City of San Leandro

WATER POLLUTION CONTROL DIVISION CIP UPDATE

Facilites and Transportation Committee

AGENDA

1. Facility Overview
2. CIP Plan Overview
3. Nutrient Reduction Plan
4. Sanitary Sewer System
5. Implementation Next Steps

SERVING THE COMMUNITY

We have been proudly serving the community for over 85 years. The City's wastewater treatment plant has been in operation since 1939, and the most recent upgrade was completed in 2017.

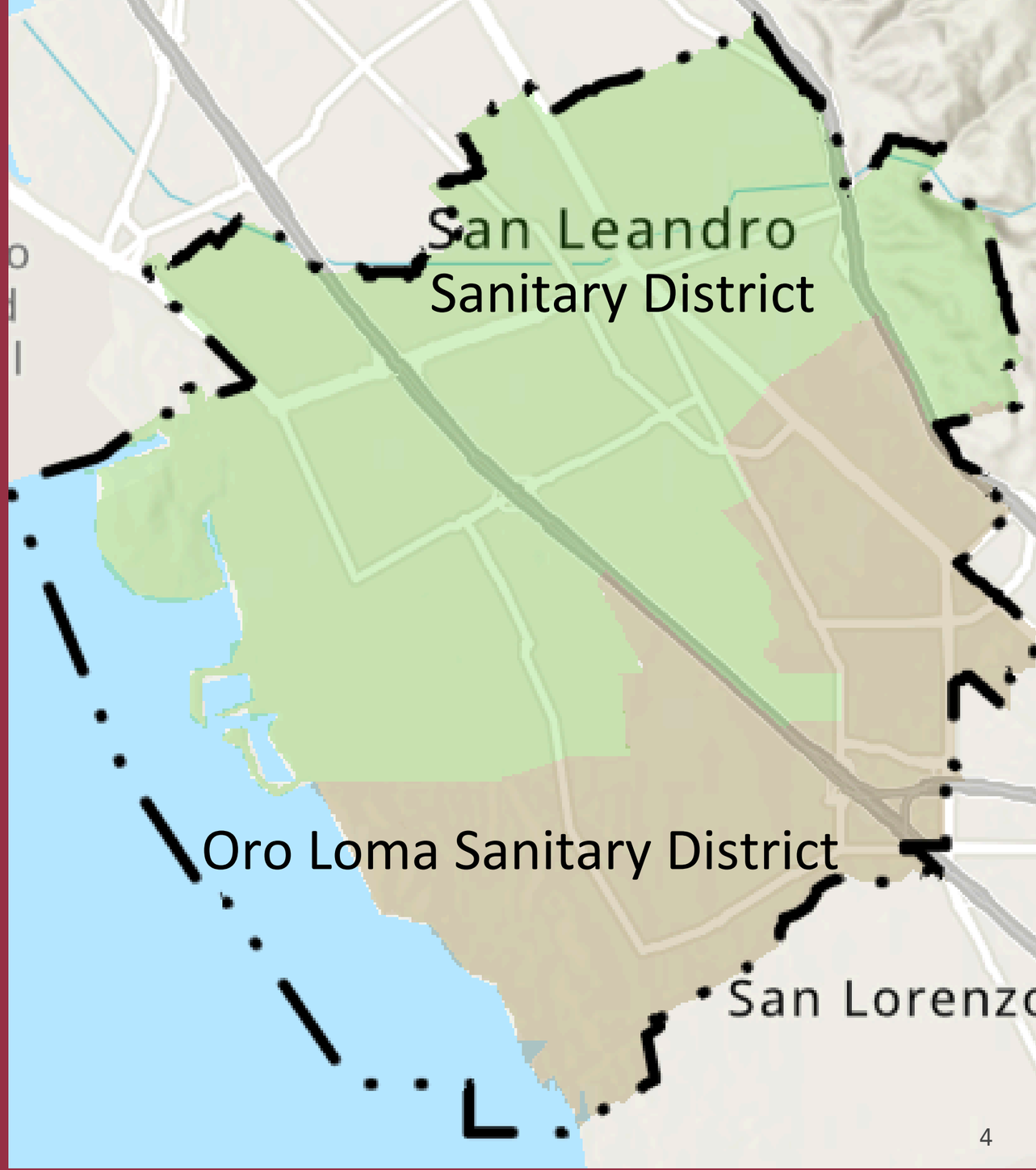
~5 Million Gallons per Day (MGD)

