

Funded Projects

Overview

The Water Capital Improvement Program provides for the planning, engineering, and construction of improvements to the City's drinking water system. The program includes projects for installing new distribution system water lines, replacing existing water lines, design and construction of a new pump station, exploring new groundwater sources, as well as evaluation of adequate funding for all water system facilities. Another component of the Capital Improvement Program is the proactive safeguards for vital facilities such as security monitoring improvements and seismic upgrades. All of these projects align with the latest Water System Master Plan, adopted by the City Council September 2012.

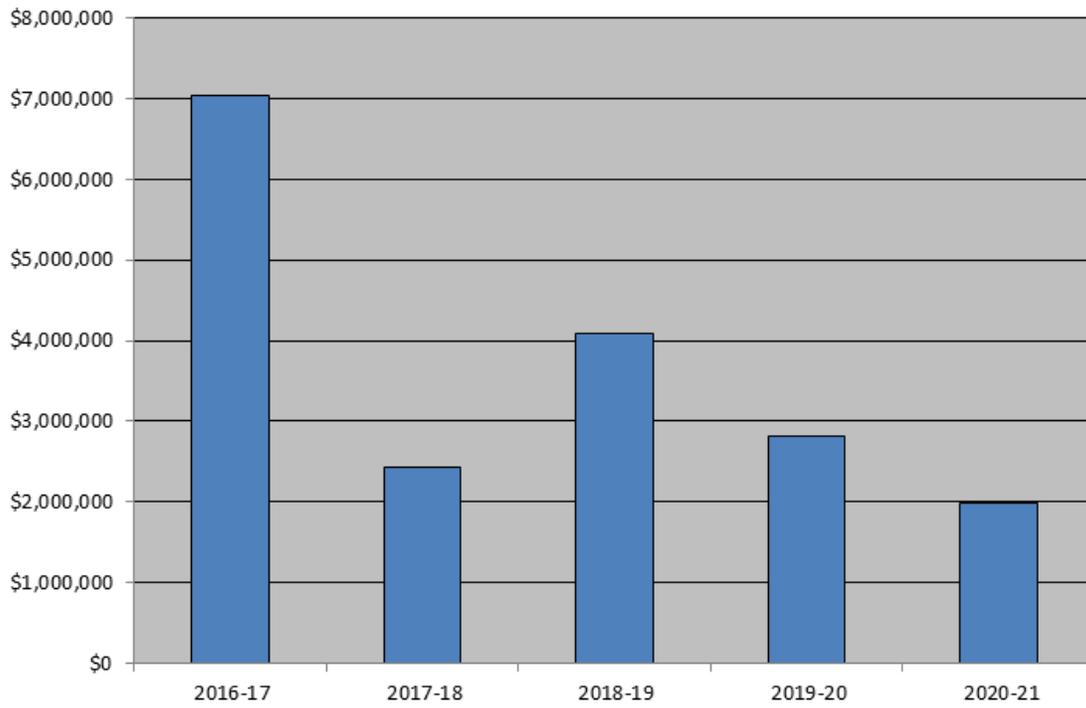
Highlights

One of the primary goals of the Water Program is to ensure that this community's drinking water supplies are protected, available, and affordable now and into the future. Another goal is to continually evaluate, and change when possible, business methods so they align with the City's sustainability directives.

The following list provides examples of projects that support the Water Program's goals:

1. Water System Master Plan #426600
2. NW Division St (Capacity Enhancement) #427100
3. SE Waterline Replacement Package Phase I #427700
4. Hunters Highland Reservoir Seismic #428700
5. South Hills Seismic #429200
6. Condition Assessment - Critical Mains - Phase I #429400
7. Intermediate Transmission Main #430000

Water Expenditure Graph by Fiscal Year



Water Funded Summary										
Project	Project Name	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total		
400300	Water System Improvements	272,190	100,000	100,000	100,000	100,000	100,000	772,190		
400600	Waterline Oversizing	120,185	25,000	25,000	25,000	25,000	25,000	245,185		
408700	Water Service and Meter Upgrades	179,572	50,000	50,000	50,000	50,000	50,000	429,572		
416000	Water System and Supply Studies	96,792	20,000	20,000	20,000	20,000	20,000	196,792		
417000	Viewcrest Dr. (East of Blaine)	0	0	0	0	40,000	148,202	188,202		
420300	Water Facility Security Systems	100,000	25,000	25,000	25,000	25,000	25,000	225,000		
422100	SE Orient Waterline	0	1,246,300	0	0	0	0	1,246,300		
425000	Intermediate Service Level Pump Station Installation	68,000	0	0	0	0	0	68,000		
425500	Salquist Water Line - East	0	0	0	220,504	514,508	0	735,012		
425600	Minor Capital Maintenance Projects	490,475	500,000	515,000	530,450	546,364	562,755	3,145,044		
425800	NE 8th - Kane to Hacienda	269,394	0	0	0	0	0	269,394		
426400	NE Waterline Replacement Package Phase II	0	203,544	474,936	0	0	0	678,480		
426600	Water System Master Plan	0	175,000	0	0	0	0	175,000		
426800	SE Waterline Replacement Package Phase II	0	0	152,856	356,664	0	0	509,520		
427100	NW Division St (Capacity Enhancement)	1,284,420	150,000	0	0	0	0	1,434,420		
427300	Test Wells	485,671	325,000	525,000	0	225,000	525,000	2,085,671		
427700	SE Waterline Replacement Package Phase I	0	750,000	0	0	0	0	750,000		
427800	NE 38th - Hogan to Rene Ave.	245,150	0	0	0	0	0	245,150		
427900	SW Florence Eastman to Powell	0	84,103	196,241	0	0	0	280,344		
428300	NW Waterline Replacement Package Phase II	0	0	0	178,200	415,800	0	594,000		
428700	Hunters Highland Reservoir Seismic	500,000	700,000	0	0	0	0	1,200,000		
428800	SCADA Cellular Conversion	100,000	0	0	0	0	0	100,000		
428900	Gresham's Well #2 (Cascade Well #6)	0	100,000	100,000	2,321,000	0	0	2,521,000		
429100	Lusted Site Improvements	25,000	275,000	0	0	0	0	300,000		
429200	South Hills Seismic	0	250,000	0	0	0	0	250,000		
429300	Walters Hill Reservoir and Pump Station Abandonment	0	0	0	90,000	210,000	0	300,000		
429400	Condition Assessment - Critical Mains - Phase I	250,000	0	250,000	0	0	0	500,000		
429500	Horizontal Directional Drilling	150,000	0	0	0	0	0	150,000		
429600	Intermediate Pump Station Waterline Work	0	0	0	45,000	105,000	0	150,000		
429700	Seismic Resiliency Study	150,000	0	0	0	0	0	150,000		
429800	Hunters Highland Booster	150,000	0	0	0	0	0	150,000		
429900	SE Stark/Rene	0	0	0	132,337	308,787	0	441,124		
430000	Intermediate Transmission Main	0	0	0	0	0	0	0		
430100	Kane Road (North of Division)	0	2,000,000	0	0	0	0	2,000,000		
430200	Asset Management Software	0	50,000	0	0	225,000	525,000	750,000		
Grand Total		4,936,849	7,028,947	2,434,033	4,094,155	2,810,459	1,980,957	23,285,400		

Water Funded Summary by Resource							
Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Debt-Operating	2,426,023	819,250	743,750	1,949,661	507,291	488,851	6,934,826
Debt-SDC	312,951	2,240,750	166,250	780,612	666,011	219,351	4,385,925
Dev/SDC Credit	0	1,246,300	0	0	0	0	1,246,300
Operating	434,491	385,000	85,000	130,000	190,000	85,000	1,309,491
Repair/Replacement Reserves	1,763,384	2,337,647	1,439,033	1,233,882	1,447,157	1,187,755	9,408,858
Grand Total	4,936,849	7,028,947	2,434,033	4,094,155	2,810,459	1,980,957	23,285,400

Water Funded Resource Detail										
Project	Project Name	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total	
400300	Water System Improvements	Operating	136,095	50,000	50,000	50,000	50,000	50,000	386,095	
		Repair/Replace	136,095	50,000	50,000	50,000	50,000	50,000	386,095	
400300 Total			272,190	100,000	100,000	100,000	100,000	100,000	772,190	
400600	Waterline Oversizing	Debt-SDC	120,185	25,000	25,000	25,000	25,000	25,000	245,185	
400600 Total			120,185	25,000	25,000	25,000	25,000	25,000	245,185	
408700	Water Service and Meter Upgrades	Debt-Operating	37,908	0	0	0	0	0	37,908	
		Repair/Replace	141,664	50,000	50,000	50,000	50,000	50,000	391,664	
408700 Total			179,572	50,000	50,000	50,000	50,000	50,000	429,572	
416000	Water System and Supply Studies	Debt-SDC	48,396	10,000	10,000	10,000	10,000	10,000	98,396	
		Operating	48,396	10,000	10,000	10,000	10,000	10,000	98,396	
416000 Total			96,792	20,000	20,000	20,000	20,000	20,000	196,792	
417000	Viewcrest Dr. (East of Blaine)	Debt-Operating	0	0	0	0	20,000	74,101	94,101	
		Debt-SDC	0	0	0	0	20,000	74,101	94,101	
417000 Total			0	0	0	0	40,000	148,202	188,202	
420300	Water Facility Security Systems	Operating	100,000	25,000	25,000	25,000	25,000	25,000	225,000	
420300 Total			100,000	25,000	25,000	25,000	25,000	25,000	225,000	
422100	SE Orient Waterline	Dev/SDC Credit	0	1,246,300	0	0	0	0	1,246,300	
422100 Total			0	1,246,300	0	0	0	0	1,246,300	
425000	Intermediate Service Level Pump Station Installation	Debt-Operating	25,621	0	0	0	0	0	25,621	
		Debt-SDC	42,379	0	0	0	0	0	42,379	
425000 Total			68,000	0	0	0	0	0	68,000	
425500	Salquist Water Line - East	Debt-Operating	0	0	0	42,661	99,541	0	142,202	
		Debt-SDC	0	0	0	177,843	414,967	0	592,810	
425500 Total			0	0	0	220,504	514,508	0	735,012	
425600	Minor Capital Maintenance Projects	Repair/Replace	490,475	500,000	515,000	530,450	546,364	562,755	3,145,044	
425600 Total			490,475	500,000	515,000	530,450	546,364	562,755	3,145,044	
425800	NE 8th - Kane to Hacienda	Debt-Operating	269,394	0	0	0	0	0	269,394	
425800 Total			269,394	0	0	0	0	0	269,394	
426400	NE Waterline Replacement Package Phase II	Repair/Replace	0	203,544	474,936	0	0	0	678,480	
426400 Total			0	203,544	474,936	0	0	0	678,480	
426600	Water System Master Plan	Debt-Operating	0	87,500	0	0	0	0	87,500	
		Debt-SDC	0	87,500	0	0	0	0	87,500	
426600 Total			0	175,000	0	0	0	0	175,000	
426800	SE Waterline Replacement Package Phase II	Repair/Replace	0	0	152,856	356,664	0	0	509,520	
426800 Total			0	0	152,856	356,664	0	0	509,520	
427100	NW Division St (Capacity Enhancement)	Debt-Operating	1,284,420	150,000	0	0	0	0	1,434,420	
427100 Total			1,284,420	150,000	0	0	0	0	1,434,420	
427300	Test Wells	Debt-Operating	383,680	227,750	414,750	0	177,750	414,750	1,618,680	
		Debt-SDC	101,991	97,250	110,250	0	47,250	110,250	466,991	
427300 Total			485,671	325,000	525,000	0	225,000	525,000	2,085,671	
427700	SE Waterline Replacement Package Phase I	Repair/Replace	0	750,000	0	0	0	0	750,000	

