



**King County**

**Sewer Rate Overview and 2021 Schedule**  
And  
**Portfolio and Asset Management**  
Wastewater Treatment Division

Presented to the Regional Water Quality Committee  
March 3, 2021



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**Wastewater Treatment Division**

# Rate Schedule

**February** – WTD project managers update cashflow projections for capital projects to inform final rate proposal; previous year's financials are closed

**February 4** – MWPAAC Rates and Finance Subcommittee meeting

**February 24** – MWPAAC General meeting

**March 4** – MWPAAC Rates and Finance Subcommittee meeting

**March 8** – Executive briefing, direction provided



# Rate Schedule

**March 24** – MWPAAC vote on recommendation letter to Executive regarding the proposed rate

**April 1** – MWPAAC Rates and Finance Subcommittee

**April 15** – Executive’s 2022 Sewer Rate and Capacity Charge Proposal transmitted to King County Council

**April 28** – MWPAAC General meeting and possible consideration of a recommendation letter to King County Council regarding the proposed rate

**May 5** – King County Council Regional Water Quality Committee briefing

**May – June** – King County Council Budget and Fiscal Management Committee briefings and Council action

The regional sewer contract stipulates that King County shall determine the rate *prior* to July 1st of each year

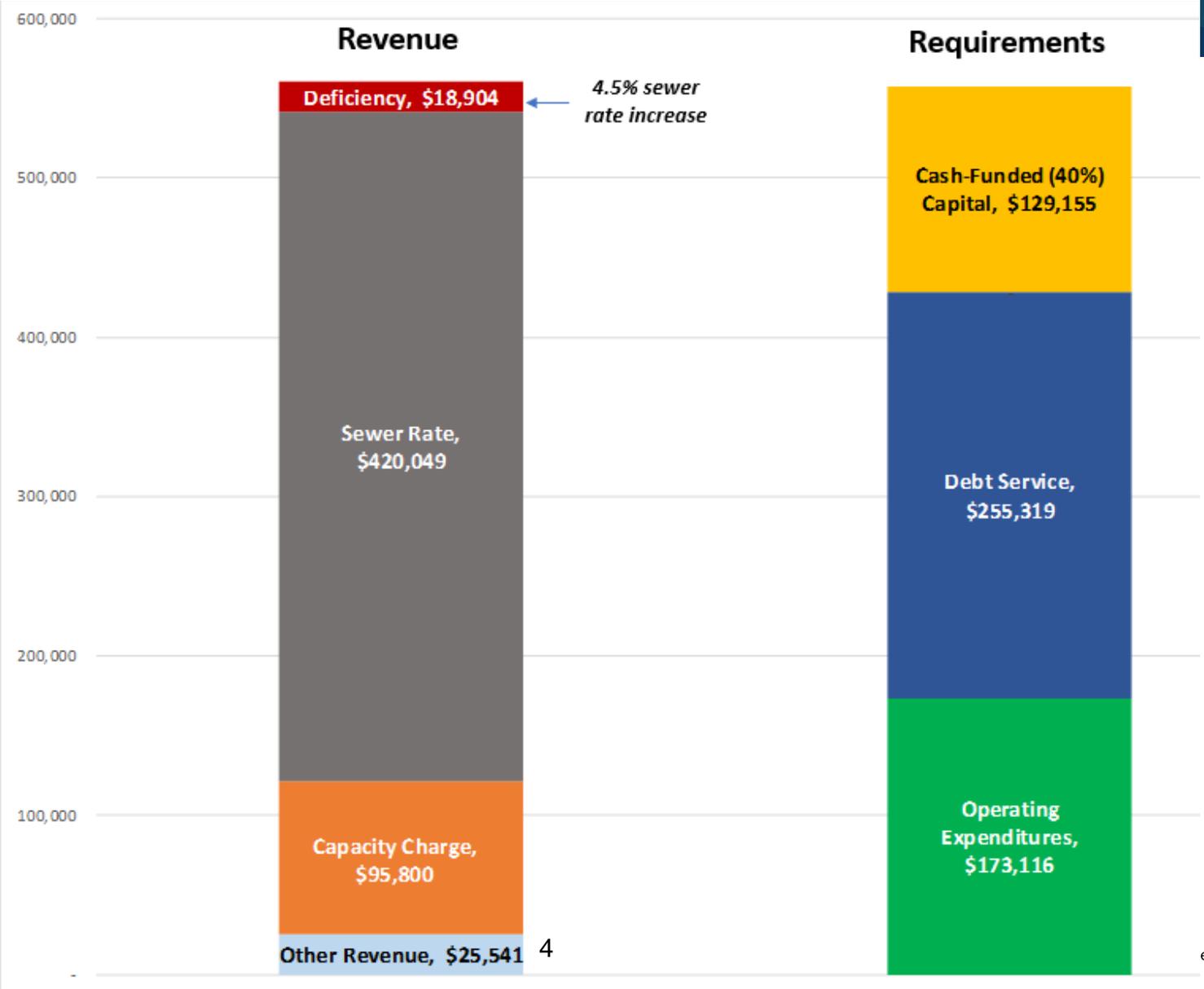


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# Revenue Requirement Overview

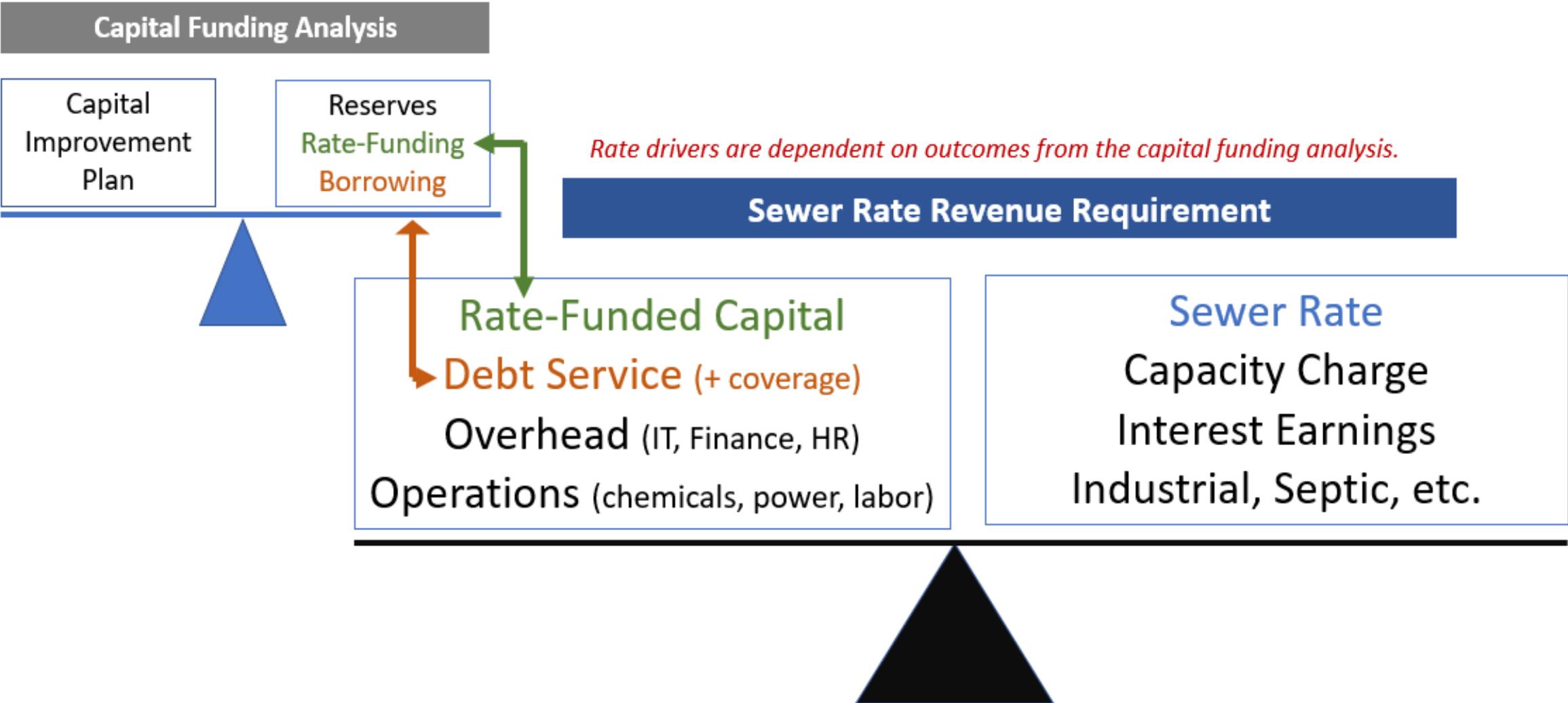
2021  
Revenue  
Requirement  
Components  
(\$ in 1,000s)



