
Program: Utilities/Water – Capital Construction

Services Delivered:

This activity includes planning, engineering, and all construction of major water system improvements. The water system includes the treatment plant, eight reservoirs, thirteen pump stations, and 180 miles of water mains. Major repairs and improvements to the water system are financed through this capital budget. The minor repairs to the system are financed through the operating activities.

This budget sets aside funds to provide major rehabilitation of the water treatment plant, pump stations, water storage reservoirs, and the distribution system.

FY'19 Anticipated Accomplishments & Corresponding Council Goal - Strategic Plan Item:

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

Objective 2: Ensure water infrastructure needs are met

Action 1: Build new Water Plant (PAVE). ***

- Staff will continue to evaluate property options and work towards locating a new plant.

Action 2: Design and implement a distribution system valve exercise and replacement program to ensure system operability. ***

- Work is being planned in conjunction with new flushing program.

Action 3: Design/install redundant water main loop in Redwood Highway pedestrian way. **

- Begin assembling resources for the design of improvement.

Action 4: Develop emergency water hook-up at City Hall well.*

- Continue testing and evaluate feasibility.

Program: Utilities/Water – Capital Construction

Budget Highlights:

The project listing shows resources across the columns. Columns show the “Actual resources through FY’17”; the re-assessed resource needs of projects using current data for the “Estimated FY’18” column, guiding our “Adopted FY’19” and resources estimated “Through FY’19”. 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’18 Activity Review:

- Hired an Owners Representative to assist with the development of a new Water Treatment Plant.
- Continued with property evaluation for a new Water Treatment Plant.
- Continued work on the Small Main Replacement program.
- Started a rate and SDC study for the water system.
- Selection and start of implementation of an Asset Management program.

Program: Utilities/Water – Capital Construction

ACTIVE CAPITAL PROJECT RESOURCES

	Actual Through FY'17	Estimated FY'18	Adopted FY'19	Total Through FY'19	Future Years	Total Project
WA0000 Miscellaneous Water Projects - General (758)	374,796	(60,000)	(10,000)	304,796	(144,627)	160,169
WA4742 Meadow Wood Reservoir No. 16 - Site Purchase	350,000	0	0	350,000	0	350,000
WA4971 Meadow Wood Reservoir No. 16	0	0	100,000	100,000	4,000,000	4,100,000
WA5096 WTP Structural Repairs	650,000	150,000	75,000	875,000	300,000	1,175,000
WA6000 MSA Task Order #1	200,000	20,000	20,000	240,000	80,000	320,000
WA6058 Water System Security Projects	130,000	10,000	10,000	150,000	70,000	220,000
WA6059 Pump Station Repairs	150,000	25,000	25,000	200,000	100,000	300,000
WA6207 WTP Replacement	8,725,000	1,300,000	1,750,000	11,775,000	44,425,000	56,200,000
WA6250 Water Rate & SDC Study	70,000	0	0	70,000	0	70,000
WA6251 Purchase Portable Generator for Pump	125,000	0	0	125,000	0	125,000
WA6252 Arc Flash Study WA and SE	100,000	0	0	100,000	0	100,000
WA6253 Small Main Replacement	880,000	220,000	0	1,100,000	0	1,100,000
WA6329 UDF Program	0	100,000	0	100,000	0	100,000
WA6330 Freeze Protect ARVs on Pedestrian Bridge	0	50,000	0	50,000	0	50,000
WA6331 Seismic Evaluations PS & Reservoirs	0	200,000	0	200,000	0	200,000
WA6332 Vine Street Water Line Replacement	0	400,000	0	400,000	0	400,000
NEW PROJECTS						
WA6360 Small Main Replacement Program	0	0	300,000	300,000	900,000	1,200,000
WA6361 WTP SCADA Improvements	0	0	200,000	200,000	0	200,000
WA6362 Redwood Highway Looping	0	0	400,000	400,000	3,000,000	3,400,000
Total Projects	<u>11,754,796</u>	<u>2,415,000</u>	<u>2,870,000</u>	<u>17,039,796</u>	<u>52,730,373</u>	<u>69,770,169</u>
Miscellaneous Water Funds						
Miscellaneous Water Projects - SDC's (752)	418,287	(79,500)	(213,000)	1,494,031	(426,000)	855,031
Miscellaneous Water Projects - AFD's (755)	49,697	5,000	20,000	71,844	31,000	122,844
Miscellaneous Water Projects - LID's (759)	0	0	0	12,581	0	12,581
Total Miscellaneous Funds	<u>467,984</u>	<u>(74,500)</u>	<u>(193,000)</u>	<u>1,578,456</u>	<u>(395,000)</u>	<u>990,456</u>
Grand Total - All Projects	<u>12,222,780</u>	<u>2,340,500</u>	<u>2,677,000</u>	<u>18,618,252</u>	<u>52,335,373</u>	<u>70,760,625</u>