CITY SEWER SERVICE AREA

125 miles of sewer pipeline

12 Lift Stations

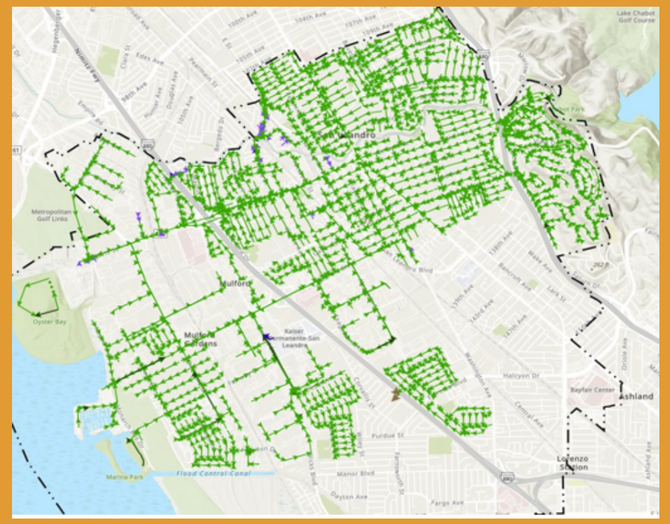
One Treatment Plant



WASTEWATER TREATMENT

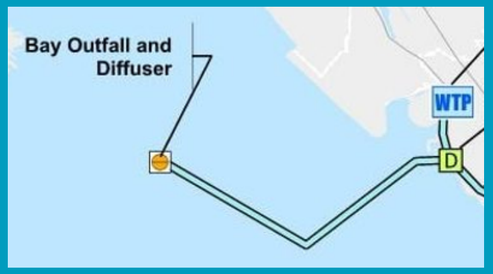
Water Pollution Control Division has a mission of protecting public health and the environment through the collection, treatment, and disposal of treated wastewater and processed solids.

COLLECT

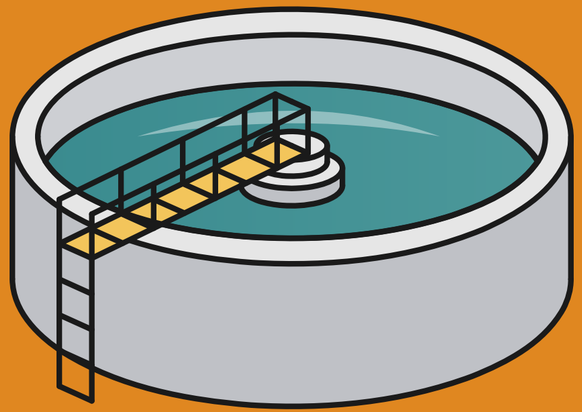


TREAT

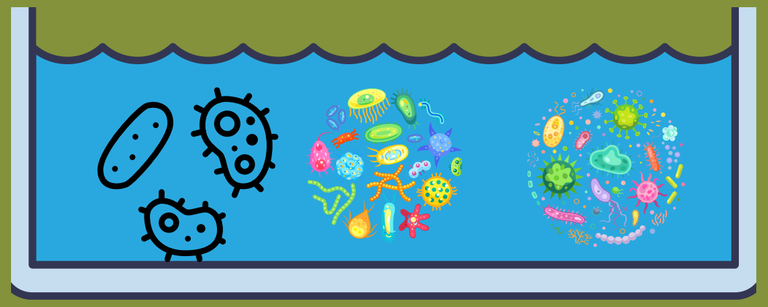
DISPOSE



TREATMENT PROCESS



Mechanical



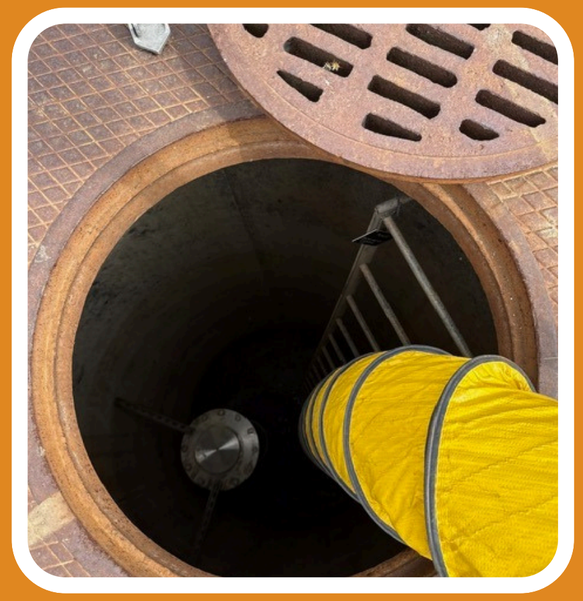
Biological

Chemical

CIP PLAN OVERVIEW

1. Respond to changing regulations
2. Maintain a high-functioning, reliable system
3. Set a basis for ongoing cash flow management