Water Funded Resource Detail										
Project	Project Name	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total	
427700 Total			0	750,000	0	0	0	0	750,000	0
427800	NE 38th - Hogan to Rene Ave.	Repair/Replace	245,150	0	0	0	0	0	245,150	0
427800 Total			245,150	0	0	0	0	0	245,150	0
427900	SW Florence Eastman to Powell	Repair/Replace	0	84,103	196,241	0	0	0	280,344	0
427900 Total			0	84,103	196,241	0	0	0	280,344	0
428300	NW Waterline Replacement Package Phase II	Repair/Replace	0	0	0	178,200	415,800	0	594,000	0
428300 Total			0	0	0	178,200	415,800	0	594,000	0
428700	Hunters Highland Reservoir Seismic	Repair/Replace	500,000	700,000	0	0	0	0	1,200,000	0
428700 Total			500,000	700,000	0	0	0	0	1,200,000	0
428800	SCADA Cellular Conversion	Repair/Replace	100,000	0	0	0	0	0	100,000	0
428800 Total			100,000	0	0	0	0	0	100,000	0
428900	Gresham's Well #2 (Cascade Well #6)	Debt-Operating	0	79,000	79,000	1,817,000	0	0	1,975,000	0
		Debt-SDC	0	21,000	21,000	504,000	0	0	546,000	0
428900 Total			0	100,000	100,000	2,321,000	0	0	2,521,000	0
429100	Lusted Site Improvements	Debt-Operating	25,000	275,000	0	0	0	0	300,000	0
429100 Total			25,000	275,000	0	0	0	0	300,000	0
429200	South Hills Seismic	Operating	0	250,000	0	0	0	0	250,000	0
429200 Total			0	250,000	0	0	0	0	250,000	0
429300	Walters Hill Reservoir and Pump Station Abandonment	Debt-Operating	0	0	0	90,000	210,000	0	300,000	0
429300 Total			0	0	0	90,000	210,000	0	300,000	0
429400	Condition Assessment - Critical Mains - Phase I	Debt-Operating	250,000	0	250,000	0	0	0	500,000	0
429400 Total			250,000	0	250,000	0	0	0	500,000	0
429500	Horizontal Directional Drilling	Repair/Replace	150,000	0	0	0	0	0	150,000	0
429500 Total			150,000	0	0	0	0	0	150,000	0
429600	Intermediate Pump Station Waterline Work	Operating	0	0	0	45,000	105,000	0	150,000	0
429600 Total			0	0	0	45,000	105,000	0	150,000	0
429700	Seismic Resiliency Study	Operating	150,000	0	0	0	0	0	150,000	0
429700 Total			150,000	0	0	0	0	0	150,000	0
429800	Hunters Highland Booster	Debt-Operating	150,000	0	0	0	0	0	150,000	0
429800 Total			150,000	0	0	0	0	0	150,000	0
429900	SE Stark/Rene	Debt-SDC	0	0	0	63,769	148,794	0	212,563	0
		Repair/Replace	0	0	0	68,568	159,993	0	228,561	0
429900 Total			0	0	0	132,337	308,787	0	441,124	0
430000	Intermediate Transmission Main	Debt-SDC	0	2,000,000	0	0	0	0	2,000,000	0
430000 Total			0	2,000,000	0	0	0	0	2,000,000	0
430100	Kane Road (North of Division)	Repair/Replace	0	0	0	0	225,000	525,000	750,000	0
430100 Total			0	0	0	0	225,000	525,000	750,000	0
430200	Asset Management Software	Operating	0	50,000	0	0	0	0	50,000	0
430200 Total			0	50,000	0	0	0	0	50,000	0
Grand Total			4,936,849	7,028,947	2,434,033	4,094,155	2,810,459	1,980,957	23,285,400	0

FUNDED PROJECT
Water

400300: Water System Improvements

Description: This project supports water system repair and rehabilitation through improvements such as waterline relocations and replacements, improvements necessary to retain water quality, improvements in support of other projects and facilities protection as needed. This project is located in various neighborhood districts within the City.

Justification: This project serves existing customers by protecting facilities during construction by others, and by maintaining service continuity, system reliability and fire protection. Some of these project costs are recoverable from other public agencies, utilities or private developers. The desired outcome is to minimize service outages, protect the integrity of the system and maintain water quality. This project also replaces undersized facilities and relocates fire hydrants to meet ADA requirements as part of other small scale transportation related projects. (Existing / Future Customers Benefited:100% / 0%)

Type of Project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Operating	136,095	50,000	50,000	50,000	50,000	50,000	386,095
	Repair/Replacement Reserves	136,095	50,000	50,000	50,000	50,000	50,000	386,095
Resources Total		272,190	100,000	100,000	100,000	100,000	100,000	772,190
Expenses	Design/Const Admin	47,753	17,544	17,544	17,544	17,544	17,544	135,473
	Construction	191,010	70,175	70,175	70,175	70,175	70,175	541,885
	Admin (14%)	33,427	12,281	12,281	12,281	12,281	12,281	94,832
Expenses Total		272,190	100,000	100,000	100,000	100,000	100,000	772,190

FUNDED PROJECT
Water

400600: Waterline Oversizing

Description: This project represents City contributions to miscellaneous oversizing of waterlines designated in the Water Master Plan or system modeling. Gresham will consider cost reimbursements, as established by Council resolution, for waterline oversizing above 8" in size and updates for new hydrant installations, if required by the City. This project also supports construction of water facilities to provide additional fire flow to specific areas of the city. The project is located in various neighborhood districts.

Justification: These contributions allow the City to assist in or provide for the upgrade of inadequate facilities and improving fire flows that accommodate new development. Project funding will be drawn from the forward-looking SDCs collected from new service connections. (Existing / Future Customers Benefited: 0% / 100%)

Type of Project: Construction of facilities and utilities for growth.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Debt-SDC	120,185	25,000	25,000	25,000	25,000	25,000	245,185
Resources Total		120,185	25,000	25,000	25,000	25,000	25,000	245,185
Expenses	Design/Const Admin	21,085	4,000	4,000	4,000	4,000	4,000	41,085
	Construction	84,340	17,930	17,930	17,930	17,930	17,930	173,990
	Admin (14%)	14,760	3,070	3,070	3,070	3,070	3,070	30,110
Expenses Total		120,185	25,000	25,000	25,000	25,000	25,000	245,185

FUNDED PROJECT
Water

408700: Water Service and Meter Upgrades

Description: This project is to replace service facilities such as vaults and service lines for large meters (1 1/2" and above). The service facility may need to be relocated, or upgraded for various reasons including right-of-way issues, sub-standard vaults and inadequate sizing. Where necessary, this project also includes the purchase of property or easements required to install new metering facilities as some of these meters are on private property and are difficult to access. The project is located in various neighborhood districts.

Justification: In 2013 all of the large meters were converted to the Automated Metering Infrastructure (AMI). That project only replaced the meter but did not address meter service inadequacies. The project upgrades or replaces existing water service facilities including valves, service lines, meters, vaults, and other items required.. Many vaults containing meters do not meet current OSHA standards and are inaccessible. (Existing / Future Customers Benefited: 100% / 0%)

Type of Project: Construction of facilities and utilities to correct deficiencies.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Debt-Operating	37,908	0	0	0	0	0	37,908
	Repair/Replacement Reserves	141,664	50,000	50,000	50,000	50,000	50,000	391,664
Resources Total		179,572	50,000	50,000	50,000	50,000	50,000	429,572
Expenses	Design/Const Admin	31,504	6,579	6,579	6,579	6,579	6,579	64,399
	Construction	126,015	37,281	37,281	37,281	37,281	37,281	312,420
	Admin (14%)	22,053	6,140	6,140	6,140	6,140	6,140	52,753
Expenses Total		179,572	50,000	50,000	50,000	50,000	50,000	429,572

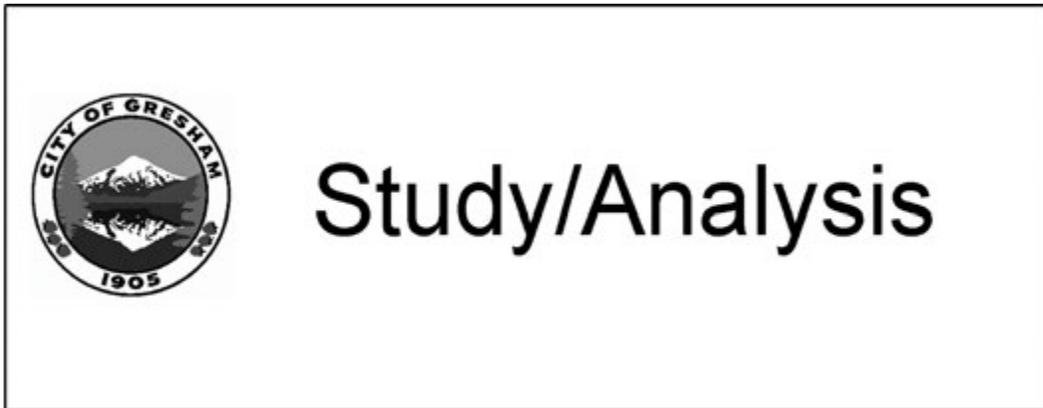
FUNDED PROJECT
Water

416000: Water System and Supply Studies

Description: This project funds studies that evaluate water supply options for meeting current and future water system reliability and demands that help ensure the City's compliance with state and federal water system mandates. Included in this project is funding for utility supply investigations, studies of urban growth boundaries, water supply option evaluations, and water treatment and water quality evaluations and other studies related to water system operation . The study includes infrastructure, financing and programming elements: e.g., reservoir storage capacity, wholesale rates, wellhead protection and water conservation program requirements. The project supports water service levels and various neighborhood districts.

Justification: This project supports the evaluation of future impacts to Gresham from infrastructure improvements and expansions to the Portland Water Bureau source of supply or the improvements made to the groundwater source of supply as well as impacts due to state and federal drinking water regulations. (Existing / Future Customers Benefited: 50% / 50%)

Type of Project: Engineering Studies Related to City services.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Debt-SDC	48,396	10,000	10,000	10,000	10,000	10,000	98,396
	Operating	48,396	10,000	10,000	10,000	10,000	10,000	98,396
Resources Total		96,792	20,000	20,000	20,000	20,000	20,000	196,792
Expenses	Design/Const Admin	84,905	17,544	17,544	17,544	17,544	17,544	172,625
	Admin (14%)	11,887	2,456	2,456	2,456	2,456	2,456	24,167
Expenses Total		96,792	20,000	20,000	20,000	20,000	20,000	196,792

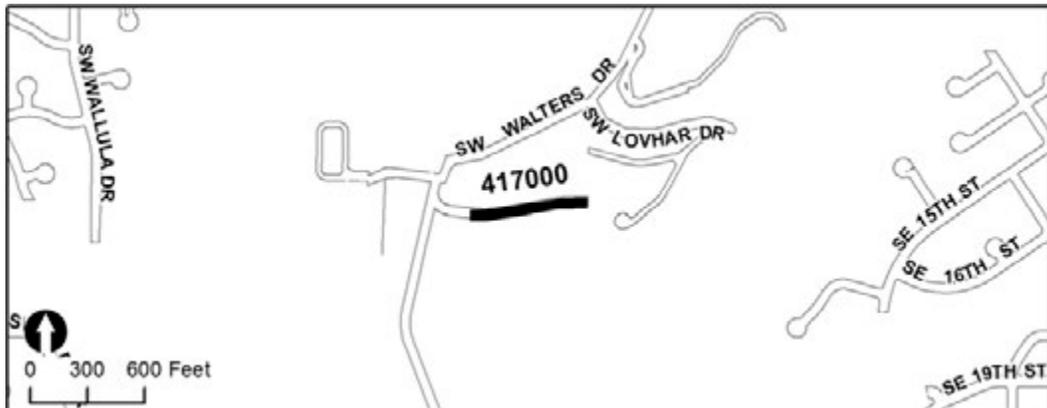
FUNDED PROJECT
Water

417000: Viewcrest Dr. (East of Blaine)

Description: This project replaces approximately 600 linear feet of 2" PVC waterline with 600 linear feet of 8" D.I. waterline and services. The project is located in the Gresham Butte Neighborhood District.

Justification: The existing waterline is undersized and in poor condition, and fire flows for the area are inadequate. The project provides for needed domestic and fire flows to meet the needs of current and future development, and it will reduce repairs and maintenance activities. (Existing / Future Customers Benefited: 50% / 50%)

Type of Project: Construction of facilities and utilities for growth and to correct deficiencies.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Debt-Operating	0	0	0	0	20,000	74,101	94,101
	Debt-SDC	0	0	0	0	20,000	74,101	94,101
Resources Total		0	0	0	0	40,000	148,202	188,202
Expenses	Design/Const Admin	0	0	0	0	35,088	34,962	70,050
	Construction	0	0	0	0	0	95,040	95,040
	Admin (14%)	0	0	0	0	4,912	18,200	23,112
Expenses Total		0	0	0	0	40,000	148,202	188,202

FUNDED PROJECT
Water

420300: Water Facility Security Systems

Description: This project provides security monitoring systems and other recommendations provided by the vulnerability assessment study and emergency response plan completed June 2004 by CH2M-Hill for Gresham's water infrastructure. An update to the vulnerability assessment was completed in 2011. Projects identified in the update will be constructed in this project. This project is located in various neighborhood districts.

