



# Preliminary 2024-2029 Capital Facilities Plan

Olympia

**Utility Advisory Committee**  
**August 3, 2023**



*East Bay Marina Sewer Lift Station*

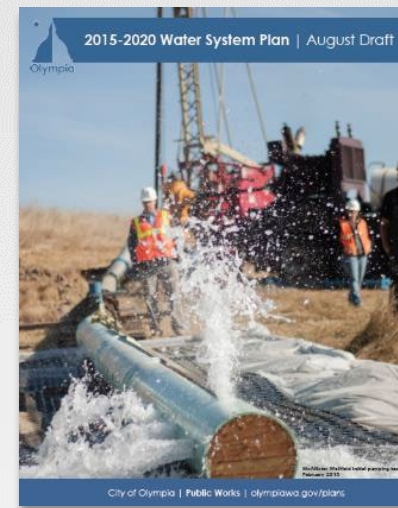
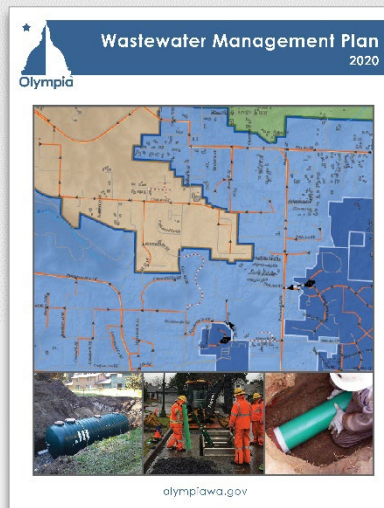


# Introduction: Utility Missions

The **Stormwater Utility's** mission is to reduce flooding, improve water quality and protect and enhance aquatic habitat in Olympia.

The **Wastewater Utility's** mission is to collect and convey wastewater, also known as sewage, to treatment facilities in a manner that protects the health of both the public and the environment.

The **Drinking Water Utility's** mission is to provide and protect healthy drinking water for the community.



# Introduction: Staff

## Engineering & Planning Workgroup

### 2024 – Capital Facilities Plan Contributors

- Fran Love – Stormwater Engineer
- David Dunn – Wastewater Engineer
- Kin Tam – Drinking Water Engineer
- Plus - Tami Tonder & Sue Barclift

**ENGINEERING & PLANNING**  
  
**Susan Clark**  
Engineering & Planning Manager

 <b>David Dunn</b> Project Engineer II (Wastewater)	 <b>Vacant</b> Project Engineer II (Drinking Water)
 <b>Tami Tonder</b> Project Engineer I (Stormwater/Wastewater)	 <b>Frances Love</b> Project Engineer I (Stormwater)
 <b>Kin Tam</b> Project Engineer I (Drinking water)	 <b>Sue Barclift</b> Senior Program Specialist
 <b>Justin Peterson</b> GIS Program Specialist	 <b>Vacant</b> Project Engineer II (StormWater)

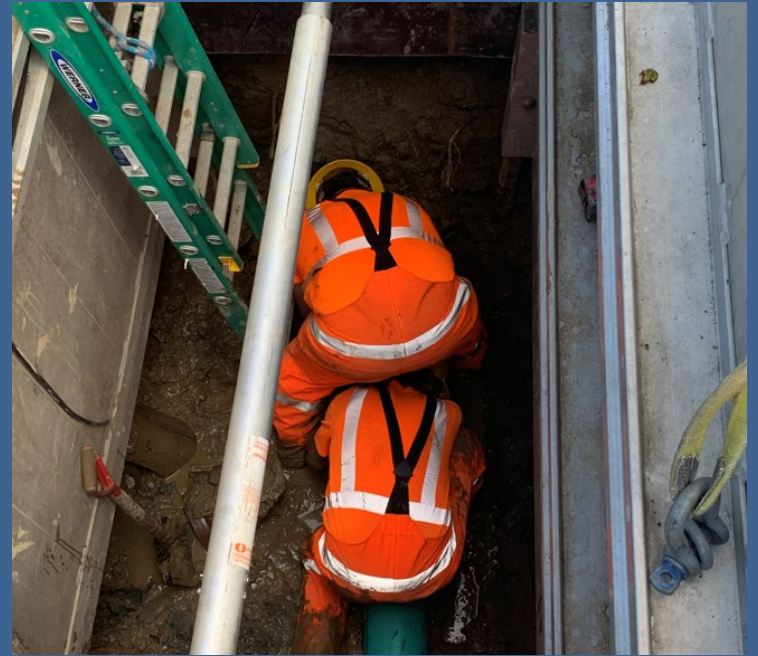














# 2024-2029 Capital Facilities Plan

## Tonight's Agenda

### Overview

- Contents of the CFP
- CFP review process – UAC's role
- Background about our decision-making processes

### 2024 Capital Facilities Plan

- 2023 accomplishments & carry-overs
- 2024 – 2029 projects

### Questions





# Capital Facilities Plan - Definitions

## Capital Facilities Plan

A twenty-year plan to implement the comprehensive plan vision, showing how the City will provide urban governmental services at adopted levels of service standards for the existing and projected population growth in the City and Urban Growth Area. It includes projected timing, location, costs and funding sources for capital projects. The CFP identifies which capital facilities are necessary to support development/growth. Projects in the CFP are directly related to the applicable master plan or functional plans.

## Capital Facilities

A structure, improvement, piece of equipment or other major asset, including land that has a useful life of at least 5 years and costs at least \$5,000.

## Capital Budget

A plan of proposed capital expenditures and the means of financing them. The capital budget may be enacted as part of the complete annual budget, including both operating and capital outlays. The capital budget is based on the Capital Facilities Plan.

# 2024-2029 Capital Facilities Plan

## Plan Contents

- Detailed 6-year “plan” with project descriptions
- 2024 = Budget Request
- Revenue assumptions - must be balanced
- Year 7 to 20 list of projects – little detail

## Revenue Assumptions

- Transfer from specific utility operating fund – considered new money (system reinvestment or depreciation funding)
- General facilities charges – new money per customer growth projections
- Capital fund “cash on-hand”
- Grants or loans
  - Stormwater water quality projects
  - Loans used in later years to balance

Revenue Requirement Forecast	2019	2020	2021	2022	2023	2024
Revenues						
City Wastewater Rate Revenue	\$ 7,029	\$ 7,167	\$ 7,307	\$ 7,451	\$ 7,597	\$ 7,745
LOTT Wastewater Rate Revenue	13,662	14,347	15,067	15,824	16,618	17,452
Other Operating Revenue	34	35	36	37	38	40
Total	\$ 20,724	\$ 21,549	\$ 22,410	\$ 23,311	\$ 24,253	\$ 25,238
Expenses						
City Operating Expenses	\$ 5,848	\$ 6,018	\$ 6,199	\$ 6,386	\$ 6,583	\$ 6,787
LOTT Charges	13,662	14,347	15,067	15,824	16,618	17,452
Debt Service	606	604	606	602	604	581
System Reinvestment Funding	741	782	991	1,300	1,556	2,550
Total	\$ 20,857	\$ 21,751	\$ 22,864	\$ 24,112	\$ 25,361	\$ 27,370
Net Cash Flow	(\$ 133)	(\$ 202)	(\$ 453)	(\$ 801)	(\$ 1,108)	(\$ 2,133)
Bond Coverage at Existing Rates	2.42	2.50	2.36	2.27	2.16	2.12
Annual City Wastewater Rate Increase						
		4.5%	4.5%	4.5%	4.5%	4.5%
Summary After Rate Increases:						
Net Cash Flow	(\$ 133)	\$ 80	\$ 135	\$ 119	\$ 171	(\$ 465)
Debt Service Coverage	2.42	3.07	3.53	4.10	4.71	5.59
Operating Fund Ending Balance	\$ 2,975	\$ 3,054	\$ 3,189	\$ 3,308	\$ 3,479	\$ 3,014
Operating Fund Minimum Balance	\$ 1,951	\$ 2,037	\$ 2,127	\$ 2,221	\$ 2,320	\$ 2,424