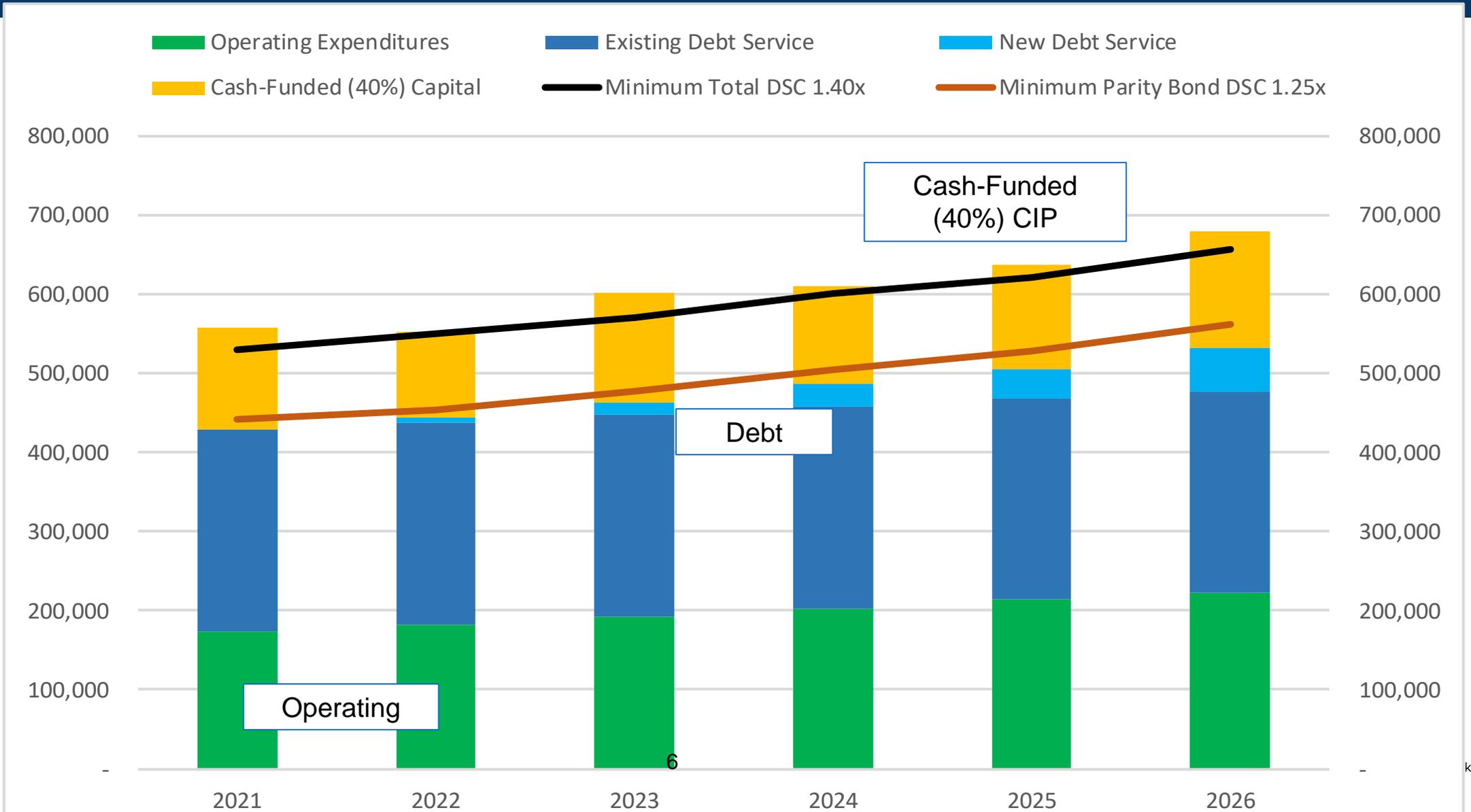
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# Revenue Requirement Overview