Justification: This project will reduce the City's vulnerability to physical, water quality, and cyber attacks. (Existing / Future Customers Benefited: 100% / 0%)

Type of Project: Construction to enhance security of facilities.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Operating	100,000	25,000	25,000	25,000	25,000	25,000	225,000
Resources Total		100,000	25,000	25,000	25,000	25,000	25,000	225,000
Expenses	Design/Const Admin	17,544	4,386	4,386	4,386	4,386	4,386	39,474
	Construction	70,175	17,544	17,544	17,544	17,544	17,544	157,895
	Admin (14%)	12,281	3,070	3,070	3,070	3,070	3,070	27,631
Expenses Total		100,000	25,000	25,000	25,000	25,000	25,000	225,000

FUNDED PROJECT
Water

422100: SE Orient Waterline

Description: This project installs 1,100 linear feet of 12" DI on SE Orient between SE Anderson and Welch, and 3,500 linear feet of 12" DI between SE 31st and 282nd. This project is located in the Kelly Creek Neighborhood District.

Justification: The existing waterlines in SE Orient are currently undersized to support additional growth, and also require regular repair and maintenance. A major portion of the project will be waterline in a new area. This project will provide a crucial link between Lusted PS #2 and Wheeler Reservoir, improve system performance and fire flows to the surrounding areas, and reduce repair and maintenance activities. When completed, this project will serve as a major “backbone” waterline for water service into the Springwater Development Area. (Existing/Future Customers Benefited 20% / 80%)

Type of Project: Construction of facilities and utilities for growth and to correct deficiencies.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Dev/SDC Credit	0	1,246,300	0	0	0	0	1,246,300
Resources Total		0	1,246,300	0	0	0	0	1,246,300
Expenses	Design/Const Admin	0	218,650	0	0	0	0	218,650
	Construction	0	874,596	0	0	0	0	874,596
	Admin (14%)	0	153,054	0	0	0	0	153,054
Expenses Total		0	1,246,300	0	0	0	0	1,246,300

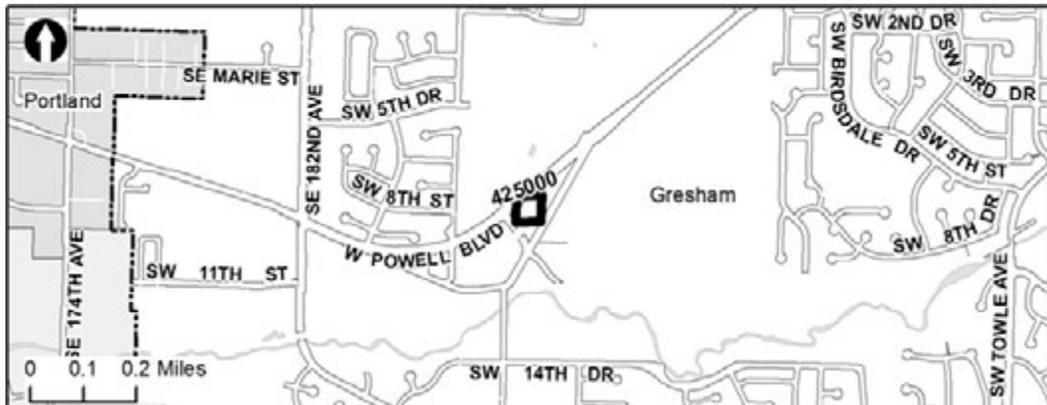
FUNDED PROJECT
Water

425000: Intermediate Service Level Pump Station Installation

Description: This project constructs a pump station to support the Intermediate Service Level. The project includes consultant services, property acquisition and construction of a pump station and associated infrastructure.

Justification: This pump station will support both the existing system with redundancy and operational flexibility as well as support future growth. The pump station will be designed to meet the capacity if the Division Street Pump Station were to fail. The pump station will also be sized to accommodate future growth of the Pleasant Valley area.. (Existing / Future Customers Benefited: 33% / 67%)

Type of Project: Construction of facilities and utilities for growth.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Debt-Operating	25,621	0	0	0	0	0	25,621
	Debt-SDC	42,379	0	0	0	0	0	42,379
Resources Total		68,000	0	0	0	0	0	68,000
Expenses	Design/Const Admin	11,930	0	0	0	0	0	11,930
	Construction	47,719	0	0	0	0	0	47,719
	Admin (14%)	8,351	0	0	0	0	0	8,351
Expenses Total		68,000	0	0	0	0	0	68,000

FUNDED PROJECT
Water

425500: Salquist Water Line - East

Description: This project installs 1500 LF of 12-inch D.I. pipe on SE Salquist Road between SE Glacier Ave. and SE Night Heron Way. This is the second phase of a comprehensive pipeline replacement project on SE Salquist Road between SE Orient Drive and SE 282nd Avenue. This project serves the Lusted Service Level and is located in the Kelly Creek Neighborhood District.

Justification: Much of the existing waterline on SE Salquist Road is currently undersized and unable to provide an adequate level of service for the new development that is occurring in this area. Additionally, much of the older sections of the pipeline have proven to require more maintenance and repair work in recent years. This project when completed will provide a critical link between the Salquist Pump Station and the Wheeler Reservoir (as well as the rest of the Lusted Service Level). To fully utilized the new groundwater supply resource, the City needs to have larger diameter distribution mains as a backbone to move water west to east from the Grant Butte Service Level (where the groundwater is introduced into the distribution system) to the Lusted Service Level through the Salquist Pump Station. (Existing/Future Customers Benefited 20% / 80%)

Type of Project: Construction of facilities and utilities to correct existing deficiencies and provide for future growth.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Debt-Operating	0	0	0	42,661	99,541	0	142,202
	Debt-SDC	0	0	0	177,843	414,967	0	592,810
Resources Total		0	0	0	220,504	514,508	0	735,012
Expenses	Design/Const Admin	0	0	0	22,050	51,451	0	73,501
	Construction	0	0	0	174,337	406,786	0	581,123
	Admin (14%)	0	0	0	24,117	56,271	0	80,388
Expenses Total		0	0	0	220,504	514,508	0	735,012

FUNDED PROJECT
Water

425600: Minor Capital Maintenance Projects

Description: This project constructs multiple small projects which are identified in the Capital Maintenance Plan (CMP) or have been identified through the Operations or Engineering groups as needed. Projects will include replacement of aging infrastructure which could include waterlines, pump stations, valves, and hydrants.

Justification: The Capital Maintenance Plan (CMP) identified projects which are generally maintenance in nature and do not have an SDC component. The plan examines system deficiencies within the existing water system. The projects identified in the plan as well as other capital maintenance projects identified during the daily operation of the system will be funded through the Repair/Replacement Reserves fund. (Existing/Future Customer Benefit: 100%/ 0%)

Type of Project: Repair and rehabilitation of facilities and utilities to correct deficiencies.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Repair/Replacement Reserves	490,475	500,000	515,000	530,450	546,364	562,755	3,145,044
Resources Total		490,475	500,000	515,000	530,450	546,364	562,755	3,145,044
Expenses	Design/Const Admin	86,048	87,719	90,351	93,061	95,853	98,729	551,761
	Construction	344,193	357,596	361,403	372,246	383,414	394,916	2,213,768
	Admin (14%)	60,234	54,685	63,246	65,143	67,097	69,110	379,515
Expenses Total		490,475	500,000	515,000	530,450	546,364	562,755	3,145,044

FUNDED PROJECT
Water

425800: NE 8th – Kane to Hacienda

Description: This project installs approximately 950 linear feet of 8” DI on NE 8th between NE Kane and NE Hacienda. The project will allow an area which historically had low pressure served on the Grant Butte pressure system to be switched to the Intermediate service level.

Justification: Recent water line improvements completed on the NE Kane transportation project have looped the Intermediate service line on SE Kane into SE Division. This looping has presented an opportunity to convert an area that has historically had less than ideal pressure to a service level that would provide a pressure allowing for an increased fire flow capacity. (Existing/Future Customer Benefit: 100%/ 0%)

Type of Project: Repair and rehabilitation of facilities and utilities to correct deficiencies.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Debt-Operating	269,394	0	0	0	0	0	269,394
Resources Total		269,394	0	0	0	0	0	269,394
Expenses	Design/Const Admin	47,262	0	0	0	0	0	47,262
	Construction	189,049	0	0	0	0	0	189,049
	Admin (14%)	33,083	0	0	0	0	0	33,083
Expenses Total		269,394	0	0	0	0	0	269,394

FUNDED PROJECT
Water

426400: NE Waterline Replacement Package Phase II

Description: This project replaces aging 6-inch cast iron with 8-inch ductile iron including services. These replacements are located in various neighborhood districts. The top three projects listed by priority include: NE 19th – Liberty to 20th, NE 6th south of NE Cochran and NE La Mesa Ct. south of NE 8th. The priority of the projects are subject to change.

Justification: The waterline projects replaces badly deteriorated waterlines with a high record of repairs and greatly improves system flows and reliability. (Existing/Future Customers Benefited: 100%/0%)

Type of Project: Repair and rehabilitation of facilities and utilities



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Repair/Replacement Reserves	0	203,544	474,936	0	0	0	678,480
Resources Total		0	203,544	474,936	0	0	0	678,480
Expenses	Design/Const Admin	0	35,709	83,322	0	0	0	119,031
	Construction	0	142,838	333,289	0	0	0	476,127
	Admin (14%)	0	24,997	58,325	0	0	0	83,322
Expenses Total		0	203,544	474,936	0	0	0	678,480

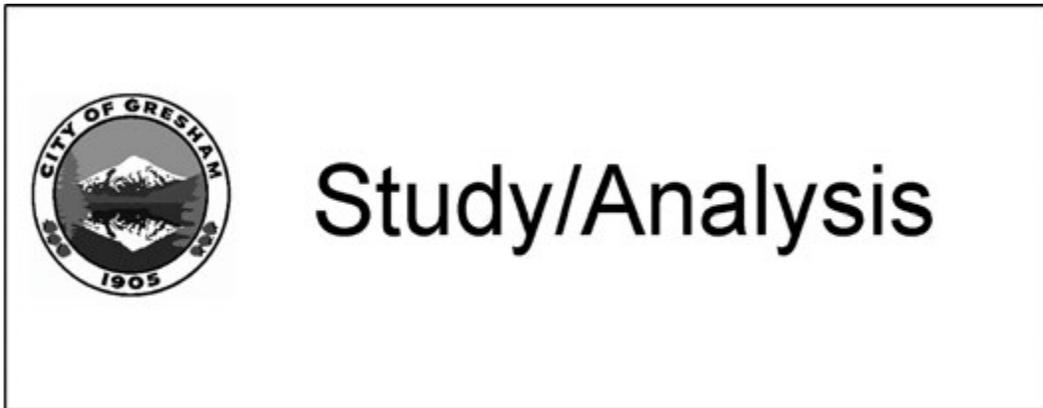
FUNDED PROJECT
Water

426600: Water System Master Plan

Description: The Water System Master Plan must be updated every five years to meet State requirements and to account for changes in projected development, economic conditions, water system priorities and condition of existing assets. The project benefits all water service levels and neighborhood districts. This project will provide for the next five year update.