# Handouts: 6-Year CFP

DRINKING WATER PROJECTS	2023 Projected Spending	2024	2025	2026	2027	2028	2029
<b>ASPHALT OVERLAY ADJUSTMENTS</b>							
Asphalt Overlay Adjustments	\$14,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
<b>INFRASTRUCTURE PRE-DESIGN AND PLANNING</b>							
Pre-Design and Planning	\$50,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
<b>SMALL DIAMETER WATER PIPE REPLACEMENT</b>							
Small Diameter Water Mains	\$300,000	\$120,000	\$300,000	\$522,000	\$522,000	\$522,000	\$522,000
Union and McCormick Water Mains	\$234,725						
2022 small diameter	\$20,000						
7th and boundary	\$20,000						
<b>TRANSMISSION AND DISTRIBUTION PROJECTS</b>							
Security and Remote Systems Program	\$44,550	\$58,000	\$58,000	\$58,000	\$58,000	\$58,000	\$58,000
Asset Management Program	\$15,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000
Fones Road Improvement Project	\$2,360,517	\$1,250,000	\$40,000				
36-Inch Transmission Main Condition Assessment & Enhancements	\$10,000						
Union and McCormick Water Mains	\$665,275						
AC and Aging Pipe Replacements				\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
Distribution Main Assesment	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Elliott Ave Watern Main	\$308,000		\$308,000	\$208,000			
Distribution System Oversizing		\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
Transmission Main Seismic Valve		\$150,000	\$1,200,000				
Booster Station Upgrades/Rehabilitation		\$250,000	\$525,000	\$50,000			
Eastside Street and Henderson Boulevard Water Main Extension				\$809,514	\$817,486		
On-site Generator Replacement Plan			\$100,000				
Zone 417 to 347 PRV Stations Installation		\$50,000	\$260,000				
New PRV Installations	\$40,000		\$40,000		\$40,000		
Decatur 298 Zone Connection							\$150,000
Ci Tech Software Upgrade	\$130,288						

# 2024-2029 Capital Facilities Plan

## Review Process & UAC Role

Provide advice to the City Council, the City Manager's office, the Planning Commission and the Public Works Department in developing the Capital Facilities Plan.

Provide policy advice and direction on the setting of utility rates.

## Draft List of Capital Projects Tonight

- September 22, 2023, summary of comments for planning commission.
- October 4, 2023, summary of comments/recommendation for council.

## Revenue Requirements (Rate Adjustments) Later

- September 7, 2023
- October 5, 2023



# Review Process & UAC Role

## Planning Commission review

- Does the Capital Facilities Plan make investments needed to implement the Comprehensive Plan?
- Are there investment gaps to adequately implement the Comprehensive Plan?
- In future Capital Facilities Plans, how can the City better implement the Comprehensive Plan?

WATER RESOURCES (Storm and Surface Water Utility & Wastewater Utility) AND DRINKING WATER UTILITY RESPONSES  
September 9, 2022

### OPC Finance Subcommittee

*CFP Comments and Question for Discussion with City Staff on September 12, 2022*

#### General Comments & Questions:

1. Page 1-9 Graphic is outdated. Were the Water System Plan and Waste Resources Management Plan updated in 2021 as planned?

Drinking Water Utility Response: As of September 8, 2022 one Water System Plan chapter remains pending. The Drinking Water Utility expects to submit the draft Water System Plan to its regulator, the Washington State Department of Health, in October.

2. Under funding for some programs, it states "transfer from fund balance." What fund does this refer to? Is each program a separate fund?

Drinking Water Utility Response: As of September 8, 2022 one Water System Plan chapter remains pending. The Drinking Water Utility expects to submit the draft Water System Plan to its regulator, the Washington State Department of Health, in October.

3. Can you explain generally, why City of Olympia has chosen to set up various programs (e.g. ADA accessibility, C&AMP) under which pretty much all projects fall as compared to what is seen more typically in which each project being separate within the larger departments funding request and programmatic projects being used to manage smaller groups of semi-regular projects?

Water Resources and Drinking Water Utility Response: All three utilities monitor total project costs using a variety of sources, including computer software programs (such as E-Builder and Crystal Reports) and monthly capital project reconciliation spreadsheets prepared for us by Finance.

4. Is there a location where total project costs can be seen for each project (past, and future cost)?
5. What guidelines does City of Olympia follow for determining whether something should be paid out of operations budget versus capital budget? (For example, in some cases in the CFP assessments are paid out of Capital funds and they may or may not result in a capital project).

Water Resources and Drinking Water Utility Response: When making operating vs capital funding decisions all three utilities rely on the advice provided by Finance.

6. For disparate project types which can pull from the same pot of funding (e.g. REET, Cable Tax, VUT) how does the City determine how funding will be prioritized amongst these projects? The City has previously explained how like projects are scored, but the explanation of different categories of projects being prioritized has not been provided.

# Where Projects Come From

Drinking Water	Wastewater	Storm & Surface Water
Hydraulic Model Capacities	Hydraulic Model Capacities	Flooding Events
O&M Inspections	O&M Inspections	O&M Inspections
Main Breaks and Leaks	CCTV Inspections	CCTV Inspections
Asset Management – Age/material	Septic to Sewer extensions	Water Quality - SMAP
Water Rights Perfection/Mitigation	Asset Management – Age	Habitat Planning
Coordination with other LOBs	Coordination with other LOBs	Coordination with other LOBs



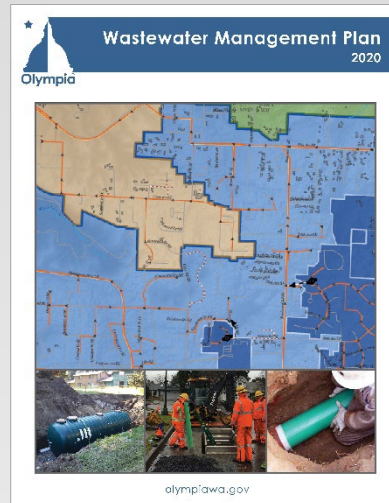
# Utility Planning

## Storm and Surface Water Plan



No planning requirement.  
Completed in 2018.

## Wastewater Management Plan



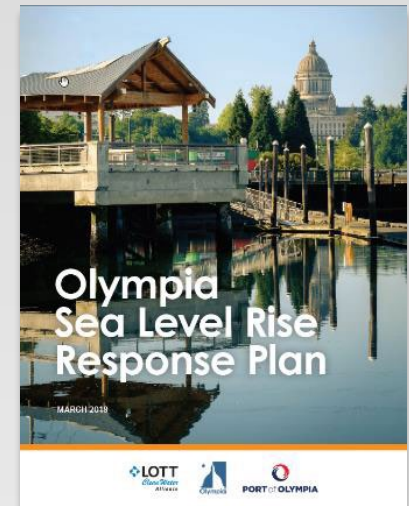
Required only at  
wastewater utility  
establishment.  
Completed in 2020.

## Water System Plan



Required to be  
updated every 6 years.  
ALMOST APPROVED.

## Sea Level Rise



Storm & Surface Water  
Utility helps fund  
implementation.

# Stormwater Operations Problem Solving (STOPS)

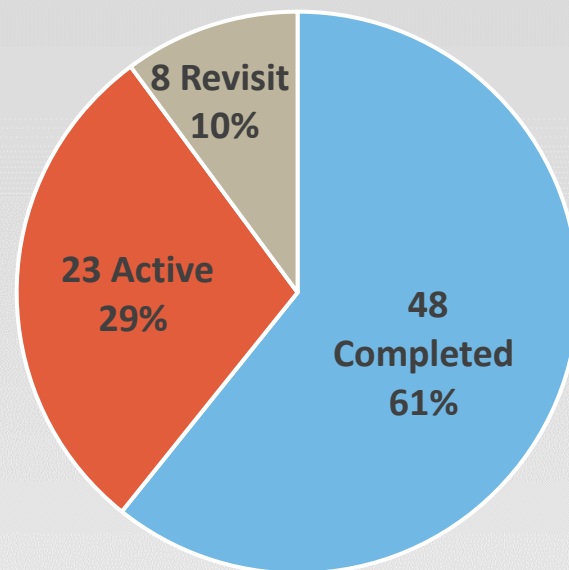
STOPS investigates, evaluates and prioritizes all storm and surface water related problems.

