



San Leandro Water Pollution Control 10 Year Capital Improvement Plan

h2oworks
san leandro wastewater treatment
Serving the Community. Protecting the Bay.



Capital Improvement Plan Goals

Goals:

- **Respond to changing regulations**
- **Maintain high-functioning facility**
- **Set a basis for ongoing cash flow management and sewer rate study**

Note: All CIP estimates in 2024 dollars



Plan Overview

Process:

Analyzed prior studies, current and upcoming regulations and each part of the treatment process.

Major findings:

- Nutrient removal will require plant upgrades
- Plant benefits from recent \$50M rehabilitation project, which improved the liquid processing facilities
- Solids handling processes due for upgrades over the next 10 years
- Recommend full sewer line replacements



Harmful Algal Blooms (HABs)

- Algal bloom in San Francisco Bay killed thousands of fish in 2022.
- Algae use nitrogen as a nutrient and sunlight to grow. When they die, the decay causes a drop in dissolved oxygen in the water, which causes fish mortality.
- SF Bay has historically been resistant to nitrogen, but that is waning because of climate change and increased water clarity.
- In July 2024, the SF Bay Regional Water Quality Control Board (“Water Board”) mandated 40% reduction in nitrogen discharged to SF Bay levels by 2034.
- Removing nitrogen from wastewater requires treatment plant upgrades. Estimated SF Bay-wide cost is \$11B. 2018 Nutrient Study estimated capital costs of \$60M for San Leandro.



Photo: Ingrid Taylar, <https://www.flickr.com/photos/taylor/>

Nutrient Strategy

- Implement Treatment Wetland project, which will be approximately 15% - 20% reduction. Current cost estimates are \$9.5M, but \$6.7M in grants already secured.
- Engage experts to identify cost-effective strategies for nutrient reduction.
- Develop implementation plans that can be used to apply for grants
- Set aside \$2M per year for nutrient expenses, which will be refined over the first years of the 10-year planning period.



Collection System Renewal Program

- City has about 125 miles of sanitary sewer, with some pipes are approaching 100 years old
- Recommend replacing 1% of the system per year
- Target areas that are most in need of replacement first
- Set aside approximately \$2.2M annually to fund program

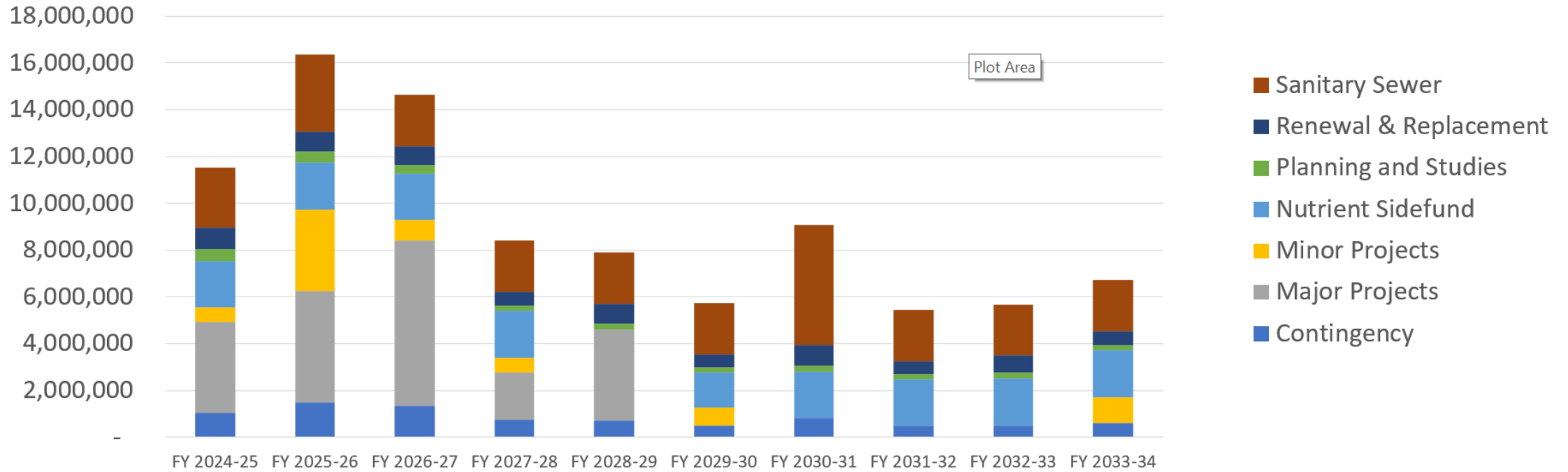


Other Major Items

- Solids handling and processing
 - Digester 1 & 2 Improvements
 - Belt Press Replacement
 - Thickening upgrade
- Effluent Pump Station
- Complete energy efficiency project
- Remove old Fixed Film Reactor



CIP Expenditure by Year and Type



What's next?

October 2024: Appropriate funds \$2,660,000 for FY 2024-2025 capital program

Early 2025: Complete sewer rate study, which will include cash flow analysis and recommend rate increases

Spring 2025: Commence Prop 218 process to set sewer rates



Questions?

