

## **Background**

The City of Lacey provides water service to approximately 70,000 people within its corporate City limits and adjacent urban areas. Groundwater is the supply source to the system. Lacey's water service area abuts the City of Olympia's service area and a number of smaller privately owned water systems, many of which lie within Lacey's city limits. Lacey's system is challenged with replacing deteriorated facilities and mains, and installing growth-related source, storage, and transmission to meet demands as they occur.

Lacey's water system improvements are guided by the 2013 Water Comprehensive Plan. The plan, which serves as the basis for water-related capital projects and this capital facilities plan element covers the following:

- 1) Evaluated the current capabilities and limitations of Lacey's existing water systems;
- 2) Projected future demands in Lacey's current and long-term service areas; and
- 3) Established a schedule of system repairs, improvements, and expansion necessary to assure adequate supply and delivery of water to those service areas.

System repair and improvement projects listed in this capital facilities plan include replacement and upgrades of distribution piping, development of new water sources and storage capacity, water quality improvements, and other items that will lead to more effective use of existing water resources and facilities.

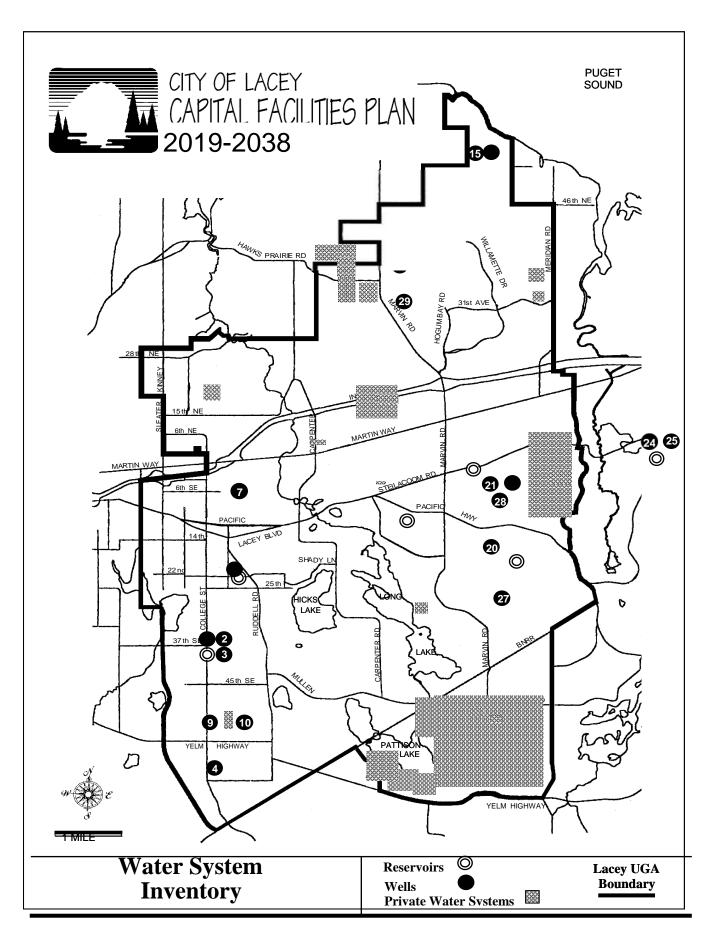
The exact timing of water-related projects in this area are outlined in this Capital Facilites Plan. This plan will be reviewed annually to assure that needed expansions are in place to accommodate development as it occurs.

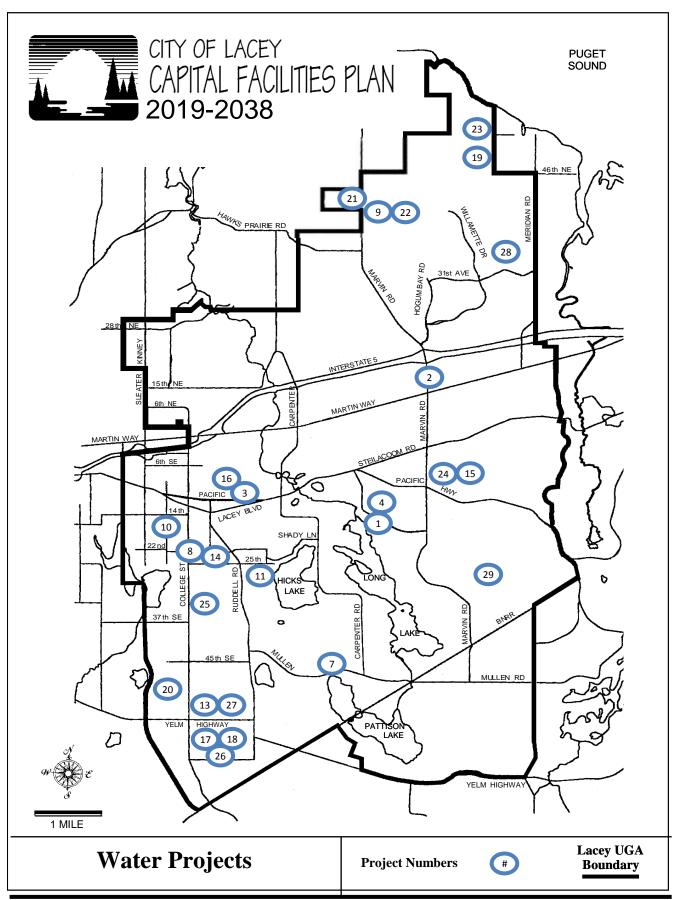
It is important to note that this Capital Facilities Plan's purpose is to demonstrate how the City will implement the Water Comprehensive Plan. Readers wishing more detailed explanations of methodologies and findings are encouraged to review the full 2013 Water Comprehensive Plan. Copies are available in the Report and Plans Library on the City of Lacey website.

# Water System Planning Goals and Objectives

Planning goals and objectives as established by Lacey's Comprehensive Water Plan are:

 Provide sufficient supply to meet increasing water system demands and complete water right mitigation projects in order to utliize new water rights. The development of increased water supply includes maximizing capacity from existing sources and the development of new sources.