Justification: This study will provide the necessary and effective direction to our long-range Water Capital Improvement Program, future growth, and financial requirements.
(Existing/Future Customer Benefit: 50% / 50%)

Type of Project: Engineering study related to city services.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Debt-Operating	0	87,500	0	0	0	0	87,500
	Debt-SDC	0	87,500	0	0	0	0	87,500
Resources Total		0	175,000	0	0	0	0	175,000
Expenses	Design/Const Admin	0	153,509	0	0	0	0	153,509
	Admin (14%)	0	21,491	0	0	0	0	21,491
Expenses Total		0	175,000	0	0	0	0	175,000

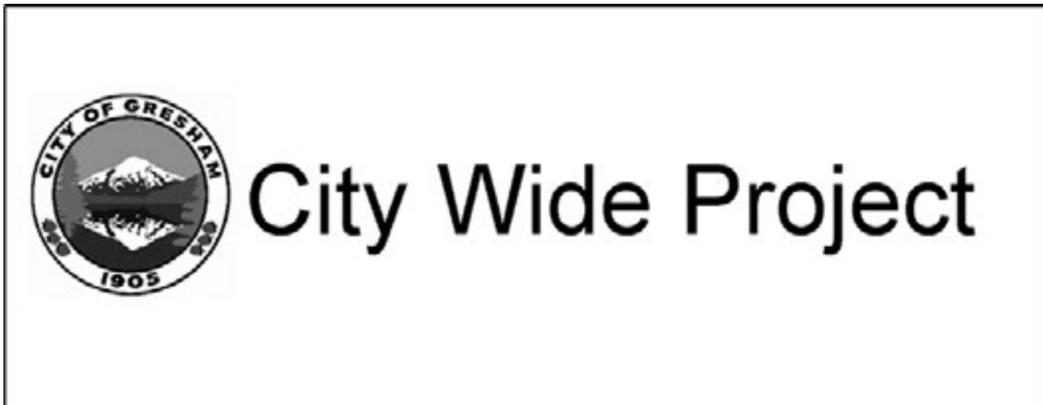
FUNDED PROJECT
Water

426800: SE Waterline Replacement Package Phase II

Description: This project replaces aging 6-inch cast iron with 8-inch ductile iron including services. These replacements are located in various neighborhood districts. The top three projects listed by priority include: SE Liberty south of Roberts, SE 2nd East of Morlan and SE Spruce. The priority of the projects are subject to change.

Justification: The waterline projects replaces badly deteriorated waterlines with a high record of repairs and greatly improves system flows and reliability. (Existing/Future Customers Benefited: 100%/0%)

Type of Project: Repair and rehabilitation of facilities and utilities



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Repair/Replacement Reserves	0	0	152,856	356,664	0	0	509,520
Resources Total		0	0	152,856	356,664	0	0	509,520
Expenses	Design/Const Admin	0	0	26,817	62,573	0	0	89,390
	Construction	0	0	107,267	250,290	0	0	357,557
	Admin (14%)	0	0	18,772	43,801	0	0	62,573
Expenses Total		0	0	152,856	356,664	0	0	509,520

FUNDED PROJECT
Water

427100: NW Division St. (Capacity Enhancement)

Description: This project replaces approximately 2,600 linear feet of 8-inch waterline with 16-inch DI. The project is located on NW 14th between NW Birdsdale Ave. and NW Wallula Ave.

Justification: The existing 12-inch transmission line in NW Division St. is currently under sized. It is connected on either end to a 16-inch transmission main and was identified as a bottle-neck in the Capital Maintenance Plan. Installation of the new 12-inch DI in NW 14th combined with the existing 12-inch waterline in NW Division will enhance the capacity of the Grant Butte Service Level.

Type of Project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Debt-Operating	1,284,420	150,000	0	0	0	0	1,434,420
Resources Total		1,284,420	150,000	0	0	0	0	1,434,420
Expenses	Design/Const Admin	303,004	26,316	0	0	0	0	329,320
	Construction	823,680	105,263	0	0	0	0	928,943
	Admin (14%)	157,736	18,421	0	0	0	0	176,157
Expenses Total		1,284,420	150,000	0	0	0	0	1,434,420

FUNDED PROJECT
Water

427300: Test Wells

Description: This project will identify three locations for potential well development and construct test wells. The information gathered from the test wells will be used to evaluate which wells would be most advantageous for the City to develop into production wells. The first test well is currently under construction and should be complete early Spring 2016.

Justification: The City of Gresham currently is allocated 10 MGD groundwater capacity under the Intergovernmental Agreement (IGA) with the Rockwood Water People Utility District. This agreement was developed to maintain adequate source redundancy and supplement source capacity during peak demand times. Currently the City has developed 5 MGD of the allocated capacity through the construction of Cascade Well #5. (Existing / Future Customers Benefited: 79% / 21%)

Type of Project: Development of source water.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Debt-Operating	383,680	227,750	414,750	0	177,750	414,750	1,618,680
	Debt-SDC	101,991	97,250	110,250	0	47,250	110,250	466,991
Resources Total		485,671	325,000	525,000	0	225,000	525,000	2,085,671
Expenses	Design/Const Admin	85,205	57,018	92,105	0	39,474	92,105	365,907
	Construction	340,822	228,070	368,421	0	157,894	368,421	1,463,628
	Admin (14%)	59,644	39,912	64,474	0	27,632	64,474	256,136
Expenses Total		485,671	325,000	525,000	0	225,000	525,000	2,085,671

FUNDED PROJECT
Water

427700: SE Waterline Replacement Package Phase I

Description: This project replaces aging 6-inch cast iron with 8-inch ductile iron including services. These replacements are located in various neighborhood districts. The top three projects listed by priority include: Se 10th – Liberty to Hogan, SE Kelly south of Regner and SE Atherton. The priority of the projects are subject to change.

Justification: The waterline projects replaces badly deteriorated waterlines with a high record of repairs and greatly improves system flows and reliability. (Existing/Future Customers Benefited: 100%/0%)

Type of Project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Repair/Replacement Reserves	0	750,000	0	0	0	0	750,000
Resources Total		0	750,000	0	0	0	0	750,000
Expenses	Design/Const Admin	0	65,789	0	0	0	0	65,789
	Construction	0	592,106	0	0	0	0	592,106
	Admin (14%)	0	92,105	0	0	0	0	92,105
Expenses Total		0	750,000	0	0	0	0	750,000

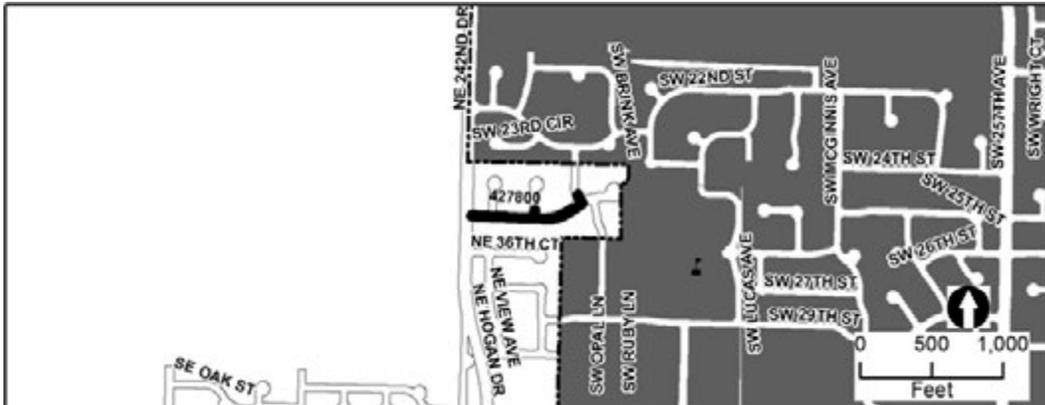
FUNDED PROJECT
Water

427800: NE 38th Dr.

Description: This project replaces approximately 800 linear feet of 6-inch CI pipe with 8-inch DI. The limits of this project are NE 38th Dr. between NE Hogan Dr. and NE Rene Ave. This project was identified in the Capital Maintenance Plan.

Justification: This project will replace a section of water line on NE 38th Dr. that is undersized and does not provide adequate fire flow. Upsizing this line to 8-inch will bring this section up to code and will meet current fire flow requirements.

Type of Project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Repair/Replacement Reserves	245,150	0	0	0	0	0	245,150
Resources Total		245,150	0	0	0	0	0	245,150
Expenses	Design/Const Admin	43,009	0	0	0	0	0	43,009
	Construction	172,035	0	0	0	0	0	172,035
	Admin (14%)	30,106	0	0	0	0	0	30,106
Expenses Total		245,150	0	0	0	0	0	245,150

FUNDED PROJECT
Water

427900: SW Florence

Description: This project replaces approximately 900 linear feet of 6-inch CI pipe with 12-inch DI. The limits of this project are SW Florence from W Powell Blvd. to SW Eastman Parkway. This project was identified in the Capital Maintenance Plan.

Justification: This project will replace a section of water line on SW Florence that is undersized and does not provide adequate fire flow. Upsizing this line to 12-inch will bring this section up to code and will meet current fire flow requirements.

Type of Project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Repair/Replacement Reserves	0	84,103	196,241	0	0	0	280,344
Resources Total		0	84,103	196,241	0	0	0	280,344
Expenses	Design/Const Admin	0	25,000	24,000	0	0	0	49,000
	Construction	0	48,775	148,141	0	0	0	196,916
	Admin (14%)	0	10,328	24,100	0	0	0	34,428
Expenses Total		0	84,103	196,241	0	0	0	280,344

FUNDED PROJECT
Water

428300: NW Waterline Replacement Package Phase II

Description: This project replaces aging 6-inch cast iron with 8-inch ductile iron including services. These replacements are located in various neighborhood districts. The top three projects listed by priority include: NW Angeline south of Division and NW Norman Ave between 4th and 8th. The priority of the projects are subject to change.

Justification: The waterline projects replaces badly deteriorated waterlines with a high record of repairs and greatly improves system flows and reliability. (Existing/Future Customers Benefited: 100%/0%)

Type of Project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Repair/Replacement Reserves	0	0	0	178,200	415,800	0	594,000
Resources Total		0	0	0	178,200	415,800	0	594,000
Expenses	Design/Const Admin	0	0	0	31,263	72,947	0	104,210
	Construction	0	0	0	125,053	291,790	0	416,843
	Admin (14%)	0	0	0	21,884	51,063	0	72,947
Expenses Total		0	0	0	178,200	415,800	0	594,000

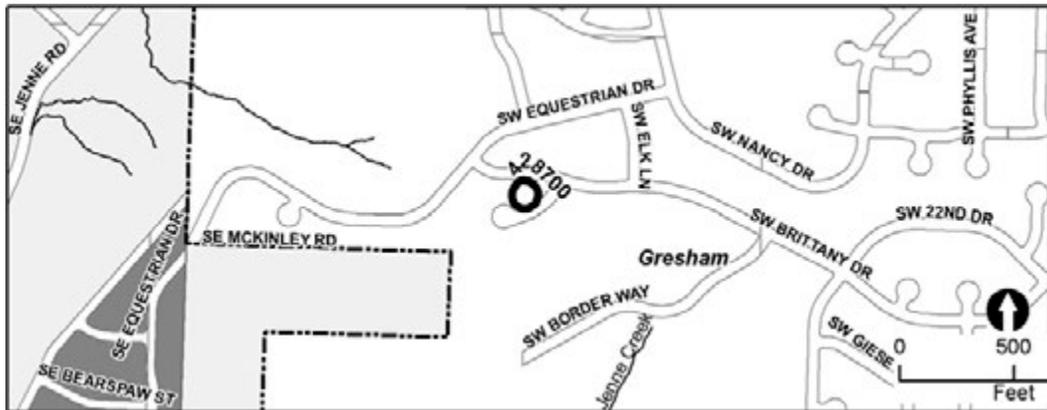
FUNDED PROJECT
Water

428700: Hunters Highland Reservoir Seismic

Description: This project will add to the existing reservoir foundation to comply with current seismic codes. The project will include micropiling to better secure the reservoir and enhancing the existing foundation. Design is currently underway and construction is scheduled for Spring 2017.

Justification: The Hunters Highland Reservoir is a 1.2 million gallon steel reservoir and is the sole reservoir supplying the Hunters Highland service area. A seismic evaluation of the reservoir in 2012 found the reservoir to need upgrades to meet current seismic codes. The recommendation included micropiling to enhance the existing foundation. The design will be similar to the recently renovated Gabbert Reservoir.

Type of Project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Repair/Replacement Reserves	500,000	700,000	0	0	0	0	1,200,000
Resources Total		500,000	700,000	0	0	0	0	1,200,000
Expenses	Design/Const Admin	100,000	40,000	0	0	0	0	140,000
	Construction	338,596	574,035	0	0	0	0	912,631
	Admin (14%)	61,404	85,965	0	0	0	0	147,369
Expenses Total		500,000	700,000	0	0	0	0	1,200,000

FUNDED PROJECT
Water

428800: SCADA Cellular Conversion

Description: This project will convert the Supervisory Control and Data Acquisition (SCADA) telemetry system from an unreliable and costly land line system to a more reliable cellular system.

