AGENDA
Board Workshop
Tuesday, May 19, 2026 - 6:00 PM
OMC Training Room, 2600 Grant Avenue, San Lorenzo, CA 94580

ACCESSIBILITY INFORMATION: In compliance with the Americans with Disabilities Act of 1990, if you need special assistance to participate in a District meeting or need a copy of the agenda in an appropriate alternative format, please contact the District Secretary at (510) 276-4700. Notification of at least 48 hours prior to the meeting will assist District staff with ensuring reasonable arrangements can be made.

MEETING DECORUM AND PUBLIC PARTICIPATION GUIDELINES: The Oro Loma Board of Directors encourages a respectful dialogue that supports freedom of speech and values diversity of opinion, in a manner consistent with the requirements of the Brown Act. The Board, staff, and members of the public are expected to be civil and courteous, and to refrain from questioning the character or motives of others participating in the meeting. Members of the public should direct their comments to the Board, and not staff or other members of the public. Speakers should not use threatening, profane or abusive language that disrupts, disturbs, or otherwise impedes the orderly conduct of the meeting.

Page

1. **CALL TO ORDER**

2. **ROLL CALL**
   OLSD Directors - Dean, Duncan, Lee, Simon, Young

   CVSan Directors - Akagi, (Dooman) Woerz, Johnson, McGowan, Sadoff

3. **GENERAL PUBLIC**
   (Members of the public wishing to comment on any item not on the agenda, but within the Board's jurisdiction, should notify the Board at this time. Those wishing to comment on any item on the agenda should do so at the time the item is considered. Comments may be limited to three (3) minutes. Time limitations shall be at the discretion of the President.)

4. **OLSD/CVSAN JOINT PRESENTATION & DISCUSSION**

   4.1. **OLSD/CVSan 2026 Joint Meeting Presentation & Discussion** 2 - 46
   OLSD General Manager Dang and CVSan General Manager Williams will present an update on the 10-Year Capital Improvement Program and Renewal and Replacement Projects, including an update on the Cloth Filter Project. Staff will also provide an overview of ongoing joint agency coordination efforts, including development of the treatment plant planning-level master plan. The Board will be asked to discuss the proposed scope of work for the master plan and provide direction regarding preparation of the Request for Proposals (RFP).
   Attachment - Slide Deck, OLSD/CVSan Presentation

5. **STAFF/DIRECTOR COMMENTS**

6. **ADJOURNMENT**

OLSD/CVSan Joint Meeting

Roland Williams, CVSan

Jimmy Dang, OLSD

May 19, 2026

Agenda

- **10 Year CIP/R&R Update**
- **Cloth Filter Project Scope Update**
- **Current Joint OLSD/CVSan Efforts**
- **Treatment Plant Master Plan RFP Scope Development: What questions need to be answered?**

Completed Projects (FY 25/26)

- Parking Lot Improvements
- Electrical Vehicle Charging Station
- Electrical System Master Plan Study

Active Projects (FY 26/27)

- Digester Rehabilitation Project
- Primary Clarifier Rehabilitation
- Treatment Unit Grating Replacement Project, Phase 2
- Engineering Office Remodel
- Secondary Clarifier Rehabilitation

Parking Lot Improvements

Status: Completed

Demolish and upgrade existing parking lot improvements, including striping, fencing/gates, lighting, storefront entry, and associated site and electrical work.

Project Budget: $767,000

Total Expenditures: $764,490

EV Charging Stations

Status: Completed

Install new electric vehicle charging stations at the treatment plant, including new panelboard and transformer, feeder/conduit routing, and modifications to the existing MCC-THI for power supply and integration.

Project Budget: $347,000

Total Expenditures: $192,343

Electrical System Master Plan Study

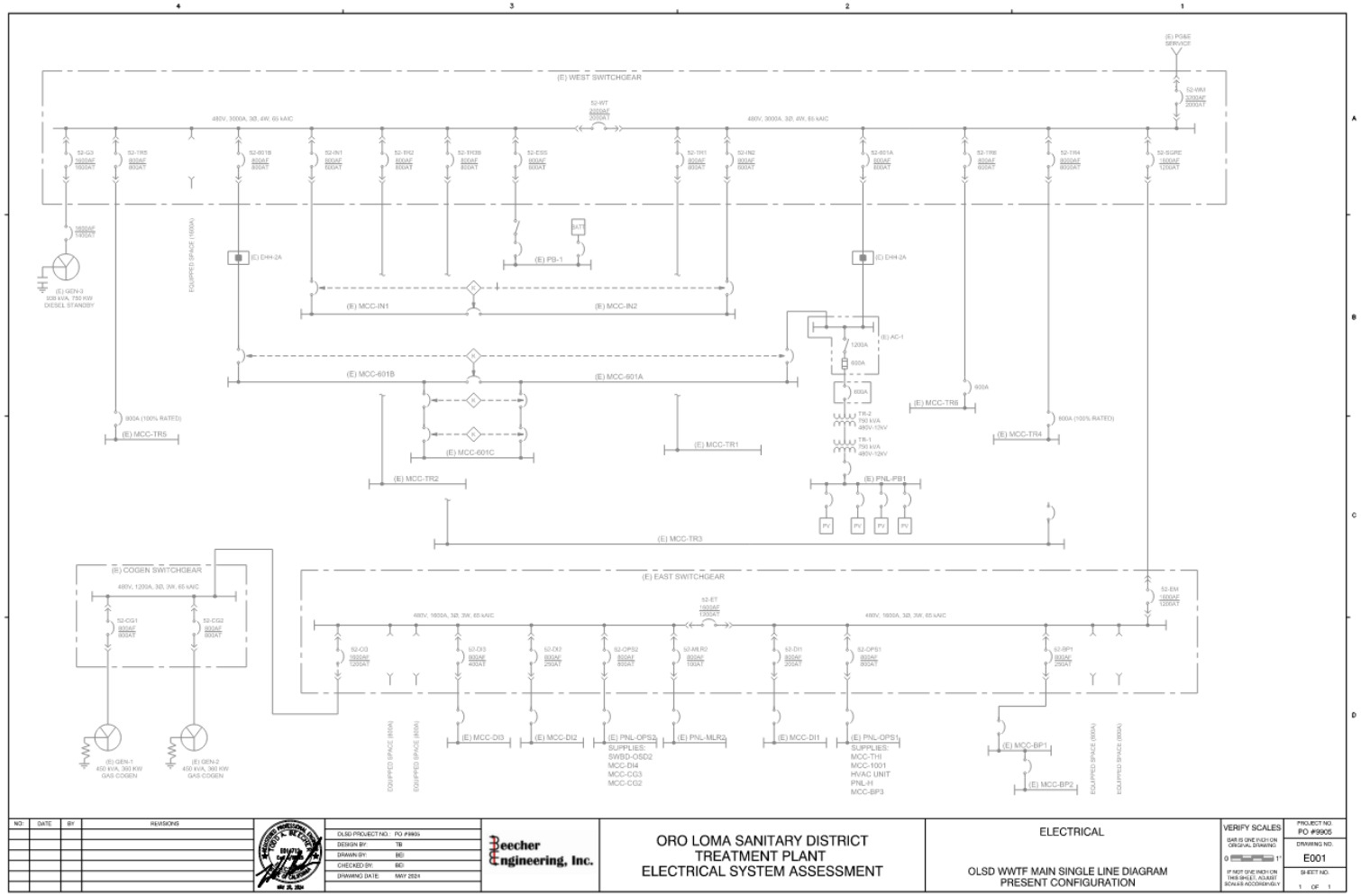
Status: Completed.

Performed a comprehensive condition assessment of the electrical system components.

Developed a long-term strategic plan for the plant electrical distribution system upgrades.

