

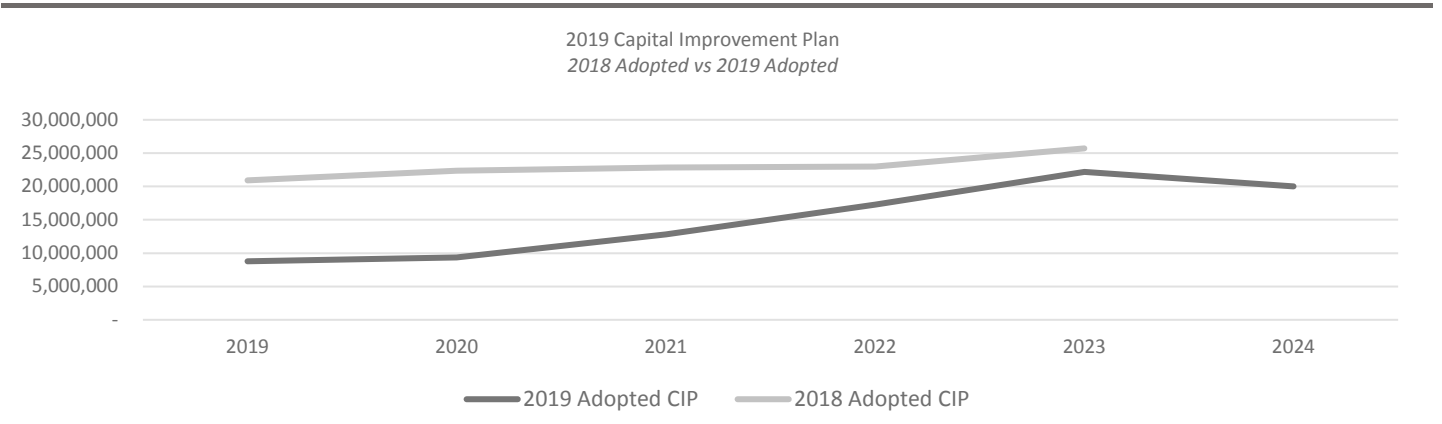
# Water Utility

## Capital Improvement Plan

### Project Summary

	2019	2020	2021	2022	2023	2024
Booster Pump Station 109 (Spaanem Ave)	-	-	-	-	345,000	2,873,000
Booster Pump Station 129 Reconstruction	-	-	-	384,240	4,330,000	-
Booster Station 106 Reconstruction	-	-	-	-	-	813,000
Far West Elevated Reservoir	-	-	-	-	-	1,355,000
Lakeview Reservoir Reconstruction	-	-	2,081,000	-	-	680,000
Unit Well 12 Conversion to a Two Zone Well	-	-	228,960	3,816,000	804,000	-
Water Mains - New	1,382,000	1,317,000	1,396,000	2,261,000	2,397,000	2,541,000
Water Mains Replace Rehab Improve - Paver	2,020,000	1,317,000	1,820,000	1,929,000	2,045,000	2,168,000
Water Mains Replace Rehab Improve - Pipe I	-	1,040,000	1,082,000	1,125,000	1,170,000	1,217,000
Water Mains Replace Rehab Improve - Recor	4,887,000	5,180,000	5,491,000	5,820,000	6,169,000	6,539,000
Water Utility Facility Improvements	491,000	512,000	704,000	1,132,000	768,000	1,158,100
Well 14 Mitigation	-	-	-	801,000	4,160,000	-
Well 19 Iron and Manganese Filter	-	-	-	-	-	665,330
<b>Total</b>	<b>\$ 8,780,000</b>	<b>\$ 9,366,000</b>	<b>\$ 12,802,960</b>	<b>\$ 17,268,240</b>	<b>\$ 22,188,000</b>	<b>\$ 20,009,430</b>