## **CITY OF LACEY 2019-2038 CAPITAL FACILITIES PLAN**

**WATER PROJECTS SUMMARY SHEET** 

			WATER PE	ROJECTS S	UMMARY	SHEET				
ELINDING C	COLIDORO	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total %	Future Years
General Rev Voted G.O. I Non-Voted C Revenue Bo Utility Rates GFC Revent LID / ULID Arterial Stree PWTF Loan Interfund Loa Grants SEPA / LTA Developer F	venue Bonds G.O. Bonds onds / Fees ue et Fund i Total an	22,000 905,000	432,000 9,576,000	1,350,000 11,167,000	1,300,000 16,355,000	1,300,000 11,875,000	1,300,000 14,404,278	1,300,000 1,605,000	6,982,000 10% 64,982,278 90%	
Other	TOTAL	927,000	10,008,000	12,517,000	17,655,000	13,175,000	15,704,278	2,905,000	71,964,278 100%	11,850,000
EXPENDITI	URES BY CATEGORY									
Planning Preliminary I Design & En Land / ROW Construction Other	Design ngineering / Acquisition	225,000 86,000 227,000 150,000 239,000	1,372,000 900,000 1,756,000 4,957,000 1,023,000	337,000 1,490,000 10,455,000 235,000	50,000 1,840,000 15,580,000 185,000	200,000 1,090,000 11,700,000 185,000	150,000 840,000 7,730,000 6,984,278	400,000 940,000 1,380,000 185,000	1,759,000 2% 1,650,000 2% 7,956,000 11% 51,802,000 72% 8,797,278 12%	500,000 11,350,000
	TOTAL	927,000	10,008,000	12,517,000	17,655,000	13,175,000	15,704,278	2,905,000	71,964,278 100%	11,850,000
Water - 4 Water - 5 Water - 6 Water - 7 Water - 8 Water - 9 Water - 10 Water - 11 Water - 12 Water - 13 Water - 14 Water - 15 Water - 16 Water - 17 Water - 18 Water - 19 Water - 20 Water - 21 Water - 22 Water - 23 Water - 24 Water - 25	Well S09 Rehabilitation Well S06 Rehabilitation Fitzhugh Water Main Well S07 Rehabilitation Well S04 Nitrate Study Capitol City Estates Fire-Flow Well S15/S16 Replacement 337 Zone Reservoir Marvin Rd Well	110,000 28,000 125,000 10,000 100,000 18,000 4,000 15,000 82,000 236,000	1,797,000 671,000 200,000 750,000 300,000 990,000 235,000 76,000 82,000 100,000 62,000 50,000 200,000 444,000 450,000 250,000 500,000	137,000 750,000 350,000 350,000 50,000 1,750,000 2,000,000 550,000 1,000,000 2,000,000	4,000,000 2,000,000 3,000,000 1,500,000 2,000,000 1,500,000 300,000	1,020,000 3,000,000 750,000 2,000,000 750,000 1,000,000 2,000,000	3,000,000		1,797,000 2% 671,000 1% 337,000 0% 1,500,000 2% 650,000 1% 500,000 1% 990,000 1% 235,000 0% 76,000 0% 82,000 0% 100,000 0% 487,000 1% 100,000 0% 5,950,000 8% 7,000,000 10% 3,500,000 5% 6,550,000 9% 850,000 1% 4,000,000 6% 6,000,000 8%	
Water - 26 Water - 27 Water - 28 Water - 29 Water - 30 Water - 31 Water - 32 Water - 33 Water - 34 Water - 35 Water - 36 Water - 37 Water - 38 Water - 39	Well S04 Expansion Well S09 Treatment Study Meridian Campus Well Evergreen pH Adjustment Brewery Wellfield Development Critical Valves	92,000 927,000	200,000 197,000 444,000 150,000 150,000	50,000 100,000 85,000 20,000 150,000 100,000 1,100,000 100,000	50,000 50,000 100,000 85,000 20,000 150,000 1,000,000 1,100,000 100,000	500,000 150,000 200,000 100,000 85,000 20,000 150,000 100,000 1,100,000 100,000	2,000,000 150,000 850,000 200,000 100,000 85,000 20,000 150,000 1,000,000 1,100,000 1,000,000 6,799,278 15,704,278	150,000 250,000 500,000 200,000 100,000 85,000 20,000 150,000 150,000 1,100,000 1,100,000	3,000,000 4% 300,000 0% 1,250,000 2% 500,000 1% 700,000 1% 622,000 1% 544,000 1% 900,000 1% 900,000 1% 2,300,000 3% 5,500,000 8% 500,000 1% 6,799,278 9% 71,964,278 100%	4,750,000 3,500,000 2,600,000

Notes: Project funding and expenditure amounts shown in the future years column are preliminary estimates for planning purposes. Id entification of specific revenue sources and expenditures will be made as the project moves into the 6-year planning window.

2019-2038

Union Mills Water Services

Location:

Union Mills Rd

File Number:

wtr001.xls Tanglewilde CFP Project: Department:

Water- 1

UGA Planning Area: Water Plan Project:

N/A

**Public Works** 

Project Description: Replace and consolidate failing water service lines.

Project Justification: Improve service pressure and water use efficiency.

Policy Basis: Best Management Practices

Current Project Status: Complete

Land Status: Public ROW

## PROJECT FUNDING SOURCES AND EXPENDITURES

		Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%	Future Years
	FUNDING										
	General Revenue Voted G.O. Bonds										
	Non-Voted G.O. Bonds Revenue Bonds										
	Utility Rates / Fees										
$\infty$	GFC Revenue	10,000	135,000						135,000	100%	
6	LID / ULID Arterial Street Fund										
	PWTF Loan Interfund Loan										
	Grants SEPA / LTA										
	Developer Financing Other <sup>1</sup>										
	TOTAL FUNDING	10,000	135,000						135,000	100%	
	EXPENDITURES										
	Planning Preliminary Design										
	Design & Engineering Land / ROW Acquisition	10,000									
	Construction Other		135,000						135,000	100%	
	TOTAL EXPENDITURES	10,000	135,000						135,000	100%	

2019-2038

Discolored Water Study Hawks Prairie

Location:

File Number:

wtr002.xls Hawks Prairie CFP Project: Department:

Water-

UGA Planning Area: Water Plan Project:

N/A

Public Works

2

Project Description: Evaluation of possible causes for occasional "yellow water" events.

Project Justification: Improve water quality and reduce customer impacts.

Policy Basis: Best Management Practices

Current Project Status: Planning

Land Status: N/A

## PROJECT FUNDING SOURCES AND EXPENDITURES

		Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%_	Future Years
	FUNDING				_				•		
	General Revenue Voted G.O. Bonds										
	Non-Voted G.O. Bonds Revenue Bonds										
	Utility Rates / Fees										
8-7	GFC Revenue LID / ULID	97,000	75,000						75,000	100%	
	Arterial Street Fund										
	PWTF Loan Interfund Loan										
	Grants SEPA / LTA										
	Developer Financing Other <sup>1</sup>										
	TOTAL FUNDING	97,000	75,000						75,000	100%	
	EXPENDITURES										
	Planning Preliminary Design	97,000	75,000						75,000	100%	
	Design & Engineering Land / ROW Acquisition										
	Construction Other										
•	TOTAL EXPENDITURES	97,000	75,000						75,000	100%	

2019-2038

Train Depot Water

Location: Lebanon St

File Number:

wtr003.xls Central CFP Project: Department:

Water-Public Works 3

UGA Planning Area: Water Plan Project:

N/A

Project Description: Install new water line concurent with the Lebanon extension project.

Project Justification:

Provide water service to the Train Depot site and improve water system looping.

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Construction

Land Status: Public ROW

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%	Future Year
FUNDING										
General Revenue Voted G.O. Bonds										
Non-Voted G.O. Bonds Revenue Bonds										
Utility Rates / Fees										
GFC Revenue		250,000						250,000	100%	
LID / ULID Arterial Street Fund										
PWTF Loan Interfund Loan										
Grants SEPA / LTA										
Developer Financing Other <sup>1</sup>										
TOTAL FUNDING		250,000						250,000	100%	
EXPENDITURES										
Planning Preliminary Design										
Design & Engineering Land / ROW Acquisition										
Construction Other		250,000						250,000	100%	
TOTAL EXPENDITURES		250,000						250,000	100%	

2019-2038

Union Mills Seismic Upgrade & Overflow

Location: Paradise Ct

File Number: UGA Planning Area: Water Plan Project: wtr004.xls Tanglewilde

ST-03

CFP Project: Department:

Water- 4 Public Works

Project Description: This project will the foundation and anchorage of the Union Mills tank and add a dedicated overflow and drain line.

Project Justification: Improve infrastructure resiliency during emergencies.

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Construction

Land Status: City and County ROW

### PROJECT FUNDING SOURCES AND EXPENDITURES

		Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total % F	uture Years
	FUNDING									
	General Revenue Voted G.O. Bonds									
	Non-Voted G.O. Bonds Revenue Bonds									
	Utility Rates / Fees									
8-9	GFC Revenue LID / ULID	110,000	1,797,000						1,797,000 100%	
	Arterial Street Fund									
	PWTF Loan Interfund Loan									
	Grants SEPA / LTA									
	Developer Financing Other <sup>1</sup>									
-	TOTAL FUNDING	110,000	1,797,000						1,797,000 100%	
	EXPENDITURES									
	Planning Preliminary Design									
	Design & Engineering Land / ROW Acquisition	110,000								
	Construction Other		1,797,000						1,797,000 100%	
•	TOTAL EXPENDITURES	110,000	1,797,000						1,797,000 100%	

2019-2038

Water System Plan

Location:

N/A

File Number:

wtr005.xls ΑII

G-5

CFP Project:

Water-

UGA Planning Area: Water Plan Project:

Department:

**Public Works** 

5

Project Description: Update the water system plan.

Project Justification: State Department of Health requirement.