Project Budget: $150,000

Total Expenditures: $145,200



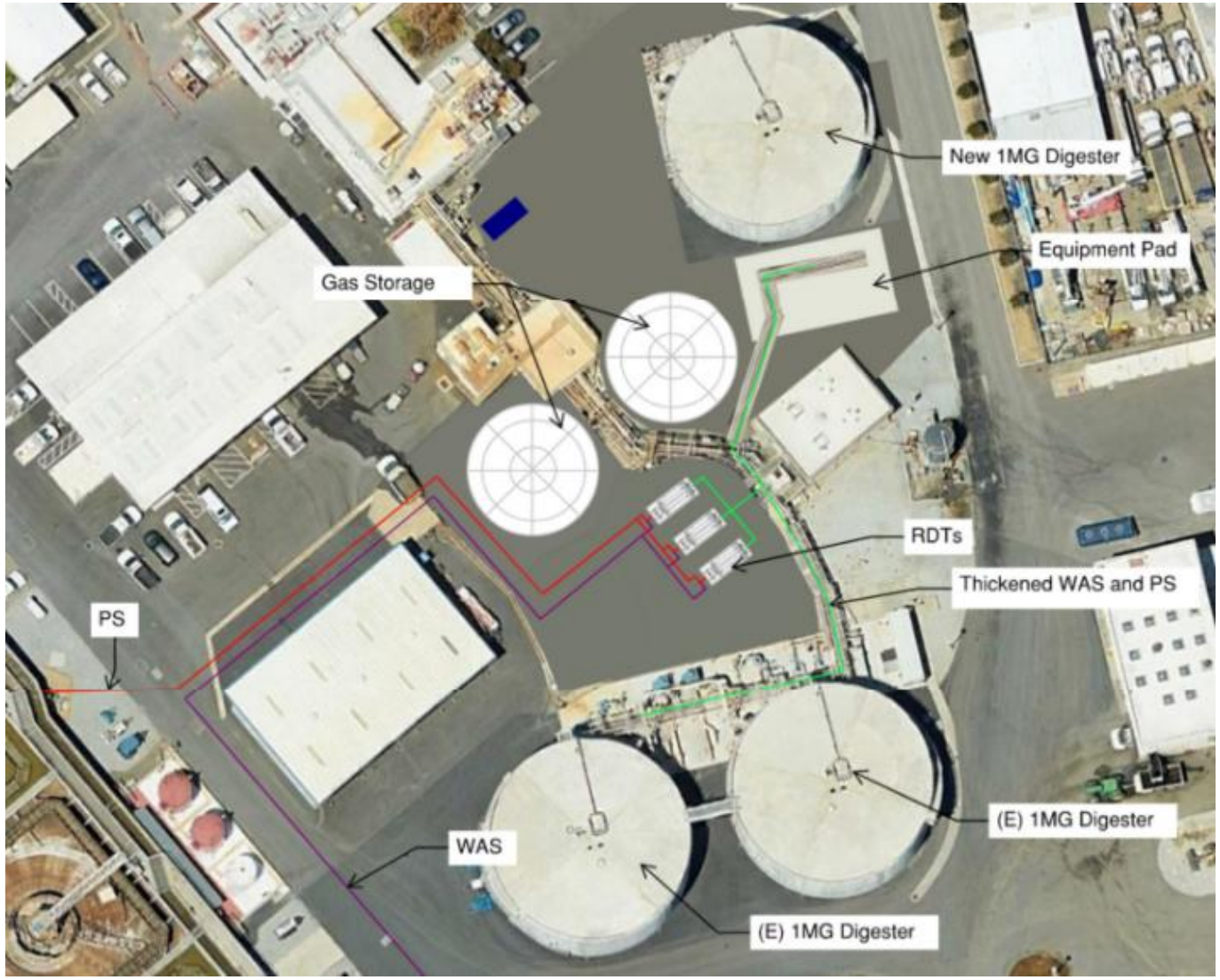
Digester Rehabilitation Project

Status: Phase 1 of the project is in construction. Phase 2 design in-progress.

The Digester Rehabilitation Project has been divided into two phases:

Phase 1. Co-thickening and dewatering of primary and secondary sludge which includes a co-thickening pilot study, demolition of existing digesters #1, #2 and #5, and new gas storage. Project Budget: $12.7 M

Phase 2. Demolition of existing digesters #3, and #4, new gas storage, and a new 1 M gallon digester. Budget: $17.2 M. Phase 2 is planned for FY 27/28.



Primary Clarifier Rehabilitation

Status: Project is in construction.

The scope of work includes repairing the clarifier concrete floors, recoating the primary clarifier mechanisms, installing sacrificial anodes, and repairing corroded steel and the corner sweeps.

Project Budget:
$3.7 M

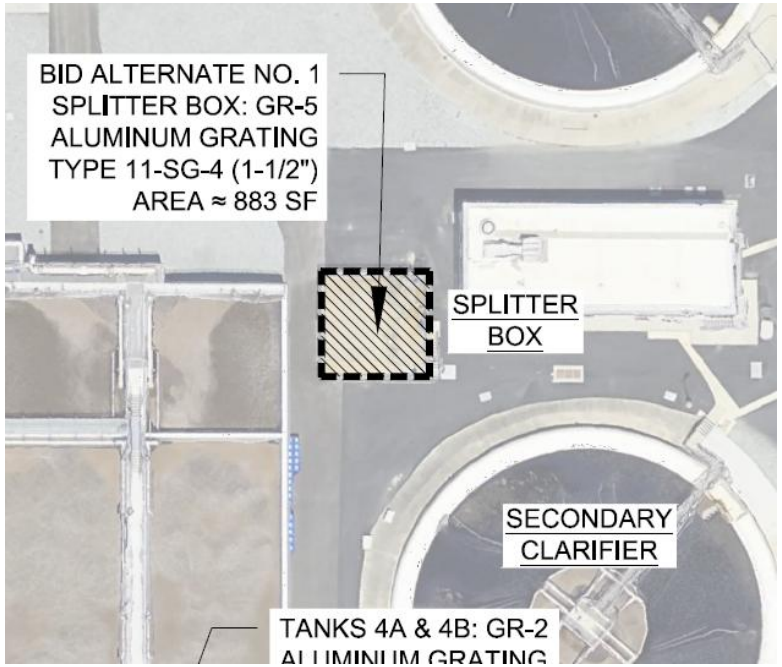
Next renovation phase is expected in FY 34/35

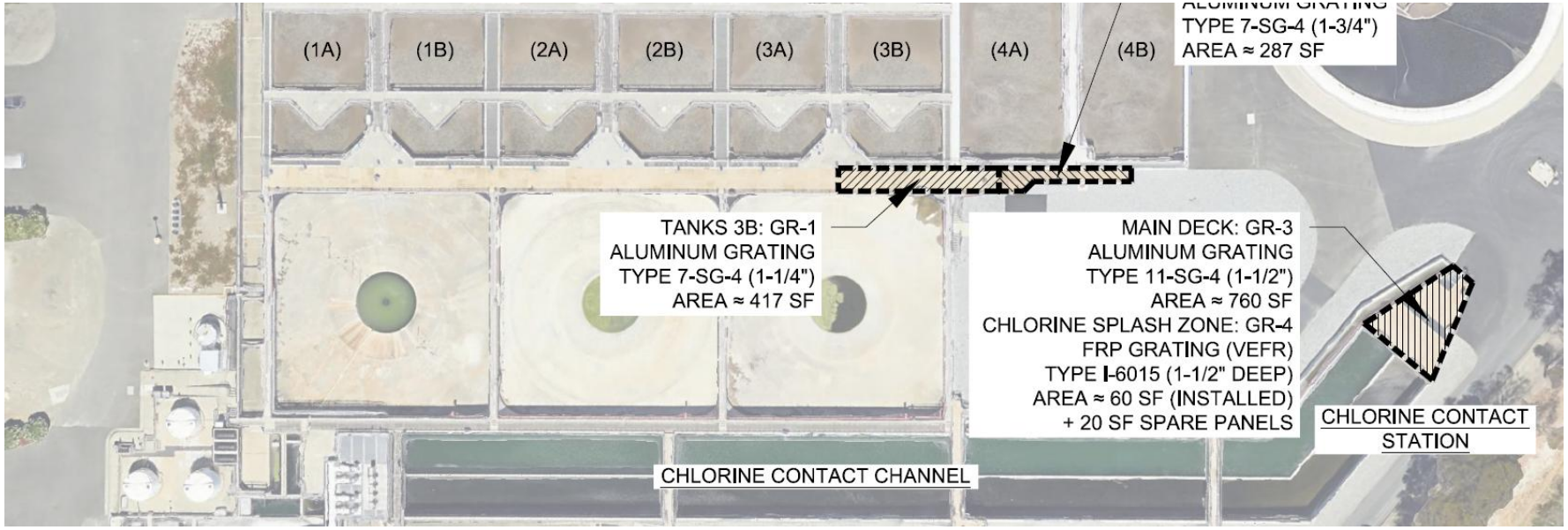
Treatment Unit Grating Replacement, Phase 2

Status: In-progress

The fiberglass grating installed under the 2006 Capacity Restoration Project has reached the end of its service life. Approximately half has been replaced to date. Design is underway to replace the remaining grating, with advertisement anticipated in June 2026.

Project Budget: $320,000





Engineering Building Remodel

Status: Project is in construction.