Program: Utilities/Water – Capital Construction

ACTIVE CAPITAL PROJECT SUMMARIES FOR FY'19

		Adopted FY'19 Beginning Fund Balance	Adopted FY'19 Revenue	Adopted FY'19 Capital Outlay	Adopted FY'19 Transfers	Adopted FY'19 Appropriated Fund Balance
WA0000	Miscellaneous Water Projects - General (758)	188,518	(10,000)	0	0	178,518
WA4742	Meadow Wood Reservoir No. 16 - Site Purchase	281,544	0	281,544	0	0
WA4971	Meadow Wood Reservoir No. 16	0	100,000	100,000	0	0
WA5096	WTP Structural Repairs	54,984	75,000	129,984	0	0
WA6000	MSA Task Order #1	13,495	20,000	33,495	0	0
WA6058	Water System Security Projects	43,758	10,000	53,758	0	0
WA6059	Pump Station Repairs	37,565	25,000	62,565	0	0
WA6207	WTP Replacement	9,073,216	1,750,000	10,823,216	0	0
WA6250	Water Rate & SDC Study	4,296	0	4,296	0	0
WA6251	Purchase Portable Generator for Pump	57,891	0	57,891	0	0
WA6252	Arc Flash Study WA and SE	95,000	0	95,000	0	0
WA6253	Small Main Replacement	253,042	0	253,042	0	0
WA6329	UDF Program	50,000	0	50,000	0	0
WA6330	Freeze Protect ARVs on Pedestrian Bridge	35,000	0	35,000	0	0
WA6331	Seismic Evaluations PS & Reservoirs	100,000	0	100,000	0	0
WA6332	Vine Street Water Line Replacement	<u>350,000</u>	<u>0</u>	<u>350,000</u>	<u>0</u>	<u>0</u>
NEW PROJECTS						
WA6360	Small Main Replacement Program	0	300,000	300,000	0	0
WA6361	WTP SCADA Improvements	0	200,000	200,000	0	0
WA6362	Redwood Highway Looping	<u>0</u>	<u>400,000</u>	<u>400,000</u>	<u>0</u>	<u>0</u>
	Total Projects	<u>10,638,309</u>	<u>2,870,000</u>	<u>13,329,791</u>	<u>0</u>	<u>178,518</u>
Miscellaneous Water Funds						
	Miscellaneous Water Projects - SDC's (752)	1,042,189	(213,000)	0	0	829,189
	Miscellaneous Water Projects - AFD's (755)	76,826	20,000	0	0	96,826
	Miscellaneous Water Projects - LID's (759)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
	Total Miscellaneous Funds	<u>1,119,015</u>	<u>(193,000)</u>	<u>0</u>	<u>0</u>	<u>926,015</u>
	Grand Total - All Projects	<u>11,757,324</u>	<u>2,677,000</u>	<u>13,329,791</u>	<u>0</u>	<u>1,104,533</u>