# Adopted Rate Plan – 2021 Rate Setting in 2020



# Questions?

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# Project Portfolio Management

In 2017, WTD introduced Project Portfolio:

- Allocate resources to the right projects at the right time
- Objective process to prioritize / balance / sequence refurbishment, repair and replacement of equipment
- Ensure transparent decision making
- Tools to document and communicate the “why” behind project prioritization



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# Project Portfolio Management

- Created inventory (or list) of all known project requests
- Created categories of similar type projects
- Prioritized projects based on each category's unique criteria (routinely reassessed)
- Aligned categories with WTD strategy
  - Ensures strategies are funded and implemented



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Asset Management



Regulatory



Resources &  
Energy



Operational  
Enhancements



Capacity  
Improvement



Resiliency

**WTD Capital Categories**

# Conveyance System

- Approximately 400 miles of sewer pipelines
- 25 regulator stations
- 48 pump stations



# Conveyance System History – Major Expansions

1900s

- Seattle combined system construction (North Trunk still in use)

1960s

- Metro regional system construction

1980s

- Renton Effluent Transfer pipeline

1990s

- RWSP adopted, CSI program started

2000s

- CSO Facilities

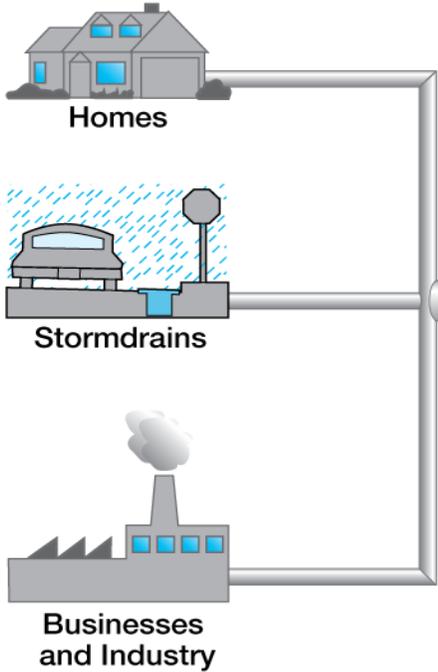


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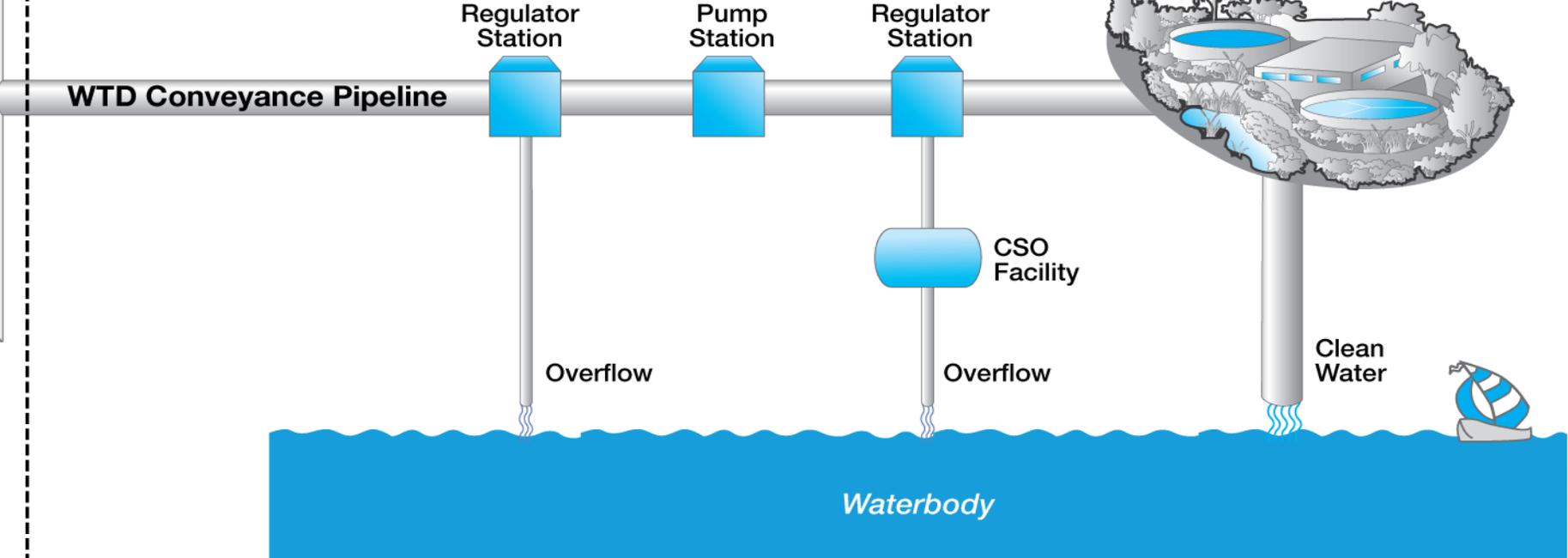
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# Conveyance System Facilities

## Local Sewer System



## Regional Sewer System



# Upcoming Major Asset Replacements



- North Mercer Island and Enatai Interceptors Upgrade (Mercer Island, Bellevue)
- Pump station and conveyance system capacity upgrade
- New force mains, gravity pipe, and siphons as well as gravity pipe rehabilitation



# Upcoming Major Asset Replacements

## Variable Frequency Drive Replacement (Systemwide)

- Ongoing program
- Proactively replace variable frequency drives (VFDs) at the end of their life or that become obsolete