- The project involves demolition of the existing open work area and construction of six offices, one storage room, and remodeling of the front lobby.
- Existing ceilings, windows, HVAC, and plumbing will be reused where feasible.
- Work includes new partitions, finishes, flooring, and data connections, with no major structural changes.
- Project Budget:
  $315,000

Secondary Clarifier Rehabilitation

Rehabilitation of protective coating of existing steel mechanisms. Design is anticipated to begin in June 2026.

- Estimate: $827,000

Projects in the Next 10 Years

Project	Budget	CV San Share	FY
Digester Rehabilitation Project Phase 2	$16,852,000	$4,213,000	27/28
Influent Pump Replacements	$4,631,000	$1,157,750	28/29
Digesters No. 6 & 7 Rehabilitation	$730,000	$182,500	29/30
Belt Filter Press Replacement	$2,553,000	$638,250	30/31
Bar Screens Replacement	$5,172,000	$1,293,000	33/34
Electrical Switchgear Upgrade	$40,721,000	$10,180,250	33/34
Cogeneration System Upgrade/Replacement	$7,757,000	$1,939,250	34/35
Digester Gas System Flares	$1,500,000	$375,000	34/35
Primary Clarifier Rehabilitation	$1,500,000	$375,000	34/35
Total	**$81,416,000**	**$20,354,000**	

*Budget Amounts are inflated to the appropriate year (3.74% per year)

Influent Pump Replacements

The scope of work provides for the replacement of the existing influent pumps, associated electrical gear and control upgrades.

Current pumps were installed in 1946.

- **Estimate: $4.9 M**
- **FY 28/29**

Digester No. 6 & 7 Rehabilitation

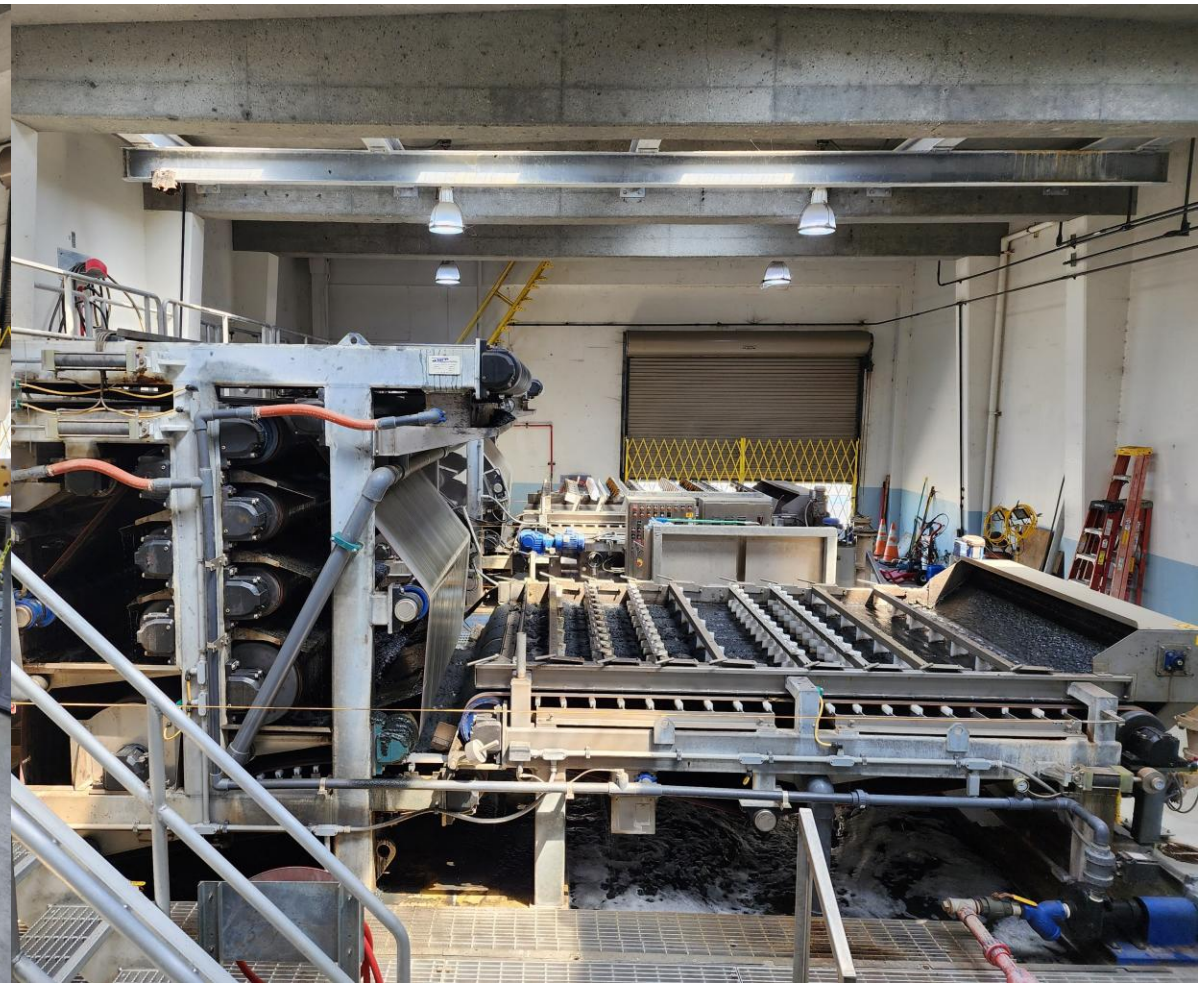
The scope of work provides for the cleaning, inspection, and recoating of the interior of Digesters No. 6 & 7.

- **Estimate: $730,000**
- **FY 29/30**

Belt Filter Press Replacement

The scope of work provides for the replacement of the two belt filter presses, which were installed in 2011.

- **Estimate: $2.5 M**
- **FY 30/31**



Bar Screens Replacement

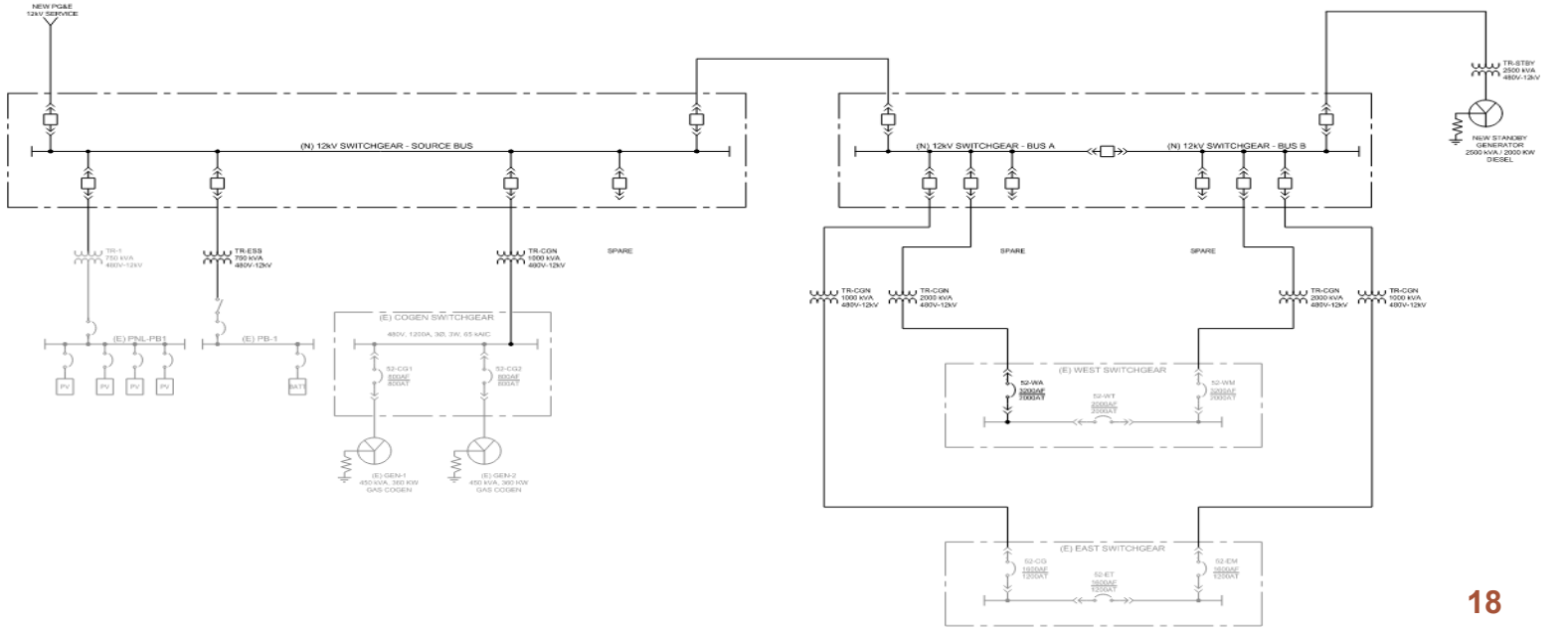
The scope of work provides for the evaluation and replacement of the bar screens which were installed in 2007.