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Planning

Land Status: N/A

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total % Future Years
FUNDING								
General Revenue								
Voted G.O. Bonds								
Non-Voted G.O. Bonds								
Revenue Bonds								
Utility Rates / Fees GFC Revenue	28,000	671,000						671,000 100%
LID / ULID	20,000	07 1,000						071,000 10076
Arterial Street Fund								
PWTF Loan								
Interfund Loan								
Grants								
SEPA / LTA								
Developer Financing Other <sup>1</sup>								
TOTAL FUNDING	29 000	671 000				_		671 000 100%
TOTAL FUNDING	28,000	671,000						671,000 100%
EXPENDITURES								
Planning	28,000	671,000						671,000 100%
Preliminary Design								
Design & Engineering								
Land / ROW Acquisition								
Construction								
Other								
TOTAL EXPENDITURES	28,000	671,000						671,000 100%

Planning Period: 2019-2038 File Number: wtr006.xls CFP Project: Water-Project Title: Reclaimed Water Plan ΑII Department: Public Works

UGA Planning Area: Water Plan Project: Location: N/A WS-5

Project Description: Develop a Reclaimed Water Plan.

6

Project Justification: Evaluate how best to utilize reclaimed water as a resource.

Policy Basis: 2013Comprehensive Water Plan Current Project Status: Planning Land Status: N/A

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%	Future Years
FUNDING							,			
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds										
Utility Rates / Fees		000 000	407.000					007.000	1000/	
GFC Revenue		200,000	137,000					337,000	100%	
LID / ULID Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants										
SEPA / LTA										
Developer Financing										
Other <sup>1</sup>										
TOTAL FUNDING		200,000	137,000					337,000	100%	
EXPENDITURES										
Planning		200,000	137,000					337,000	100%	
Preliminary Design										
Design & Engineering										
Land / ROW Acquisition										
Construction										
Other										
TOTAL EXPENDITURES		200,000	137,000					337,000	100%	

2019-2038 Mullen Rd Water

Mullen Rd

File Number:

wtr007.xls Lakes

CFP Project: Department:

Water- 7 **Public Works** 

Location:

UGA Planning Area: Water Plan Project:

N/A

Relocate and upsize the existing water line in Mullen Rd concurant with the County's road reconstruction project.

Project Justification:

Project Description:

Reduce utility conflicts with the road reconstruction and improve water transmission capabilities.

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Design

Land Status: Public ROW

## PROJECT FUNDING SOURCES AND EXPENDITURES

		Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	% Future Yea	ars
F	FUNDING										
	General Revenue										
	Voted G.O. Bonds										
	Non-Voted G.O. Bonds										
	Revenue Bonds										
	Utility Rates / Fees										
$\infty$	GFC Revenue		750,000	750,000					1,500,000	100%	
12	LID / ULID										
	Arterial Street Fund										
	PWTF Loan										
	Interfund Loan										
	Grants										
	SEPA/LTA										
	Developer Financing										
	Other <sup>1</sup>										
-	FOTAL FUNDING		750,000	750,000					1,500,000	100%	_
E	EXPENDITURES										
	Planning										
	Preliminary Design										
	Design & Engineering										
	Land / ROW Acquisition										
	Construction Other <sup>2</sup>		750,000	750,000					1,500,000	100%	
-	TOTAL EXPENDITURES		750,000	750,000					1,500,000	100%	_

Planning Period:

2019-2038

College & 22nd Water College St Project Title:

Location:

File Number:

wtr008.xls Central

CFP Project: Department:

8 Water-Public Works

UGA Planning Area: Water Plan Project:

P-09

Project Description: Replace and upsize the existing water line in College St concurant with the City's road reconstruction project.

Project Justification:

Replaces an aging water line and improves water transmission capacity, coordination with transprotation projects.

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Construction

Land Status: Public ROW

### PROJECT FUNDING SOURCES AND EXPENDITURES

		Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	% Future Years
	FUNDING									
	General Revenue									
	Voted G.O. Bonds									
	Non-Voted G.O. Bonds									
	Revenue Bonds									
	Utility Rates / Fees									
$\infty$	GFC Revenue		300,000	350,000					650,000	100%
13	LID / ULID									
-	Arterial Street Fund									
	PWTF Loan									
	Interfund Loan									
	Grants									
	SEPA / LTA									
	Developer Financing									
	Other <sup>1</sup>									
	TOTAL FUNDING		300,000	350,000					650,000	100%
	EXPENDITURES									
	Planning									
	Preliminary Design									
	Design & Engineering									
	Land / ROW Acquisition									
	Construction Other		300,000	350,000				_	650,000	100%
	TOTAL EXPENDITURES		300,000	350,000					650,000	100%

2019-2038

Hawks Prairie Wellfield

Location:

Marvin Rd

File Number:

wtr009.xls Hawks Prairie

WS-09

CFP Project: Department:

Water- 9 **Public Works** 

Project Description: This project will make repairs to source 31 and evaluate the aquifer capacity to support additional wells.

UGA Planning Area: Water Plan Project:

Project Justification:

Excessive sand in source 31 requires remediation and repair. Aquifer capacity needs to be evaluated before constructing additional

sources.

Policy Basis: Best Management Practices

Current Project Status: Design

Land Status: City and County ROW

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total %	Future Years
FUNDING									
General Revenue									
Voted G.O. Bonds									
Non-Voted G.O. Bonds									
Revenue Bonds									
Utility Rates / Fees									
GFC Revenue	125,000	500,000						500,000 100%	
LID/ULID									
Arterial Street Fund									
PWTF Loan									
Interfund Loan Grants									
SEPA / LTA									
Developer Financing									
Other <sup>1</sup>									
TOTAL FUNDING	125 000	500,000						500 000 100%	
TOTAL FUNDING	125,000	500,000						500,000 100%	
EXPENDITURES									
Planning		350,000						350,000 70%	
Preliminary Design		000,000						000,000 1070	
Design & Engineering									
Land / ROW Acquisition									
Construction									
Other	125,000	150,000						150,000 30%	
TOTAL EXPENDITURES	125,000	500,000					-	500,000 100%	
	120,000	333,333						300,000 10070	

2019-2038

Golf Club Rd Watermain

Location:

Golf Club Rd

File Number: UGA Planning Area: Water Plan Project: wtr010.xls Central P-08

CFP Project: Department:

Water- 10 Public Works

Project Description: Replace a section of water line in Golf Club Rd.

Project Justification: The existing water line is under sized and nearing the end of its useful life.

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Design

Land Status: Public ROW

## PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total %	Future Years
FUNDING									
General Revenue									
Voted G.O. Bonds									
Non-Voted G.O. Bonds									
Revenue Bonds									
Utility Rates / Fees	40.000	000 000						000 000 4000	,
GFC Revenue	10,000	990,000						990,000 100%	O .
Arterial Street Fund									
PWTF Loan									
Interfund Loan									
Grants									
SEPA / LTA									
Developer Financing									
Other <sup>1</sup>									_
TOTAL FUNDING	10,000	990,000						990,000 100%	6
EXPENDITURES									
Planning									
Preliminary Design									
Design & Engineering	10,000								
Land / ROW Acquisition									
Construction Other <sup>2</sup>		990,000						990,000 100%	6
TOTAL EXPENDITURES	10,000	990,000						990,000 100%	6

2019-2038

pH Treatment Recommendations

Location: Various File Number:

wtr012.xls ΑII

CFP Project: Department:

Water-12 **Public Works** 

UGA Planning Area: Water Plan Project:

N/A

Project Description: Study to evaluate water treatment needs related to the Lead & Copper Rule.

Project Justification:

State Department of Health requirement.

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Planning

Land Status: N/A

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	% Future Ye	ars
FUNDING										
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds										
Utility Rates / Fees										
GFC Revenue	100,000	76,000						76,000	100%	
LID/ULID										
Arterial Street Fund										
PWTF Loan										
Interfund Loan Grants										
SEPA / LTA										
Developer Financing										
Other <sup>1</sup>										
TOTAL FUNDING	100,000	76,000						76,000	100%	
EXPENDITURES										
Planning	100,000	76,000						76,000	100%	
Preliminary Design										
Design & Engineering Land / ROW Acquisition										
Construction										
Other <sup>2</sup>										
TOTAL EXPENDITURES	100,000	76,000						76,000	100%	

2019-2038

e: 25th Loop Water

Location:

25th Lp

File Number: UGA Planning Area: Water Plan Project: wtr011.xls Central

2023

Central P-08 CFP Project: Department:

2024

Water- 11 Public Works

2041

Project Description: Replace a section of water line along 25th Lp.

Project Justification: The existing water line has reached the end of its useful life.