## Priorities

- Infrastructure failures
- Structural flooding
- Primary vehicle lane flooding
- Significant erosion
- Available funding

## Remedies

- O&M in-house projects
- Streets in-house projects
- Capital projects
- Storm & Surface Water Plan



Annual resolution of stormwater issues coordinated through STOPS:

- 79 items in 2022

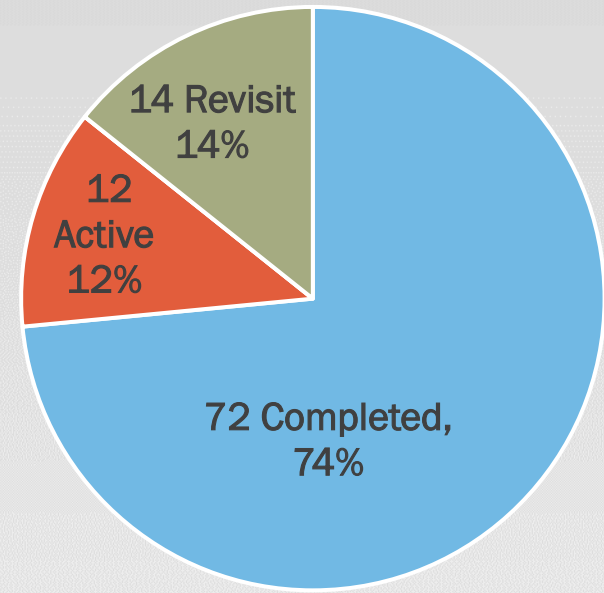


# Wastewater Operations Problem Solving (WWOPS)

WWOPs investigates, evaluates, and prioritizes all wastewater related problems

## Remedies

- O&M in-house projects
- Capital projects
- Wastewater Management Plan



Annual resolution of wastewater issues coordinated through WWOPS:

- 98 items in 2022

# Asset Management: Our Journey has Begun

## Why Manage Assets?

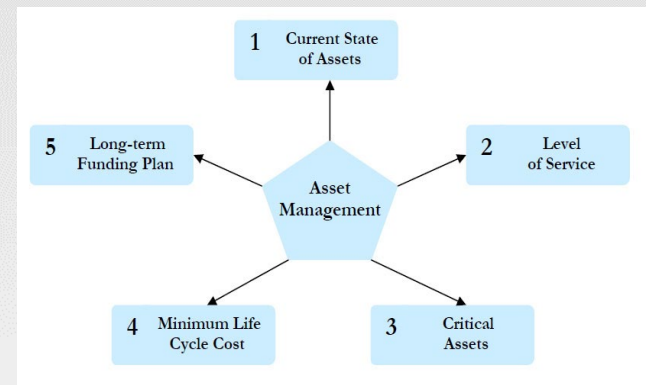
Public utilities have a commitment to provide safe and reliable services to their communities, in perpetuity.

## Asset Management

*A system for monitoring and maintaining our infrastructure at a desired level of service and at the best appropriate cost.*

## Core Asset Management Elements:

- An inventory of critical assets.
- Evaluation of condition and performance.
- Understanding of consequence/risk of failure.
- Plan to maintain, repair, and replace those assets.
- Engineering plans AND long-term financial planning.





# Asset Management: Our Journey has Begun

## **Define Asset Management for Ourselves**

- Common understanding of process & vocabulary
- Asset Management Vision for our 3-water related utilities to guide our asset management work

## **Develop an Asset Management Strategy**

- Re-established the Asset Management / Decision-Making UAC Briefing

**Evidence-based justification for why projects are important and why money should be invested to address our aging infrastructure.**

# New Climate and Equity Frameworks

**Current Policy PU1.4:** Make necessary improvements to utility facilities that do not currently meet minimum standards. Prioritize capital improvements to existing systems based on age, condition, risk of failure and capacity while also balancing the fair distribution of services and benefits to the entire community.



## Equity Framework



START HERE

Project Name: \_\_\_\_\_ Contact: \_\_\_\_\_ Date: \_\_\_\_\_

### Applying an "Equity Lens"

- The purpose of this framework is to apply a basic equity lens to a proposed action or project to analyze and summarize its equity impacts.
- Foundational to an equity analysis is to identify: 1) *those who will benefit* from an action, 2) *those who will be burdened*, and the 3) *disparities* that inform how the action could be made more equitable.
- The **difference between equality and equity**: Simply put, **equality** is treating everyone the same ("equally"), while **equity** takes into consideration how past or current injustices may have created unequal starting points or differing needs. Applying an equity lens to City work means asking questions that enable us to serve those for whom equal treatment does not amount to an equal outcome.

### Asking the right questions:

The questions in this framework are designed to clarify the possible equity impacts of a proposed action. Try not to get overwhelmed by the unknowns or the complexities of the issues. Ultimately this is a simple framework for understanding and communicating what is inevitably complicated and nuanced work. No one has all the answers, but we strengthen our ability to act equitably when we train ourselves to ask the right questions about the work we are doing. That is what it means to apply an equity lens to our work.

### This framework will help you:

1. Identify **groups** impacted **GROUPS**
2. Identify existing **demographic** data **DEMOGRAPHICS**
3. Identify and address **disparities** **DISPARITIES**
4. **Summarize** the equity impacts of a proposed action **SUMMARIZE**

### Before you start, remember:

- Be Inclusive:** Whenever possible, invite others to work through this framework with you. The more diverse perspectives you bring into the process, the more accurate and complete your analysis has the potential to be.
- Reporting:** You won't need to share all your responses from the **Groups**, **Demographics**, and **Disparities** sections. Your answers on the **Summarize** page will form the equity analysis for your staff report.

City of Olympia | Equity Framework Continue to GROUPS



## Climate Framework



START HERE

Project Name: \_\_\_\_\_ Contact: \_\_\_\_\_ Date: \_\_\_\_\_

### Applying a "Climate Lens"

- The purpose of this framework is to analyze and report on how a proposed action may impact the City's climate mitigation strategies.
- The strategies identified in this framework are based on the [Thurston Climate Mitigation Plan \(TCMP\)](#) which is linked on each page.
- Complete the following:   
Step 1: Identify relevant climate mitigation sectors (below).  
Step 2: Evaluate each relevant sector.  
Step 3: Summarize findings for your staff report.

### Step 1: Identify relevant climate mitigation sectors.

Will the proposed action impact greenhouse gas emissions in...

Buildings or energy use?	<input type="checkbox"/> YES	<input type="checkbox"/> N/A	If "YES," complete section: <b>B</b>
Transportation or land use?	<input type="checkbox"/> YES	<input type="checkbox"/> N/A	If "YES," complete section: <b>T</b>
Water or waste?	<input type="checkbox"/> YES	<input type="checkbox"/> N/A	If "YES," complete section: <b>W</b>
Agriculture, forests, or urban tree canopy?	<input type="checkbox"/> YES	<input type="checkbox"/> N/A	If "YES," complete section: <b>A</b>

Next Steps! For every "YES" above, complete the corresponding section. When all relevant sections are completed, jump to "Summarize."