- **Estimate: $5.2M**
- **FY 33/34**

Electrical Switchgear Upgrade

The scope of work provides for upgrading the plant's electrical system to medium voltage; 12 kV.

- **Estimate: $40.7 M**
- **FY 33/34**



Cogeneration System Upgrade

Project will provide for the replacement of the cogeneration system at the end of its useful life.

- **Estimate: $7.6 M**
- **FY 34/35**

Digester Gas System Flares

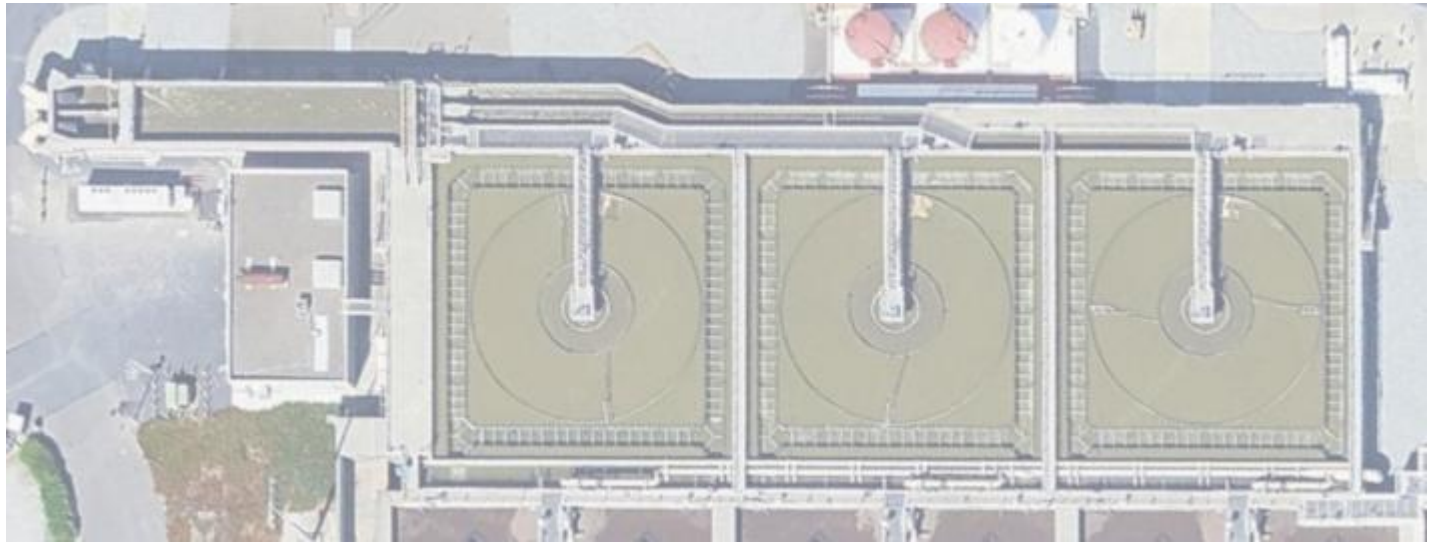
Project will provide for the replacement of digester gas system flares at the end of their useful life.

- **Estimate: $1.5 M**
- **FY 34/35**

Primary Clarifier Rehabilitation

The scope provides for recoating the primary clarifier mechanisms, installing sacrificial anodes, and repairing corroded steel and the corner sweeps.

