>	<u>4,180,610</u>	<u>4,024,896</u>	<u>4,024,896</u>	<u>4,974,389</u>	<u>314,962</u>

## Program: Utilities/Wastewater – Capital Construction

<b>Project</b>	<b>SE0000</b>	<b>Fund 728 Sewer Capital Projects – General</b>
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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

	<b>Actual Through FY'15</b>	<b>FY'16 Adopted</b>	<b>FY'16 Revised</b>	<b>FY'17 Adopted</b>	<b>Through FY'17</b>	<b>FY'18 Projected</b>	<b>Future</b>	<b>Total Project</b>
Wastewater Operations Fund	12,040,676	1,719,000	1,719,000	3,028,300	<b>16,787,976</b>	2,400,000	5,329,834	<b>24,517,810</b>
Transfers								
Wastewater Capital & SDC's to Projects	(17,692,921)	(1,760,000)	(1,321,000)	(3,615,000)	<b>(22,628,921)</b>	(2,400,000)	(5,470,000)	<b>(30,498,921)</b>
Advance Finance	745,988				<b>745,988</b>		5,903	<b>751,891</b>
Investment Interest	2,260,663				<b>2,260,663</b>			<b>2,260,663</b>
Wastewater & RSSSD SDC's	2,521,564				<b>2,521,564</b>			<b>2,521,564</b>
Other/ETO FY16	1,410,445				<b>1,410,445</b>			<b>1,410,445</b>
<b>Total Resources</b>					<b>1,097,715</b>			<b>963,452</b>

### Requirements

Expenditures	454,781				<b>454,781</b>			<b>454,781</b>
Transfers	494,891				<b>494,891</b>			<b>494,891</b>
<b>Ending Balance by Year</b>	<b>336,743</b>	<b>251,426</b>	<b>734,743</b>	<b>148,043</b>	<b>148,043</b>	<b>148,043</b>	<b>13,780</b>	<b>13,780</b>
<b>Total Requirements</b>					<b>1,097,715</b>			<b>963,452</b>

## Program: Utilities/Wastewater – Capital Construction

**Project SE4964 WRP Phase 2 Expansion**

### Project Description

This project will expand aeration basin capacity; install reuse filtration, new secondary clarifier, thickener modifications, seismic upgrades, replacement UV equipment and miscellaneous piping, electrical and SCADA improvements.



### Need for Project

The project will expand the capacity of the WRP and meet anticipated treatment requirements from ODEQ.

### 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. Design of expansion/improvements will take approximately 18 to 24 months. Construction of designed expansion/improvements will last approximately 18 to 36 months.

**Estimated Total Project Cost: \$12,026,995** (Revised from \$9,970,000 to reflect ENR index of January 2013)

### Resources

	Actual Through FY'15	FY'16 Adopted	FY'16 Revised	FY'17 Adopted	Through FY'17	FY'18 Projected	Future	Total Project
Wastewater Capital Projects	2,255,000	1,100,000	1,100,000	2,035,000	5,390,000	1,250,000	950,000	7,590,000
Wastewater SDC's	1,180,000	200,000	200,000	350,000	1,730,000	150,000	350,000	2,230,000
Loan / ETO FY'16			206,995		206,995		2,000,000	2,206,995
<b>Total Resources</b>					7,326,995			12,026,995

### Requirements

Expenditures	548,795	3,469,782	1,400,000	5,378,200	7,326,995	1,400,000	3,300,000	12,026,995
Transfers/Contingency					0			0
<b>Ending Balance by Year</b>	2,886,205	0	2,993,200	0	0	0	0	0
<b>Total Requirements</b>					7,326,995			12,026,995

## Program: Utilities/Wastewater – Capital Construction

<b>Project</b>	<b>SE5080</b>	<b>WRP Structural Repairs</b>
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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. This project will also repair/install needed fall protection and leveling of clarifier weirs.

### 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. Two out buildings with flat roofs have wood rot and need to be re-roofed. We will convert the flat roofs to a slope roof with metal covers similar to other out buildings we have on site.