START HERE

**B**

**T**

**W**

**A**

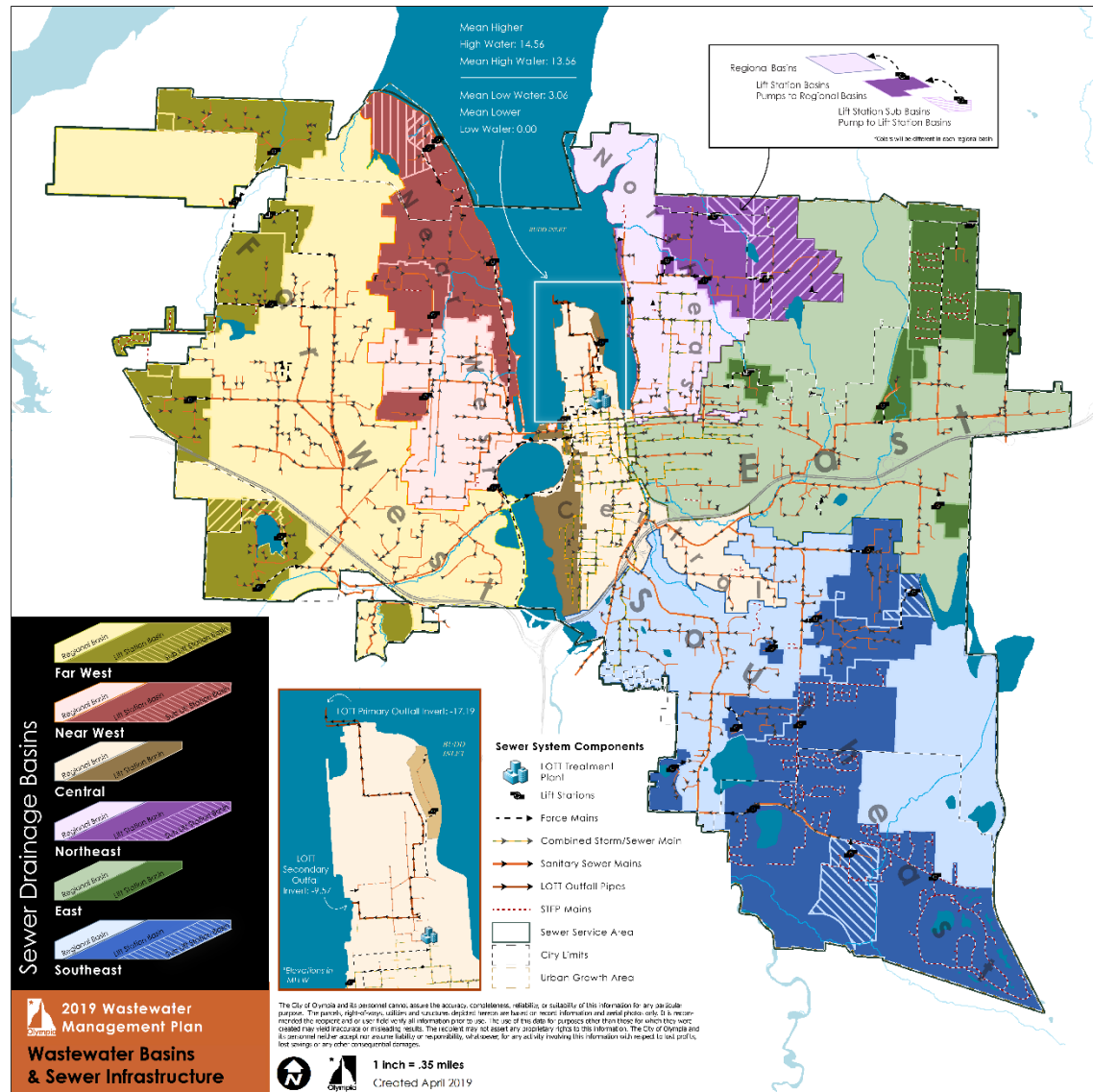
END HERE

LEARN MORE

City of Olympia | Climate Framework Complete all relevant sectors, then jump to SUMMARIZE



# Wastewater Utility



# Wastewater Utility

## Condition rating of Critical Assets

- Three videos

# Wastewater Utility

## 2023 Accomplishments

- Miller and Central Lift Station complete – started in 2020.
- Water Street Lift Station Generator – emergency generator at Percival landing.
- Garfield Nature Trail Trestle maintenance – elevated sewer crossing the valley.
- Porta Court sewer extension – sewer extension to decommission 16 septic systems.
- Division and Jackson Lift Station wetwell repairs.
- Miller and Ann Lift Station emergency power design.
- 4<sup>th</sup> Ave sewer pipe upsize design.

## 2023 Projects carried over

- 6<sup>th</sup> Ave sewer extension.
- Van Epps sewer extension.





# Wastewater Utility

## Water Street Lift Station Generator



# Wastewater Utility

## Street Reconstruction Asphalt Adjustments

- Casting adjustments and replacements.

## Transmission & Collection highlights

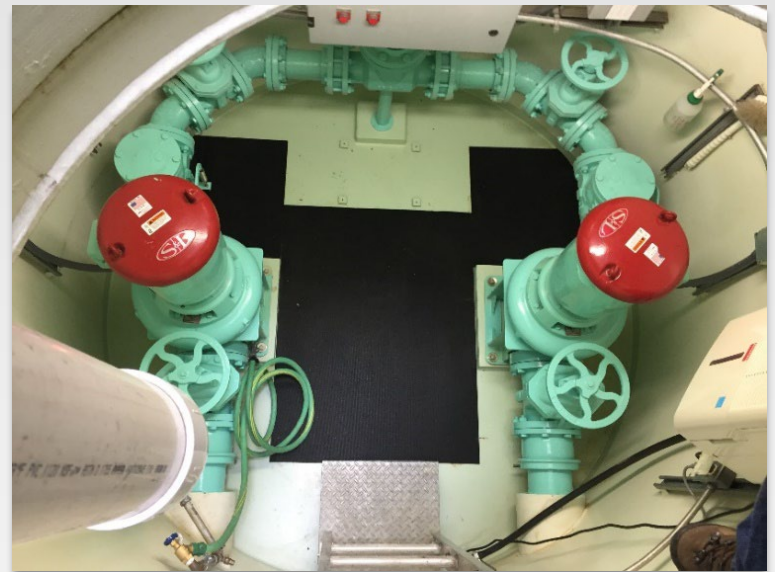
- Many routine repairs are reflected in the maintenance budget.
- B Street sewer replacement.
- Cured-in-place-pipe (CIPP) project to rehabilitate pipes or sections of pipes.
- New program to partner with development to replace aging infrastructure.



# Wastewater Utility

## Lift Station Highlights

- Construction of the Old Port 1 lift station and forcemain.
- Miller & Ann lift station emergency power design. Construction planned in 2004.
- Rossmoor lift station: design in 2025 for 2026 construction.
- Old Port 2 lift station: begin design in 2028.





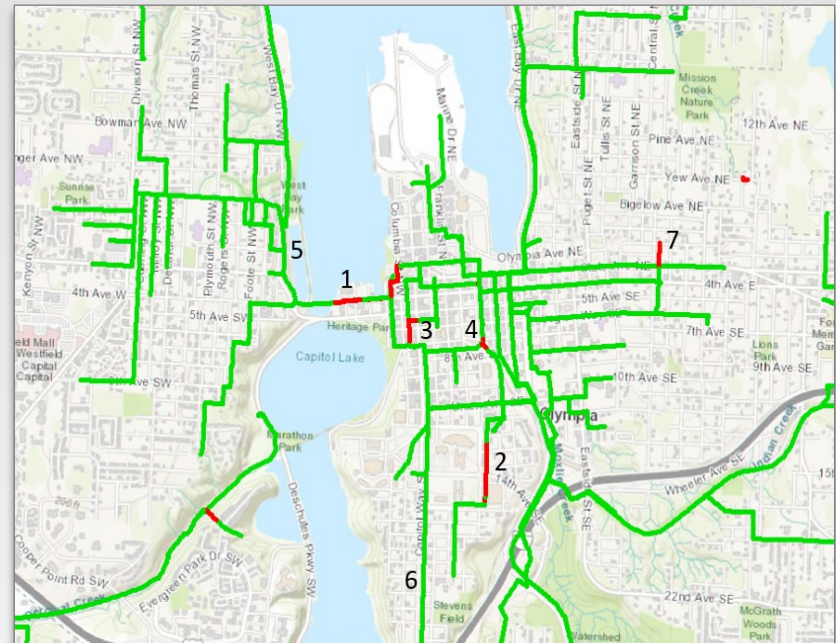
# Wastewater Utility

## Sewer System Planning

- Pre-design and planning continue for replacing the sewer on Percival Creek bridge with a new sewer under the creek.
- Anticipate FEMA BRIC funding for the project.

## Pipe Capacity Upgrades

- Design of 4<sup>th</sup> Ave capacity increase project. – address capacity bottleneck at 4<sup>th</sup> Ave bridge.
- The 2020 Wastewater Management Plan identified areas in the City facing pipe capacity issues in the coming years.



# Wastewater Utility

## Onsite Sewage System Conversion

- 6<sup>th</sup> Avenue Sewer Extension Project.
- Public outreach and update to the Neighborhood Sewer Extension List.
- CFP includes budget for additional future sewer extensions.