- **Estimate: $1.5 M**
- **FY 34/35**



Cloth Filters Update

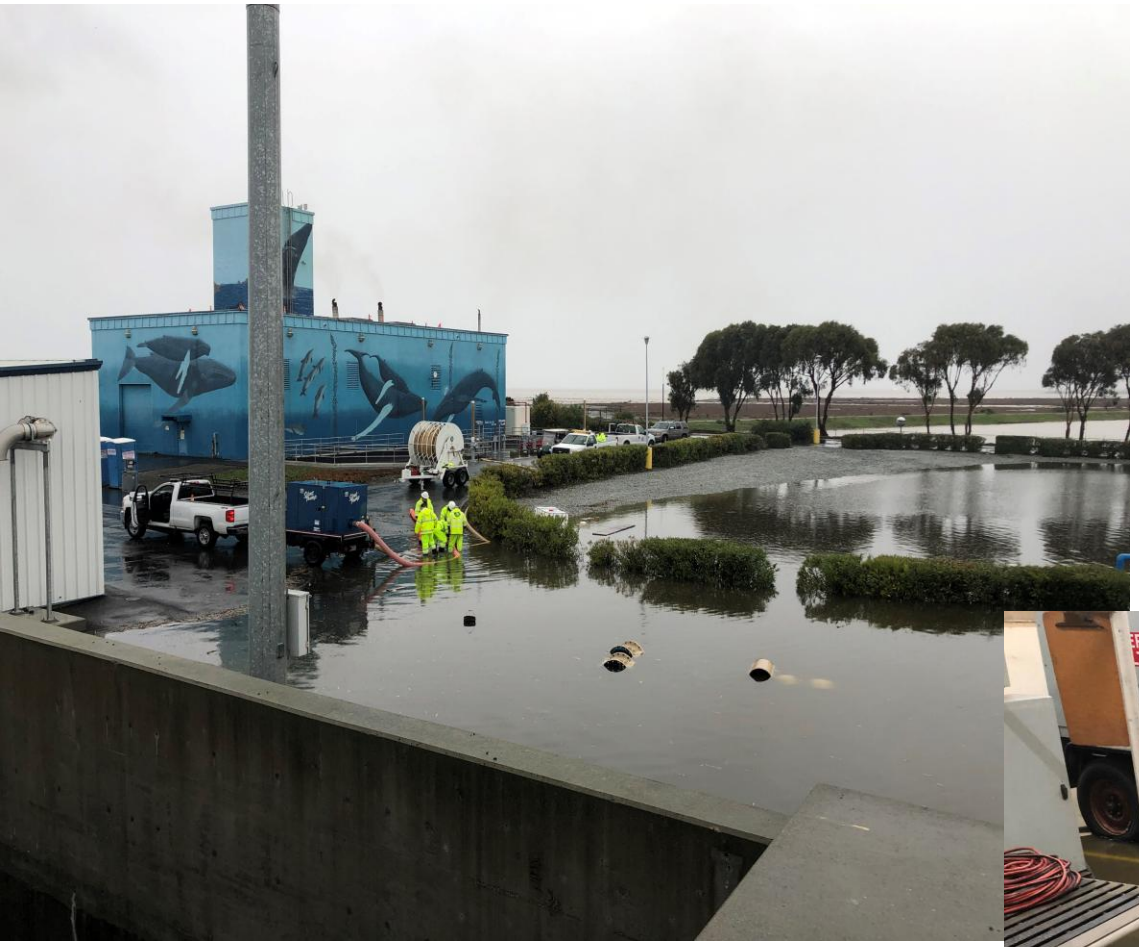
Topics

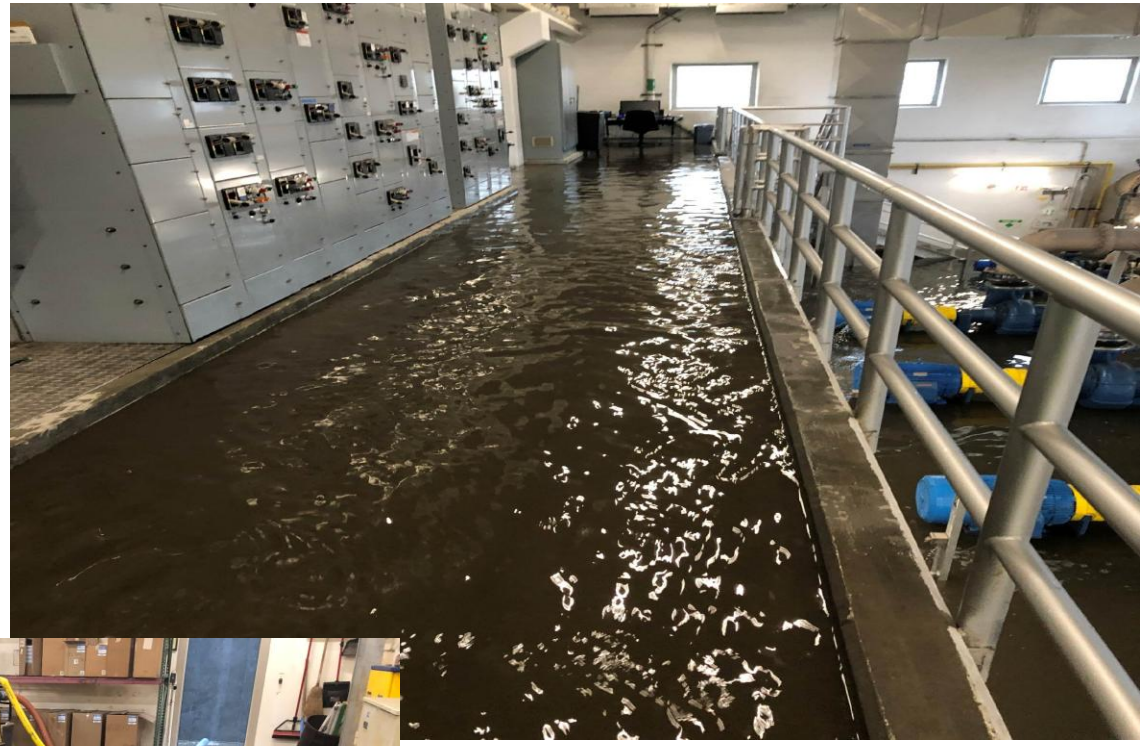
- Regional and State Water Board Requirements
- Plant Capacity
  - Treatment Capacity vs. Hydraulic Capacity
- Historical Storm Frequency Analysis
- Common Mitigation Methods
  - EQ Basin vs. Filters
- Alternatives Analysis – Filters

Legal Requirements

- Two NPDES Discharge Permits
  - EBDA
  - Local Wet Weather Outfall
- Primary Objective (Discharge Prohibitions)
  - “Discharge of treated or partially-treated wastewater at a location or in a manner different from that described in this Order is prohibited.”
- EPA Commentary
  - “Will work with agencies, however, should mitigate prior effluent challenges.”
  - A Cease-and-Desist Order in California regarding wastewater is a formal directive issued by a Regional Water Quality Control Board to stop or change specific actions related to wastewater discharge. These orders are legal tools used to address violations of wastewater discharge regulations and ensure compliance with water quality standards.

December 31, 2022 Storm





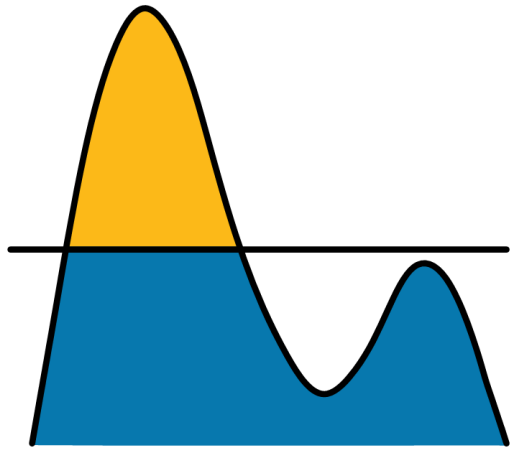
Plant Capacity

Flow	Capacity (Million Gallons a Day – MGD)
Average Dry Weather Flow (ADWF)	11 MGD
Full Nutrient Treatment	16 MGD
Partial Nutrient Treatment	30 MGD
Activated Sludge Treatment	50 MGD
Hydraulic (Pumping)	106 MGD (85 MGD at Splitter Box)

How to Manage Peak Flows

- Treatment Plant ADWF is 11 MGD and can hit 84 MGD or more during a storm
- Historically experiences 0-8 storms a year
- Solids loading is also at its highest during the higher flows
- Not an issue for EBDA permit but becomes problematic for local outfall for single day events

EBDA Permit (Wet Weather) & Local Outfall Permit (Flows above 30 MGD)
cBOD Average Weekly Limit of 40mg/L
TSS Average Weekly Limit of 45mg/L



The Wet Weather Problem

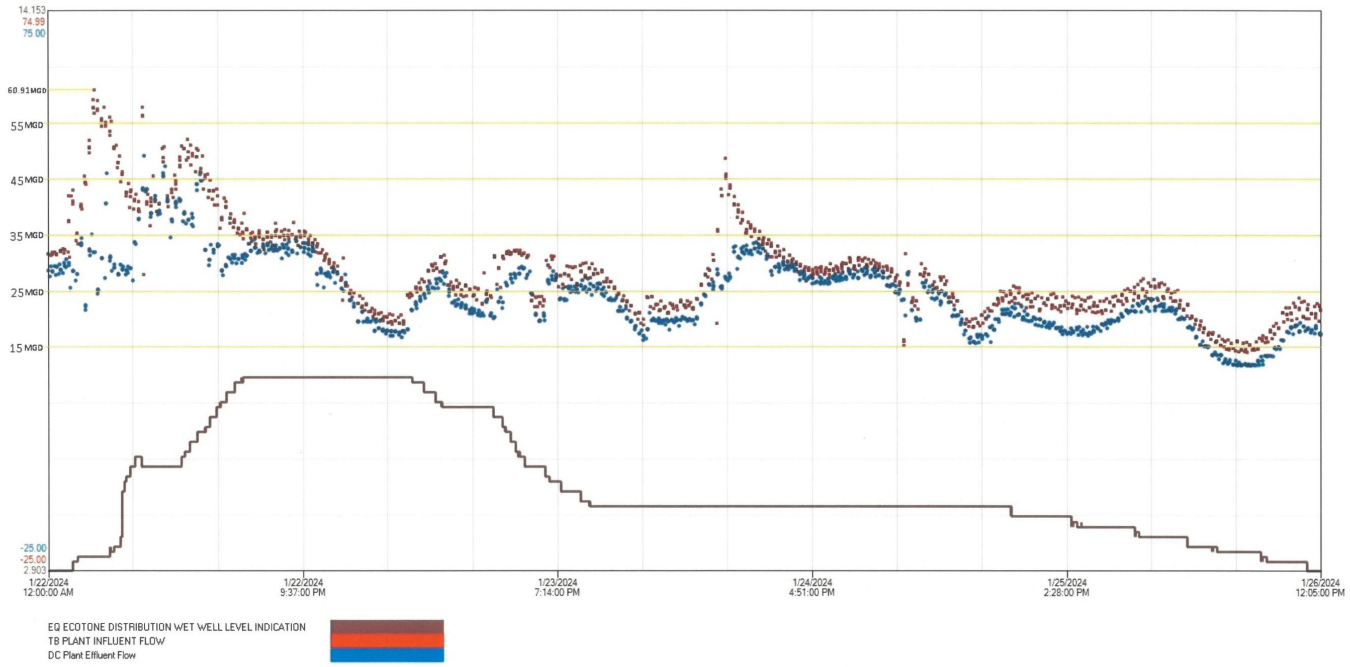
- During wet weather (rainfall, infiltration/inflow), flows into WWTPs can spike well beyond the plant's normal design capacity.
  - Primary and secondary processes can become overwhelmed.
  - Clarifiers struggle with short detention times.
  - Solids can wash out, and permit violations may occur (TSS, BOD, etc.).