### Changes from 2018 CIP



## Project Adjustments

- Booster Pump Station 109 (Spaanem Ave): Project construction deferred from 2020 to 2024.
- Booster Pump Station 129 Reconstruction: Project construction deferred from 2019 to 2023.
- Booster Pump Station 106 Reconstruction: Project construction deferred from 2020 to 2024.
- Far West Elevated Reservoir: Project construction deferred from 2021 to 2024.
- Lakeview Reservoir Reconstruction: Project construction deferred from 2020 to 2021.
- Unit Well 12 Conversion: Project budget increased; Project construction advanced from 2023 to 2022 (\$3.2m)
- VOC Air Stripper at Well 18: Project removed from CIP (\$0.47m)
- Well 14 Mitigation: Project removed from CIP (\$4.96m)
- Well 19 Iron/Manganese Filter: Planning deferred to 2024; project construction removed from CIP (\$4.0m)
- Well 24 Iron/Manganese Filter: Project removed from CIP (\$0.57m)
- Well 28 Iron/Manganese Filter: Project removed from CIP (\$4.98m)
- Well 30 Iron/Manganese Filter: Project removed from CIP (\$5.18m)
- Well 7 Area Hydraulic Improvements: Project removed from CIP (\$0.87)
- Zone 4 Fire Flow Supply Augment: Project removed from CIP (\$1.09m)
- Zones 7 & 8 Supply - Whitney Way: Project removed from CIP (\$1.65m)

## Program Adjustments

- Water Mains - New: Program budget decreased in out-years (\$5.5m)
- Water Mains Replace Rehab Improve - Pavement Management: Program budget decreased in out-years (\$15.65m)
- Water Mains Replace Rehab Improve - Pipe Lining: Program budget decreased in out-years (\$1.22m)
- Water Mains Replace Rehab Improve - Reconstruction Streets: Program budget increased in out-years (\$3.4m)
- Water Utility Facility Improvements: Program budget decreased in out-years (\$4.15m)

# Water Utility

## Budget Overview

### 2019 CIP by Expenditure Type

	2019	2020	2021	2022	2023	2024
Building	112,000	118,000	1,978,960	4,906,240	3,872,000	4,235,430
Machinery and Equipment	379,000	394,000	410,000	426,000	443,000	461,000
Other	-	-	5,000	-	7,000	-
Water Network	8,289,000	8,854,000	10,409,000	11,936,000	17,866,000	15,313,000
<b>Total</b>	<b>\$ 8,780,000</b>	<b>\$ 9,366,000</b>	<b>\$ 12,802,960</b>	<b>\$ 17,268,240</b>	<b>\$ 22,188,000</b>	<b>\$ 20,009,430</b>

### 2019 CIP by Funding Source

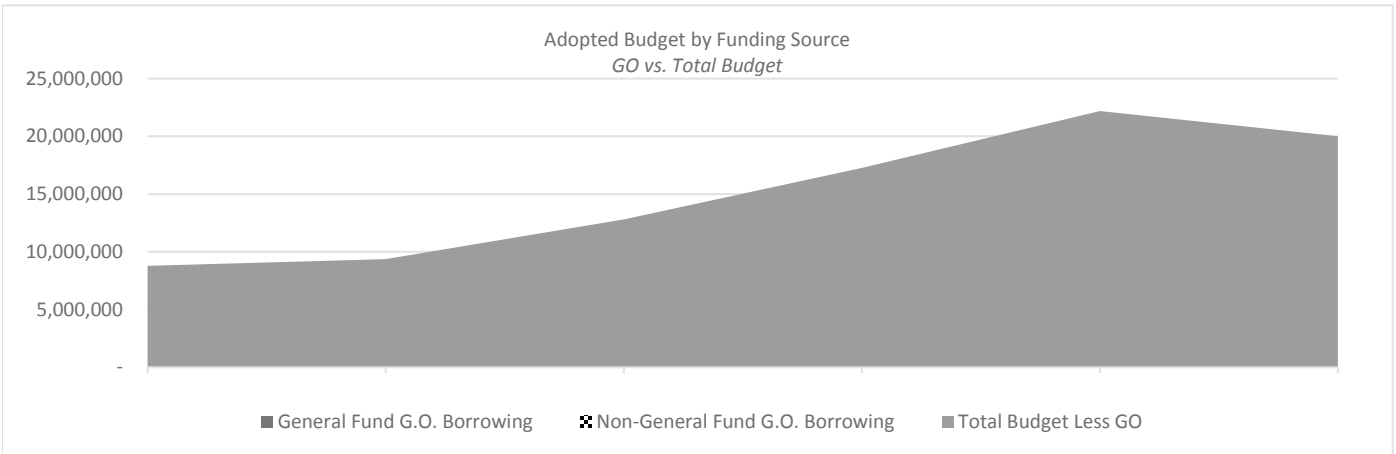
	2019	2020	2021	2022	2023	2024
Revenue Bonds	8,780,000	9,366,000	12,802,960	17,268,240	22,188,000	20,009,430
<b>Total</b>	<b>\$ 8,780,000</b>	<b>\$ 9,366,000</b>	<b>\$ 12,802,960</b>	<b>\$ 17,268,240</b>	<b>\$ 22,188,000</b>	<b>\$ 20,009,430</b>