**Prior Years** 

2019

2020

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Design

Land Status: Public ROW

6-Year Total

%

**Future Years** 

### PROJECT FUNDING SOURCES AND EXPENDITURES

2022

2021

FUNDING		 	
General Revenue			
Voted G.O. Bonds			
Non-Voted G.O. Bonds			
Revenue Bonds			
Utility Rates / Fees			
GFC Revenue	235,000	235,000	100%
LID/ULID			
Arterial Street Fund			
PWTF Loan			
Interfund Loan			
Grants			
SEPA / LTA			
Developer Financing Other <sup>1</sup>			
TOTAL FUNDING	235,000	 235,000	100%
EXPENDITURES			
Planning			
Preliminary Design			
Design & Engineering			
Land / ROW Acquisition			
Construction Other	235,000	235,000	100%
TOTAL EXPENDITURES	235,000	 235,000	100%
		 	<del></del>

2019-2038

Well S09 Rehabilitation

Location:

Little Prairie

File Number: UGA Planning Area: Water Plan Project: wtr013.xls Horizons WS-09 CFP Project: Department:

Water- 13 Public Works

Project Description: Rehabilitate well S09 and replace pumping equipment.

Project Justification: Source 9 has been experiancing sand and occasional waterlevel fluctuations. The exising pump has reached the end of its useful life.

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Construction

Land Status: Easement

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total %	Future Years
FUNDING					·				
General Revenue									
Voted G.O. Bonds									
Non-Voted G.O. Bonds									
Revenue Bonds	48.000	82.000						92.000 100%	
Utility Rates / Fees	18,000	82,000						82,000 100%	
· LID / LILID									
Arterial Street Fund									
PWTF Loan									
Interfund Loan									
Grants									
SEPA / LTA									
Developer Financing Other <sup>1</sup>									
	40.000	00.000						02.000 4000/	<del>-</del>
TOTAL FUNDING	18,000	82,000						82,000 100%	
EXPENDITURES									
Planning									
Preliminary Design									
Design & Engineering									
Land / ROW Acquisition									
Construction									
Other <sup>2</sup>	18,000	82,000						82,000 100%	
TOTAL EXPENDITURES	18,000	82,000						82,000 100%	

2019-2038

Well S06 Rehabilitation

Location:

Judd Hill

File Number: UGA Planning Area: Water Plan Project:

wtr014.xls Central

WS-09

CFP Project: Department:

Water-**Public Works**  14

Project Description: Rehabilitate source 6.

Source 6 has seen a significant decline in specific capaicty, rehabilitation is necessary to maintain its productivity. Project Justification:

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Construction

Land Status: Public ROW

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total % Future Years
FUNDING  General Revenue  Voted G.O. Bonds  Non-Voted G.O. Bonds								
Revenue Bonds Utility Rates / Fees GFC Revenue	4,000	100,000						100,000 100%
LID / ULID Arterial Street Fund PWTF Loan Interfund Loan								
Grants SEPA / LTA Developer Financing								
Other <sup>1</sup> TOTAL FUNDING	4,000	100,000						100,000 100%
EXPENDITURES Planning Preliminary Design								
Design & Engineering Land / ROW Acquisition Construction								
Other TOTAL EXPENDITURES	4,000	100,000						100,000 100% 100,000 100%

Planning Period:

2019-2038

Project Title: Fitzhugh Water Main

Location:

Madrona Park

File Number:

wtr015.xls Meadows

CFP Project: Department:

Water- 15 Public Works

UGA Planning Area: Water Plan Project: P-09

Project Description: Upsize a portion of water line through Madrona Park to improve water transmission and relieve locally high pressure.

Project Justification: Increase water transmission capacity.

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Design

Land Status: Public ROW

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%_	Future Years
FUNDING										
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds Utility Rates / Fees										
o GFC Revenue	15,000	62,000	425,000					487,000	100%	
LID/ULID	. 0,000	0=,000	0,000					.0.,000	.00,0	
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants SEPA / LTA										
Developer Financing										
Other <sup>1</sup>										
TOTAL FUNDING	15,000	62,000	425,000					487,000	100%	
EXPENDITURES										
Planning										
Preliminary Design										
Design & Engineering	15,000	62,000						62,000	13%	
Land / ROW Acquisition			405.000					405.000	0704	
Construction Other <sup>2</sup>			425,000					425,000	87%	
TOTAL EXPENDITURES	15,000	62,000	425,000					487,000	100%	
		<u> </u>	-					-		

2019-2038

Well S07 Rehabilitation

Location:

Bowker St

File Number: UGA Planning Area: Water Plan Project: wtr016.xls Central

WS-09

CFP Project: Department:

Water- 16 **Public Works** 

Project Description: Rehabilitate well S07.

Well S07 has shown signs of sand production and slight declines in specific capacity. Project Justification:

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Planning

Land Status: City ROW

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	Future Years
FUNDING		_					_		<u> </u>
General Revenue									
Voted G.O. Bonds									
Non-Voted G.O. Bonds									
Revenue Bonds Utility Rates / Fees		50,000	50,000					100,000 100	10 <u>/</u>
o GFC Revenue		30,000	30,000					100,000 100	770
P LID/ULID									
Arterial Street Fund									
PWTF Loan									
Interfund Loan									
Grants SEPA / LTA									
Developer Financing									
Other <sup>1</sup>									
TOTAL FUNDING	<del></del>	50,000	50,000					100,000 100	9%
		<u> </u>						·	
EXPENDITURES									
Planning									
Preliminary Design Design & Engineering									
Land / ROW Acquisition									
Construction									
Other <sup>2</sup>		50,000	50,000					100,000 100	<u> </u>
TOTAL EXPENDITURES		50,000	50,000					100,000 100	)%

2019-2038

Well S04 Nitrate Study

Location:

Sarazen St

File Number:

wtr017.xls Horizons

CFP Project: Department:

Water- 17 **Public Works** 

UGA Planning Area: Water Plan Project:

N/A

Project Description: Study to evaluate nitrate levels in well S04, to determine if remedial action is necessary, and to explore possible source control options.

Well S04 has moderatly elevated nitrate levels and the City would like to increase production at this site. Project Justification:

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Planning

Land Status: City Owned

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total %	6 Future Years
FUNDING									
General Revenue Voted G.O. Bonds									
Non-Voted G.O. Bonds Revenue Bonds									
Utility Rates / Fees									
∞ GFC Revenue			150,000					150,000 100	%
LID / ULID Arterial Street Fund									
PWTF Loan Interfund Loan									
Grants SEPA / LTA									
Developer Financing Other <sup>1</sup>									
TOTAL FUNDING			150,000					150,000 100	<u> </u>
EXPENDITURES									
Planning Preliminary Design			150,000					150,000 100	%
Design & Engineering Land / ROW Acquisition									
Construction Other <sup>2</sup>									
TOTAL EXPENDITURES			150,000					150,000 100	<u> </u>

2019-2038

Capitol City Estates Fire-Flow

Location:

Capitol City Estates

File Number:

wtr018.xls Horizons

P-1

CFP Project: Department:

Water- 18 Public Works

UGA Planning Area: Water Plan Project:

Project Description: Replace water lines throughout Capitol City Estates with larger diameter mains.

Project Justification: The exising lines throughout the Capitol City Estates are at the end of their useful life and are too small to support current fire-flow requirements.

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Design

Land Status: Easement

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%	Future Years
FUNDING										
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds Utility Rates / Fees										
GFC Revenue	82,000	200,000	1,750,000	4,000,000				5,950,000	100%	
LID / ULID	02,000	200,000	1,7 00,000	1,000,000				0,000,000	10070	
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants SEPA / LTA										
Developer Financing										
Other <sup>1</sup>										
TOTAL FUNDING	82,000	200,000	1,750,000	4,000,000				5,950,000	100%	
EXPENDITURES										
Planning										
Preliminary Design										
Design & Engineering	82,000	200,000						200,000	3%	
Land / ROW Acquisition										
Construction			1,750,000	4,000,000				5,750,000	97%	
Other								-		
TOTAL EXPENDITURES	82,000	200,000	1,750,000	4,000,000				5,950,000	100%	

2019-2038

Well S15/S16 Replacement

Location:

wtr019.xls **UGA Planning Area:** Hawks Prairi CFP Project: Department:

Water- 19 **Public Works** 

48th Way

Water Plan Project:

File Number:

WS-11

Project Description: Replacement of well S15. Upgrade of structure, control, mechanical, and electrical for well S16. Addition of pH adjustment for both wells.