Justification: The current method of delivering remote water facility readings to the operations center is through cable land lines which frequently are down or cause error codes on the SCADA system. Conversion to a cellular system will eliminate these interruptions, make the system more reliable in emergency situations, and will eliminate the monthly bills for maintaining a land line to each of the facilities.

Type of Project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Repair/Replacement Reserves	100,000	0	0	0	0	0	100,000
Resources Total		100,000	0	0	0	0	0	100,000
Expenses	Design/Const Admin	17,544	0	0	0	0	0	17,544
	Construction	70,175	0	0	0	0	0	70,175
	Admin (14%)	12,281	0	0	0	0	0	12,281
Expenses Total		100,000	0	0	0	0	0	100,000

FUNDED PROJECT
Water

428900: Gresham Well #2 (Cascade Well #6)

Description: This project will construct a new production well and the infrastructure to deliver the water to the City’s distribution grid. Currently the City has developed 5 MGD of the potential 10 MGD groundwater capacity under the Intergovernmental Agreement (IGA) with the Rockwood Water People Utility District (RWPUD) The 2012 Master Plan recommended potentially seven production wells to develop the capacity under the IGA as well as an additional 4.8 MGD to meet projected system demand in 2031.

Justification: The City of Gresham currently is allocated 10 MGD groundwater capacity under the (IGA) with the (RWPUD). This agreement was developed to maintain adequate source redundancy and supplement source capacity during peak demand times. Currently the City has developed 5 MGD of the allocated capacity through the construction of Cascade Well #5.
(Existing / Future Customers Benefited: 79% / 21%)

Type of Project: Development of Source.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Debt-Operating	0	79,000	79,000	1,817,000	0	0	1,975,000
	Debt-SDC	0	21,000	21,000	504,000	0	0	546,000
Resources Total		0	100,000	100,000	2,321,000	0	0	2,521,000
Expenses	Design/Const Admin	0	17,544	17,544	407,193	0	0	442,281
	Construction	0	70,175	70,175	1,628,772	0	0	1,769,122
	Admin (14%)	0	12,281	12,281	285,035	0	0	309,597
Expenses Total		0	100,000	100,000	2,321,000	0	0	2,521,000

FUNDED PROJECT
Water

429100: Lusted Site Improvements

Description: This project produces a Master Plan for the Lusted Reservoir site. Once the Master Plan is complete, construction and potentially deconstruction of facilities can occur.

Justification: The Lusted Reservoir is decommissioned and could either be re-used at another location if feasible or scrapped. The site is intended to be used during emergencies as identified in the Water Division’s Continuation of Operations Plan (CoOP). Additionally, the site will be used for Water Division Emergency equipment such as generators.

Type of Project: Study and construction.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Debt-Operating	25,000	275,000	0	0	0	0	300,000
Resources Total		25,000	275,000	0	0	0	0	300,000
Expenses	Design/Const Admin	21,930	25,000	0	0	0	0	46,930
	Construction	0	219,923	0	0	0	0	219,923
	Admin (14%)	3,070	30,077	0	0	0	0	33,147
Expenses Total		25,000	275,000	0	0	0	0	300,000

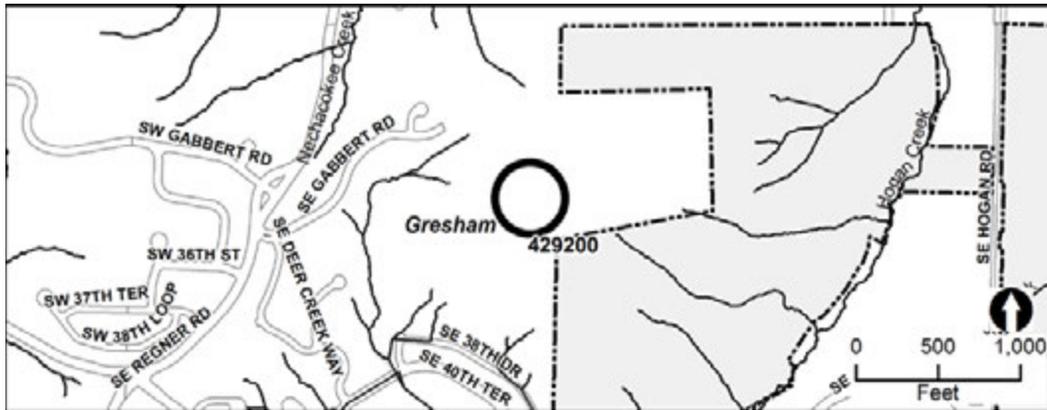
FUNDED PROJECT
Water

429200: South Hills Seismic

Description: This project makes site improvements recommended in the South Hills and Hunters Highland Reservoir Seismic Evaluation Study. The study recommended that to improve the seismic performance of the reservoir the embankment soil around the reservoir should be removed.

Justification: In order to provide continuity of service in the case event of a major seismic event, improvements to the reservoir are necessary. One of the recommendations provided in the South Hills and Hunters Highland Reservoir Seismic Evaluation Study was to remove the embankment soil around the reservoir.

Type of Project: Construction.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Operating	0	250,000	0	0	0	0	250,000
Resources Total		0	250,000	0	0	0	0	250,000
Expenses	Design/Const Admin	0	37,500	0	0	0	0	37,500
	Construction	0	181,800	0	0	0	0	181,800
	Admin (14%)	0	30,700	0	0	0	0	30,700
Expenses Total		0	250,000	0	0	0	0	250,000

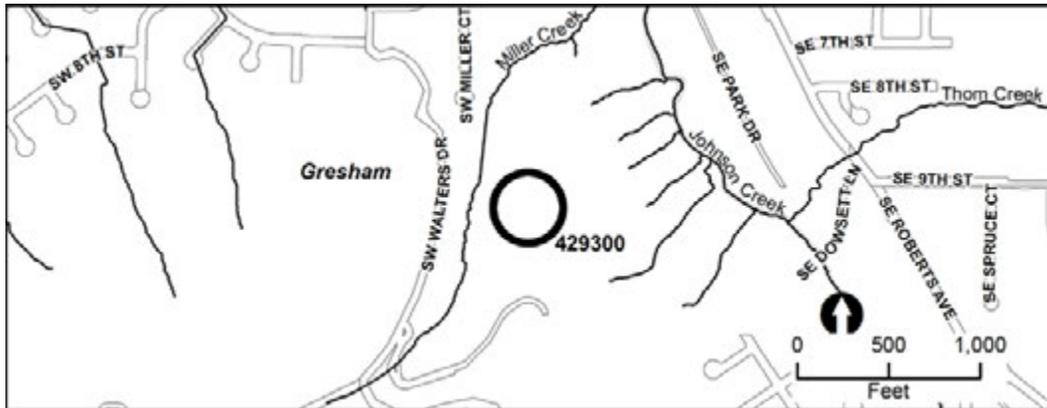
FUNDED PROJECT
Water

429300: Walters Hill Reservoir and Pump Station Abandonment

Description: This project abandons both the Walters Hill Reservoir and Pump Station.

Justification: Both the Walters Hill Pump Station and Reservoir have been replaced by the Gabbert Pump Station and Gabbert Reservoir and have not been used for years. The reservoir is a partially buried concrete reservoir and is potentially a safety hazard for trespassers.

Type of Project: Construction.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Debt-Operating	0	0	0	90,000	210,000	0	300,000
Resources Total		0	0	0	90,000	210,000	0	300,000
Expenses	Design/Const Admin	0	0	0	25,000	20,000	0	45,000
	Construction	0	0	0	53,947	164,211	0	218,158
	Admin (14%)	0	0	0	11,053	25,789	0	36,842
Expenses Total		0	0	0	90,000	210,000	0	300,000

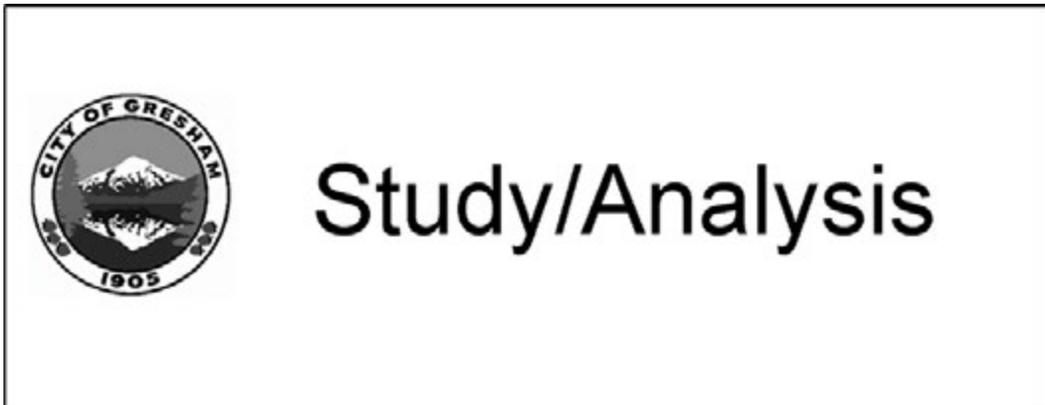
FUNDED PROJECT
Water

429400: Condition Assessment – Critical Mains – Phase I

Description: This project will provide a condition assessment of some of the City’s critical mains.

Justification: Assessing the condition of buried mains is critical to both understanding the useful life of the main as well as identifying potential failures that could be ready to surface. Critical mains will be identified by size, age, leak history and criticality. To determine condition, several methods may be employed dependent on pipe access, whether the pipe segment can be taken out of service and size and type of pipe material.

Type of Project: Study.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Debt-Operating	250,000	0	250,000	0	0	0	500,000
Resources Total		250,000	0	250,000	0	0	0	500,000
Expenses	Design/Const Admin	222,658	0	222,658	0	0	0	445,316
	Admin (14%)	27,342	0	27,342	0	0	0	54,684
Expenses Total		250,000	0	250,000	0	0	0	500,000

FUNDED PROJECT
Water

429500: Horizontal Directional Drilling

Description: This project will employ a trenchless technology in areas where traditional trenching methods are impractical.

Justification: Two locations have been identified to use a trenchless technology, Horizontal Direction Drilling (HDD). The first is a replacement of vulnerable exposed waterline crossing Kelly Creek. Open trenching is not an option for this replacement. The second location is to loop two dead end pipes eliminating a single point of failure in the Hunters Highland service area. The project crosses private property. The City is presently in negotiations with the property owner to obtain an easement.

Type of Project: Construction.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Repair/Replacement Reserves	150,000	0	0	0	0	0	150,000
Resources Total		150,000	0	0	0	0	0	150,000
Expenses	Design/Const Admin	25,000	0	0	0	0	0	25,000
	Construction	108,595	0	0	0	0	0	108,595
	Admin (14%)	16,405	0	0	0	0	0	16,405
Expenses Total		150,000	0	0	0	0	0	150,000

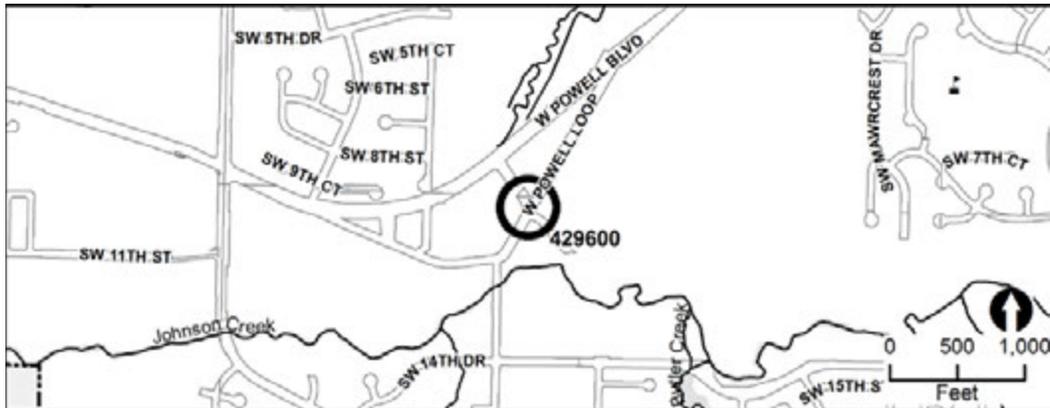
FUNDED PROJECT
Water

429600: Intermediate Pump Station Waterline

Description: This project will loop the pump station to existing main to give redundant inlet supply to the Intermediate Pump Station.