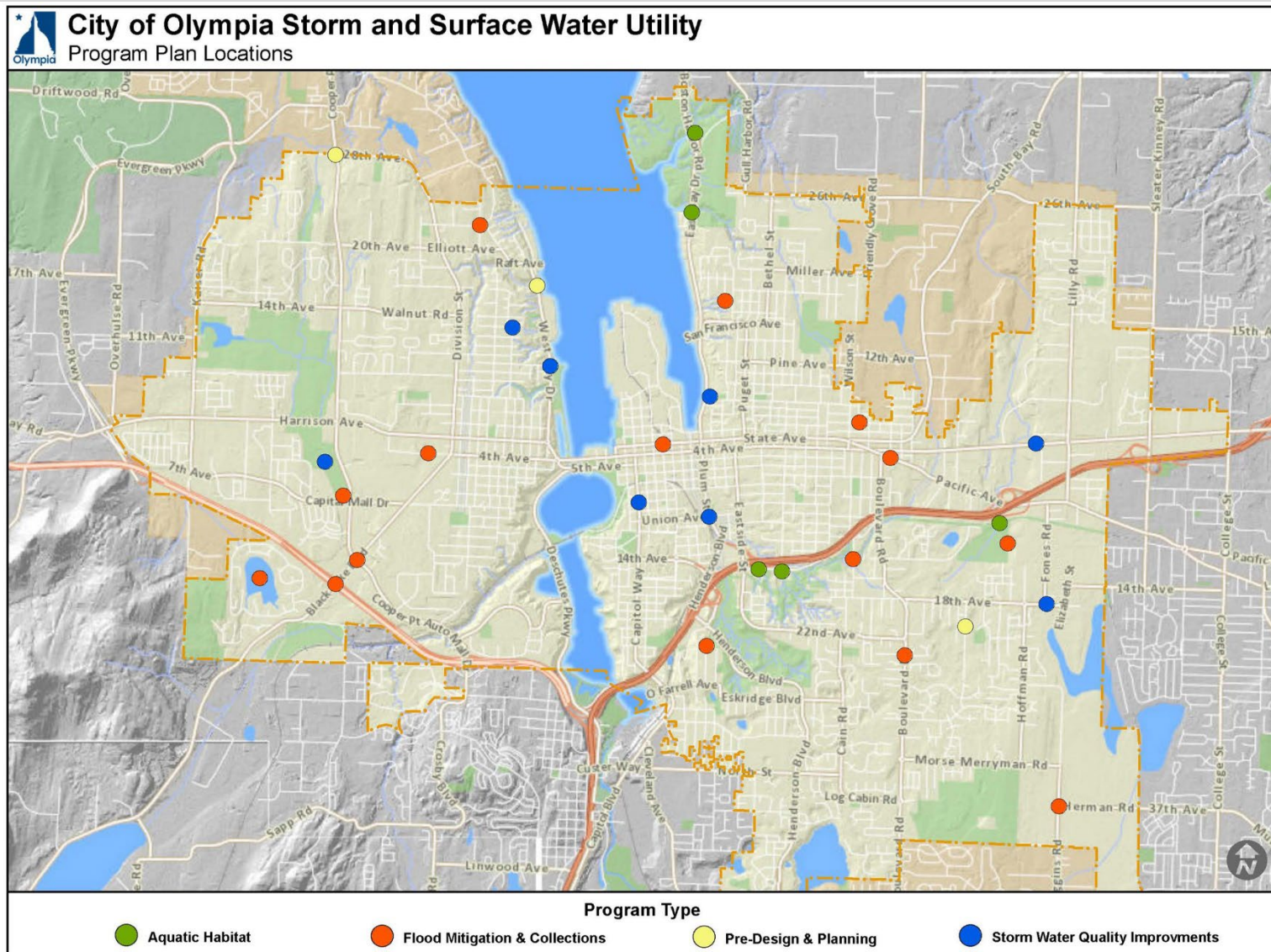
## Program 9903 Predesign & Planning

- Scoping for complex projects.
- Update of Wastewater Management Plan.





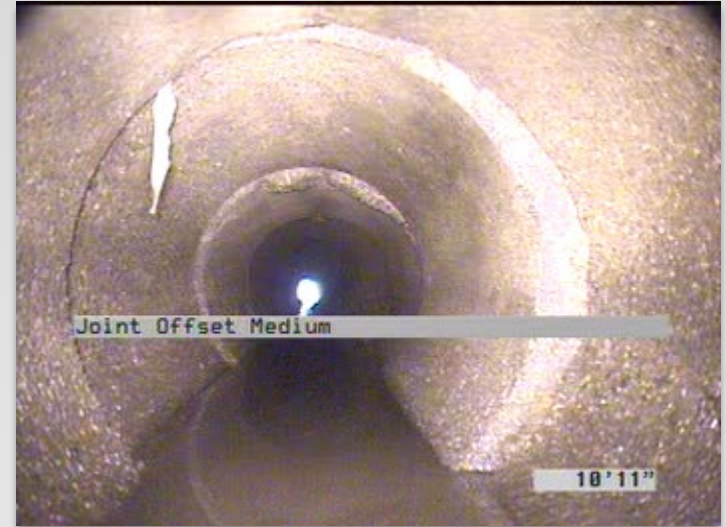
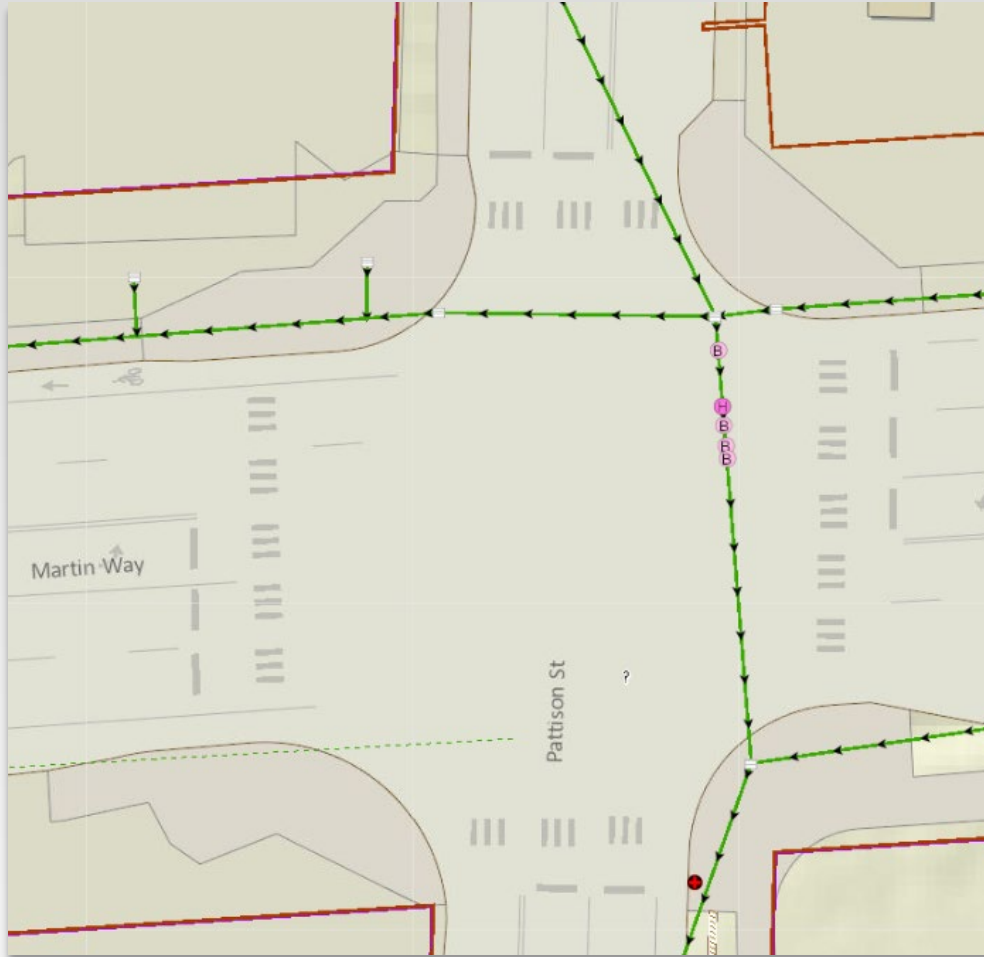
# Stormwater Utility





