

CULTURE

COMMUNITY

CLIMATE



 WEST COUNTY
WASTEWATER

AGENDA

- Introduction
- Introduction to Capital Projects
- Clean & Green Project
- Force Main
 - Lakeside
 - Hilltop Green
- Sea Level Rise Protection
- Agency Coordination
- Questions

WEST COUNTY WASTEWATER (WCW): WHAT DO WE DO?

- In December 2021, West County Wastewater (WCW) celebrated its 100th Anniversary
- For 100 years, WCW has run the Water Quality & Resource Recovery Plant (WQ&RR) in Richmond, California
- West County's wastewater goes through a series of physical, biological, and chemical processes to meet state and federal regulations
- At the end of the process, WCW wastewater is safe and clean enough to be used for other uses or discharged to the San Francisco Bay



WHERE IS WEST COUNTY?

WCW's Service Area covers:

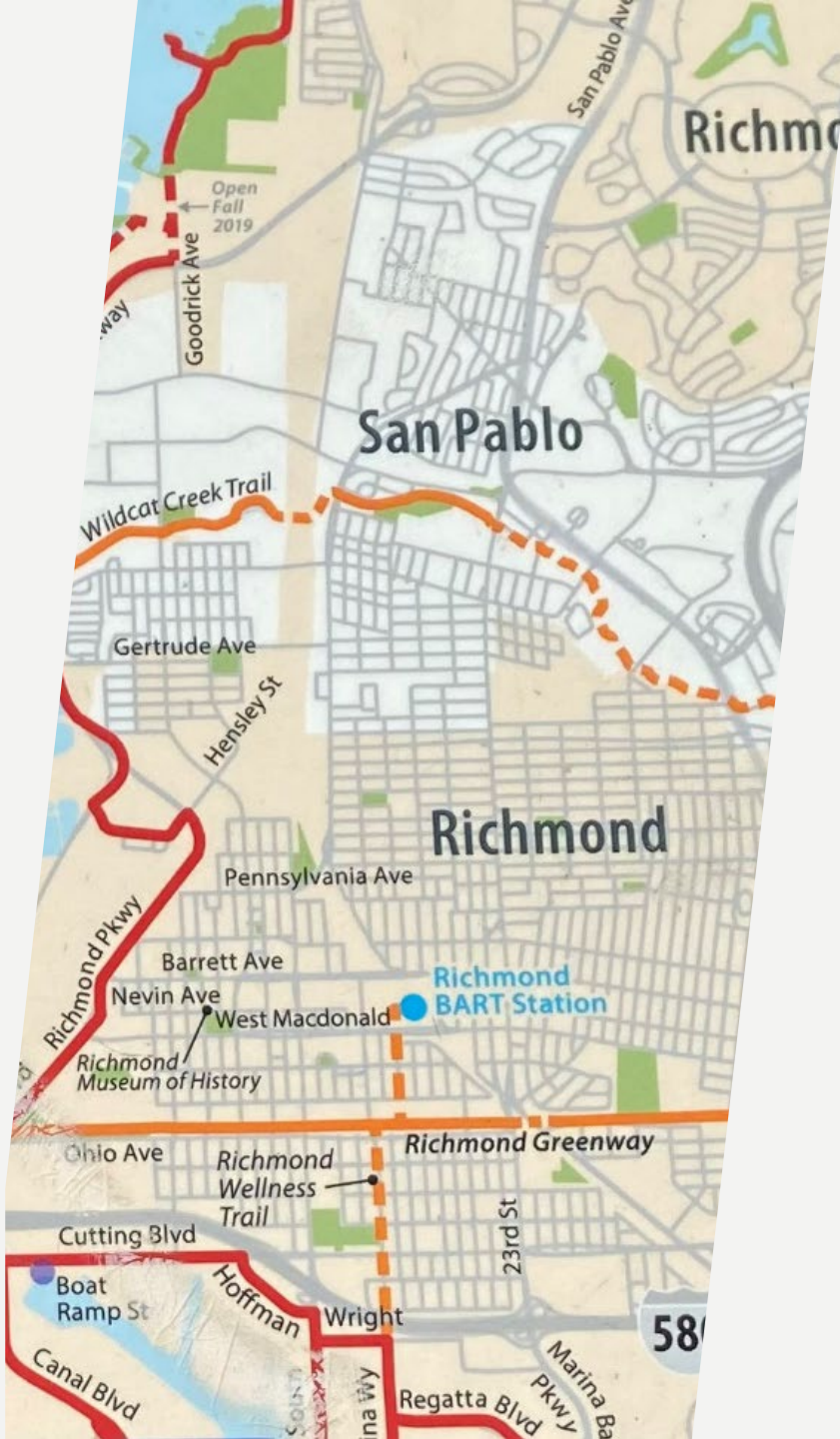
- The City of San Pablo
- Tara Hills neighborhood
- Northern subdivisions of Richmond
- Designated sectors of the City of Pinole
- El Sobrante
- Rollingwood
- Bay View
- Parts of unincorporated Contra Costa County