### Borrowing Summary

	2019	2020	2021	2022	2023	2024
<b>Borrowing Schedule</b>						
General Fund G.O. Borrowing	-	-	-	-	-	-
Non-General Fund G.O. Borrowing	-	-	-	-	-	-
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

### Annual Debt Service

General Fund G.O. Borrowing	-	-	-	-	-	-
Non-General Fund G.O. Borrowing	-	-	-	-	-	-





**Project Lakeview Reservoir Reconstruction Project # 10439**

*Project Description*

This project funds reconstruction of the Lakeview Reservoir at Lake View Avenue on the City’s north side. The goal of the project is to upgrade the existing booster pumping station to improve efficiency, increase capacity, and provide reliability to the pumping system. Pipelines will be upgraded in the system to increase hydraulic capacity and improve fire protection. Funding in 2021 is for the first phase of construction; funding in 2024 is for the final phase of construction.

*Project Budget by Funding Source*

	Reauth	2019	2020	2021	2022	2023	2024
Revenue Bonds	-	-	-	2,081,000	-	-	680,000
<b>TOTAL</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,081,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 680,000</b>

**Project Unit Well 12 Conversion to a Two Zone Well Project # 10452**

*Project Description*

This project funds rebuilding and expanding Well 12 located on South Whitney Way. The goal of the project is to provide water supply capacity to five existing pressure zones which represents the majority of the City’s west side. The system flexibility provided by this project will improve service reliability and maximize water supply. Funding in 2021 is for design; funding in 2022 and 2023 is for construction.

*Project Budget by Funding Source*

	Reauth	2019	2020	2021	2022	2023	2024
Revenue Bonds	-	-	-	228,960	3,816,000	804,000	-
<b>TOTAL</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 228,960</b>	<b>\$ 3,816,000</b>	<b>\$ 804,000</b>	<b>\$ -</b>

**Project Unit Well No. 8 Reconstruction Project # 10944**

*Project Description*

This project funds upgrades to Well 8 at Lakeland Avenue on the City's east side. The project scope includes installing a filter for iron and manganese to address current water quality issues at Well 8. The goal of the project is to reduce iron and manganese to diminish colored water events and the need for system flushing.

*Project Budget by Funding Source*

	Reauth	2019	2020	2021	2022	2023	2024
Revenue Bonds	215,000	-	-	-	-	-	-
<b>TOTAL</b>	<b>\$ 215,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Project Water Mains - New Project # 12507**

*Project Description*

This program funds installing new water mains throughout the City. The goal of the program is to strengthen and expand the existing distribution system, improve water pressure, improve fire protection, allow transfer of water between pressure zones, and to serve the growing areas of the City. Newly installed mains include hydraulic improvements consistent with the Water Utility Master Plan. Planned projects in 2019 include: County Highway M at Midtown Road and Raymond Road, Cottage Grove

*Project Budget by Funding Source*

	Reauth	2019	2020	2021	2022	2023	2024
Revenue Bonds	2,617,350	1,382,000	1,317,000	1,396,000	2,261,000	2,397,000	2,541,000
<b>TOTAL</b>	<b>\$ 2,617,350</b>	<b>\$ 1,382,000</b>	<b>\$ 1,317,000</b>	<b>\$ 1,396,000</b>	<b>\$ 2,261,000</b>	<b>\$ 2,397,000</b>	<b>\$ 2,541,000</b>

**Project**                                       **Water Mains Replace Rehab  
Improve - Pavement Management**                                       **Project #**                                       **11894**

*Project Description*

This program funds replacing existing water mains in conjunction with the repaving of roads as part of the City’s Engineering-Major Streets Pavement Management program. The goal of the program is to update the water infrastructure reducing the risk of pipe failure. The program aligns with the Water Utility’s goal to replace or rehabilitate over 400 miles of aging pipe within the City over a 40-year period to renew and maintain the system.

*Project Budget by Funding Source*

	Reauth	2019	2020	2021	2022	2023	2024
Revenue Bonds	2,014,508	2,020,000	1,317,000	1,820,000	1,929,000	2,045,000	2,168,000
<b>TOTAL</b>	<b>\$ 2,014,508</b>	<b>\$ 2,020,000</b>	<b>\$ 1,317,000</b>	<b>\$ 1,820,000</b>	<b>\$ 1,929,000</b>	<b>\$ 2,045,000</b>	<b>\$ 2,168,000</b>

**Project**                                       **Water Mains Replace Rehab  
Improve - Pipe Lining**                                       **Project #**                                       **11892**

*Project Description*

This program provides cured-in-place-pipe lining (CIPP) to improve the quality of existing pipes in the water network throughout the City. The goal of the program is to lengthen the useful life of the pipes at a lower cost than replacing the pipe. The program measures the miles of pipe rehabilitated using the lining method. Locations for CIPP lining are evaluated on an annual basis.