Justification: This project was originally planned as part of the Intermediate Pump Station installation, however, due to budget constraints, this part of the contract was removed. Constructing this section of water main will provide a redundant supply to the Intermediate Pump Station.

Type of Project: Construction.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Operating	0	0	0	45,000	105,000	0	150,000
Resources Total		0	0	0	45,000	105,000	0	150,000
Expenses	Design/Const Admin	0	0	0	15,000	10,000	0	25,000
	Construction	0	0	0	24,474	82,105	0	106,579
	Admin (14%)	0	0	0	5,526	12,895	0	18,421
Expenses Total		0	0	0	45,000	105,000	0	150,000

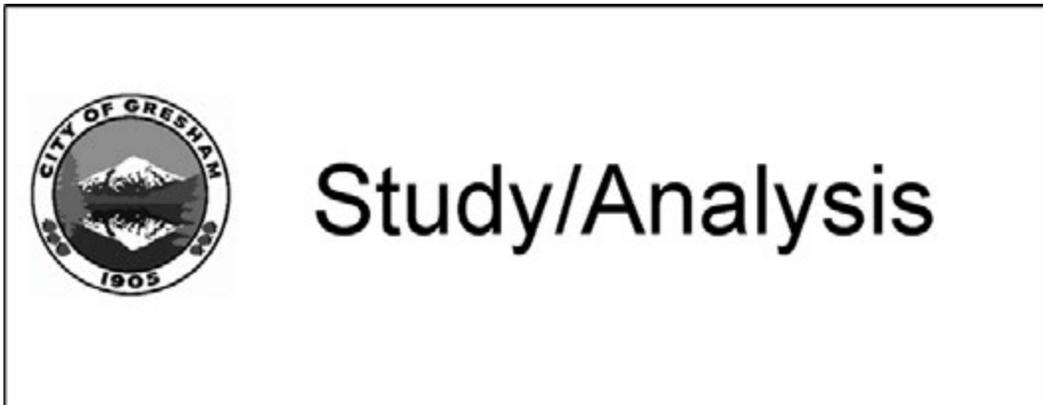
FUNDED PROJECT
Water

429700: Seismic Resiliency Study

Description: This project will examine the seismic resiliency of the City’s reservoirs and pump stations as well as develop a guideline for the design of large water transmission mains. The study is currently underway and should be completed by early Summer 2017.

Justification: This project will study the seismic stability of the City’s reservoirs and pump stations and make recommendations for improvements necessary to ensure continued operation of major water infrastructure after a seismic event. The study will also examine design standards of large transmission and distribution mains for both seismic and corrosion resiliency.

Type of Project: Study.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Operating	150,000	0	0	0	0	0	150,000
Resources Total		150,000	0	0	0	0	0	150,000
Expenses	Design/Const Admin	133,595	0	0	0	0	0	133,595
	Admin (14%)	16,405	0	0	0	0	0	16,405
Expenses Total		150,000	0	0	0	0	0	150,000

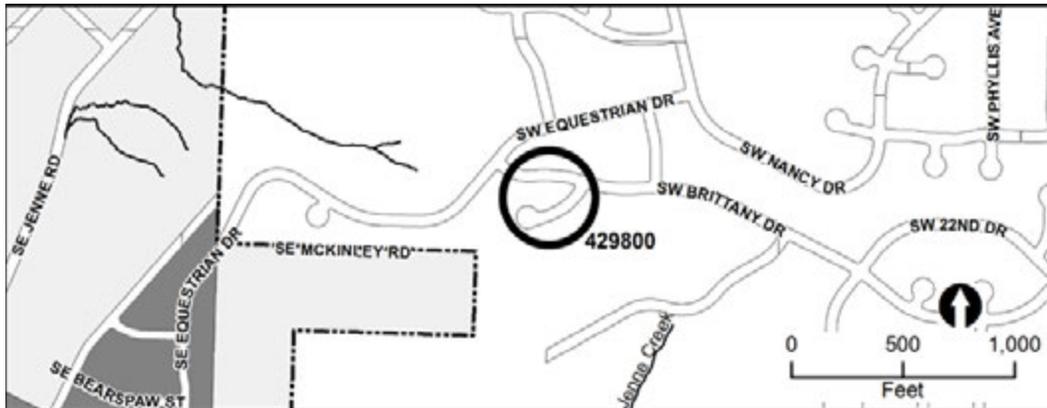
FUNDED PROJECT
Water

429800: Hunters Highland Booster

Description: This project will design and construct a booster pump station to serve the higher elevations within the service area.

Justification: This project will design a booster pump station to serve a small residential area in the Hunters Highland service area. Currently, the Hunters Highland reservoir is not fully utilized due to low pressure in the higher elevations of the service area. Construction of the booster station will allow the reservoir to cycle more water improving the operational capacity and water quality of the reservoir.

Type of Project: Construction.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Debt-Operating	150,000	0	0	0	0	0	150,000
Resources Total		150,000	0	0	0	0	0	150,000
Expenses	Design/Const Admin	26,316	0	0	0	0	0	26,316
	Construction	105,263	0	0	0	0	0	105,263
	Admin (14%)	18,421	0	0	0	0	0	18,421
Expenses Total		150,000	0	0	0	0	0	150,000

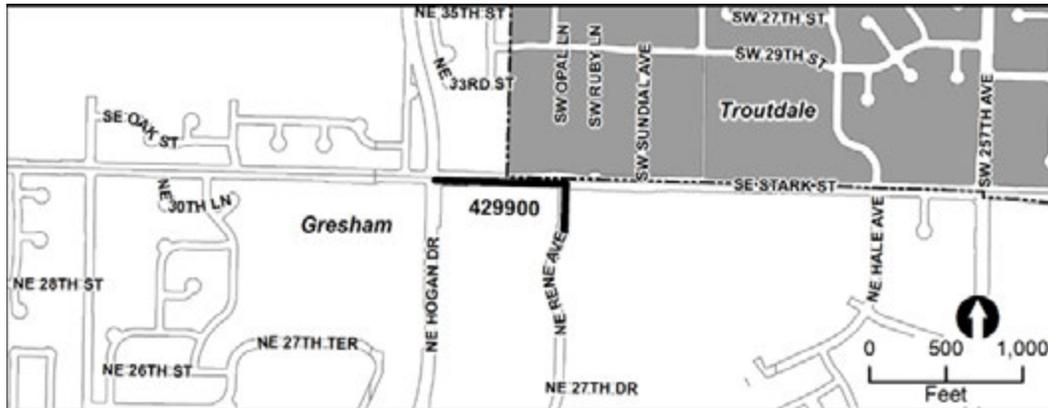
FUNDED PROJECT
Water

429900: SE Stark/Rene

Description: This project replaces approximately 1350 linear feet of 8- inch and 6-inch CI pipe with 12-inch DI and 8-inch DI pipe. The limits of this project are SE Stark St. between NE Hogan Dr. and NE Rene Ave, and NE Rene Avenue between SE Stark and approximately 475 feet south. This project was identified in the 2012 Master Plan.

Justification: This project will replace a section of water line on SE Stark Street and NE Rene Avenue Ave. that is undersized and does not provide adequate fire flow. Upsizing these lines will bring this sections up to code and will meet current fire flow requirements.

Type of Project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Debt-SDC	0	0	0	63,769	148,794	0	212,563
	Repair/Replacement Reserves	0	0	0	68,568	159,993	0	228,561
Resources Total		0	0	0	132,337	308,787	0	441,124
Expenses	Design/Const Admin	0	0	0	40,000	37,000	0	77,000
	Construction	0	0	0	76,085	233,866	0	309,951
	Admin (14%)	0	0	0	16,252	37,921	0	54,173
Expenses Total		0	0	0	132,337	308,787	0	441,124

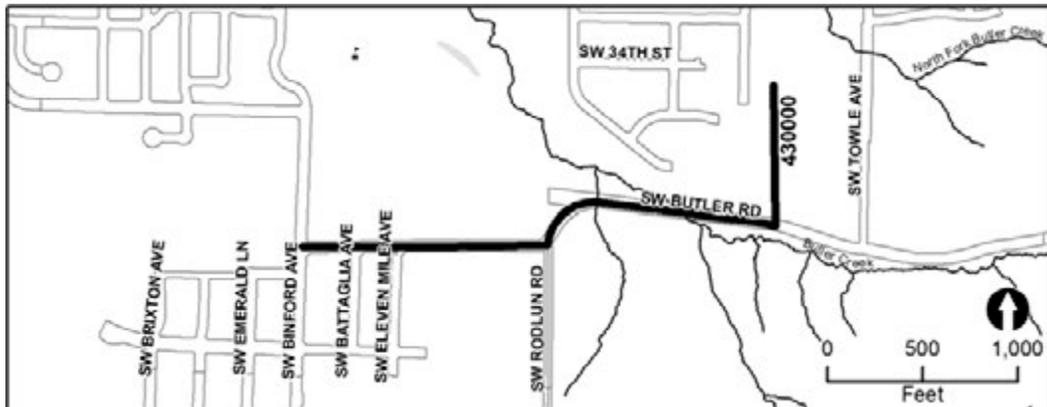
FUNDED PROJECT
Water

430000: Intermediate Transmission Main

Description: This project constructs a 16-inch water transmission line from the Butler Reservoir to SW Binford. This transmission line is necessary to deliver Intermediate Service Level water to the Pleasant Valley area. Currently there is no direct line connecting the Intermediate Service Level to the Pleasant Valley area. New development must construct temporary Pressure Reducing Valves (PRVs) connected to either the Hunters Highland or South Hills service levels. The South Hills Reservoir is at capacity.

Justification: The construction of this transmission water line will allow for the further development of the Pleasant Valley area without straining existing capacity in the South Hills Service Area.

Type of Project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Debt-SDC	0	2,000,000	0	0	0	0	2,000,000
Resources Total		0	2,000,000	0	0	0	0	2,000,000
Expenses	Design/Const Admin	0	350,877	0	0	0	0	350,877
	Construction	0	1,403,509	0	0	0	0	1,403,509
	Admin (14%)	0	245,614	0	0	0	0	245,614
Expenses Total		0	2,000,000	0	0	0	0	2,000,000

FUNDED PROJECT
Water

430100: Kane Road (North of Division)

Description: This project replaces approximately 1000 linear feet of 8- inch CI pipe with 8-inch DI pipe. The limits of this project are Kane Rd between NE 18th and NE 23rd. This project replaces waterline that does not meet the State requirements for separation between a sewer pressure main and a waterline. The project also replaces waterline which went under Kelly Creek and that was abandoned during the Kane Road stormwater renewal project in the winter of 2015-16.

Justification: This project will replace a section of water line on Kane Rd. that currently does not meet State requirements for separation between pressurized sanitary mains and waterline.

Type of Project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Repair/Replacement Reserves	0	0	0	0	225,000	525,000	750,000
Resources Total		0	0	0	0	225,000	525,000	750,000
Expenses	Design/Const Admin	0	0	0	0	70,000	61,500	131,500
	Construction	0	0	0	0	127,368	399,026	526,394
	Admin (14%)	0	0	0	0	27,632	64,474	92,106
Expenses Total		0	0	0	0	225,000	525,000	750,000

FUNDED PROJECT
Water

430200: Asset Management Software

Description: This project funds the purchase and implementation of a computerized maintenance management system (CMMS) for asset management of our public works-type assets. This will be a commercial-off-the-shelf software purchase that will integrate existing and legacy City data and systems. The software will provide a single platform to allow City staff to record and monitor the condition and cost of its assets, initiate and track work orders, develop capital projects, and project future budgetary requirements.

Justification: Asset management software is essential to help ensure millions of dollars of assets are being planned, designed, installed, maintained and retired in the most cost-efficient way. Implementation of asset management software is consistent with the City’s 2014 Technology Strategic Plan.

Type of Project: Asset management tracking software.



