



Informational Session – Capital Projects

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Agenda

- Projects Completed in Prior Year
- Plant Flow Challenges
- Future Major Projects – 10 Years
- Financial Analysis
- Rates



Projects Completed

- 78” Influent Pipeline Condition Assessment
- Cogen Engine Overhauls
- Consolidated Operations Building
- Influent Pump Station Variable Frequency Drive (VFD) Replacement
- Auxiliary Clarifiers Motorized Actuator Install
- SCADA (Supervisory Control and Data Acquisition) Software Upgrades
- Treatment Unit Gate Replacements
- Major focus on Collections System Improvements



Major Focus on Collections System Improvements

- 4 completed and 3 active sewer line replacement projects resulting in 10.1 miles of completed line replacement.
- 1 active point repairs project

Sewer Line Replacement Strategic Goal Update

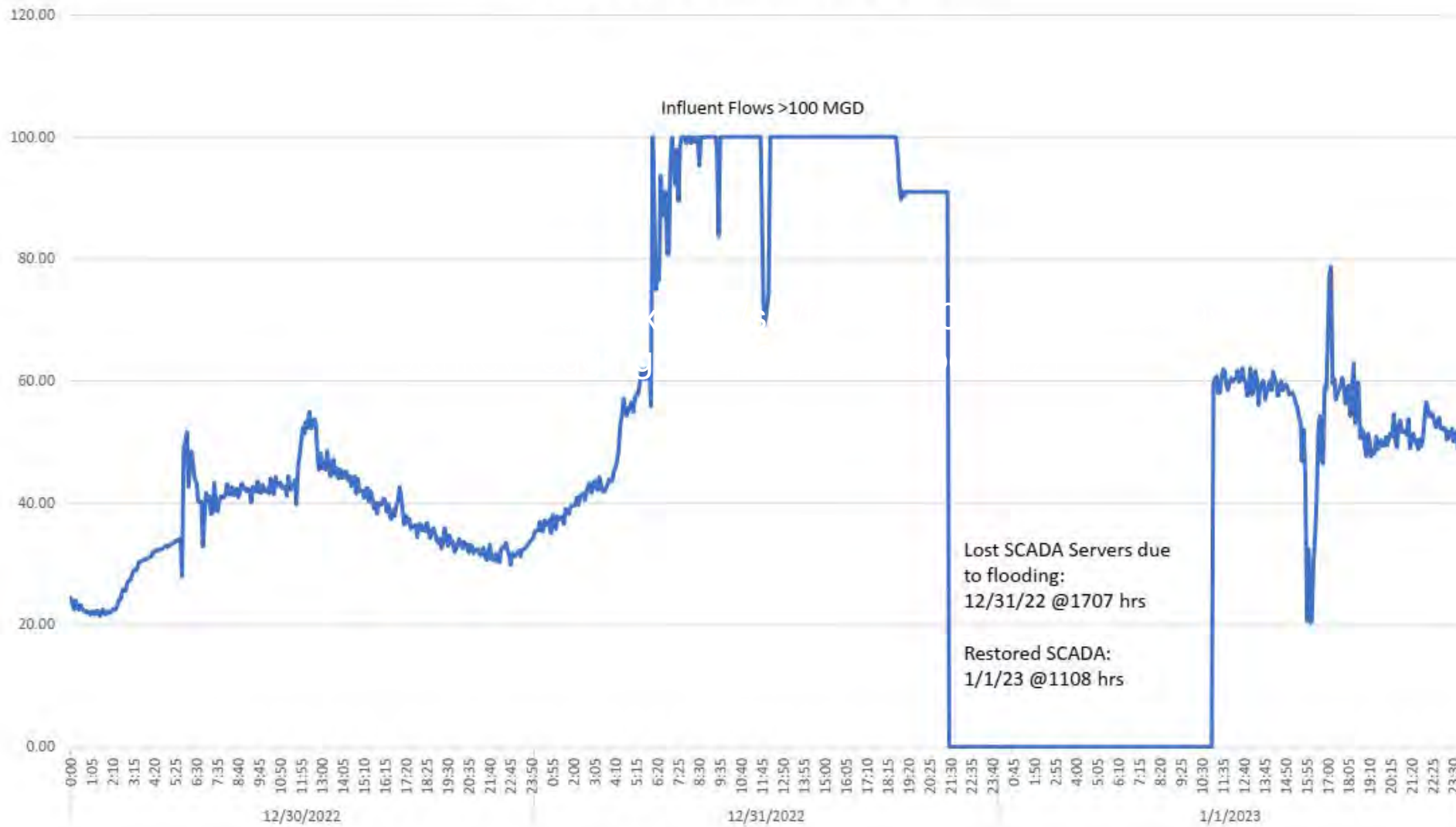
Strategic Goals Replace a minimum of 40 miles of collection system pipe between 2019 and 2029.