Project Justification:

The existing Beachcrest wells aren't able to produce their full water right due to well inefficiencies. The structures are in need of replacement. pH adjustment is required at this site to address corrosion issues.

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Design

Land Status: Public ROW

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%	Future Years
FUNDING										
General Revenue Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds Utility Rates / Fees										
GFC Revenue	236,000	444,000	2,000,000	2,000,000	1,020,000			5,464,000	100%	
2 LID/ULID										
Arterial Street Fund PWTF Loan										
Interfund Loan										
Grants SEPA / LTA										
Developer Financing										
Other <sup>1</sup>										
TOTAL FUNDING	236,000	444,000	2,000,000	2,000,000	1,020,000			5,464,000	100%	
EXPENDITURES										
Planning	00.000									
Preliminary Design Design & Engineering	86,000	444,000	200,000	200,000				844,000	15%	
Land / ROW Acquisition									,	
Construction Other	150,000		1,800,000	1,800,000	1,020,000			4,620,000	85%	
TOTAL EXPENDITURES	236,000	444,000	2,000,000	2,000,000	1,020,000			5,464,000	100%	

Planning Period:

2019-2038

Project Title: 337 Zone Reservoir

Location:

Intelco Lp

File Number: UGA Planning Area:

Water Plan Project:

wtr020.xls Horizons ST-02 CFP Project: Department:

Water- 20 Public Works

Project Description: Construct a new elevated storage tank, approximately 0.75MG.

Project Justification: Helps to address the storage deficit in the 337 pressure zone, improves system operation, and helps to regulate pressure in the southwest portion of the City.

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Preliminary Design

Land Status: City ROW

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%	Future Years
FUNDING										
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds										
Utility Rates / Fees										
GFC Revenue		450,000	550,000	3,000,000	3,000,000			7,000,000	100%	
LID / ULID  Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants										
SEPA / LTA										
Developer Financing										
Other <sup>1</sup>										
TOTAL FUNDING		450,000	550,000	3,000,000	3,000,000			7,000,000	100%	
EXPENDITURES										
Planning										
Preliminary Design		450,000						450,000	6%	
Design & Engineering			550,000	200,000	100,000			850,000	12%	
Land / ROW Acquisition										
Construction Other <sup>2</sup>				2,800,000	2,900,000			5,700,000	81%	
TOTAL EXPENDITURES		450,000	550,000	3,000,000	3,000,000			7,000,000	100%	

Project Description:

2019-2038 Marvin Rd Well Marvin Rd File Number: UGA Planning Area: Water Plan Project: wtr021.xls Hawks Prairie WS-04 CFP Project: Department:

Water- 21 Public Works

Location: Marvin R

Construct a new well source at the north west corner of Marvin Rd and 41st Ave.

Project Justification: Increases total water production to allow for additional growth and improves source redundancy.

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Planning

Land Status: Public ROW

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%_	Future Years
FUNDING		_					_			
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds										
Utility Rates / Fees GFC Revenue		250,000	1,000,000	1,500,000	750,000			3,500,000	100%	
LID/ULID		200,000	1,000,000	1,000,000	700,000			0,000,000	10070	
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants										
SEPA / LTA Developer Financing										
Other <sup>1</sup>										
TOTAL FUNDING		250,000	1,000,000	1,500,000	750,000			3,500,000	100%	
TOTALTONDING		230,000	1,000,000	1,500,000	730,000			3,300,000	10070	
EXPENDITURES										
Planning										
Preliminary Design		250,000						250,000	7%	
Design & Engineering			100,000	100,000				200,000	6%	
Land / ROW Acquisition			000 000	4 400 000	750 000			0.050.000	070/	
Construction Other			900,000	1,400,000	750,000			3,050,000	87%	
		050.000	4 000 000	4.500.000	750,000			0.500.000	4000/	
TOTAL EXPENDITURES		250,000	1,000,000	1,500,000	750,000			3,500,000	100%	

Planning Period: CFP Project: 2019-2038 File Number: wtr022.xls Water- 22 Project Title: Hawks Prairie Tank Repair & Sister Tank UGA Planning Area: Department: Hawks Prairie Public Works Location: Marvin Rd Water Plan Project: N/A

Project Description: Construct a new 1.5MG storage tank on the Hawks Prairie site and repair the roof rafters in the existing Hawks Prairie tank.

Project Justification: The existing Hawks Prairie tank is in need of repair due to failed coatings and excessive corrosion. A second smaller tank is needed on-site to provide the needed system storage while the existing tank is off-line for repair.

Policy Basis: 2013Comprehensive Water Plan Current Project Status: Planning Land Status: City Owned

#### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%	Future Years
FUNDING										
General Revenue Voted G.O. Bonds Non-Voted G.O. Bonds Revenue Bonds Utility Rates / Fees										
GFC Revenue LID / ULID Arterial Street Fund PWTF Loan Interfund Loan Grants SEPA / LTA Developer Financing Other 1		550,000	2,000,000	2,000,000	2,000,000			6,550,000	100%	
TOTAL FUNDING		550,000	2,000,000	2,000,000	2,000,000			6,550,000	100%	
EXPENDITURES										
Planning Preliminary Design Design & Engineering Land / ROW Acquisition Construction Other <sup>2</sup>		550,000	200,000	200,000	100,000			1,050,000	16% 84%	
TOTAL EXPENDITURE	S	550,000	2,000,000	2,000,000	2,000,000			6,550,000	100%	

Planning Period:

2019-2038

Project Title: 48th/50th Ave Fire-Flow

Location:

48th/50th Ave

File Number: **UGA Planning Area**: wtr023.xls Hawks Prairi

P-02

CFP Project: Department:

Water- 23 **Public Works** 

Water Plan Project:

Project Description: Replace the existing water lines in this area of Beachcrest with larger diameter mains to improve fire-flow.

These existing lines are near the end of their useful life and are undersized. The existing lines are not capable of supporting current fire-flow Project Justification:

requirements.

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Planning

Land Status: Public ROW

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%	Future Years
FUNDING										
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds										
Utility Rates / Fees										
∞ GFC Revenue				100,000	750,000			850,000	100%	
LID/ULID										
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants SEPA / LTA										
Developer Financing										
Other <sup>1</sup>										
				400,000	750,000			050,000	4000/	
TOTAL FUNDING				100,000	750,000			850,000	100%	
EXPENDITURES										
Planning										
Preliminary Design										
Design & Engineering				100,000				100,000	12%	
Land / ROW Acquisition				, , , , , , , , , , , , , , , , , , , ,						
Construction					750,000			750,000	88%	
Other								_		
TOTAL EXPENDITURES	S			100,000	750,000			850,000	100%	

Planning Period:

2019-2038

Project Title: Madrona pH Adjustment

Location:

Milbanke Dr

File Number:

wtr024.xls Meadows

N/A

CFP Project: Department:

Water- 24 Public Works

UGA Planning Area: Water Plan Project:

Project Description: Construct a corrosion control for the Madrona wellfield to raise the distribution system pH.

Project Justification: pH adjustment for corrosion control is required at this site by the state department of health.

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Planning

Land Status: City Owned

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%	Future Years
FUNDING			· ·							
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds Utility Rates / Fees										
© GFC Revenue		500,000	1,000,000	1,500,000	1,000,000			4,000,000	100%	
⊋ LID/ULID		,	.,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,,			.,,		
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants SEPA / LTA										
Developer Financing										
Other <sup>1</sup>										
TOTAL FUNDING		500,000	1,000,000	1,500,000	1,000,000			4,000,000	100%	
EXPENDITURES										
Planning										
Preliminary Design		F00 000	100 000	400 000	400 000			000 000	000/	
Design & Engineering Land / ROW Acquisition		500,000	100,000	100,000	100,000			800,000	20%	
Construction			900,000	1,400,000	900,000			3,200,000	80%	
Other			7 7 7 9 7 7 7	, ,				-,,		
TOTAL EXPENDITURES		500,000	1,000,000	1,500,000	1,000,000			4,000,000	100%	
		222,300	.,,	1,223,000	1,110,000			1,110,000		

2019-2038

Well S01 Replacement

Location: College Street File Number: UGA Planning Area: Water Plan Project: wtr025.xls Horizons WS-12

CFP Project: Department:

Water- 25 Public Works

Project Description: Rehabilitate well S01 and evaluate the need for a replacement well. Add pH adjustment to this site for wells S01, S02, and S03.