Estimated Dollars:

Funds	Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Resources	Operating	0	50,000	0	0	0	0	50,000
Resources Total		0	50,000	0	0	0	0	50,000
Expenses	Design/Const Admin	0	43,850	0	0	0	0	43,850
	Admin (14%)	0	6,150	0	0	0	0	6,150
Expenses Total		0	50,000	0	0	0	0	50,000



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Water Unfunded and Future Summary								
Project	Project Name	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
402400	New Grant Butte Reservoir	0	0	0	0	0	0	3,970,000
413400	NW Bella Vista Park between NW 3rd - 4th	0	0	0	0	0	0	103,741
417100	Hillyard Waterline Crossing @ US HWY 26	0	0	0	0	0	0	277,879
418900	SE Barnes Rd. Waterline (Orient - SE 26th Ct)	0	0	0	0	0	0	574,284
419600	SE Woodland Waterline	0	0	0	0	0	0	92,626
420550	NE 3rd Street (NE Hood to NE Cleveland)	0	0	0	0	0	0	637,270
420950	NE Division St. (Eastman to Burnside)	0	0	0	0	0	0	2,628,122
424800	Interconnection w/ Lusted Water district	0	0	0	0	0	0	481,658
424900	Hunter's Highland Service Level Pump Station Installation	0	0	0	0	0	0	1,984,510
425100	Hunter's Highland Reservoir #2	0	0	0	0	0	0	1,250,000
426300	Gabbert Reservoir - Phase 2	0	0	0	0	0	0	1,000,000
428400	Exploratory Well Drilling	0	0	0	0	0	0	3,000,000
428500	Production Wells	0	0	0	0	0	0	15,000,000
428600	Fire Flow Improvements	0	0	0	0	0	0	5,500,000
Grand Total		0	0	0	0	0	0	36,500,090



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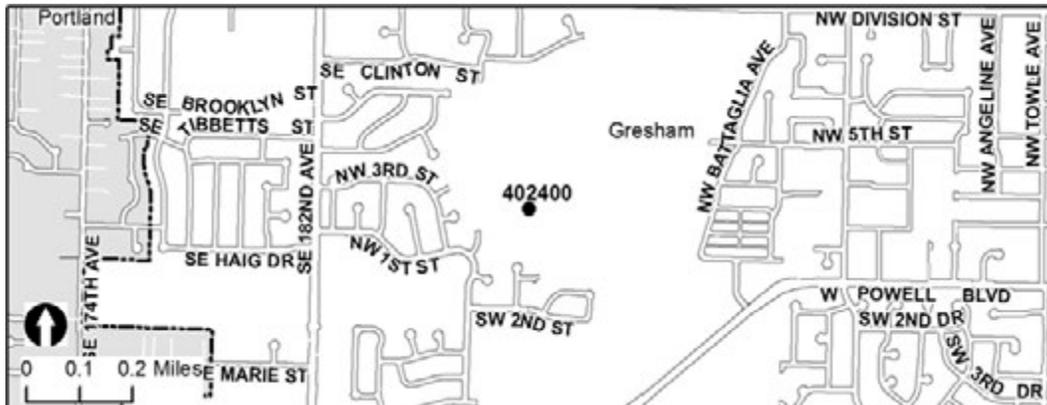
**UNFUNDED and FUTURE PROJECT
Water**

402400: New Grant Butte Reservoir

Description: This project constructs a second reservoir on Grant Butte. The project includes consultant services and construction of a 2.2 MG prestressed concrete tank and associated facilities. The project is located in the Centennial Neighborhood District.

Justification: With the increase in system demand due to industrial growth, additional storage capacity will be needed. This project will be initiated when system demands are expected to exceed existing storage capacity. This project was originally identified as a 15 MG reservoir in the 1998 Water Master Study Plan to serve demand from Fujitsu. However, the 2005 Master Plan states much less service capacity is needed. (Existing / Future Customers Benefited: 0% / 100%)

Type of Project: Construction of facilities and utilities for growth.



Estimated Dollars:

Funds	Description	Total
Resources	SDC	3,970,000
Resources Total		3,970,000
Expenses	Design/Const Admin	696,491
	Construction	2,785,965
	Admin (14%)	487,544
Expenses Total		3,970,000

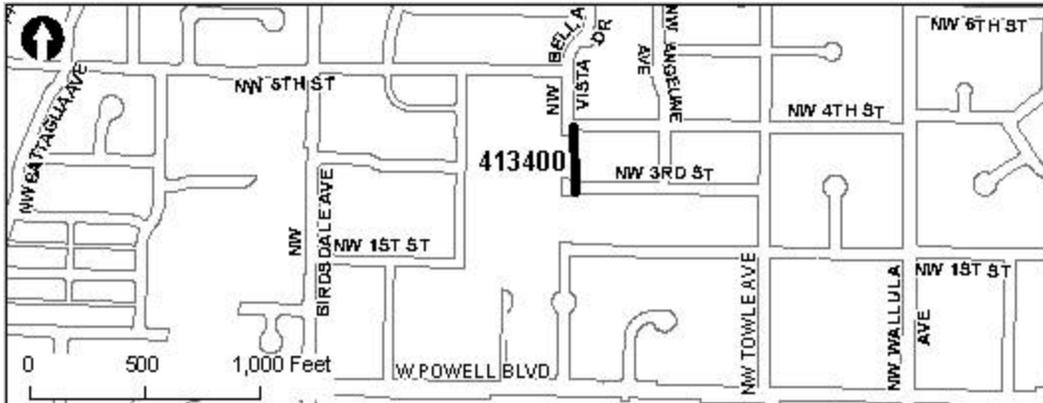
**UNFUNDED and FUTURE PROJECT
Water**

413400: NW Bella Vista Park between NW. 3rd – 4th

Description: This project installs 420 L.F. of 8" D.I. waterline and hydrants. There is no existing waterline in NW Bella Vista Park (east side) between NW 3rd and NW 4th Streets. The new waterline will loop existing dead-end waterlines. The project is located in the Northwest Neighborhood District.

Justification: The project loops existing dead-end waterlines, improves water movement through the higher portion of the Intermediate Service Level, and retires an undersized and deteriorating waterline. It will upgrade the size to meet current needs of the surrounding residents and fire flows. (Existing/Future Customer Benefit: 90% / 10%)

Type of Project: Construction of facilities and utilities for growth and to correct deficiencies.



Estimated Dollars:

Funds	Description	Total
Resources	Debt-SDC	10,374
	Operating	93,367
Resources Total		103,741
Expenses	Design/Const Admin	24,473
	Construction	66,528
	Admin (14%)	12,740
Expenses Total		103,741

**UNFUNDED and FUTURE PROJECT
Water**

417100: Hillyard (Water line crossing @ US HWY 26)

Description: This project replaces 750 L.F. of 6" D.I. on SE Hillyard Road under Highway 26 with 12" D.I. The project is located in the Mt. Hood and Kelly Creek Neighborhood Districts and serving the Intermediate Service Level.

Justification: The existing waterlines in this area that were undersized and deteriorating have been replaced with previous CIP projects and development projects. What remains is the last segment of 12" DI main which will link both sides of the water line along US Hwy 26 together. When the final segment under the highway is completed, not only will fire flow capabilities be improved, but the City will have another west-to-east "backbone" water line to move groundwater across the Intermediate Service Level so it can be made available for the Lusted Service Level and the new development in the Springwater Urban Reserve Area. (Existing/Future Customer Benefit: 25% / 75%)

Type of Project: Construction of facilities and utilities for growth and to correct deficiencies.



Estimated Dollars:	Funds	Description	Total
	Resources	Operating	111,152
		SDC	166,727
	Resources Total		277,879
	Expenses	Design/Const Admin	65,554
		Construction	178,200
		Admin (14%)	34,125
	Expenses Total		277,879

**UNFUNDED and FUTURE PROJECT
Water**

418900: SE Barnes Rd. Waterline (Orient – SE 26th Ct)

Description: This project replaces 1,550 L.F. of 8" cast iron waterline with 12" ductile iron waterline for the Intermediate Service Level, replaces services and installs fire hydrants. The project is located in the Kelly Creek Neighborhood District.

Justification: The project will provide transmission capacity and looping on the eastern Intermediate Service Level boundary to support future development and to maintain fire flow capacities for existing customers. When constructed, this water line will serve as part of the "backbone" system to bring water from the Intermediate Service Level into the Springwater Development Area. (Existing / Future Customers Benefited: 0% / 100%)

Type of Project: Construction of facilities and utilities for growth and to provide better service to existing customers.



Estimated Dollars:

Funds	Description	Total
Resources	SDC	574,284
Resources Total		574,284
Expenses	Design/Const Admin	135,478
	Construction	368,280
	Admin (14%)	70,526
Expenses Total		574,284

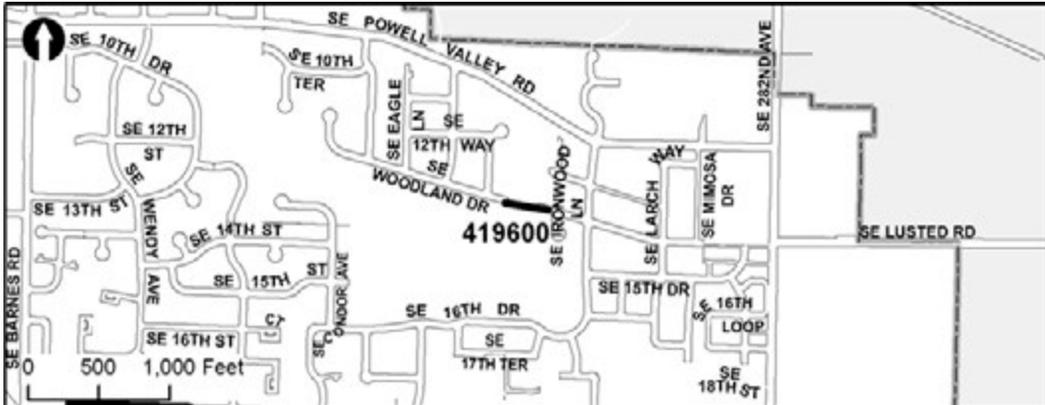
**UNFUNDED and FUTURE PROJECT
Water**

419600: SE Woodland Waterline

Description: This project installs 250 L.F. of 12" D.I. waterline across City property along the SE Woodland Way alignment between Sun Meadows and Eagle Terrace Subdivisions. The project is located in the Kelly Creek Neighborhood District and will serve the Lusted Service Level.

Justification: This project will provide water system looping in the Lusted Water Service Level, providing this area with increased storage capacity, fire flows and service continuity. (Existing / Future Customers Benefited: 0% / 100%)

Type of Project: Construction of facilities and utilities for growth.



Estimated Dollars:

Funds	Description	Total
Resources	SDC	92,626
Resources Total		92,626
Expenses	Design/Const Admin	21,851
	Construction	59,400
	Admin (14%)	11,375
Expenses Total		92,626

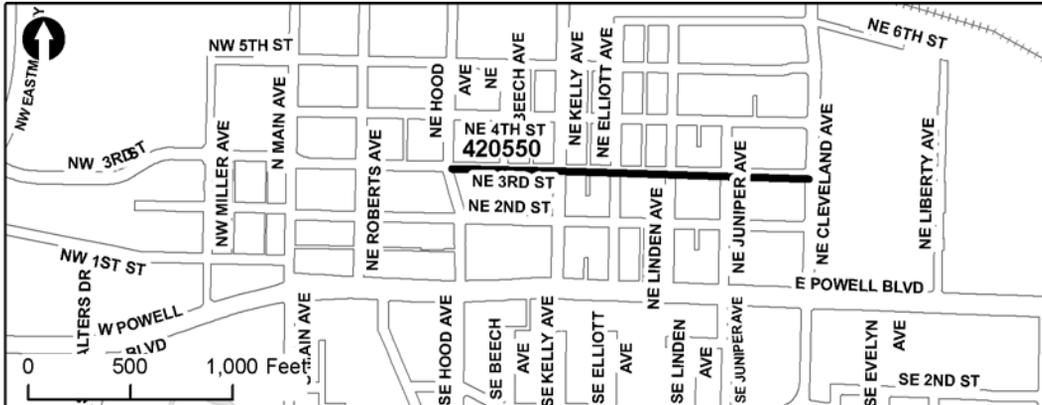
**UNFUNDED and FUTURE PROJECT
Water**

420550: NE 3rd Street (NE Hood to NE Cleveland)

Description: This project constructs 1,700 linear feet of 12" D.I. Waterline in the Grant Butte Service Level. In 2008/2009 part of this project was completed to accommodate the construction of the new Center for the Arts Plaza project. The first phase of replacement was between NE Hood and NE Kelly. The remaining section between NE Kelly and NE Cleveland is still needed. This project is located in the Central City Neighborhood District.