Goal (Miles)	Miles to Date	Miles Remaining	Average Miles per Month
40.0	24.2	15.8	0.39

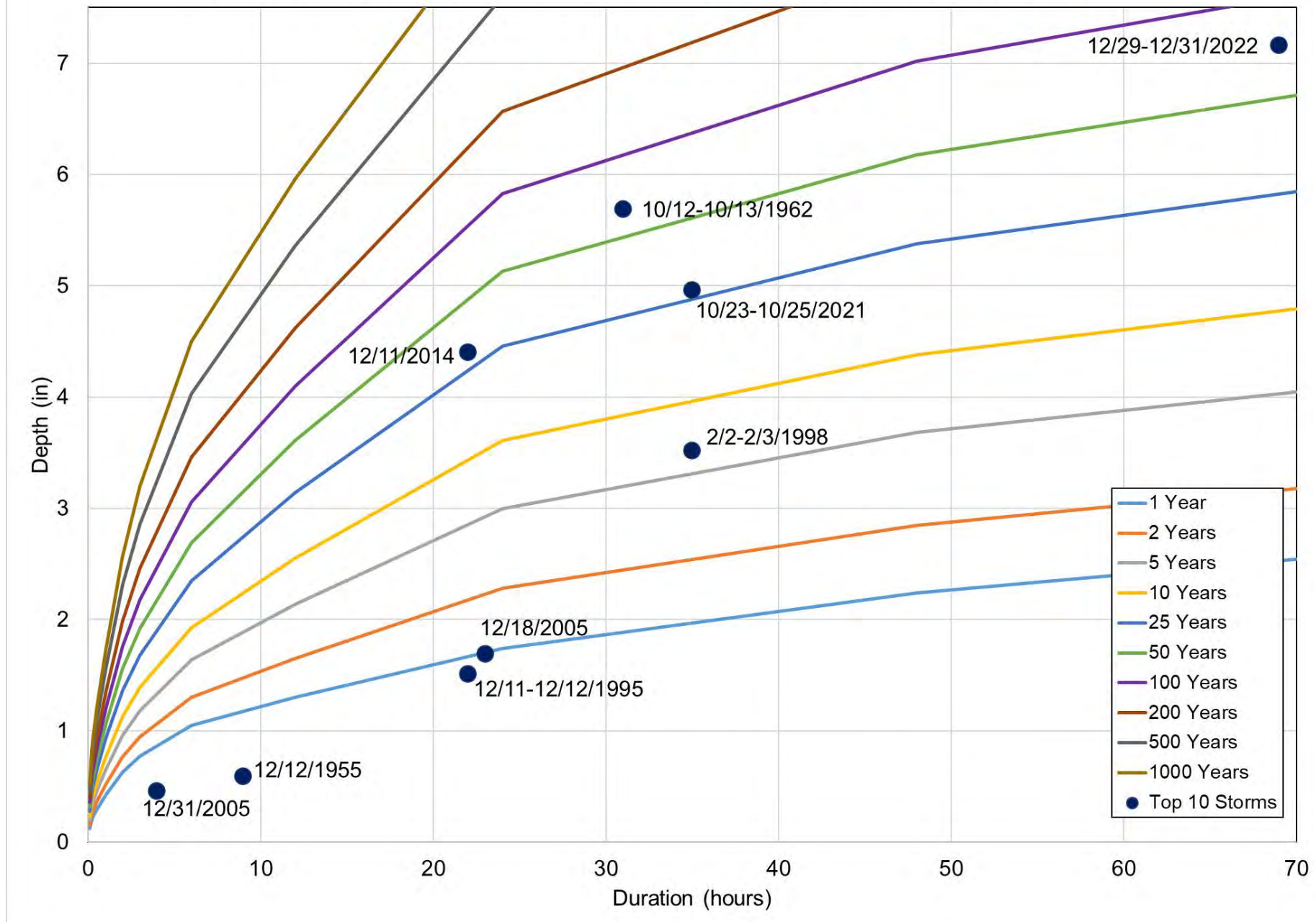


Plant Influent Flow Data

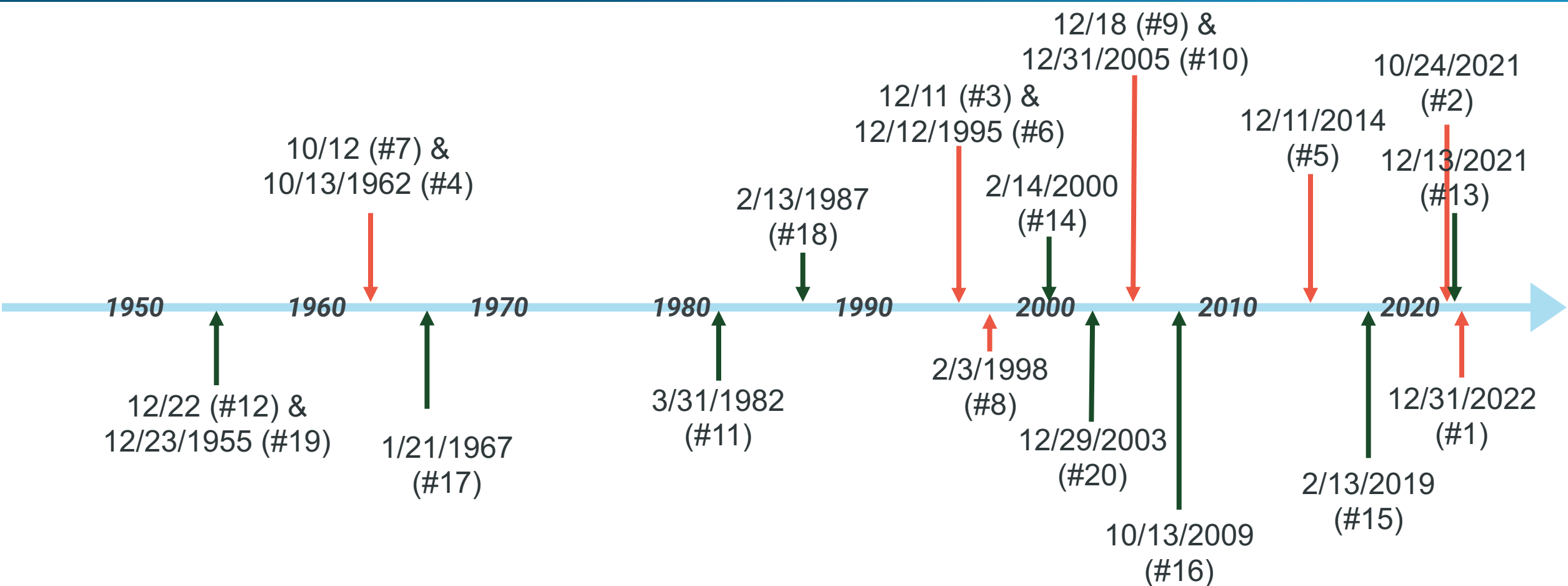
TB PLANT INFLUENT FLOW, MGD



Top 10 Storms (Total Depth/Duration) and NOAA Point Precipitation Frequency Estimates



Timeline of Major Storm Events – Top 20 (by Peak 24-Hr Precipitation)



Distribution of large storm events gets more concentrated in recent times (post-1990)

- Storms 1-10
- Storms 11-20

Summary of Analysis of Storms

- The recent atmospheric river event at the end of 2022 was the largest storm event in the Bay Area since the 1950s by 24-hour peak precipitation.
- The 2020s (1/1/2020-1/6/2023) make up only 4% of the total timeline maintained by GGWS, but 2 of the 10 largest storms (20%) from the GGWS record occurred in the 2020s.