- 2021 Planned Replacements:
  - Duwamish PS (Seattle)
  - 63<sup>rd</sup> Ave PS (Seattle)
  - West Seattle PS (Seattle)
  - Wilburton PS (Bellevue)
  - South Mercer PS (Mercer Island)
  - Kenmore PS (Kenmore)



# Upcoming Major Asset Replacements

## Medina PS

- Replace Motor Control Center
- Replace Variable Frequency Drives
- Install a permanent standby generator



# Upcoming Major Asset Replacements



## Lakeland Hills Generator (Auburn)

- Install a standby generator and fuel tank
- Pump station does not currently have a standby power system
- Currently served by a mobile generator



# Upcoming Major Asset Replacements

## Alki Permanent Standby Generator (Seattle)

- Replace existing generator at Alki Wet Weather Treatment Station (WWTS)
- Backup power to both Alki WWTS and 63<sup>rd</sup> Avenue PS
- Pump station does not have a standby power system
  - Currently served by a mobile generator



# Upcoming Pipeline Replacements

## Coal Creek Trunk (Bellevue)

- Capacity expansion
- Realignment out of a creek bed



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# Upcoming Pipeline Replacements



## Lake Hills Trunk and Northwest Lake Sammamish Interceptor Upgrade (Redmond and Unincorporated King County)

- Replace, refurbish, or parallel 4.5 miles of pipeline
- Current pipes are under capacity and in poor condition



# Upcoming Pipeline Replacements / Rehabilitation



Figure 32: Ov



## Interbay Force Main & Odor Control (Seattle)

- Dual force mains, discharge structure, and gravity pipe are corroded
- Replace the Interbay Pump Station dual force mains
- Rehabilitate the force main discharge structure (FMDS)
- Rehabilitate downstream 96" gravity pipe
- Construct an odor control facility at the FMDS



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# Upcoming Pipeline Rehabilitation

## Lake Hills Interceptor Rehabilitation Phase II (Bellevue)

- Rehabilitate 7,776 linear feet of reinforced concrete Lake Hills Interceptor pipe
- Pipeline is deteriorating due to hydrogen sulfide exposure



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# Questions?

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