Justification: The adopted Water Master plan calls for the installation of an upsized water main along 3rd Street in front of the future Center for the Arts Plaza renovation. Fire flows in this area are not adequate for the current zoning designations. (Existing / Future Customers Benefited: 25% / 75%)

Type of Project: Construction of facilities and utilities for growth.



Estimated Dollars:

Funds	Description	Total
Resources	Operating	159,317
	SDC	477,953
Resources Total		637,270
Expenses	Design/Const Admin	150,337
	Construction	408,672
	Admin (14%)	78,261
Expenses Total		637,270

**UNFUNDED and FUTURE PROJECT
Water**

420950: NE Division St. (Eastman to Burnside)

Description: This project installs 5,320 L.F. of 16" D.I. waterline crossings, fire hydrants and services in the Grant Butte Service Level. It replaces an existing 6" waterline. This project is located in the Downtown Neighborhood District.

Justification: Existing lines are inadequate to provide fire flows to this area for existing and future customers. (Existing / Future: 30% / 70%)

Type of Project: Construction of facilities and utilities for growth and to correct deficiencies.



Estimated Dollars:

Funds	Description	Total
Resources	Operating	788,437
	SDC	1,839,685
Resources Total		2,628,122
Expenses	Design/Const Admin	619,994
	Construction	1,685,376
	Admin (14%)	322,752
Expenses Total		2,628,122

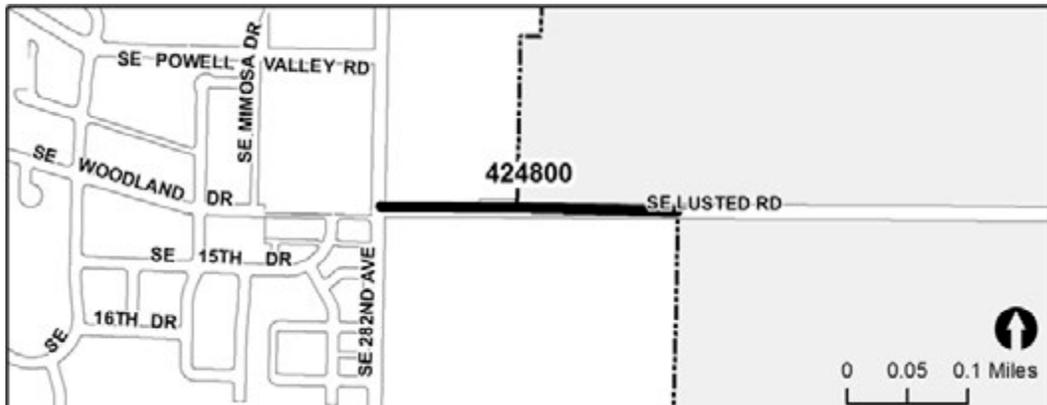
**UNFUNDED and FUTURE PROJECT
Water**

424800: Interconnection w/ Lusted Water district

Description: This project replaces approximately 595 L.F. of 6" D.I. waterline with 1300 L.F. of 8" D.I. waterline and services. The project is located in the Powell Valley and Kelly Creek Neighborhood District.

Justification: Existing waterline is undersized for future development. This project provides the needed domestic service for current customers and increase the fire flow in this area. This project will also be able to serve Lusted Water District as an emergency source of water. (Existing / Future Customers Benefited: 0% / 100%)

Type of Project: Construction of facilities and utilities for growth and to correct deficiencies.



Estimated Dollars:	Funds	Description	Total
	Resources	SDC	481,658
	Resources Total		481,658
	Expenses	Design/Const Admin	113,627
		Construction	308,880
		Admin (14%)	59,151
	Expenses Total		481,658

**UNFUNDED and FUTURE PROJECT
Water**

424900: Hunter’s Highland Service Level Pump Station Installation

Description: This project constructs a pump station located on the Butler Reservoir site to support the Hunter’s Highland expanded Service Level. The project includes consultant services, and construction of a pump station and associated infrastructure.

Justification: With the increase in system demand due to growth in the Pleasant Valley and Springwater areas, additional pumping capacity will be needed. This project will be initiated when system demands are expected to exceed existing storage capacity. (Existing / Future Customers Benefited: 0% / 100%)

Type of Project: Construction of facilities and utilities for growth.



Estimated Dollars:	Funds	Description	Total
	Resources	SDC	1,984,510
	Resources Total		1,984,510
	Expenses	Design/Const Admin	554,860
		Construction	1,185,938
		Admin (14%)	243,712
	Expenses Total		1,984,510

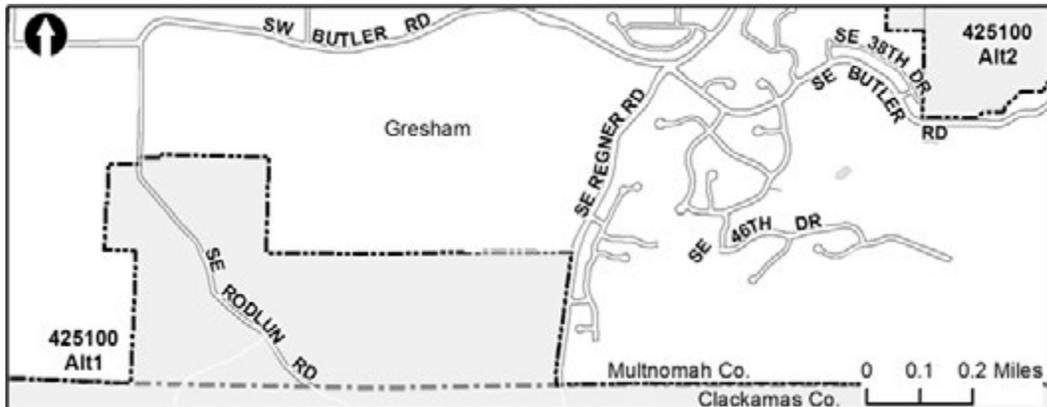
**UNFUNDED and FUTURE PROJECT
Water**

425100: Hunter’s Highland Reservoir #2

Description: This project constructs a second reservoir on Hunter’s Highland Service Level. The project includes consultant services and construction of a 0.4 MG tank and associated facilities. The project is located in the Pleasant Valley area or within Clackamas County.

Justification: With the increase in system demand due to growth in the Pleasant Valley area, additional storage capacity will be needed. This project will be initiated when system demands are expected to exceed existing storage capacity. (Existing / Future Customers Benefited: 0% / 100%)

Type of Project: Construction of facilities and utilities for growth.



Estimated Dollars:

Funds	Description	Total
Resources	SDC	1,250,000
Resources Total		1,250,000
Expenses	Design/Const Admin	219,298
	Construction	877,193
	Admin (14%)	153,509
Expenses Total		1,250,000

**UNFUNDED and FUTURE PROJECT
Water**

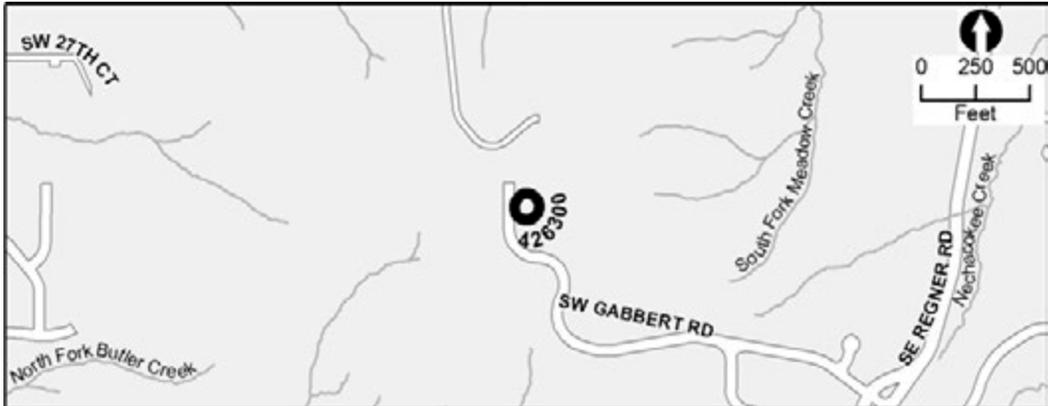
426300: Gabbert Reservoir - Phase 2

Description: The Gabbert Reservoir is currently undersized to meet the future growth demands of Pleasant Valley area specifically around the Persimmon Development and is seismically unstable. The Master Plan called for the construction of a one million gallon reservoir to replace the existing 200,000 gallon reservoir along with 1,320 feet of new 12-inch ductile iron water line to connect the reservoir to the Gabbert Pump Station. Most of the funding was to come from SDC's. However, growth to accommodate the expansion of the reservoir is likely many years out while the seismic threat remains. Therefore, this project has been split into two Phases. Phase 1 will replace the reservoir to accommodate the existing customers. Phase 2, an unfunded project, will construct another reservoir when and if demand deems the project necessary.

Justification: This reservoir will serve the Gabbert Service Level and the Pleasant Valley area for domestic water service and fire flow protection. The Phase 2 project will install a second reservoir to specifically meet future growth demands.(Existing / Future Customers Benefited: 0% / 100%)

Type of Project: New construction for new growth as well as replacement of aging infrastructure.

Map: Refer to the City of Gresham Neighborhood Districts Map.



Estimated Dollars:

Funds	Description	Total
Resources	SDC	1,000,000
Resources Total		1,000,000
Expenses	Design/Const Admin	175,439
	Construction	701,754
	Admin (14%)	122,807
Expenses Total		1,000,000

**UNFUNDED and FUTURE PROJECT
Water**

428400: Exploratory Well Drilling

Description: This project will identify six locations for potential well development and construct test wells. The information gathered from the test wells will be used to evaluate which wells would be most advantageous for the City to develop into production wells. Currently the City has developed 5 MGD of the potential 10 MGD groundwater capacity under the Intergovernmental Agreement (IGA) with the Rockwood Water People Utility District (RWPUD). The recently completed Master Plan recommended potentially nine test wells to develop the capacity under the IGA as well as an additional 4.8 MGD to meet projected demand in 2031. The first three test wells are identified as Test Wells in the funded CIP.

Justification: The City of Gresham currently is allocated 10 MGD groundwater capacity under the (IGA) with the (RWPUD). This agreement was developed to maintain adequate source redundancy and supplement source capacity during peak demand times. Currently the City has developed 5 MGD of the allocated capacity through the construction of Cascade Well #5. (Existing / Future Customers Benefited: 79% / 21%)

Type of Project: Development of source water.



Estimated Dollars:

Funds	Description	Total
Resources	Operating	2,370,000
	SDC	630,000
Resources Total		3,000,000
Expenses	Design/Const Admin	281,250
	Construction	2,350,329
	Admin (14%)	368,421
Expenses Total		3,000,000

**UNFUNDED and FUTURE PROJECT
Water**

428500: Production Wells

Description: This project will construct potentially seven production wells and the infrastructure to deliver the water to the City’s distribution grid. Currently the City has developed 5 MGD of the potential 10 MGD groundwater capacity under the Intergovernmental Agreement (IGA) with the Rockwood Water People Utility District (RWPUD) The recently completed Master Plan recommended potentially seven production wells to develop the capacity under the IGA as well as an additional 4.8 MGD to meet projected demand in 2031.

Justification: The City of Gresham currently is allocated 10 MGD groundwater capacity under the (IGA) with the (RWPUD). This agreement was developed to maintain adequate source redundancy and supplement source capacity during peak demand times. Currently the City has developed 5 MGD of the allocated capacity through the construction of Cascade Well #5.
(Existing / Future Customers Benefited: 79% / 21%)

Type of Project: Development of source water.



Estimated Dollars:

Funds	Description	Total
Resources	Operating	11,850,000
	SDC	3,150,000
Resources Total		15,000,000
Expenses	Design/Const Admin	2,000,000
	Property Acq	300,000
	Construction	10,857,895
	Admin (14%)	1,842,105
Expenses Total		15,000,000

**UNFUNDED and FUTURE PROJECT
Water**

428600: Fire Flow Improvements

Description: This project will replace existing infrastructure to enhance fire flow capacity to meet current City standards.

Justification: The Master Plan completed in 2012 and the Capital Maintenance Plan identified areas that currently do not meet City standards for fire flow capacity.

Type of Project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	Total
Resources	Operating	4,345,000
	SDC	1,155,000
Resources Total		5,500,000
Expenses	Design/Const Admin	750,000
	Construction	4,074,561
	Admin (14%)	675,439
Expenses Total		5,500,000