Projects in the Next 10 Years

Project	Budget	Fiscal Year
78" Plant Influent Pipe Lining	\$3,000,000	23/24, 24/25
Primary Clarifier Rehabilitation	\$1,750,000	24/25
GBT Facility Rehabilitation	\$1,250,000	26/27
Influent Pump Replacements	\$4,000,000	28/29
Bar Screens Replacement	\$3,500,000	26/27
Belt Filter Press Replacement	\$2,000,000	30/31
Cogen System Replacement	\$10,000,000	28/29, 29/30
Digester Gas System Flares	\$1,100,000	26/27
Digester Facilities Improvements	\$13,600,000	23/24, 24/25, 25/26
Total	\$40,200,000	

78" Plant Influent Pipe Lining

- Inspection Performed on 3/9/22
- Key Findings
 - Exposed aggregate
 - Exposed steel reinforcing bars
- Scope: Rehabilitate Pipeline
 - Lining project
- Estimate: \$3M
- Fiscal Years 2023/24 & 2024/25



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Primary Clarifier Rehabilitation

- Scope is to recoat primary clarifier mechanisms, install sacrificial anodes, and fix/replace any failed mechanisms
- Estimate: \$1.75M
- Fiscal Year 24/25





Gravity Belt Thickener Facility Rehabilitation

- Scope is to replace or rehabilitate GBTs (installed 2009)
- Estimate: \$1.25M
- Fiscal Year 2026/27



Influent Pump Replacements

- Scope is to replace existing influent pumps and associated electrical controls (1946 vintage)
- Estimate: \$4.0M
- Fiscal Year 2028/29



Bar Screens Replacement

- Scope is to evaluate and replace bar screens (installed in 2007)
- Estimate: \$3.5M
- Fiscal Year 2026/27