### 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'15	FY'16 Adopted	FY'16 Revised	FY'17 Adopted	Through FY'17	FY'18 Projected	Future	Total Project
Wastewater Capital Projects	308,000	75,000	75,000	0	383,000	75,000	225,000	683,000
<b>Total Resources</b>					383,000			683,000

### Requirements

Expenditures	73,390	159,610	100,000	209,610	383,000	75,000	225,000	683,000
Transfers/ Contingency					0			0
<b>Ending Balance by Year</b>	<b>234,610</b>	<b>0</b>	<b>209,610</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Requirements</b>					383,000			683,000

## Program: Utilities/Wastewater – Capital Construction

<b>Project</b>	<b>SE5081</b>	<b>Collection System Master Plan Update</b>
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### Project Description

This project will update the Collection System Master Plan completed in 2004.

### Need for Project

The Master Plan Update will identify infrastructure requirements and sizing to serve the enlarged Urban Growth Boundary.

### Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs

Objective 1: Plan and develop infrastructure.

### Future and Ongoing Costs

After preliminary discussions to update and calibrate flow model, it has been determined original project cost estimate was low.

New flow model will be developed and flow monitoring will be complete FY'12. Completion of the Master Plan will not occur until after the UGB enlargement process is complete.

**Estimated Project Cost: \$305,000** (Revised from \$225,000 to reflect remaining RS share. Original Estimated Total Project Cost was \$ 100,000)

### Resources

	<b>Actual Through FY'15</b>	<b>FY'16 Adopted</b>	<b>FY'16 Revised</b>	<b>FY'17 Adopted</b>	<b>Through FY'17</b>	<b>FY'18 Projected</b>	<b>Future</b>	<b>Total Project</b>
Wastewater Capital Projects	275,000	30,000	30,000		<b>305,000</b>			<b>305,000</b>
<b>Total Resources</b>					<b>305,000</b>			<b>305,000</b>

### Requirements

Expenditures	190,432	38,672	110,000	4,568	<b>305,000</b>			<b>305,000</b>
Transfers/ Contingency					<b>0</b>			<b>0</b>
<b>Ending Balance by Year</b>	<b>84,568</b>	<b>0</b>	<b>4,568</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Requirements</b>					<b>305,000</b>			<b>305,000</b>

## Program: Utilities/Wastewater – Capital Construction

<b>Project</b>	<b>SE6012</b>	<b>Western Avenue Sewer Replacement</b>
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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 Upper River Road 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 second priority for hydraulic capacity improvements in the 2004 Collection System Master Plan.

### 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.

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

### Resources

	<b>Actual Through FY'15</b>	<b>FY'16 Adopted</b>	<b>FY'16 Revised</b>	<b>FY'17 Adopted</b>	<b>Through FY'17</b>	<b>FY'18 Projected</b>	<b>Future</b>	<b>Total Project</b>
Wastewater Capital Projects				600,000	<b>600,000</b>	420,000	275,000	<b>1,295,000</b>
Wastewater SDC's 86%	10,000			225,000	<b>235,000</b>			<b>235,000</b>
General Fund				85,000	<b>85,000</b>	185,000		<b>270,000</b>
<b>Total Resources</b>					<b>920,000</b>			<b>1,800,000</b>

### Requirements

Expenditures	121	5,000	5,000	914,879	<b>920,000</b>	605,000	275,000	<b>1,800,000</b>
Transfers/Contingency					<b>0</b>			<b>0</b>
<b>Ending Balance by Year</b>	<b>9,879</b>	<b>0</b>	<b>4,879</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Requirements</b>					<b>920,000</b>			<b>1,800,000</b>

## Program: Utilities/Wastewater – Capital Construction

<b>Project</b>	<b>SE6064</b>	<b>Sewer Main Structural Repairs (Multiple Phases)</b>
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### Project Description

This project will replace very old structurally deficient sewer pipe in 5th Street, the alleys fronting 5th Street between ‘M’ and ‘A’ Streets and the alleys fronting Pine Street between Bridge and G Streets. The alleys identified for repair will be ranked as to severity and the project completed in multiple phases.

### Need for Project

The majority of the sewer lines in the alleys are very old 6" pipe, have structural defects (cracks, holes and broken pipe) and extensive root encroachment which requires frequent and difficult cleaning and maintenance. This project combines the top two ranked priorities for structural repair in the 2004 Collection System Master Plan.

### 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 expected to continue as funding allows.

The current funding should complete all alley work associated with Pine Street.