# Stormwater Utility

## Martin Way & Pattison Street CIPP Before and After



# Stormwater Utility

## 2023 Accomplishments

- Brawne Ave water quality design at 90%
- New street sweeper – October arrival
  - Enhanced street sweeping plans
  - O&M Plans
- Property acquisition – Wheeler & Central
- Identified new predesign projects





# Stormwater Utility

## Program 9024 – Aquatic Habitat Improvements

- *Property Acquisition*
- Ellis Creek/East Bay Drive Fish Passage
- Woodard Creek/Woodard Trail Fish Passage
- Mission Creek/East Bay Drive Fish Passage
- Indian Creek/East Bay Fish Passage

## Program 9903 – Pre-Design and Planning

- *Infrastructure Pre-Design and Planning*
- Schneider Creek Fish Passage Design
- Pear Street Conveyance
- Frederick Thurston Pond
- Allen Road Ponding
- 28<sup>th</sup> Ave Ponding



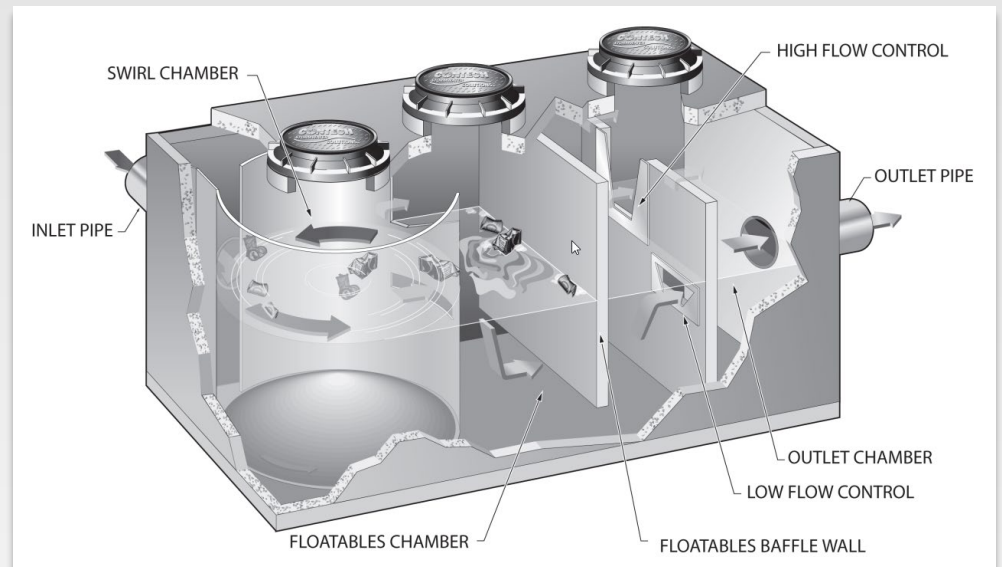
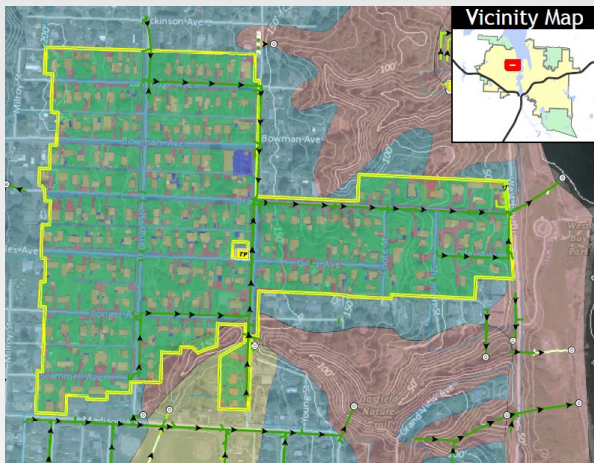


# Stormwater Utility

## Program 9027 – Water Quality Improvements

- Brawne Ave water quality retrofit
- Neighborhood LID design project
- Enhanced street sweeper program
- Street sweeper parking
- Stormwater facility educational signs
- Fones Road swale water quality retrofit
- East Bay Drive water quality retrofit
- Capitol Way water quality retrofit
- Union Ave @ Plum St water quality retrofit
- Martin Way @ Mary Elder quality retrofit

Brawne Ave – Contech Vortechs  
will treat nearly 59 acres of land



# Stormwater Utility

## Program 9028 – Flood Mitigation

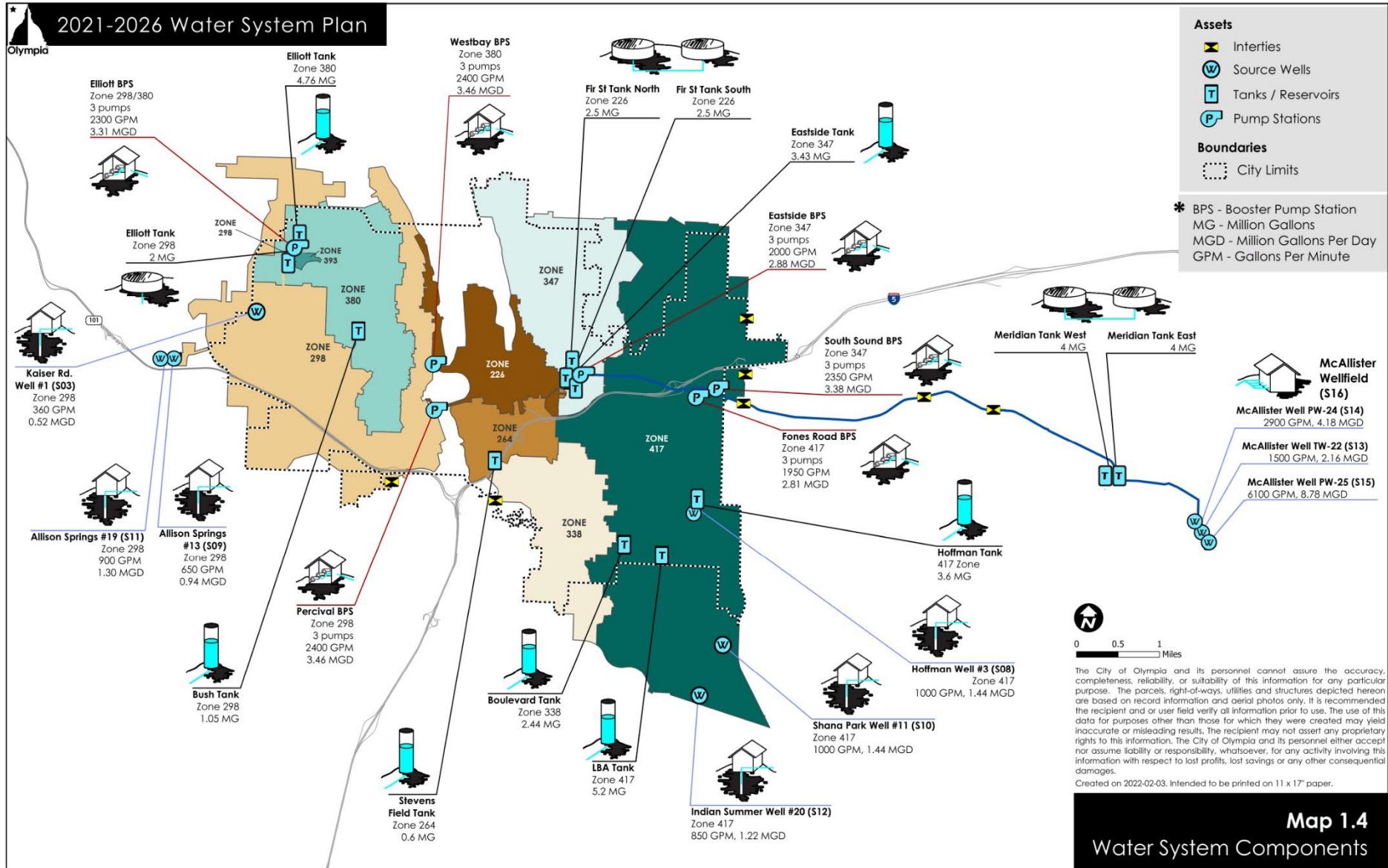
- *Conveyance spot repairs*
- *Condition rating of existing conveyance*
- *Public pond rehabilitation*
- *Cured in Place Pipe Lining (CIPP)*
- *Downtown flood mitigation/Sea Level Rise*