*Project Budget by Funding Source*

	Reauth	2019	2020	2021	2022	2023	2024
Revenue Bonds	-	-	1,040,000	1,082,000	1,125,000	1,170,000	1,217,000
<b>TOTAL</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,040,000</b>	<b>\$ 1,082,000</b>	<b>\$ 1,125,000</b>	<b>\$ 1,170,000</b>	<b>\$ 1,217,000</b>

**Project**                                       **Water Mains Replace Rehab  
Improve - Reconstruct Streets**                                       **Project #**                                       **11893**

*Project Description*

This program funds replacing existing water mains in conjunction with the reconstruction of roads as part of the City’s Engineering-Major Streets Reconstruct Streets program. The goal of the program is to update the water infrastructure diminishing the risk of pipe failure. The program aligns with the Water Utility’s goal to replace or rehabilitate over 400 miles of aging pipe within the City over a 40-year period to renew and maintain the system. Funding was added to 2019 for water main replacement in conjunction with reconstruction streets projects for Bassett Street and West Wilson Street by Finance Committee amendment #4.

*Project Budget by Funding Source*

	Reauth	2019	2020	2021	2022	2023	2024
Revenue Bonds	1,688,689	4,887,000	5,180,000	5,491,000	5,820,000	6,169,000	6,539,000
<b>TOTAL</b>	<b>\$ 1,688,689</b>	<b>\$ 4,887,000</b>	<b>\$ 5,180,000</b>	<b>\$ 5,491,000</b>	<b>\$ 5,820,000</b>	<b>\$ 6,169,000</b>	<b>\$ 6,539,000</b>

**Project**                                       **Water Utility Facility Improvements**                                       **Project #**                                       **10440**

*Project Description*

This program funds repairs and security upgrades at Water Utility facilities. The goal of the program is to maintain facilities for reliable services while reducing the need for emergency repairs. Progress is measured by tracking the number of emergency calls, facility outages, and accidents each year. Funding in 2019 is for upgrades to the meter network.

*Project Budget by Funding Source*

	Reauth	2019	2020	2021	2022	2023	2024
Reserves Applied	210,226	-	-	-	-	-	-
Revenue Bonds	32,764	491,000	512,000	704,000	1,132,000	768,000	1,158,100
<b>TOTAL</b>	<b>\$ 242,990</b>	<b>\$ 491,000</b>	<b>\$ 512,000</b>	<b>\$ 704,000</b>	<b>\$ 1,132,000</b>	<b>\$ 768,000</b>	<b>\$ 1,158,100</b>



# Water Utility

## 2019 Appropriation Schedule

### 2019 Appropriation

### Adopted Budget

	Request	Executive	GO Borrowing	Other	Total
Water Mains - New	1,382,000	1,382,000	-	1,382,000	1,382,000
Water Mains Replace Rehab Improve - Pavement Managem	1,620,000	1,620,000	-	2,020,000	2,020,000
Water Mains Replace Rehab Improve - Reconstruct Streets	4,887,000	4,887,000	-	4,887,000	4,887,000
Water Utility Facility Improvements	491,000	491,000	-	491,000	491,000
<b>Total</b>	<b>\$ 8,380,000</b>	<b>\$ 8,380,000</b>	<b>\$ -</b>	<b>\$ 8,780,000</b>	<b>\$ 8,780,000</b>

### Reauthorized Appropriation

	GO Borrowing	Other	Total
Booster Pump Station 109 (Spaanem Ave)	-	81,000	81,000
Unit Well No. 8 Reconstruction	-	215,000	215,000
Water Mains - New	-	2,617,350	2,617,350
Water Mains Replace Rehab Improve - Pavement Management	-	2,014,508	2,014,508
Water Mains Replace Rehab Improve - Reconstruct Streets	-	1,688,689	1,688,689
Water Utility Facility Improvements	-	243,953	243,953
Zone 4 Fire Flow Supply Augment	-	350,496	350,496
<b>Total</b>	<b>\$ -</b>	<b>\$ 7,210,997</b>	<b>\$ 7,210,997</b>

### Total 2019 Appropriation

	<b>\$ -</b>	<b>\$ 15,990,997</b>	<b>\$ 15,990,997</b>
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