**Estimated Total Project Cost: \$3,700,000**

### Resources

	<b>Actual Through FY'15</b>	<b>FY'16 Adopted</b>	<b>FY'16 Revised</b>	<b>FY'17 Adopted</b>	<b>Through FY'17</b>	<b>FY'18 Projected</b>	<b>Future</b>	<b>Total Project</b>
Wastewater Capital Projects	1,515,000	400,000			<b>1,515,000</b>			<b>1,515,000</b>
General Fund- Policy & Legislation	300,000	155,000	155,000		<b>455,000</b>			<b>455,000</b>
<b>Total Resources</b>					<b>1,970,000</b>			<b>1,970,000</b>

### Requirements

Expenditures	1,595,646	638,370	275,000	99,354	<b>1,970,000</b>			<b>1,970,000</b>
Transfers/Contingency					<b>0</b>			<b>0</b>
<b>Ending Balance by Year</b>	<b>219,354</b>	<b>0</b>	<b>99,354</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Requirements</b>					<b>1,970,000</b>			<b>1,970,000</b>

## Program: Utilities/Wastewater – Capital Construction

<b>Project</b>	<b>SE6112</b>	<b>Sewer Rate &amp; SDC Study</b>
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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'15	FY'16 Adopted	FY'16 Revised	FY'17 Adopted	Through FY'17	FY'18 Projected	Future	Total Project
Wastewater Capital Projects	70,000				70,000			70,000
<b>Total Resources</b>					70,000			70,000

### Requirements

Expenditures		35,000	5,000	65,000	70,000			70,000
Transfers/ Contingency					0			0
<b>Ending Balance by Year</b>	<b>70,000</b>	<b>35,000</b>	<b>65,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Requirements</b>					70,000			70,000

## Program: Utilities/Wastewater – Capital Construction

<b>Project</b>	<b>SE6156 Sewer Mains Related to Overlays</b>
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### Project Description

This project will replace old structurally deficient sewer pipe in streets prior to scheduled 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:

Prospect between Manzanita and Bellevue

Bellevue between Fry and Elm

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

### Resources

	Actual Through FY'15	FY'16 Adopted	FY'16 Revised	FY'17 Adopted	Through FY'17	FY'18 Projected	Future	Total Project
Wastewater Capital Projects	50,000			125,000	175,000		1,590,000	1,765,000
Wastewater SDC's					0			0
General Fund- Policy & Legislation				135,000	135,000			135,000
<b>Total Resources</b>					<b>310,000</b>			<b>1,900,000</b>

### Requirements

Expenditures	48,554		1,446	260,000	310,000		1,590,000	1,900,000
Transfers/Contingency					0			0
<b>Ending Balance by Year</b>	<b>1,446</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Requirements</b>					<b>310,000</b>			<b>1,900,000</b>

## Program: Utilities/Wastewater – Capital Construction

<b>Project</b>	<b>SE6198</b>	<b>Collection System Maintenance/Repair</b>
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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'15	FY'16 Adopted	FY'16 Revised	FY'17 Adopted	Through FY'17	FY'18 Projected	Future	Total Project
Wastewater Capital Projects	225,000	75,000	75,000	175,000	475,000	175,000	225,000	875,000
Wastewater SDC's					0			0
					0			0
<b>Total Resources</b>					475,000			875,000

### Requirements

Expenditures	110,257	227,869	185,000	179,743	475,000	175,000	225,000	875,000
Transfers/ Contingency					0			0
<b>Ending Balance by Year</b>	<b>114,743</b>	<b>0</b>	<b>4,743</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Requirements</b>					475,000			875,000

## Program: Utilities/Wastewater – Capital Construction

<b>Project</b>	<b>SE6199</b>	<b>Pump/Lift Station Equipment Improvement</b>
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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.

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

### Resources

	Actual Through FY'15	FY'16 Adopted	FY'16 Revised	FY'17 Adopted	Through FY'17	FY'18 Projected	Future	Total Project
Wastewater Capital Projects	85,000	10,000	10,000	10,000	105,000	10,000	30,000	145,000
Wastewater SDC's					0			0
<b>Total Resources</b>					105,000			145,000

### Requirements

Expenditures		50,000	70,000	35,000	105,000	10,000	30,000	145,000
Transfers/ Contingency					0			0
<b>Ending Balance by Year</b>	<b>85,000</b>	<b>0</b>	<b>25,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Requirements</b>					105,000			145,000

## Program: Utilities/Wastewater – Capital Construction

<b>Project</b>	<b>SE6200</b>	<b>Spaulding Industrial Park Wastewater Infrastructure Study</b>
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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 construction costs.