Buker erosion control and stormwater improvements

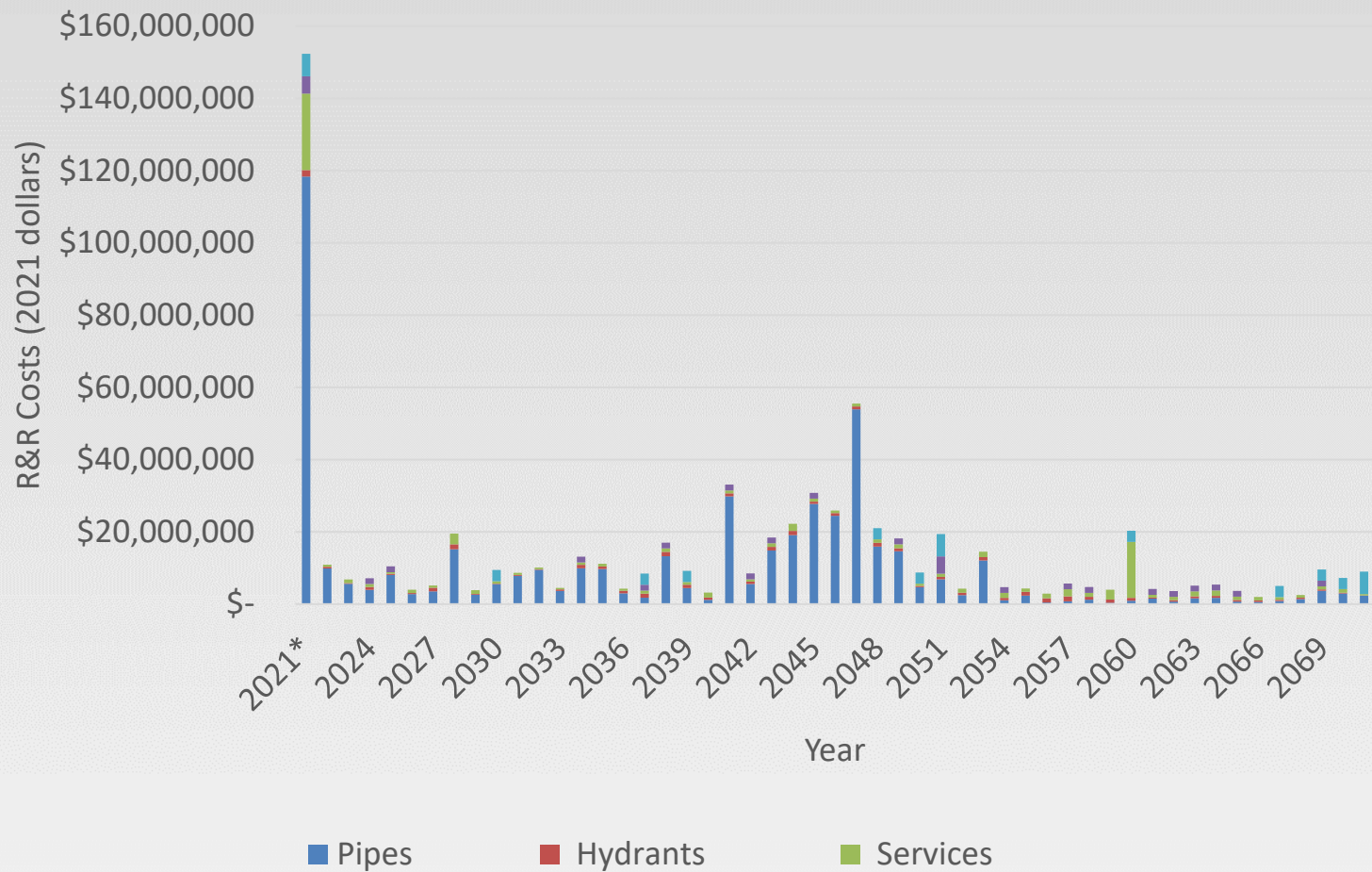
- Ascension and 4<sup>th</sup> Ave facility
- Wiggins Road ditch reconstruction
- Pacific Avenue at Chambers Pipe
- 1400 block Frederick St SE culvert replacement
- Ken Lake flood conveyance
- 2300 Block Crestline Blvd conveyance & street improvements
- Westside storm conveyance
- Taylor Wetland bar grate
- Cooper Point stormwater conveyance
- 1400 Blk Frederick St culvert
- Pear Street conveyance
- Frederick/Thurston pond
- Holly Ln & Boulevard conveyance
- Buker stormwater improvements

# Drinking Water Utility





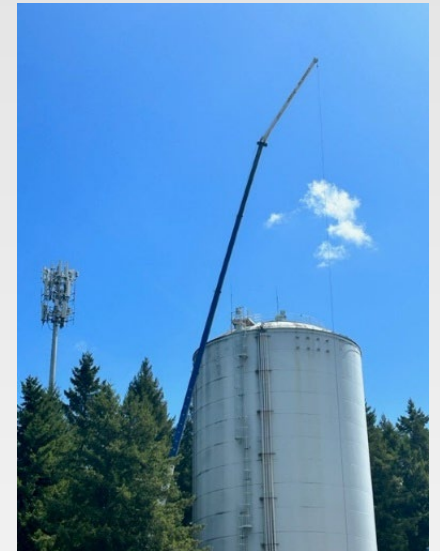
# Renewal & Replacement Costs



# Drinking Water Utility

## 2023 Accomplishments

- Union and McCormick main replacement – started in 2021
- McAllister domestic well – tribal/water right mitigation obligation
- Deschutes Watershed payment! – water right mitigation obligation
- Variable Frequency Drive (VFD) at Allison/Shana Park – designed and ordered
- Boulevard tank seismic upgrades– Drinking Water State Revolving Fund Loan
- Supervisory Control & Data Acquisition (SCADA) system upgrade
- Security upgrades/fencing Hoffman tank



# Drinking Water Utility

## 2023 Projects Pushed-out to 2024

- Briggs Well development design
- Fire suppression systems installation at Allison and Shana Park
- Sole source aquifer designation – McAllister Wellfield
- Brewery water engineering analysis
- Rancho Serino mitigation

## Other Project Delays

- Eastside Street and Henderson Blvd water main extension
  - 2024/2025 to 2026/2027
- McAllister 36" transmission main seismic valves
  - Recently informed WSDM holding our \$1.2 grant



# Drinking Water Utility

## Source Projects

- Four pushed out projects & completing VFD replacements
- Obligations at Deschutes River property

## Storage Projects

- Completing Boulevard Road Reservoir
- Eastside Reservoir reconstruction (2026 & with debt)
- Storage Tank coatings (2027)

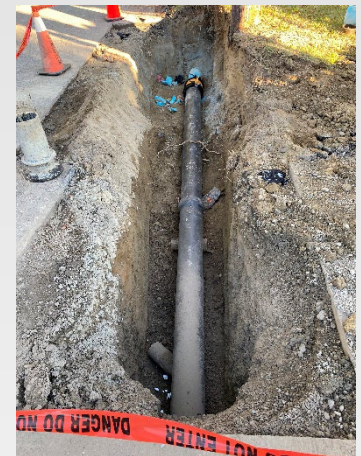
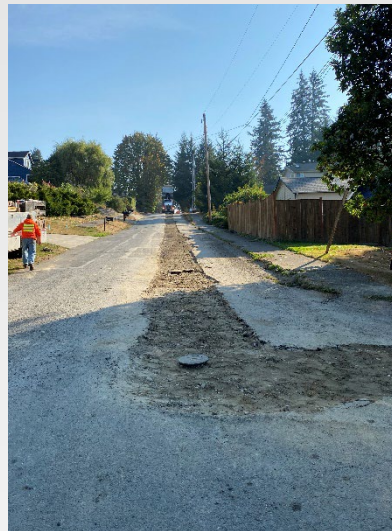