Program: Utilities/Water – Capital Construction

Financial Summary

	ACTUAL FY'16 #	ACTUAL FY'17 #	BUDGET FY'18 #	REVISED FY'18 #	Adopted FY'19 #	PROJECTED FY'20 #
Beginning Fund Balance	<u>4,587,393</u>	<u>7,395,989</u>	<u>9,458,685</u>	<u>9,458,685</u>	<u>11,757,324</u>	<u>1,104,533</u>
Resources						
Development Charges	608,527	644,363	488,800	488,800	487,000	487,000
Sale of Publications	0	0	0	0	0	0
Investment Interest	57,966	97,265	16,000	16,000	10,000	10,000
Advance Finance Interest	1,168	1,123	0	0	0	0
SDC Loans	5,022	3,857	0	0	0	0
General Fund	100,000	130,000	0	0	0	0
Sewer/Transport. Projects	0	100,000	0	0	0	0
Water Fund	3,313,000	3,425,000	1,905,000	1,905,000	2,160,000	2,400,000
Advance Financing	<u>51,119</u>	<u>12,178</u>	<u>5,000</u>	<u>5,000</u>	<u>20,000</u>	<u>20,000</u>
Other Revenue	0	0	0	0	0	0
<i>Total Current Revenues</i>	<u><i>4,136,802</i></u>	<u><i>4,413,786</i></u>	<u><i>2,414,800</i></u>	<u><i>2,414,800</i></u>	<u><i>2,677,000</i></u>	<u><i>2,917,000</i></u>
Total Resources	<u>8,724,195</u>	<u>11,809,775</u>	<u>11,873,485</u>	<u>11,873,485</u>	<u>14,434,324</u>	<u>4,021,533</u>
Requirements						
Capital Outlay	<u>1,328,206</u>	<u>980,950</u>	<u>10,458,686</u>	<u>10,458,686</u>	<u>13,329,791</u>	<u>2,550,000</u>
Transfers Out	0	0	0	0	0	0
<i>Subtotal Expenditures</i>	<u><i>1,328,206</i></u>	<u><i>980,950</i></u>	<u><i>10,458,686</i></u>	<u><i>10,458,686</i></u>	<u><i>13,329,791</i></u>	<u><i>2,550,000</i></u>
Appropriated Fund Balance	<u>7,395,989</u>	<u>10,828,825</u>	<u>1,414,799</u>	<u>1,414,799</u>	<u>1,104,533</u>	<u>1,471,533</u>
Total Requirements	<u>8,724,195</u>	<u>11,809,775</u>	<u>11,873,485</u>	<u>11,873,485</u>	<u>14,434,324</u>	<u>4,021,533</u>

Program: Utilities/Water – Capital Construction

Project	WA0000	Fund 758 Miscellaneous Water Projects
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Project Description

This project accounts for small miscellaneous projects, closed projects and projects that are in the process of starting up. Fund balances and miscellaneous expenditures that are not attributable to a specific project are accounted for in this project. Resources from a large variety of sources are distributed from this project to other active projects.

Need for Project

This project allows for tracking of fund balances and miscellaneous expenditures.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs

Objective 1: Plan and develop infrastructure.

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

Resources

Resources

	Actual Through FY'17	FY'18 Adopted	FY'18 Estimated	FY'19 Adopted	Through FY'19	FY'20 Projected	Future	Total Projects
Water Operations	16,632,795	1,905,000	1,905,000	2,160,000	20,697,795	2,400,000	8,361,516	31,459,311
Water Capital to Projects	(19,236,267)	(1,975,000)	(1,975,000)	(2,180,000)	(23,391,267)	(2,400,000)	(8,555,142)	(34,346,409)
Advanced Finance District	896,713				896,713		9,000	905,713
Investment Interest	1,393,389	10,000	10,000	10,000	1,413,389	10,000	30,000	1,453,389
Return: Lands & Bldg & Transportation	440,800				440,800			440,800
Other	247,366				247,366			247,366
Total Resources					304,796			160,170

Requirements

Expenditures	126,278				126,278			126,278
Transfers/Contingency					0			0
Ending Balance by Year	248,518	179,624	188,518	178,518	178,518	188,518	33,892	33,892
Total Requirements					126,278			126,278

Program: Utilities/Water – Capital Construction

Project	WA4742	Reservoir and Pump Station Site Purchases
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Project Description

This project would fund the purchase of land for future reservoir or pump station sites (i.e. reservoir Nos. 13 & 16, RCC pump station).

Need for Project

Land acquisition is required for the location of future, as well as replacement, reservoirs and pump stations. The sites must be located at the proper elevation and within a reasonable distance of the water system. There are very few undeveloped properties available that can meet the necessary criteria. Purchase in the near future will be necessary to avoid the need to condemn an already developed parcel at a greatly increased price.



Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs

Objective 1: Plan and develop infrastructure.

Future and Ongoing Costs

Engineering assessments, appraisals and acquisitions.