Equalization Basin

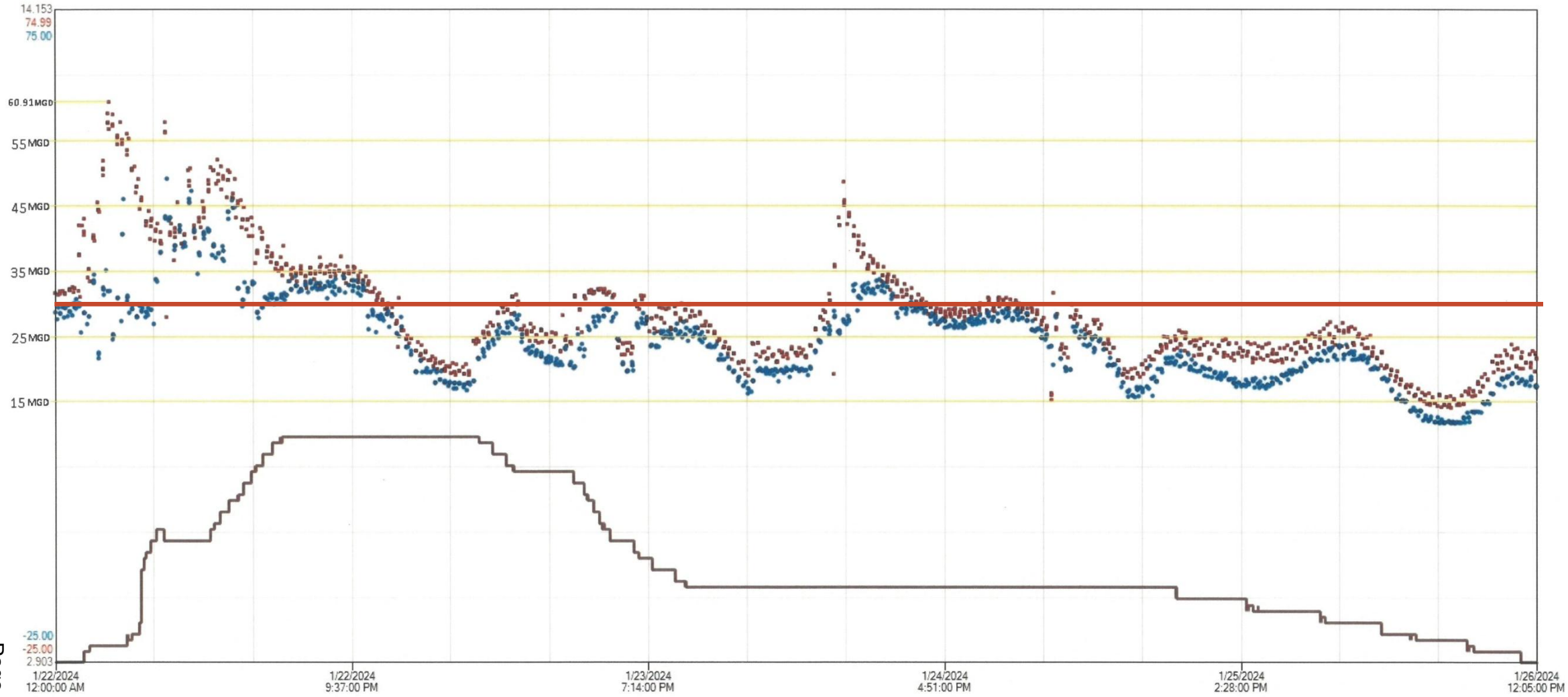
- Equalization (EQ) basins are designed to balance out variations in wastewater flow and quality before the water reaches downstream treatment processes.
  - They smooth out the highs and lows.
- WWTP influent can vary dramatically throughout the day or during storms. Without equalization, these fluctuations can overload biological or chemical treatment systems, reduce efficiency, or even cause permit violations.

Flow Equalization (Hydraulic)

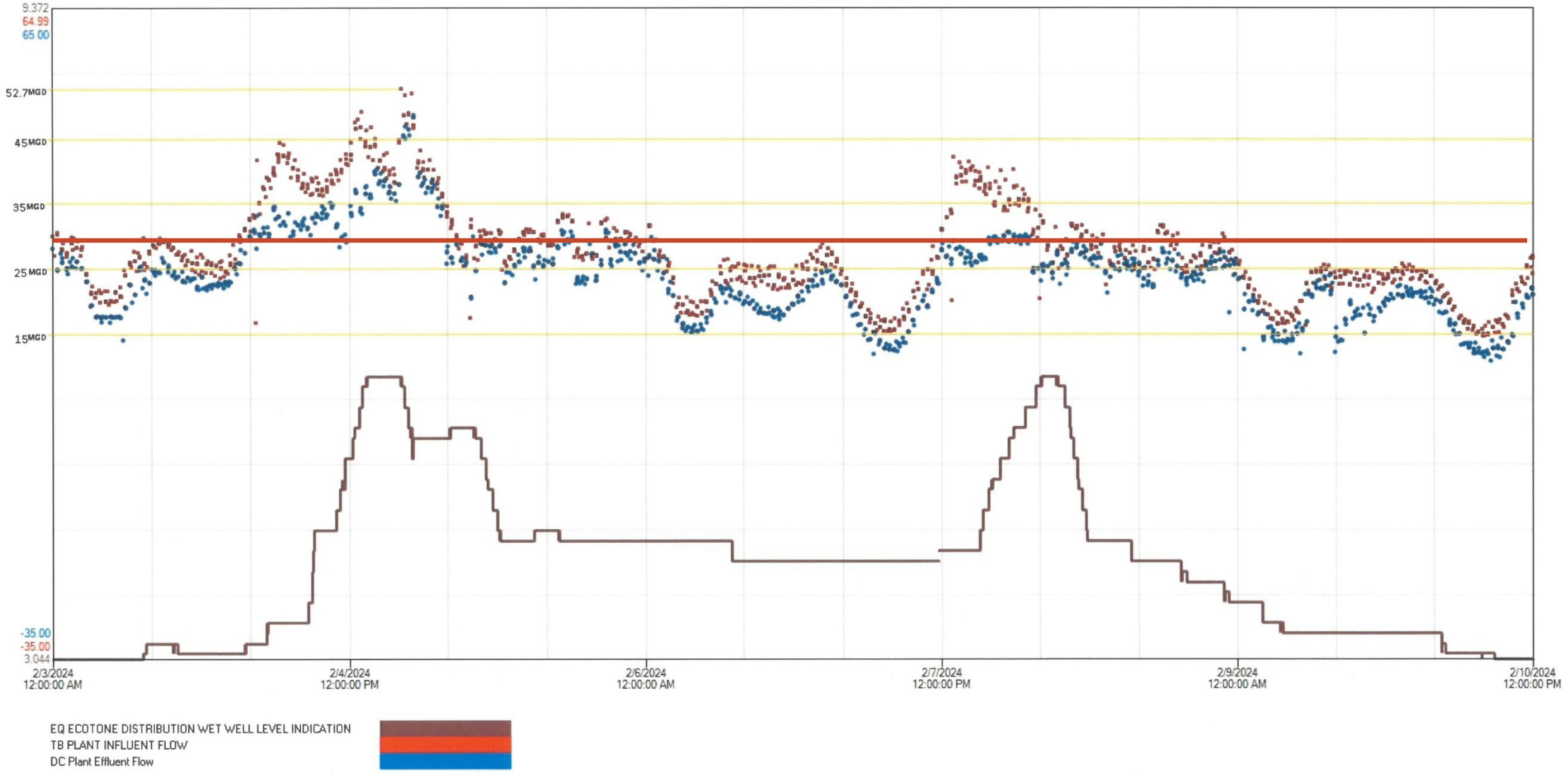
- Flows into the plant are stored temporarily in the EQ basin. During high flow periods (e.g. morning peaks, wet weather inflow), some influent is diverted to the basin.
- During low flow periods, stored wastewater is gradually released from the EQ basin into the treatment process.
- This evens out the flow rate entering downstream processes.