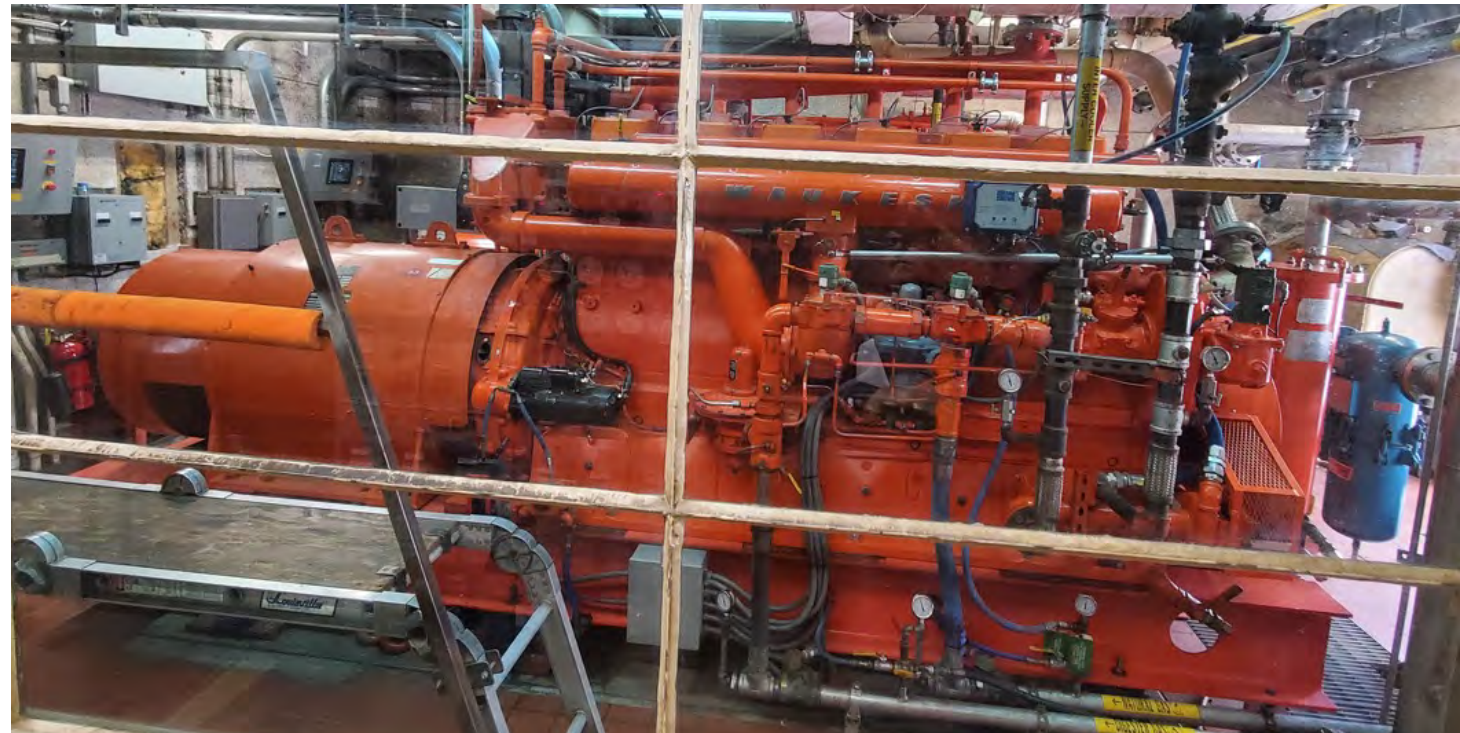
Belt Filter Press Replacement

- Scope is to rehabilitate or replace two belt filter presses (installed in 2011)
- Estimate: \$1.75M
- Fiscal Year 2030/31



Cogeneration System Replacement

- Cogens
 - Existing system is reliable and maintains a high operational uptime.
 - Permitted 30 years ago.
 - Our peers have replaced their Waukesha's (Hayward, Union SD, and Silicon Valley)
 - Risk of not meeting air regulations, failure of one of many electrical/control support systems, or inability to procure replacement parts will grow over time.
 - Evaluate new technologies and implement with the needs of the District
 - Estimate: \$10M
 - Fiscal Year 2028/29, 2029/30



Digester Gas System Flares

- Scope is to rehabilitate or replace gas flares
- Estimate: \$1.1M
- Fiscal Year 2026/27



Digester Facilities Rehabilitation

- Digesters 1, 2, 4, and 5 are seismically vulnerable and at the end of their useful lives.
- If these fail, our hydraulic retention time will fall to 15 days (legal minimum), with no redundancy.
- Digesters 4 & 5 will be rehabilitated and Digesters 1, 2, and 3 will be demolished.
- Estimate: \$13.6M
- Fiscal Years 2023/24, 2024/25, 2025/26