Revised Estimated Total Project Cost: \$350,000 (Revised from \$150,000 as other site acquisitions have been added)

Resources

	Actual Through FY'17	FY'18 Adopted	FY'18 Estimated	FY'19 Adopted	Through FY'19	FY'20 Projected	Future	Total Projects
Water Capital Projects	187,000				187,000			187,000
Water SDC's	163,000				163,000			163,000
Total Resources					350,000			350,000

Requirements

Expenditures	18,456	281,544	50,000	281,544	350,000			350,000
Transfers/ Contingency					0			0
Ending Balance by Year	331,544		281,544	0	0	0	0	0
Total Requirements					350,000			350,000

Program: Utilities/Water – Capital Construction

Project	WA4971	Meadow Wood Reservoir No. 16
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Project Description

This project will build a new 1.3 million gallon water reservoir as identified in the Water Distribution Master Plan.

Need for Project

The Water Distribution Master Plan calls for a new reservoir to serve Zone 2 customers in the southeast portion of the City. This project will accumulate the funds needed for the construction.



Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs
Objective 2: Ensure water infrastructure needs are met.

Future and Ongoing Costs

Property acquisition will occur through project WA4742. Design and construct.

Estimated Total Project Cost: \$4,000,000 (Revised from \$1,575,000 with 2016 master plan)

Resources

	Actual Through FY'17	FY'18 Adopted	FY'18 Estimated	FY'19 Adopted	Through FY'19	FY'20 Projected	Future	Total Projects
Water Capital Projects				100,000	100,000		3,000,000	3,000,000
Water SDC's (69%)					0		1,000,000	1,000,000
Total Resources					100,000			4,000,000

Requirements

Expenditures				100,000	100,000		4,000,000	4,000,000
Transfers/ Contingency					0			0
Ending Balance by Year	0		0	0	0	0	0	0
Total Requirements					100,000			4,000,000

Program: Utilities/Water – Capital Construction

Project	WA5096	Water Treatment Plant 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 Treatment Plant. Included items are: intake structure and bank stabilization, stairways and landings for basin access, basin valve repairs/replacement, lab expansion, covered pipe storage, chemical storage upgrades and sedimentation basin entrance and egress ladders.



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 Treatment Plant and its supporting structures. In addition, many of the projects listed will bring current facilities into compliance with current OR-OSHA regulations and improve staff safety.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs
Objective 2: Ensure water infrastructure needs are met.

Future and Ongoing Costs

Evaluation and repair of deficiencies.

Estimated Total Project Cost: \$75,000/year as available (Revised from \$90,000/year)

Resources

	Actual Through FY'17	FY'18 Adopted	FY'18 Estimated	FY'19 Adopted	Through FY'19	FY'20 Projected	Future	Total Projects
Water Capital Projects	650,000	250,000	150,000	75,000	875,000	75,000	225,000	1,175,000
Total Resources					875,000			1,175,000

Requirements

Expenditures	470,016	450,099	275,000	129,984	875,000	75,000	225,000	1,175,000
Transfers/ Contingency					0			0
Ending Balance by Year	179,984		54,984	0	0	0	0	0
Total Requirements					875,000			1,175,000

Program: Utilities/Water – Capital Construction

Project	WA6000	General Engineering Services
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Project Description

In May 2008 the City of Grants Pass and Murray, Smith & Associates (MSA) entered into a new, 3 year Water Master Services Agreement for Professional Engineering and Permitting Services. In May 2013, a new 3 year Master Services Agreement with MSA was entered into. In 2016 the City of Grants Pass executed the renewable 3 year option on this agreement. With this Agreement, a number of individual task orders will be assigned, negotiated and executed to undertake a variety of assignments on the City's water facilities.

Need for Project

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

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs
Objective 2: Ensure water infrastructure needs are met.

Future and Ongoing Costs

Development of new unidentified tasks.