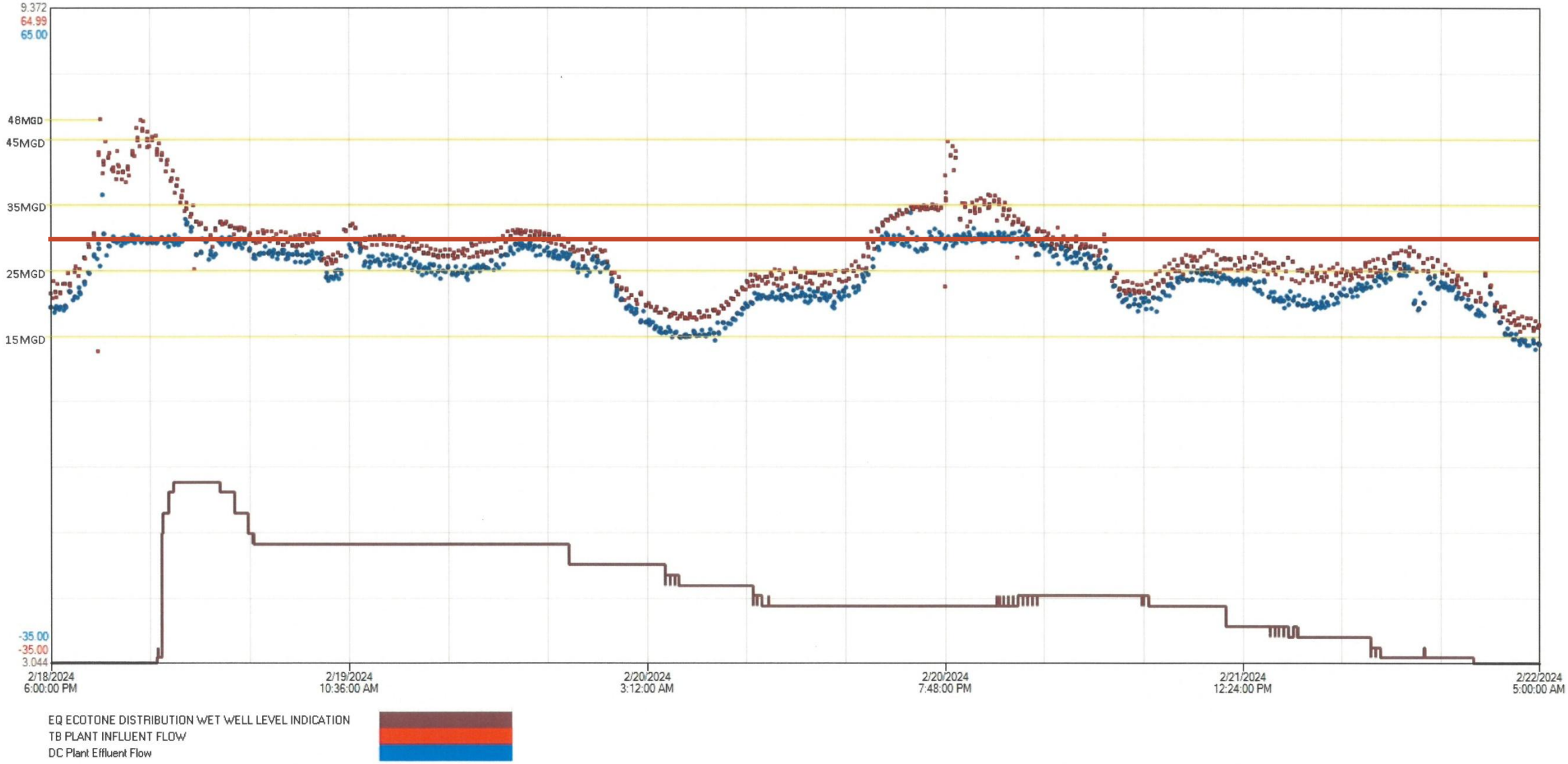
Storm 1/22/24-1/26/24



Storm 2/03/24-2/10/24



Storm 2/18/24-2/22/24



Load Equalization (Organic Load)

- Beyond just flow, EQ basins help buffer variations in:
- BOD (Biochemical Oxygen Demand)
- TSS (Total Suspended Solids)
- Nutrient loading
- This helps biological systems (like aeration tanks) operate more consistently.

Wet Weather Control

- EQ basins can serve as temporary storage for wet weather events (e.g. storms or infiltration/inflow surges).
- Stored water is treated once flows return to normal.

Filters

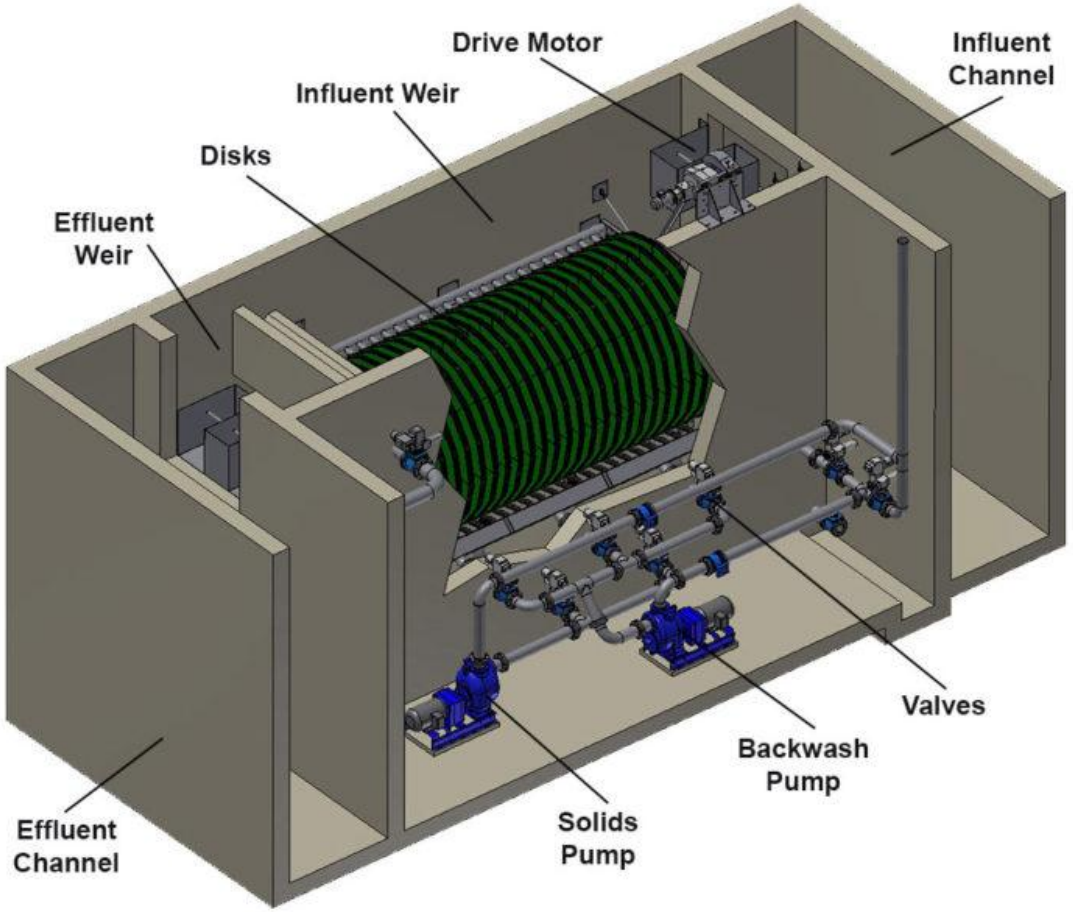
- Cloth filters help by acting as a final polishing or partial treatment step, especially for high flows that would otherwise bypass full secondary treatment.

General Concept

- Wastewater passes through rotating or fixed drum or disk filters that are wrapped in a synthetic cloth media.
- The cloth has very fine pores (typically 10-15 microns) that physically strain out suspended solids.
- Solids are retained on the cloth surface; clean effluent passes through.

Backwashing/Cleaning

- As solids accumulate on the cloth, head loss increases.
- Once a set point is reached, the system automatically triggers a backwash:
  - Spray nozzles rinse the cloth.
  - Solids are washed off and sent back to headworks or primary clarifiers.
  - The filter remains in service during backwash in most designs — very important for continuous operation during storms.