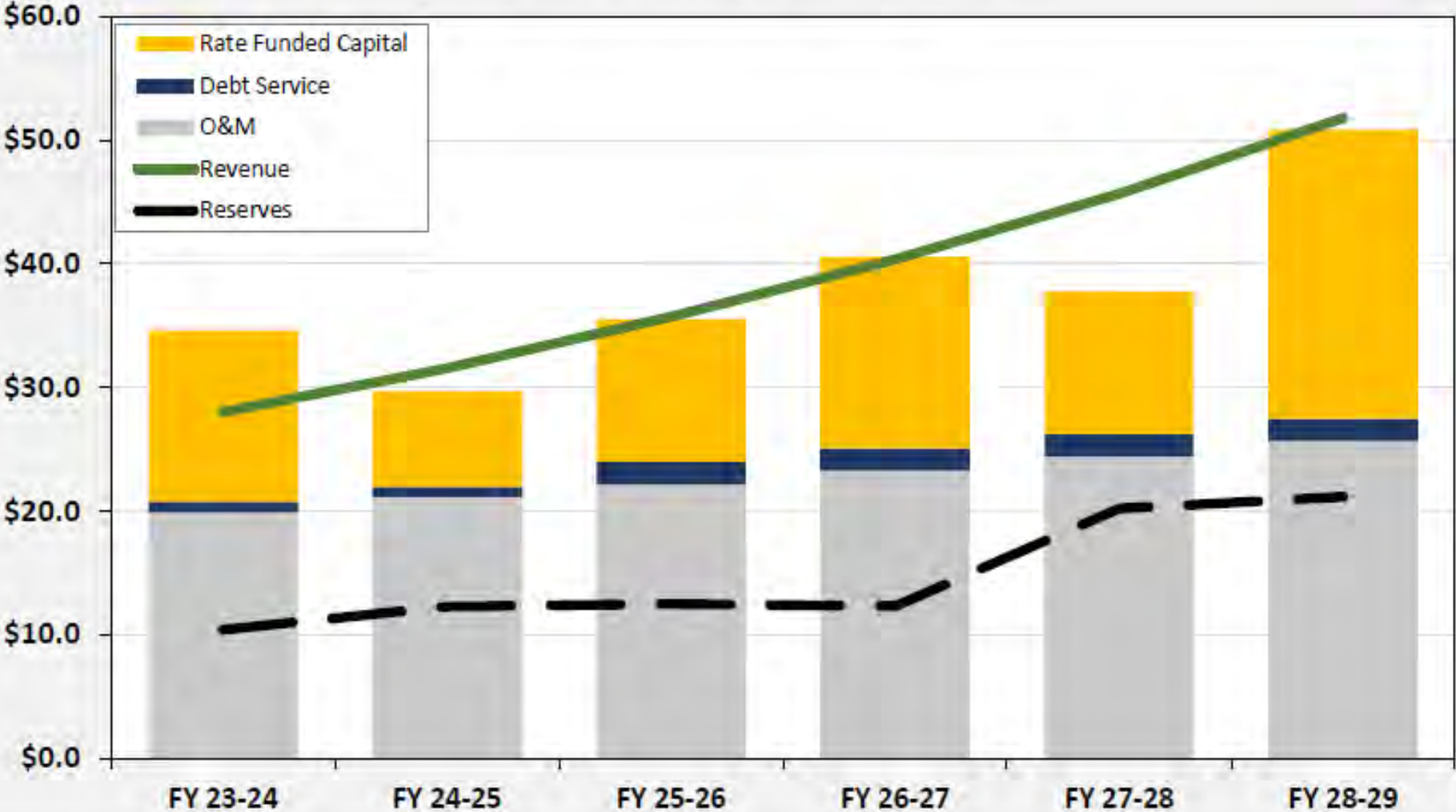


The Future

- Nutrient Treatment
- Flow Equalization Basin Expansion (Wet Weather)
- Sea Rise



Oro Loma Sanitary District Sewer Cashflow (\$ millions)



Oro Loma SD - Wastewater Rate Study

Recommended Rates

Wastewater Annual Rates	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29
	<i>Existing</i>	<i>Proposed</i>	<i>Proposed</i>	<i>Proposed</i>	<i>Proposed</i>	<i>Proposed</i>
<i>Single-Family Residential</i>						
Fixed (Per Unit)	\$368.00	\$423.12	\$486.59	\$559.58	\$643.52	\$740.05
<i>Multi-Family Residential</i>						
Fixed (Per Unit)	\$368.00	\$423.12	\$486.59	\$559.58	\$643.52	\$740.05
<i>Mobile Home</i>						
Fixed (Per Unit)	\$299.00	\$343.88	\$395.46	\$454.78	\$523.00	\$601.45
<i>School</i>						
Volumetric (CCF)	\$3.99	\$4.59	\$5.28	\$6.07	\$6.98	\$8.03
<i>Commercial</i>						
Volumetric (CCF)	\$5.43	\$6.25	\$7.19	\$8.27	\$9.51	\$10.94
<i>Industrial</i>						
Flow (Per CCF)	\$3.56	\$4.07	\$4.68	\$5.38	\$6.19	\$7.12
BOD (Per Pound)	\$0.69	\$0.80	\$0.92	\$1.06	\$1.22	\$1.40
SS (Per Pound)	\$0.79	\$0.91	\$1.05	\$1.21	\$1.39	\$1.60

Questions?