Estimated Total Project Cost: \$20,000/year

Resources

	Actual Through FY'17	FY'18 Adopted	FY'18 Estimated	FY'19 Adopted	Through FY'19	FY'20 Projected	Future	Total Projects
Water Capital Projects	200,000	20,000	20,000	20,000	240,000	20,000	60,000	320,000
Total Resources					240,000			320,000

Requirements

Expenditures	171,505	45,048	35,000	33,495	240,000	20,000	60,000	320,000
Transfers/ Contingency					0			0
Ending Balance by Year	28,495		13,495	0	0	0	0	0
Total Requirements					240,000			320,000

Program: Utilities/Water – Capital Construction

Project	WA6058	Water System Security Projects
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Project Description

This project will install and/or upgrade system security at all water system facilities as needed/required. The first location for security improvements will be at the Water Treatment Plant.

Need for Project

Currently system security is in need of upgrade and standardization. This will be an ongoing project to upgrade security across the water system.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs

Objective 2: Ensure water infrastructure needs are met.

Future and Ongoing Costs

Evaluation and upgrade of unidentified deficiencies.

Estimated Total Project Cost: \$10,000/year as available (Revised from \$20,000/year)

Resources

	Actual Through FY'17	FY'18 Adopted	FY'18 Estimated	FY'19 Adopted	Through FY'19	FY'20 Projected	Future	Total Projects
Water Capital Projects	130,000	10,000	10,000	10,000	150,000	10,000	60,000	220,000
Total Resources					150,000			220,000

Requirements

Expenditures	84,242	49,493	12,000	53,758	150,000	10,000	60,000	220,000
Transfers/ Contingency					0			0
Ending Balance by Year	45,758		43,758	0	0	0	0	0
Total Requirements					150,000			220,000

Program: Utilities/Water – Capital Construction

Project	WA6059	Pump Station Repairs
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Project Description

This project will allow for miscellaneous repairs and or upgrades to the various pump stations located throughout the water system. Examples of such are pumps, motors, equipment replacement or refurbishment, control system upgrades, painting, etc.

Need for Project

This project will account for repair or upgrade to pump station facilities as problems are identified. Additionally, pumps/motors will be changed out over a period of time to allow standardization of spare parts.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs

Objective 2: Ensure water infrastructure needs are met.

Future and Ongoing Costs

Evaluation and repair of unidentified deficiencies.

Estimated Total Project Cost: \$25,000/year as available

Resources

	Actual Through FY'17	FY'18 Adopted	FY'18 Estimated	FY'19 Adopted	Through FY'19	FY'20 Projected	Future	Total Projects
Water Capital Projects	150,000	25,000	25,000	25,000	200,000	25,000	75,000	300,000
Total Resources					200,000			300,000

Requirements

Expenditures	112,435	62,000	25,000	62,565	200,000	25,000	75,000	300,000
Transfers/ Contingency					0			0
Ending Balance by Year	37,565		37,565	0	0	0	0	0
Total Requirements					200,000			300,000

Program: Utilities/Water – Capital Construction

Project	WA6207	Water Treatment Plant Replacement
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Project Description

This project will begin accumulating resources for a new WTP. The first steps to be accomplished are a siting study and property acquisition, pilot testing of processes/technologies and a public outreach program.

Need for Project

A Facility Plan Update was completed in 2014. This facility planning effort evaluated options for the future of the WTP. These options ranged from temporary repairs, to rebuilding on-site, to relocation of the plant. The final recommended option was to build a new plant at a new location.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs

Objective 2: Ensure water infrastructure needs are met.

Future and Ongoing Costs

Once a siting study is complete and property purchased, final design of the new WTP will begin. It will take a minimum of 5 years to have the new WTP operational. The current estimated project cost is based upon the 2014 Facility Plan Update CIP.

Estimated Total Project Cost: \$56,200,000 (Revised from \$24,500,000 after Facility Plan Update)

Resources

	Actual Through FY'17	FY'18 Adopted	FY'18 Estimated	FY'19 Adopted	Through FY'19	FY'20 Projected	Future	Total Projects
Water Capital Projects	7,725,000	800,000	800,000	1,050,000	9,575,000	1,350,000	5,425,000	16,350,000
Water SDC's	1,000,000	500,000	500,000	700,000	2,200,000	150,000	2,000,000	4,350,000
Water Bond					0		35,500,000	35,500,000
Total Resources					11,775,000			56,200,000

Requirements

Expenditures	451,784	8,136,853	500,000	10,823,216	11,775,000	1,500,000	42,925,000	56,200,000
Transfers/Contingency					0		0	0
Ending Balance by Year	8,273,216		9,073,216	0	0	0	0	0
Total Requirements					11,775,000			56,200,000