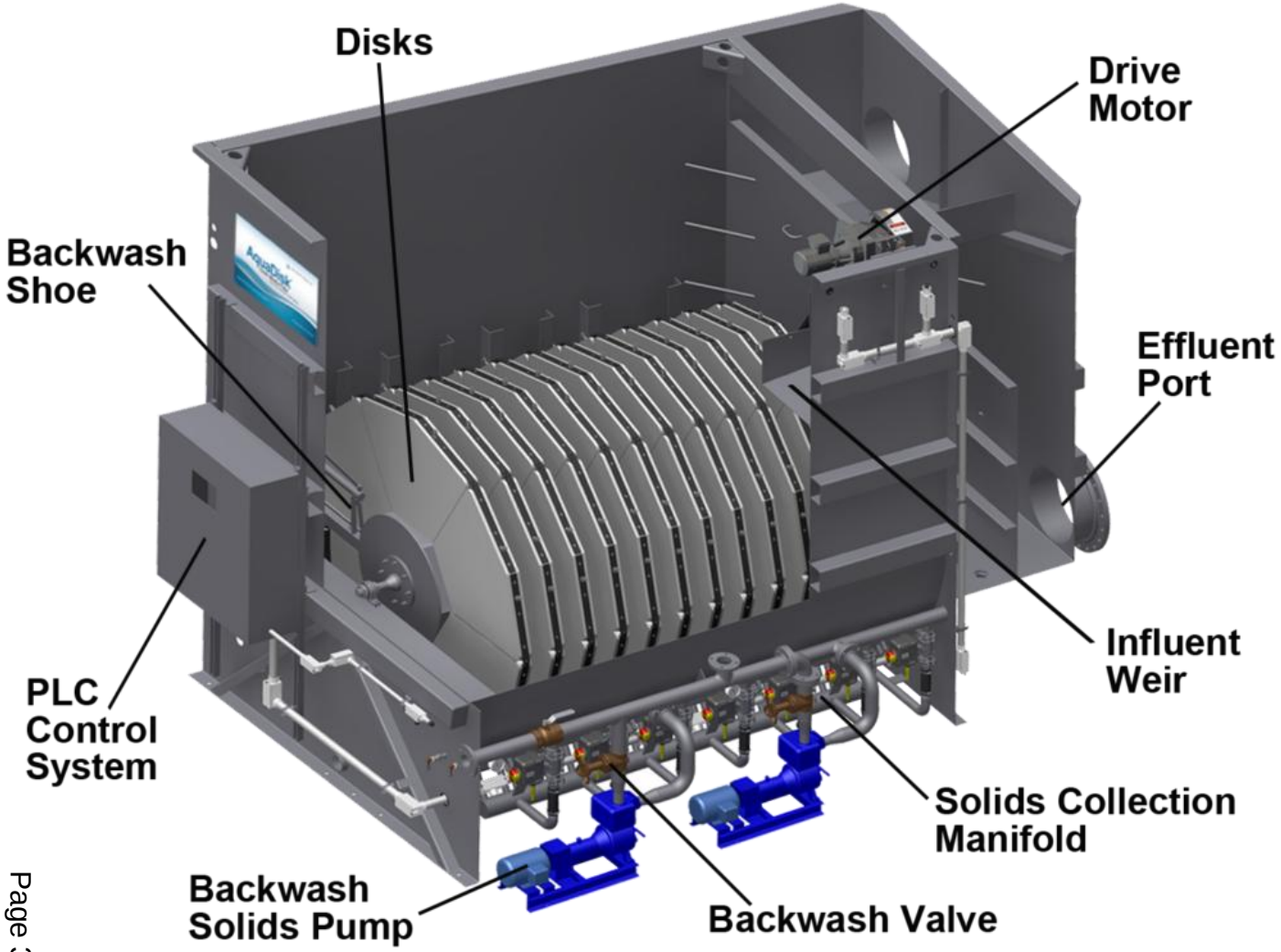
Modular/Scalable Design

- Units can be added or idled based on flow conditions.
- Typically installed downstream of primary clarifiers or secondary processes.

Alternatives Evaluation

VENDOR NAME	PRODUCT NAME	FILTER TYPE
Aqua-Aerobics	AquaStorm™ MegaDisk®	Pile Cloth Media
Alfa Laval	Iso-Disc®	Pile Cloth Media
Tomorrow Water	Proteus	Floating Plastic Media Bed

Aqua Aerobics – AquaStorm MegaDisk

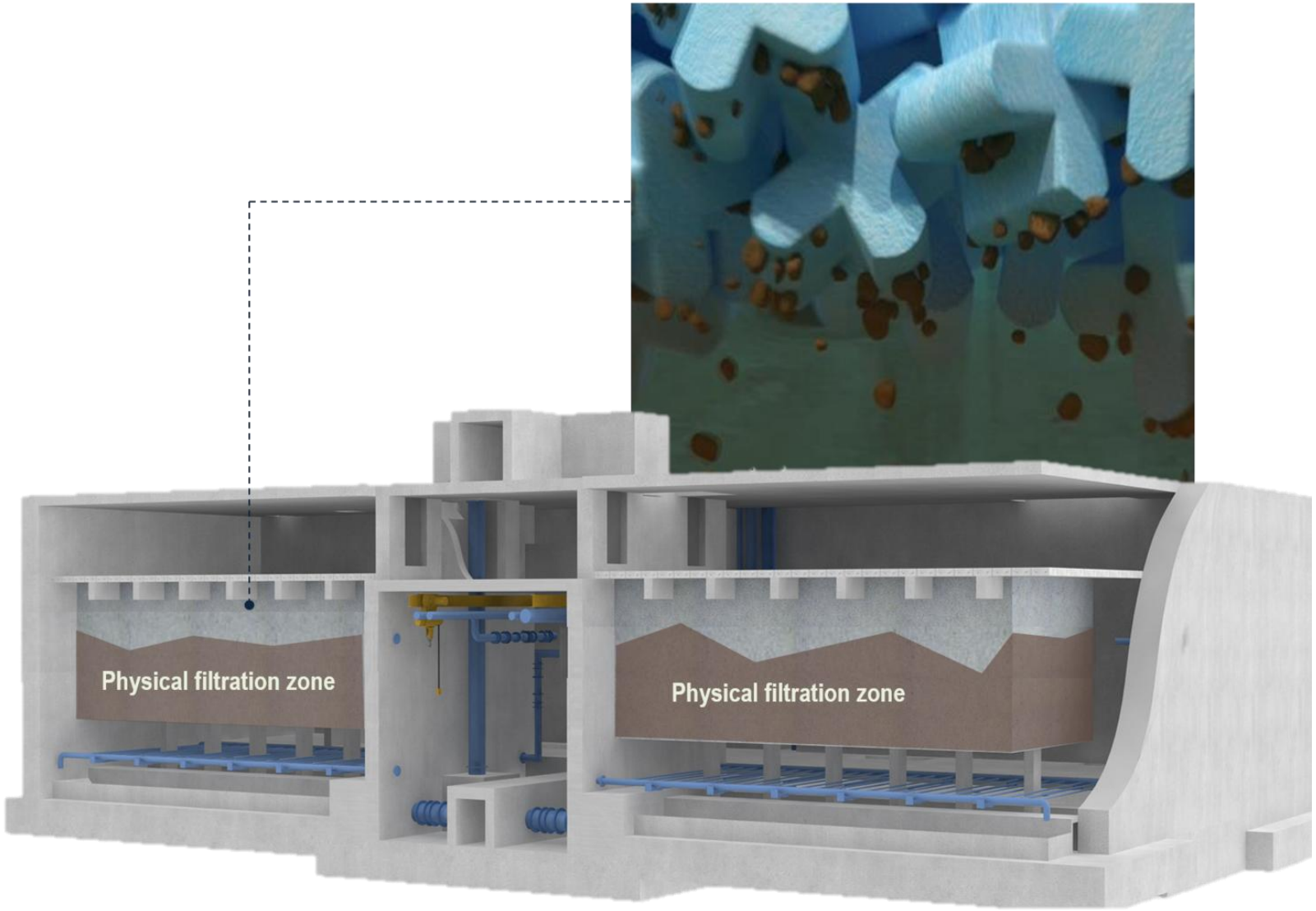


Alfa Laval – Iso-Disc

AS-H Iso-Disc® Cloth Media Filter

Wastewater Treatment: An untapped resource – Optimizing Treatment and Reuse

Tomorrow Water - Proteus



Alternatives Pricing*

Item name	AquaStorm	Iso-Disc	Proteus
Equipment price 316 SS	$ 3,510,000.00	$ 6,197,350.00	$ 3,984,240.86
Concrete volume (cu. yds.)	544.4	886	1111
Concrete price	$ 1,088,800.00	$ 1,772,000.00	$ 2,222,000.00
Total Price	$ 4,598,800.00	$ 7,969,350.00	$ 6,206,240.86

*Pricing does not include design, construction, OH&P, or contingencies. Expect an add-on of 100%

Next Steps & Updates

- Cloth Filter Technology
  - Engaged Regional Board in discussions – very positive results
    - Permit modifications
  - Perform alternatives analysis study - complete
  - Finalize construction estimate – to be determined
  - Include in 10-year CIP planning document once Basis of Design Memo is complete (July 2026)

Current Joint OLSD/CVSan Efforts

Force Main Condition Assessments

Status: In Progress

- Initial assessment is complete
- Includes As-built Inventory for 12 lift stations/force main locations and field visits performed by BKF Eng. Estimated Total Expenditures - $40,000 FY25/26
- Detailed condition assessment is split into 2 phases

Phase	Year	Scope
1	2026	Trojan, Bockman, Railroad, Canyon Drive
2	2027	Ralston, Clausen, Shawn, Monika, Blackstone, Deer Trail, Canyon Ridge, Wickman

Infectious Vector Study

Status: In Progress

- Scope: Study includes a review of legislation, requirements and guidelines for managing vectors: Flies, Rats, Cockroaches and Mosquitoes and includes a District policy for reporting vectors
- Status: Final report under review of Collection System Manager and Safety Specialist
- Total Budget: $$40,000

Treatment Plant Planning-Level Master Plan

- What is the goal of the plan and what do we want answered?
  - Summarize Technical Memos 1-5
    - TM 1 – Historical Influent Flow
    - TM 2 – Summary of Treatment Plant Capacity by Unit
    - TM 3 – Digester and Cogens
    - TM 4 – Review of Future Planning Scenarios
    - TM 5 – Equalization Basin Sizing
  - From Cost Share Agreement - Requests
    - Infrastructure Assessment
    - Future Needs and Growth
    - Current and Future Water Quality Standards
    - Risk Assessment

Treatment Plant Planning-Level Master Plan – Continued

- Structure
  - 75/25% Cost split
  - NTE $200,000 – if proposals come in above limit, then both boards to reconvene and discuss
  - Both boards to review quotes when received prior to execution of contract