Allison Well VFD

# Drinking Water Utility

## Distribution System Projects

- Two delayed projects
- Fones Road main replacement (2023 – 2025 at a projected \$3.6M)
- Annual small diameter projects (\$120,000 in 2024, \$300,000 in 2025 then \$522,000 beginning in 2026)
- Annual asbestos cement/aging infrastructure (\$1M beginning in 2026)



# Waste Resources Utility CFP

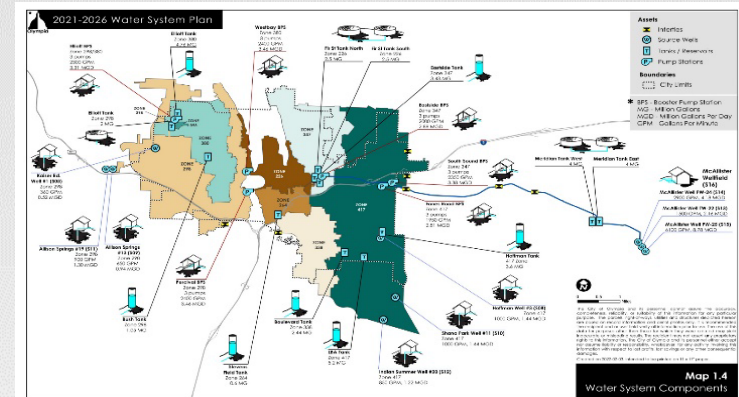
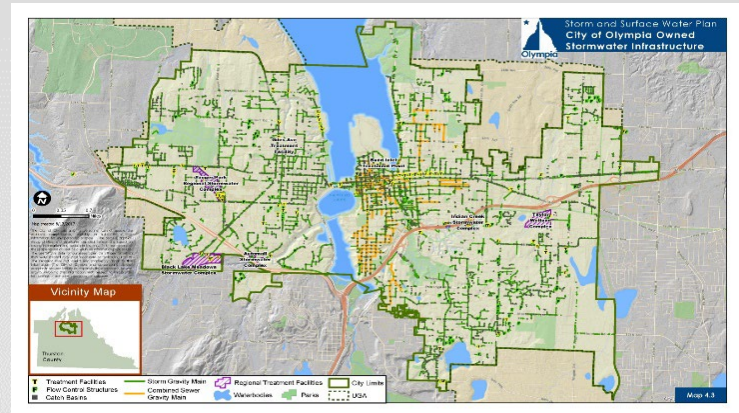
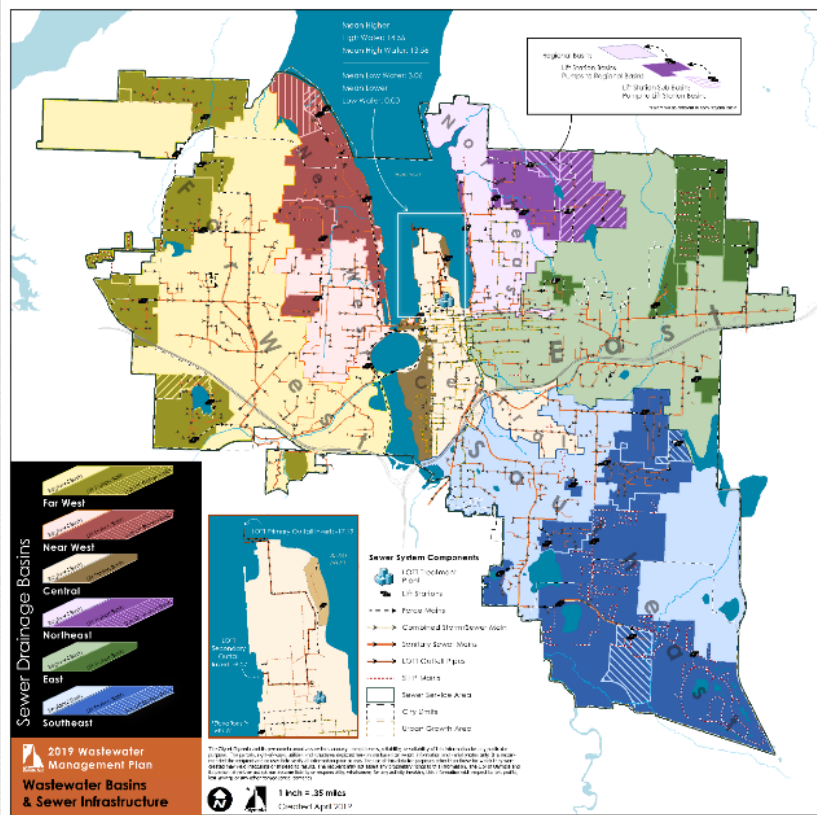
## Carpenter Road Maintenance Facility 2022



- Background
- 2018- 2022 status update



# Questions and Discussion



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360.753.8321

# Infrastructure Decisions

- Stormwater Operations Problem Solving (STOPS)
- Wastewater Operations Problem Solving (WWOPs)
- Drinking Water Coordination Team
- + City Project Planning GIS Data Layer



## **STOPS TEAM – In 2021:**

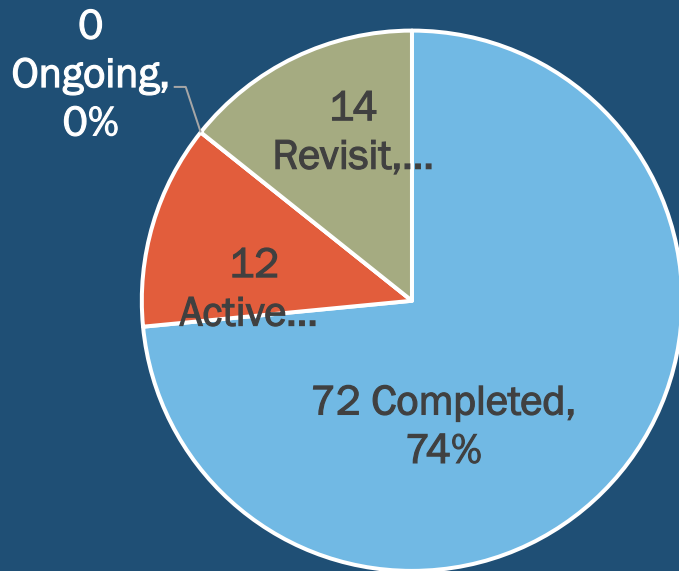
- 78 Items Reviewed
- 58 Items Completed (74%)

## **WWOPS TEAM – In 2021:**

- 119 Items Reviewed
- 65 Items Completed (55%)

## WWOPS

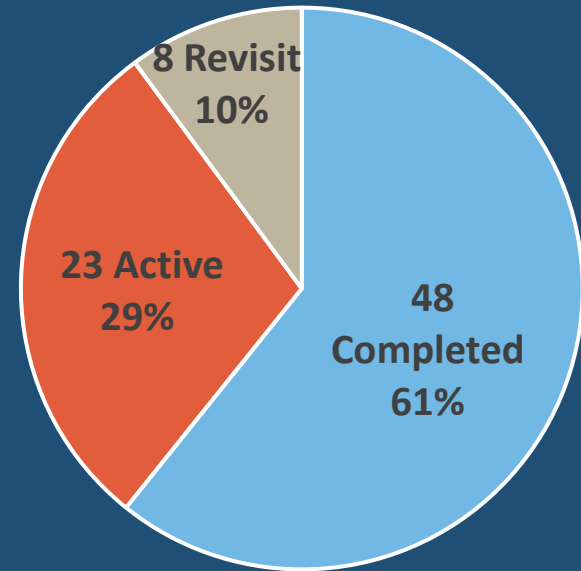
Annual resolution of wastewater issues  
coordinated through WWOPS



98 items discussed in WWOPS in 2022

## STOPS

Annual resolution of wastewater issues  
coordinated through STOPS



79 items discussed in STOPS in 2022



# Capital Project Generation

- DEI Framework
- Climate Framework
- Asset Management
- CityWorks Work Order System
- Benchmarking
- Capital Facilities Planning
- O&M Inspections
- Hydraulic Modeling
- CCTV Inspections
- Flooding Events
- Age
- Age/Material
- Financial Planning
- Management Plans
- O&M Inspections
- Performance Tracking

# Drinking Water Condition Rating