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

### Resources

	<b>Actual Through FY'15</b>	<b>FY'16 Adopted</b>	<b>FY'16 Revised</b>	<b>FY'17 Adopted</b>	<b>Through FY'17</b>	<b>FY'18 Projected</b>	<b>Future</b>	<b>Total Project</b>
Wastewater Capital Projects	100,000				<b>100,000</b>			<b>100,000</b>
Wastewater SDC's					<b>0</b>			<b>0</b>
<b>Total Resources</b>					<b>100,000</b>			<b>100,000</b>

### Requirements

Expenditures		50,000	25,000	75,000	<b>100,000</b>			<b>100,000</b>
Transfers/Contingency					<b>0</b>			<b>0</b>
<b>Ending Balance by Year</b>	<b>100,000</b>	<b>0</b>	<b>75,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Requirements</b>					<b>100,000</b>			<b>100,000</b>

## Program: Utilities/Wastewater – Capital Construction

<b>Project</b>	<b>SE6237</b>	<b>General Engineering Services</b>
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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'15	FY'16 Adopted	FY'16 Revised	FY'17 Adopted	Through FY'17	FY'18 Projected	Future	Total Project
Wastewater Capital Projects	40,000	20,000	20,000	20,000	80,000	20,000	60,000	160,000
Wastewater SDC's					0			0
<b>Total Resources</b>					80,000			160,000

### Requirements

Expenditures	1,318	30,000	30,000	48,682	80,000	20,000	60,000	160,000
Transfers/ Contingency					0			0
<b>Ending Balance by Year</b>	<b>38,682</b>	<b>0</b>	<b>28,682</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Requirements</b>					80,000			160,000

## Program: Utilities/Wastewater – Capital Construction

<b>Project</b>	<b>SE6238</b>	<b>Effluent Mixing Zone Dye Tracer Study</b>
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### Project Description:

The Wastewater Treatment 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'15	FY'16 Adopted	FY'16 Revised	FY'17 Adopted	Through FY'17	FY'18 Projected	Future	Total Project
Wastewater Capital Projects	50,000				50,000			50,000
Wastewater SDC's					0			0
<b>Total Resources</b>					50,000			50,000

### Requirements

Expenditures		50,000	25,000	25,000	50,000			50,000
Transfers/Contingency					0			0
<b>Ending Balance by Year</b>	<b>50,000</b>	<b>0</b>	<b>25,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Requirements</b>					50,000			50,000

## Program: Utilities/Wastewater – Capital Construction

<b>Project</b>	<b>SE6239</b>	<b>WRP Equipment Improvement</b>
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### Project Description

This is the replacement/refurbishment fund for miscellaneous equipment such as gas blender, aeration basin mixers, various pumps, 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'15	FY'16 Adopted	FY'16 Revised	FY'17 Adopted	Through FY'17	FY'18 Projected	Future	Total Project
Wastewater Capital Projects	50,000	50,000	50,000	50,000	150,000	50,000	150,000	350,000
Wastewater SDC's					0			0
<b>Total Resources</b>					150,000			350,000

### Requirements

Expenditures		50,000	50,000	100,000	150,000	50,000	150,000	350,000
Transfers/Contingency					0			0
<b>Ending Balance by Year</b>	<b>50,000</b>	<b>0</b>	<b>50,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Requirements</b>					150,000			350,000

## Program: Utilities/Wastewater – Capital Construction

<b>Project</b>	<b>SE6240</b>	<b>Webster Pump Station No. 1 Rehab</b>
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### Project Description

This project will evaluate whether to replace or rehabilitate Webster Pump Station No. 1. 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 at the Reinhart Volunteer Park.

### Need for Project

Webster Pump Station No. 1 is currently capacity deficient. The pump station is approaching 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.

**Estimated Total Project Cost: \$950,000** (revised from \$750,000)

### Resources

	<b>Actual Through FY'15</b>	<b>FY'16 Adopted</b>	<b>FY'16 Revised</b>	<b>FY'17 Adopted</b>	<b>Through FY'17</b>	<b>FY'18 Projected</b>	<b>Future</b>	<b>Total Project</b>
Wastewater Capital Projects	750,000			200,000	<b>950,000</b>			<b>950,000</b>
Wastewater SDC's					<b>0</b>			<b>0</b>
<b>Total Resources</b>					<b>950,000</b>			<b>950,000</b>