Nutrient Reduction



Sanitary Sewer Repair & Replacement

10 Year Plan

$97,000,000

Approved in 2024

NUTRIENT REDUCTION


Protecting You and the Bay | Clean Water Infrastructure
BACWA Bay Area Clean Water Agencies
Watch on YouTube

PRIORITY PROJECTS

Treatment Wetland

Aeration Basin Reconfiguration

Sidestream


Protecting the Bay, one step at a time
City of San Leandro
City of San Leandro
CITY COUNCIL PRIORITIES
INFRASTRUCTURE
Watch on YouTube

PILOT IN PROGRESS

- Project uses advanced technology to prepare the water
- Provides energy efficiency in a smaller footprint and lower installation costs
- Unit is currently being tested at the WPCP

NEXT STEPS

1. Phase 2 Design
2. Bid
3. Contracting
4. Phase 2 Construction

AERATION BASIN

- Utilize standby aeration basin
- Create two-step process for removing nitrogen
- Estimated project cost, including other needed improvements in the area: $12,000,000

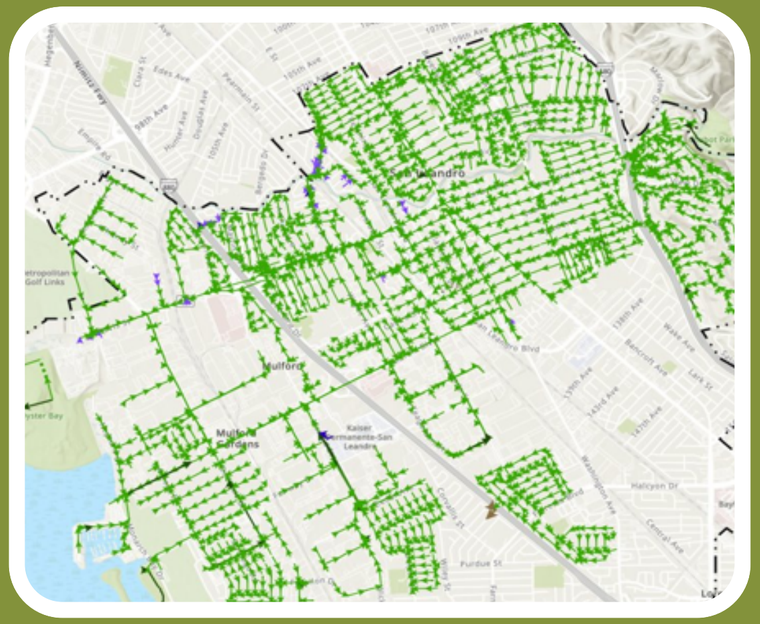
SIDESTREAM

- Water removed from solids processing is nutrient rich
- Treating by itself is more efficient
- New technologies available may capture nutrient in useful form
- Need more research - identify technologies to pilot
- Only installed if necessary
- Costs dependent on technology

SANITARY SEWER SYSTEM

SEWER SYSTEM

- 125 miles of pipeline
- Material is mostly clay
- Aging infrastructure
- $2,000,000 Budgeted per year



SEWER PIPELINE REPAIR

1. Project starting soon will fix 72 problems, replace 7 pipes and upgrade 30 manholes.
2. Updating software to improve how issues are identified and tracked for fix/replacement
3. Research sources of inflow & infiltration

CIP IMPLEMENTATION

- Requires additional support for program management, design, and construction management
- Completed an RFQ to identify qualified firms to assist with capital projects
- Establishing contracts with firms streamline design and construction phases

CIP IMPLEMENTATION COST

- On Call Agreements
  - 3 Firms-Design: $3M each
  - 3 Firms-Construction Management: $1.5M each
  - 1 Firm-Project Management: $800K

QUESTIONS?