Program: Utilities/Water – Capital Construction

Project	WA6250	Water Rate & SDC Study
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Project Description

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

Need for Project

Once the Urban Growth Boundary is adjusted, water 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, water 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'17	FY'18 Adopted	FY'18 Estimated	FY'19 Adopted	Through FY'19	FY'20 Projected	Future	Total Projects
Water Capital Projects	70,000				70,000			70,000
Water SDC's					0			0
Total Resources					70,000			70,000

Requirements

Expenditures	30,704	24,907	35,000	4,296	70,000			70,000
Transfers/ Contingency					0			0
Ending Balance by Year	39,296		4,296	0	0	0	0	0
Total Requirements					70,000			70,000

Program: Utilities/Water – Capital Construction

Project	WA6251	Purchase Portable Generator for Pump Stations
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Project Description

Purchase a portable generator for use at remote pump station sites, which do not have emergency power generators. Some of the pump station sites require modifications to current configurations to adapt to the new generator.

Need for Project

Existing portable generator has failed and requires replacement.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs

Objective 2: Ensure water infrastructure needs are met.

Future and Ongoing Costs

Adapting specific pump stations to generator electrical configuration. Routine and periodic maintenance.

Estimated Total Project Cost: **\$125,000** revised from \$75,000 due to pump station configurations

Resources

	Actual Through FY'17	FY'18 Adopted	FY'18 Estimated	FY'19 Adopted	Through FY'19	FY'20 Projected	Future	Total Projects
Water Capital Projects	125,000				125,000			125,000
Total Resources					125,000			125,000

Requirements

Expenditures	57,109	48,200	10,000	57,891	125,000			125,000
Transfers/Contingency					0			0
Ending Balance by Year	67,891		57,891	0	0	0	0	0
Total Requirements					125,000			125,000

Program: Utilities/Water – Capital Construction

Project	WA6252	Arc Flash Study WA and SE
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Project Description

This project will implement an arc flash hazard program to supplement/enhance our existing electrical safety program and provide additional safety measures for our employees. The project will complete an arc flash study at the Water and Wastewater Plants, as well as at the remote facilities. The intent is to label all electrical equipment with OR-OSHA compliant labels in regards to arc flash.

Need for Project

To provide compliance with OR-OSHA mandates.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs

Objective 2: Ensure water infrastructure needs are met.

Objective 3: Ensure sewer infrastructure needs are met.

Future and Ongoing Costs

Normal and routine maintenance.

Estimated Total Project Cost: \$100,000

Resources

	Actual Through FY'17	FY'18 Adopted	FY'18 Estimated	FY'19 Adopted	Through FY'19	FY'20 Projected	Future	Total Projects
Water Capital Projects	65,000				65,000			65,000
Wastewater Operations	35,000				35,000			35,000
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/Water – Capital Construction

Project	WA6253	Small Main Replacement
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Project Description

This is an ongoing program to replace old, undersized cast iron water mains. Identified water mains to be replaced are listed below:

NW Clarke Street (A to D) Western	SW I Street between Leonard and
NW Lynwood Place	SE Waterman
NW Prospect Avenue between Manzanita and Bellevue	SE Gene
NW Bellevue Place – Highland to Kinny and Kinny to Prospect	Blenda Court

Need for Project

The mains to be replaced do not meet adopted water service standards. Fire flow capacity is not provided and there is a relatively high rate of leak repairs. The pipes are typically clogged with rust or hardness deposits producing low delivery pressures during use. Where possible, the mains are replaced prior to scheduled street overlays.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs
Objective 2: Ensure water infrastructure needs are met.

Future and Ongoing Costs

Periodic and routine maintenance.

Estimated Total Project Cost: \$1,100,000 (Revised from \$355,000)

Resources

	Actual Through FY'17	FY'18 Adopted	FY'18 Estimated	FY'19 Adopted	Through FY'19	FY'20 Projected	Future	Total Projects
Water Capital Projects	700,000	220,000	220,000		920,000			920,000
General Fund - Policy & Legislation	180,000				180,000			180,000
Total Resources					1,100,000			1,100,000

Requirements

Expenditures	596,958	615,542	250,000	253,042	1,100,000			1,100,000
Transfers/ Contingency					0			0
Ending Balance by Year	283,042		253,042	0	0	0	0	0
Total Requirements					1,100,000			1,100,000

Program: Utilities/Water – Capital Construction

Project	WA6329	UDF Program
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Project Description

This project will provide the funding to implement a unidirectional flushing (UDF) program.