### Requirements

Expenditures	37,309	675,000	600,000	312,691	<b>950,000</b>			<b>950,000</b>
Transfers/ Contingency					<b>0</b>			<b>0</b>
<b>Ending Balance by Year</b>	<b>712,691</b>	<b>0</b>	<b>112,691</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Requirements</b>					<b>950,000</b>			<b>950,000</b>

## Program: Utilities/Wastewater – Capital Construction

<b>Project</b>	<b>SE6323</b>	<b>5<sup>th</sup> Street Sewer Main Structural Repairs (Multiple Phases)</b>
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### Project Description

This project will replace very old structurally deficient sewer pipe in 5th Street and the alleys fronting 5th Street between 'M' and 'A' Streets. The alleys identified for repair will be ranked as to severity and the project completed in multiple phases.

### Need for Project

The majority of the sewer lines in the alleys are very old 6" pipe, have structural defects (cracks, holes and broken pipe) and extensive root encroachment which requires frequent, difficult cleaning and maintenance.

### 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 expected to continue as funding allows.

**Estimated Total Project Cost: \$1,200,000**

### Resources

	Actual Through FY'15	FY'16 Adopted	FY'16 Revised	FY'17 Adopted	Through FY'17	FY'18 Projected	Future	Total Project
Wastewater Capital Projects				400,000	400,000	400,000	400,000	1,200,000
General Fund					0			0
<b>Total Resources</b>					400,000			1,200,000

### Requirements

Expenditures				400,000	400,000	400,000	400,000	1,200,000
Transfers/ Contingency					0			0
<b>Ending Balance by Year</b>	0		0	0	0	0	0	0
<b>Total Requirements</b>					400,000			1,200,000

# Project Closed – FY 2016

## Program: Utilities/Wastewater – Capital Construction

<b>Project</b>	<b>SE6111</b>	<b>Mill Street Sewer Reconstruction</b>
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### Project Description

This project will replace approximately 9,500 linear feet of sewer main.

### Need for Project

Currently a large segment of the sewer main is near capacity and inaccessible for maintenance. The reconstruction will install new accessible main line, substantially reduce current inflow and infiltration problems and add capacity. The installation will effectively increase the capacity of the dual river siphons to beyond 2060. This project was identified in the Collection System Master Plan as a top priority.

### 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.

**Estimated Total Project Cost: \$4,340,000** (Revised from \$4,150,000 to reflect ENR index of January 2013)

### Resources

	Actual Through FY'15	FY'16 Adopted	FY'16 Revised	FY'17 Adopted	Through FY'17	FY'18 Projected	Future	Total Project
Wastewater Capital Projects					0			0
Wastewater SDC's 70%	125,000		(125,000)		0			0
<b>Total Resources</b>					0			0

### Requirements

Expenditures		100,000			0	0		0
Transfers/Contingency					0			0
<b>Ending Balance by Year</b>	<b>125,000</b>	<b>0</b>						
<b>Total Requirements</b>					<b>0</b>			<b>0</b>

# Project Closed – FY 2016

## Program: Utilities/Wastewater – Capital Construction

<b>Project</b>	<b>SE6241</b>	<b>WRP SCADA System Evaluation</b>
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### Project Description

This project will evaluate the existing SCADA system hardware and software. The intent of the evaluation will be to determine to what extent existing PLC's can be migrated to a new software systems. New system hardware and software requirements will be identified.

### Need for Project

The current SCADA system uses a Windows XP operating System. Microsoft will no longer be supporting Windows XP operating systems with security and technical support. Communications from some of the old PLC's may not work with the new Windows software. The SCADA system monitors various processes and equipment. Operations and Maintenance staff use the SCADA system to monitor and control various processes and equipment throughout the plant as well as collecting data for NPDES permit reporting purposes.

### 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 evaluation, a system upgrade/replacement will be initiated.

**Estimated Total Project Cost: \$50,000**

### Resources

	Actual Through FY'15	FY'16 Adopted	FY'16 Revised	FY'17 Adopted	Through FY'17	FY'18 Projected	Future	Total Project
Wastewater Capital Projects	50,000		(39,000)		11,000			11,000
Wastewater SDC's					0			0
<b>Total Resources</b>					11,000			11,000

### Requirements

Expenditures	7,830		3,170		11,000			11,000
Transfers/Contingency					0			0
<b>Ending Balance by Year</b>	<b>42,170</b>	<b>0</b>						
<b>Total Requirements</b>					11,000			11,000