Project Justification: The existing well's capacity has significatly declined. pH adjustment for sources at this site is required by the state department of health.

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Planning

Land Status: City-owned

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%	Future Years
FUNDING										
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds										
Utility Rates / Fees		000 000	E00.000	000 000	0.000.000	0.000.000		0.000.000	4000/	
o GFC Revenue		200,000	500,000	300,000	2,000,000	3,000,000		6,000,000	100%	
LID / ULID Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants										
SEPA / LTA										
Developer Financing										
Other <sup>1</sup>				_						
TOTAL FUNDING		200,000	500,000	300,000	2,000,000	3,000,000		6,000,000	100%	
EXPENDITURES										
Planning										
Preliminary Design		200,000						200,000	3%	
Design & Engineering			100,000	300,000	200,000	200,000		800,000	13%	
Land / ROW Acquisition										
Construction Other			400,000		1,800,000	2,800,000		5,000,000	83%	
TOTAL EXPENDITURES		200,000	500,000	300,000	2,000,000	3,000,000		6,000,000	100%	

8-31

Planning Period: Project Title: 2019-2038

Well S04 Expansion Sarazen Dr

Location: Sarazen Dr

File Number: UGA Planning Area: Water Plan Project: wtr026.xls Horizons WS-03 CFP Project: Department:

Water- 26 Public Works

Project Description: Construct a second well near the e

Construct a second well near the existing S04 site and expand the existing corrosion control facility.

Project Justification:

A second well at this location will allow for a greater instantaneous pumping capacity and allow the City to better meet peak summer water

demand.

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Planning

Land Status: City Owned

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%	Future Years
FUNDING										
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds Utility Rates / Fees										
GFC Revenue				500,000	500,000	2,000,000		3,000,000	100%	
LID / ULID				233,000	000,000	_,000,000		3,000,000	.00,0	
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants SEPA / LTA										
Developer Financing										
Other <sup>1</sup>										
TOTAL FUNDING				500,000	500,000	2,000,000		3,000,000	100%	
EXPENDITURES										
Planning										
Preliminary Design										
Design & Engineering				500,000	200,000	200,000		900,000	30%	
Land / ROW Acquisition Construction					300,000	1,800,000		2,100,000	70%	
Other <sup>2</sup>					300,000	1,800,000		2,100,000	7076	
TOTAL EXPENDITURES				500,000	500,000	2,000,000		3,000,000	100%	

2019-2038

Well S09 Treatment Study

Location: Little Prairie

File Number: UGA Planning Area:

Water Plan Project:

wtr0271.xls Horizons

N/A

CFP Project: Department:

Water-

Public Works

27

Project Description: This is a study to evaluate the need for and the feasibility of adding treatment for well S09.

Project Justification: Well S09 has historically been a reliable production well but suffers from elevated iron and manganese. This causes customer complaints and increased water line flushing. Adding treatment to well S09 would improve water quality in the Southwest portion of the City.

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Planning

Land Status: Easement

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%	Future Years
FUNDING										
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds										
Utility Rates / Fees										
GFC Revenue						150,000	150,000	300,000	100%	
LID/ULID										
Arterial Street Fund										
PWTF Loan										
Interfund Loan Grants										
SEPA / LTA										
Developer Financing										
Other <sup>1</sup>										
TOTAL FUNDING						150,000	150,000	200,000	1000/	
TOTAL FUNDING						150,000	150,000	300,000	100%	
EXPENDITURES										
Planning										
Preliminary Design						150,000	150,000	300,000	100%	
Design & Engineering						,	,	,		
Land / ROW Acquisition										
Construction										
Other								1		
TOTAL EXPENDITURES						150,000	150,000	300,000	100%	

2019-2038

Meridian Campus Well

Deni Dr Location:

File Number:

wtr028.xls Hawks Prairie CFP Project: Department:

Water- 28 **Public Works** 

UGA Planning Area: Water Plan Project: N/A

Project Description: Construct a new water well and treatment facitliy at the Meridian Campus site.

Project Justification: This new well and treatment facility are needed to accomodate future growth.

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Planning

Land Status: Public ROW

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%	Future Years
FUNDING										
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds										
Utility Rates / Fees										
GFC Revenue					150,000	850,000	250,000	1,250,000	100%	4,750,000
LID / ULID Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants										
SEPA / LTA										
Developer Financing										
Other <sup>1</sup>										
TOTAL FUNDING					150,000	850,000	250,000	1,250,000	100%	4,750,000
EXPENDITURES										
Planning										
Preliminary Design										
Design & Engineering					150,000	100,000	250,000	500,000	40%	250,000
Land / ROW Acquisition										
Construction						750,000		750,000	60%	4,500,000
Other										
TOTAL EXPENDITURES					150,000	850,000	250,000	1,250,000	100%	4,750,000

Planning Period:

2019-2038

Project Title: Evergreen pH Adjustment

Location:

File Number: **UGA Planning Area:**  wtr029.xls Seasons

N/A

CFP Project: Department:

Water- 29 **Public Works** 

Hibiscus Ct

Project Description: Construct a corrosion control facility for well S27 to increase pH.

Project Justification:

Well S27 has slightly corrosive water quality characteristics and may be required to have treatment for pH adjustment. The need for this project will be verified with distribution system monitoring after the Madrona pH adjustment facility is operational to determine if there is sufficient water blending in the distribution system.

Water Plan Project:

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Planning

Land Status: City Owned

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019 20	020 2021	2022	2023	2024	6-Year Total	<u>%</u> <u>l</u>	Future Years
FUNDING									_
General Revenue									
Voted G.O. Bonds									
Non-Voted G.O. Bonds									
Revenue Bonds									
Utility Rates / Fees									
GFC Revenue						500,000	500,000	100%	3,500,000
2 LID/ULID									
Arterial Street Fund									
PWTF Loan									
Interfund Loan Grants									
SEPA / LTA									
Developer Financing									
Other <sup>1</sup>									
						500,000	F00 000	4000/	2.500.000
TOTAL FUNDING						500,000	500,000	100%	3,500,000
EXPENDITURES									
Planning									
Preliminary Design						250,000	250,000	50%	
Design & Engineering						250,000	250,000	50%	250,000
Land / ROW Acquisition									
Construction									3,250,000
Other <sup>2</sup>									
TOTAL EXPENDITURES						500,000	500,000	100%	3,500,000
55							, -		<del></del>

2019-2038

**Brewery Wellfield Development** 

File Number: **UGA Planning Area:**  wtr031.xls

CFP Project:

Water- 30

Location:

Tumwater

Water Plan Project:

N/A WS-2 Department:

**Public Works** 

Project Description:

This project will reactivate the Olympia Brewery wellfield that was jointly acquired by Lacey, Olympia, and Tumwater. This is expected to include new wells, treatment facilities, booster pump stations, and transmission piping. This will also require significant negotiation and coordination with the other

cities.

Project Justification:

This wellfield will provide additional water supply to allow for future growth.

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Planning

Land Status: To be determined

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%_	Future Years
FUNDING				_				•		
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds										
Utility Rates / Fees			50,000	50,000	200,000	200,000	200,000	700,000	100%	2,600,000
ည LID/ULID			30,000	30,000	200,000	200,000	200,000	700,000	10076	2,000,000
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants										
SEPA / LTA										
Developer Financing										
Other <sup>1</sup>										
TOTAL FUNDING			50,000	50,000	200,000	200,000	200,000	700,000	100%	2,600,000
EXPENDITURES										
			50,000	50,000				100,000	14%	
Planning Preliminary Design			50,000	50,000	200,000			200,000	29%	
Design & Engineering					200,000	200,000	200,000	400,000	57%	
Land / ROW Acquisition								.00,000		
Construction										2,600,000
Other										
TOTAL EXPENDITURES			50,000	50,000	200,000	200,000	200,000	700,000	100%	2,600,000
			<del></del>	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·			

2019-2038 Critical Valves

File Number: **UGA Planning Area**: wtr031.xls ΑII

P-12

CFP Project: Department:

Water- 31 **Public Works** 

Location: Various

Water Plan Project:

Project Description: This is a recurring budget allocation to replace and install new water valves throughout the distribution system.