Need for Project

Annual flushing of the distribution system piping will reduce in-system chlorine demand. As part of the water distribution system master planning effort completed in 2016, a UDF pilot study was conducted. The pilot study resulted in better management of disinfection by-products. This project will develop a system wide flushing plan and purchase of necessary equipment.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs

Objective 2: Ensure water infrastructure needs are met.

Future and Ongoing Costs

Routine operation and maintenance associated with annual flushing operations.

Estimated Total Project Cost: \$100,000

Resources

	Actual Through FY'17	FY'18 Adopted	FY'18 Estimated	FY'19 Adopted	Through FY'19	FY'20 Projected	Future	Total Projects
Water Capital Projects		100,000	100,000		100,000			100,000
Total Resources					100,000			100,000

Requirements

Expenditures		100,000	50,000	50,000	100,000			100,000
Transfers/ Contingency					0			0
Ending Balance by Year	0		50,000	0	0	0	0	0
Total Requirements					100,000			100,000

Program: Utilities/Water – Capital Construction

Project	WA6330	Freeze Protect ARVs on Pedestrian Bridge
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Project Description

This project will evaluate methods to freeze protect the air release valves (ARVs) on the pedestrian bridge.

Need for Project

Water pipeline insulation near the taps for the ARVs on the pedestrian bridge are in need of repair. Do to the extremely limited access, we want to ensure the correct freeze protection is incorporated into the design/repairs.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs

Objective 2: Ensure water infrastructure needs are met.

Future and Ongoing Costs

Once the correct method of freeze protection is established, the costs will be adjusted accordingly.

Estimated Total Project Cost: \$50,000

Resources

	Actual Through FY'17	FY'18 Adopted	FY'18 Estimated	FY'19 Adopted	Through FY'19	FY'20 Projected	Future	Total Projects
Water Capital Projects		50,000	50,000		50,000			50,000
Total Resources					50,000			50,000

Requirements

Expenditures		50,000	15,000	35,000	50,000			50,000
Transfers/ Contingency					0			0
Ending Balance by Year	0		35,000	0	0	0	0	0
Total Requirements					50,000			50,000

Program: Utilities/Water – Capital Construction

Project	WA6331	Seismic Evaluation PS & Reservoirs
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Project Description

This project will perform seismic evaluations and recommendations for water pump stations and reservoirs.

Need for Project

The water distribution system master plan completed in 2016 identified a capital project to evaluate pump stations and reservoirs for seismic resiliency. The intent of the evaluation is to identify system vulnerabilities and work towards developing a plan to meet seismic response and recovery goals for water utilities presented in the Oregon Resilience Plan.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs

Objective 2: Ensure water infrastructure needs are met.

Future and Ongoing Costs

Future costs will be developed based upon the recommendations of the evaluations.

Estimated Total Project Cost: **\$200,000** revised from \$100,000 after initial evaluation

Resources

	Actual Through FY'17	FY'18 Adopted	FY'18 Estimated	FY'19 Adopted	Through FY'19	FY'20 Projected	Future	Total Projects
Water Capital Projects		100,000	200,000		200,000			200,000
Total Resources					200,000			200,000

Requirements

Expenditures		100,000	100,000	100,000	200,000			200,000
Transfers/ Contingency					0			0
Ending Balance by Year	0		100,000	0	0	0	0	0
Total Requirements					200,000			200,000

Program: Utilities/Water – Capital Construction

Project	WA6332	Vine Street Water Line Replacement
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Project Description

This project will replace a deteriorated ductile iron water main from Morgan Lane north on Vine Street for approximately 1100 linear feet. Due to recent failures of the existing line, a corrosion study will be conducted prior to final design. The new water main will be up-sized to comply with our recently completed master plan.

Need for Project

The existing ductile iron pipeline is deteriorated and has several recent failures.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs

Objective 2: Ensure water infrastructure needs are met.