Project Justification: Water valves are needed at critical junctions throughout the water distribution system to allow for unidirectional flushing and to allow for small sections of water line to be shutdown

and isolated for repair or in case of an emergency. These valves reduce the number of customers impacted during a shutdown.

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Recurring

Land Status: Public ROW

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%_	Future Years
FUNDING								_		
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds Revenue Bonds										
Utility Rates / Fees		200,000	100,000	100,000	100,000	100,000	100,000	700,000	100%	
GFC Revenue		200,000	100,000	100,000	100,000	100,000	100,000	. 00,000	.0070	
LID/ULID										
Arterial Street Fund										
PWTF Loan Interfund Loan										
Grants										
SEPA / LTA										
Developer Financing										
Other <sup>1</sup>										
TOTAL FUNDING		200,000	100,000	100,000	100,000	100,000	100,000	700,000	100%	
EXPENDITURES										
Planning										
Preliminary Design										
Design & Engineering			20,000	20,000	20,000	20,000	20,000	100,000	14%	
Land / ROW Acquisition Construction		200.000	80.000	80.000	80 000	80 000	80 000	600,000	86%	
Other		200,000	80,000	80,000	80,000	80,000	80,000	600,000	00%	
TOTAL EXPENDITURES		200,000	100,000	100,000	100,000	100,000	100,000	700,000	100%	
		,								

Planning Period:

2019-2038

Project Title: Water Right Mitigation

Location:

File Number:

wtr032.xls ΑII

CFP Project: Department:

Water- 32 **Public Works** 

Various

UGA Planning Area: Water Plan Project:

WS-6

Project Description: This is a recurring budget allocation to manage and address water rights mitigation issues.

Water rights mitigation is a state department of ecology requirement. Project Justification:

Policy Basis: 2013Comprehensive Water Plan Current Project Status: Recurring Land Status: Various

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%	Future Years
FUNDING										
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds										
Utility Rates / Fees GFC Revenue		107.000	9E 000	9E 000	0E 000	9E 000	05.000	622.000	1000/	
ال GFC Revenue الك LID/ULID		197,000	85,000	85,000	85,000	85,000	85,000	622,000	100%	
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants										
SEPA / LTA										
Developer Financing										
Other <sup>1</sup>										
TOTAL FUNDING		197,000	85,000	85,000	85,000	85,000	85,000	622,000	100%	
EXPENDITURES										
Planning										
Preliminary Design										
Design & Engineering										
Land / ROW Acquisition										
Construction										
Other <sup>2</sup>		197,000	85,000	85,000	85,000	85,000	85,000	622,000	100%	
TOTAL EXPENDITURES		197,000	85,000	85,000	85,000	85,000	85,000	622,000	100%	

Location:

2019-2038

Smith Farm Management

**Deschutes Watershed** 

File Number:

wtr033.xls N/A

WS-7

CFP Project: Department:

Water- 33 Public Works

UGA Planning Area: Water Plan Project:

Project Description: This project is to provide riparian habitat improvement and on-going property management in the Deschutes watershed for water right mitigation.

Project Justification: Water right mitigation is a state department of ecology requirement.

Policy Basis: 2013Comprehensive Water Plan

Current Project Status: Recurring

Land Status: City Owned

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%	Future Years
FUNDING										
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds										
Utility Rates / Fees GFC Revenue	02.000	444.000	20.000	20.000	20.000	20.000	20.000	E44.000	1000/	
QFC Revenue	92,000	444,000	20,000	20,000	20,000	20,000	20,000	544,000	100%	
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants										
SEPA / LTA										
Developer Financing										
Other <sup>1</sup>					<del></del>	· ·				
TOTAL FUNDING	92,000	444,000	20,000	20,000	20,000	20,000	20,000	544,000	100%	
EXPENDITURES										
Planning										
Preliminary Design										
Design & Engineering										
Land / ROW Acquisition										
Construction	00 000	444.000	20.000	20.000	20.000	20.000	20.000	E44.000	4000/	
Other <sup>2</sup>	92,000	444,000	20,000	20,000	20,000	20,000	20,000	544,000	100%	
TOTAL EXPENDITURES	92,000	444,000	20,000	20,000	20,000	20,000	20,000	544,000	100%	

Planning Period:

2019-2038

**Transportation Related Improvements** 

File Number:

wtr034.xls

CFP Project:

Water- 34

Project Title: Location:

Various

UGA Planning Area: Water Plan Project:

ΑII N/A Department:

**Public Works** 

Project Description: This is a recurring budget allocation to relocate or improve water distribution infrastructure that is in conflict with transportation and road improvement projects.

This allows for coordination with transportation projects. Project Justification:

Policy Basis: Best Management Practices

Current Project Status: Recurring

Land Status: Public ROW

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%	Future Years
FUNDING		_								
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds Revenue Bonds										
Utility Rates / Fees										
GFC Revenue		150,000	150,000	150,000	150,000	150,000	150,000	900,000	100%	
ي LID/ULID		•	,		,	,	,	,		
Arterial Street Fund										
PWTF Loan										
Interfund Loan Grants										
SEPA / LTA										
Developer Financing										
Other <sup>1</sup>										
TOTAL FUNDING		150,000	150,000	150,000	150,000	150,000	150,000	900,000	100%	
EVDENDITUDES										
EXPENDITURES										
Planning										
Preliminary Design Design & Engineering										
Land / ROW Acquisition										
Construction		150,000	150,000	150,000	150,000	150,000	150,000	900,000	100%	
Other <sup>2</sup>										
TOTAL EXPENDITURES		150,000	150,000	150,000	150,000	150,000	150,000	900,000	100%	

2019-2038

**Development Related Improvements** 

Location: Various File Number:

wtr035.xls

CFP Project:

Water- 35

**UGA Planning Area:** Water Plan Project:

ΑII N/A Department:

**Public Works** 

Project Description: This is a recurring budget allocation to allow for water line upsizing, looping, and other minor improvements to be made by developers where they are not specifically required to make these improvements as part of their project but there is a benefit to the distribution system.

Project Justification: This allows for small improvements to be made during site development that might not otherwise be feasible or cost effective.

Policy Basis: Best Management Practices

Current Project Status: Recurring

Land Status: Various

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%_	Future Years
FUNDING			_		_	_				
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds Revenue Bonds										
Utility Rates / Fees										
GFC Revenue		150,000	150,000	150,000	150,000	150,000	150,000	900,000	100%	
≥ LID/ULID		,	,	,	,	,	,	,		
Arterial Street Fund										
PWTF Loan										
Interfund Loan Grants										
SEPA / LTA										
Developer Financing										
Other <sup>1</sup>										
TOTAL FUNDING		150,000	150,000	150,000	150,000	150,000	150,000	900,000	100%	
EXPENDITURES										
Planning Preliminary Design										
Design & Engineering										
Land / ROW Acquisition										
Construction		150,000	150,000	150,000	150,000	150,000	150,000	900,000	100%	
Other										
TOTAL EXPENDITURES		150,000	150,000	150,000	150,000	150,000	150,000	900,000	100%	

2019-2038

**Annual Pipeline Improvements** 

File Number:

wtr036.xls

CFP Project:

Water- 36

Location:

Various

UGA Planning Area: Water Plan Project:

ΑII P-9 Department:

**Public Works** 

Project Description:

This is a recurring budget allocation dedicated to pipe upsizing and looping to improve water transmission throughout the distribution system.

Project Justification:

Improving water transmission capabilities helps to moderate pressure fluctuations, increases water production capability, reduces operational complexity, and improves system redundancy.

Policy Basis: 2013 Comprehensive Water Plan

Current Project Status: Recurring

Land Status: Various

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%_	Future Years
FUNDING		_								
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds Utility Rates / Fees										
© GFC Revenue			100,000	1,000,000	100,000	1,000,000	100,000	2,300,000	100%	1,000,000
≥ LID/ULID			. 00,000	.,000,000	.00,000	.,000,000	.00,000	_,000,000	.00,0	.,000,000
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants SEPA / LTA										
Developer Financing										
Other <sup>1</sup>										
TOTAL FUNDING			100,000	1,000,000	100,000	1,000,000	100,000	2,300,000	100%	1,000,000
EXPENDITURES	_								_	
Planning										
Preliminary Design										
Design & Engineering			100,000		100,000		100,000	300,000	13%	
Land / ROW Acquisition										
Construction Other				1,000,000		1,000,000		2,000,000	87%	1,000,000
			400,000	4 000 000	400,000	1 000 000	400.000	2 200 000	4000/	4.000.000
TOTAL EXPENDITURES			100,000	1,000,000	100,000	1,000,000	100,000	2,300,000	100%	1,000,000

2019-2038

Location:

Annual Waterline Replacement

Various

File Number:

wtr037.xls ΑII

CFP Project: Department:

Water- 37 **Public Works** 

P-8

UGA Planning Area: Water Plan Project:

This is a recurring budget allocation to replace existing water lines that are at the end of their useful life or need other forms of repair and rehabilitation.

Project Justification:

Project Description:

Ensures that infrastructure is in good condition and reduces catastrophic failures and emergency repairs.

Policy Basis: 2013 Comprehensive Water Plan

Current Project Status: Recurring

Land Status: Various

### PROJECT FUNDING SOURCES AND EXPENDITURES

	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%	Future Years
FUNDING										
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds			4 400 000	4 400 000	4 400 000	4 400 000	4 400 000	F F00 000	4000/	
Utility Rates / Fees GFC Revenue			1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	5,500,000	100%	
LID / ULID										
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants										
SEPA / LTA										
Developer Financing Other <sup>1</sup>										
Other								-		
TOTAL FLINDING			1 100 000	1 100 000	1 1(1() ()(1()	1 1/1/1/1/1/1	1 100 000	E EUU UUU	$1 \cap \cap 0/$	
TOTAL FUNDING			1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	5,500,000	100%	
TOTAL FUNDING  EXPENDITURES			1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	5,500,000	100%	
EXPENDITURES			1,100,000	1,100,000	1,100,000		1,100,000	5,500,000	100%	
			1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	5,500,000	100%	
EXPENDITURES  Planning  Preliminary Design  Design & Engineering			1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	5,500,000	9%	
EXPENDITURES  Planning  Preliminary Design  Design & Engineering  Land / ROW Acquisition			100,000	100,000	100,000	100,000	100,000	500,000	9%	
EXPENDITURES  Planning  Preliminary Design  Design & Engineering  Land / ROW Acquisition  Construction									·	
EXPENDITURES  Planning  Preliminary Design  Design & Engineering  Land / ROW Acquisition  Construction  Other			100,000	100,000	100,000	100,000	100,000	500,000	9% 91%	
EXPENDITURES  Planning  Preliminary Design  Design & Engineering  Land / ROW Acquisition  Construction			100,000	100,000	100,000	100,000	100,000	500,000	9%	

2019-2038

Well Rehabilitation

Location:

Various

File Number:

wtr038.xls ΑII

CFP Project: Department:

Water- 38 **Public Works** 

WS-9

UGA Planning Area: Water Plan Project:

Project Description: Recuring funding to monitor groundwater wells for reductions in specific capacity, sand, and biofouling; and to rehabilitate them as needed.

Project Justification:

Groundwater wells require recurring maintenance to remain productive.

Policy Basis: 2013 Comprehensive Water Plan

Current Project Status: Planning

Land Status: Various

### PROJECT FUNDING SOURCES AND EXPENDITURES

General Revenue Voted G.O. Bonds Non-Voted G.O. Bonds Revenue Bonds Utility Rates / Fees 100,000 100,000 100,000 100,000 500,000 100%  GFC Revenue LID / ULID Arterial Street Fund PWTF Loan Interfund Loan Grants SEPA / LTA Developer Financing Other 1  TOTAL FUNDING 100,000 100,000 100,000 100,000 100,000 500,000 100%  EXPENDITURES Planning Preliminary Design	FUNDING	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%	Future Years
Revenue Bonds Utility Rates / Fees 100,000 100,000 100,000 100,000 500,000 100%  GFC Revenue LID / ULID Arterial Street Fund PWTF Loan Interfund Loan Grants SEPA / LTA Developer Financing Other 1  TOTAL FUNDING 100,000 100,000 100,000 100,000 100,000 500,000 100%  EXPENDITURES Planning Preliminary Design	Voted G.O. Bonds										
Arterial Street Fund PWTF Loan Interfund Loan Grants SEPA / LTA Developer Financing Other   TOTAL FUNDING   EXPENDITURES Planning Preliminary Design	Revenue Bonds Utility Rates / Fees GFC Revenue			100,000	100,000	100,000	100,000	100,000	500,000	100%	
Grants           SEPA / LTA           Developer Financing           Other <sup>1</sup> TOTAL FUNDING         100,000         100,000         100,000         100,000         500,000         100%           EXPENDITURES           Planning           Preliminary Design	Arterial Street Fund PWTF Loan										
Other <sup>1</sup> TOTAL FUNDING 100,000 100,000 100,000 100,000 100,000 500,000 100%  EXPENDITURES  Planning Preliminary Design	Grants SEPA / LTA										
Planning Preliminary Design	Other <sup>1</sup>			100,000	100,000	100,000	100,000	100,000	500,000	100%	
	Planning										
Land / ROW Acquisition  Construction	Design & Engineering Land / ROW Acquisition			20,000	20,000	20,000	20,000	20,000	100,000	20%	
Other         80,000         80,000         80,000         80,000         80,000         80,000         400,000         80%           TOTAL EXPENDITURES         100,000         100,000         100,000         100,000         100,000         500,000         100%	Other								•		

Planning Period: File Number: wtr039.xls **CFP Project:** Water- 39 2019-2038 Project Title: AMR System **UGA Planning Area:** ΑII Department: Finance Water Plan Project: Location: Various Project Description: Analysis for new automated meter reading system. Project Justification: Policy Basis: 2013 Comprehensive Water Plan Current Project Status: Planning Land Status: Various PROJECT FUNDING SOURCES AND EXPENDITURES **Future Years Prior Years** 2019 2020 2021 2022 2024 6-Year Total 2023 **FUNDING** General Revenue Voted G.O. Bonds Non-Voted G.O. Bonds Revenue Bonds Utility Rates / Fees **GFC** Revenue 6,799,278 6,799,278 100% LID / ULID Arterial Street Fund PWTF Loan Interfund Loan Grants SEPA / LTA **Developer Financing** Other 1 **TOTAL FUNDING** 6,799,278 6,799,278 100% **EXPENDITURES** Planning Preliminary Design Design & Engineering Land / ROW Acquisition Construction 6,799,278 100% Other TOTAL EXPENDITURES 6,799,278 100%

- 2) Provide a safe, consistent, and efficient supply of high quality water to the customers.
- 3) Increase source reliability to meet DOH recommended design criteria.
- Construct water supply, distribution, transmission and storage improvements to meet City wide water demands
- 5) Upgrade and replace aging water mains and facilities.
- 6) Provide a financing plan for the Capital improvement Program to meet projected growth and water system needs.

## **Meeting Demands of Population Growth**

In 2005, Resolution 917 was adopted to place restrictions on new water system connections in the Urban Growth Area (UGA), pending additional water right authorizations from the Department of Ecology. After Ecology issued new water rights in 2011-2012, Lacey adopted it's 2013 Comprehensive Water Plan and rescinded Resolution 917 in May 2013. The City is now authorized to withdraw up to 23,511 gpm and 16,798.2 Acre-feet per year. Mitigation is required to fully use the water rights acquired in 2011-2012.

The water utility continues to anticipate strong long-term residential and commercial growth. This could drive average daily water demands as high as 11.60 million gallons by the year 2029, a 51% increase from 2011 demands. Now that the City has acquired several new water rights, the focus of the utility shifts to developing the infrastructure needed to meet those demands. Many of the projects listed in this plan are critical to achieving that goal.

The financing plan for the first six years of the Water Element of this Capital Facilities Plan is illustrated in The Water Projects Summary Sheet.