Future and Ongoing Costs

Periodic and routine maintenance.

Estimated Total Project Cost: \$400,000

Resources

	Actual Through FY'17	FY'18 Adopted	FY'18 Estimated	FY'19 Adopted	Through FY'19	FY'20 Projected	Future	Total Projects
Water Capital Projects		400,000	400,000		400,000			400,000
Total Resources					400,000			400,000

Requirements

Expenditures		400,000	50,000	350,000	400,000			400,000
Transfers/ Contingency					0			0
Ending Balance by Year	0		350,000	0	0	0	0	0
Total Requirements					400,000			400,000

Program: Utilities/Water – Capital Construction

Project	WA6360	Small Main Replacement Program
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Project Description

This is an ongoing program to replace old, undersized cast iron water mains. Identified water mains to be replaced are listed below:

NE Foster Way	SW Short Street
NE Sherman Lane	NE B Street (8 th to Dean)
SW Laurel (Rogue River Ave to Bridge)	SW Mary Lane
NW Gilbert Way to Midland Ave (extension)	

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs
 Objective 2: Ensure water infrastructure needs are met.

Need for Project

The mains to be replaced do not meet adopted water service standards. Fire flow capacity is not provided and there is a relatively high rate of leak repairs. The pipes are typically clogged with rust or hardness deposits producing low delivery pressures during use. Where possible, the mains are replaced prior to scheduled street overlays.

Future and Ongoing Costs

Periodic and routine maintenance.

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

Resources

	Actual Through FY'17	FY'18 Adopted	FY'18 Estimated	FY'19 Adopted	Through FY'19	FY'20 Projected	Future	Total Projects
Water Capital Projects				300,000	300,000	320,000	580,000	1,200,000
Total Resources					300,000			1,200,000

Requirements

Expenditures				300,000	300,000	320,000	580,000	1,200,000
Transfers/Contingency					0			0
Ending Balance by Year	0	0	0	0	0	0	0	0
Total Requirements					300,000			1,200,000

Program: Utilities/Water – Capital Construction

Project WA6361 WTP SCADA Improvements

Project Description

This project will update the Water Treatment Plant (WTP) SCADA and Network to be in line with the improvements being installed at the Water Restoration Plant (WRP).

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs

Objective 2: Ensure water infrastructure needs are met.

Need for Project

To replace dated hardware and software equipment. Updating and matching the SCADA systems between the WRP and WTP allows for easier maintenance of both systems. Ultimate integration of the systems into asset management will be more cost effective.

Future and Ongoing Costs

Periodic and routine maintenance

Estimated Total Project Cost: \$200,000

Resources

	Actual Through FY'17	FY'18 Adopted	FY'18 Estimated	FY'19 Adopted	Through FY'19	FY'20 Projected	Future	Total Projects
Water Capital Projects				200,000	200,000			200,000
Total Resources					200,000			200,000

Requirements

Expenditures				200,000	200,000			200,000
Transfers/ Contingency					0			0
Ending Balance by Year	0		0	0	0	0	0	0
Total Requirements					200,000			200,000

Program: Utilities/Water – Capital Construction

Project	WA6362	Redwood Highway Looping
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Project Description

This project will install approximately 9,700 linear feet of 16” water main to provide a water service loop in the Redwood area.

Council Strategic Goal

Maintain, Operate and Expand our Infrastructure to Meet Community Needs

Objective 2: Ensure water infrastructure needs are met.

Need for Project

To meet fire flow requirements for an RCC expansion, a 16” water line is required from approximately Allen Creek Road to Hubbard Lane. This water line will also provide a secondary feed for all water users west of Allen Creek Road.

Future and Ongoing Costs

Periodic and routine maintenance.

Estimated Total Project Cost: \$3,400,000

Resources

	Actual Through FY'17	FY'18 Adopted	FY'18 Estimated	FY'19 Adopted	Through FY'19	FY'20 Projected	Future	Total Projects
Water Capital Projects				400,000	400,000	600,000	2,400,000	3,400,000
Total Resources					400,000			3,400,000

Requirements

Expenditures				400,000	400,000	600,000	2,400,000	3,400,000
Transfers/ Contingency					0			0
Ending Balance by Year	0		0	0	0	0	0	0
Total Requirements					400,000			3,400,000