WCW serves approximately:

- 34,000 residences
- 900 commercial and industrial businesses
- A total population of 100,000 residents

WCW service area covers almost 17 square miles, and:

- Contains about 250 miles of underground pipes
- Contains 6 miles of force mains



THE WORK WE DO



- ❑ Operate sewer mains and monitor sewer pipes
- ❑ Maintain Lift Station & respond to sewer-related problems
- ❑ Monitor businesses and industries' sewer discharge
- ❑ Keep sewers clear of debris & roots
- ❑ Run a certified, environmental laboratory
- ❑ Educate the community about how to protect pipes and pollution
- ❑ Maintain all WCV facilities
- ❑ Keep our employees, waterways, and the public healthy and safe from the dangers of polluted water

PUBLIC OUTREACH & EDUCATION

WCW's Environmental Programs Division does extensive public outreach to remind people about **Fats Oils, & Grease (FOG)**, and wipes.

Outreach includes:

- Social media campaigns
- Special events throughout West County
- Classroom visits
- Hand-outs including magnets, door-hangers, and other materials distributed to businesses and residents, including apartment complexes



LIFT STATIONS

Lift Stations are structures located all around the sewer network that house equipment including pumps.

The purpose of a Lift Station: lift stations are designed to lift, pump, and move wastewater from lower elevations to higher elevations so sewage can flow down through pipes installed at a gradual slope.

WCW maintains 20 Lift Stations.

WCW's Collection Systems Division oversees the 24/7 maintenance of pipes from where laterals meet sewer mains and continue all the way to the VQR&R.



THE FUTURE OF WCW

In the spring of 2022, WCW embarked on the Clean & Green Project, a comprehensive energy and sustainability upgrade for our WQR&R, which will improve many Plant processes, especially those related to the handling of solids.

It will also reduce WCW's carbon footprint by:

- Reducing emissions of greenhouse gases
- Producing renewable electricity
- Reducing electricity produced by burning fossil fuel
- Enhance reliability for the next century



**CLEAN & GREEN PROJECT
FORCE MAIN PROJECTS
SEA LEVEL RISE PROTECTION
CITY OF RICHMOND**

CAPITAL PROJECTS DIVISION



**WEST COUNTY
WASTEWATER**

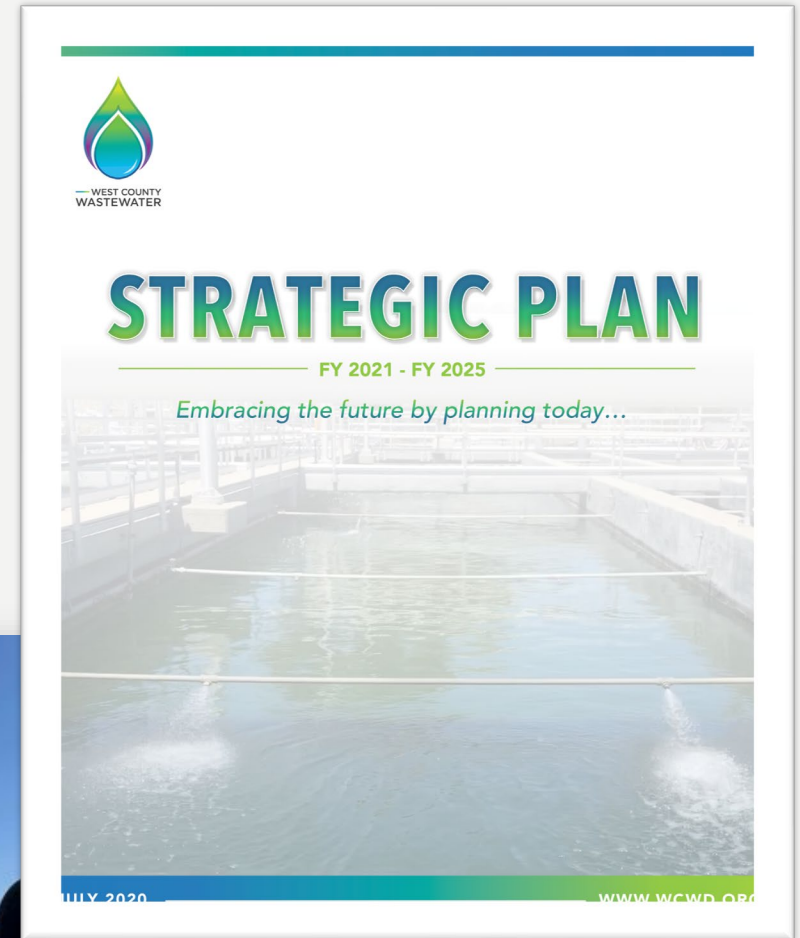
CLEAN & GREEN OVERVIEW

The purpose of the project is to reduce energy consumption and Green House Gases (GHG) emissions, improve operational safety and efficiency, and improve the quality of the biosolids produced.

These goals are consistent with the goals of the West County Wastewater strategic plan:

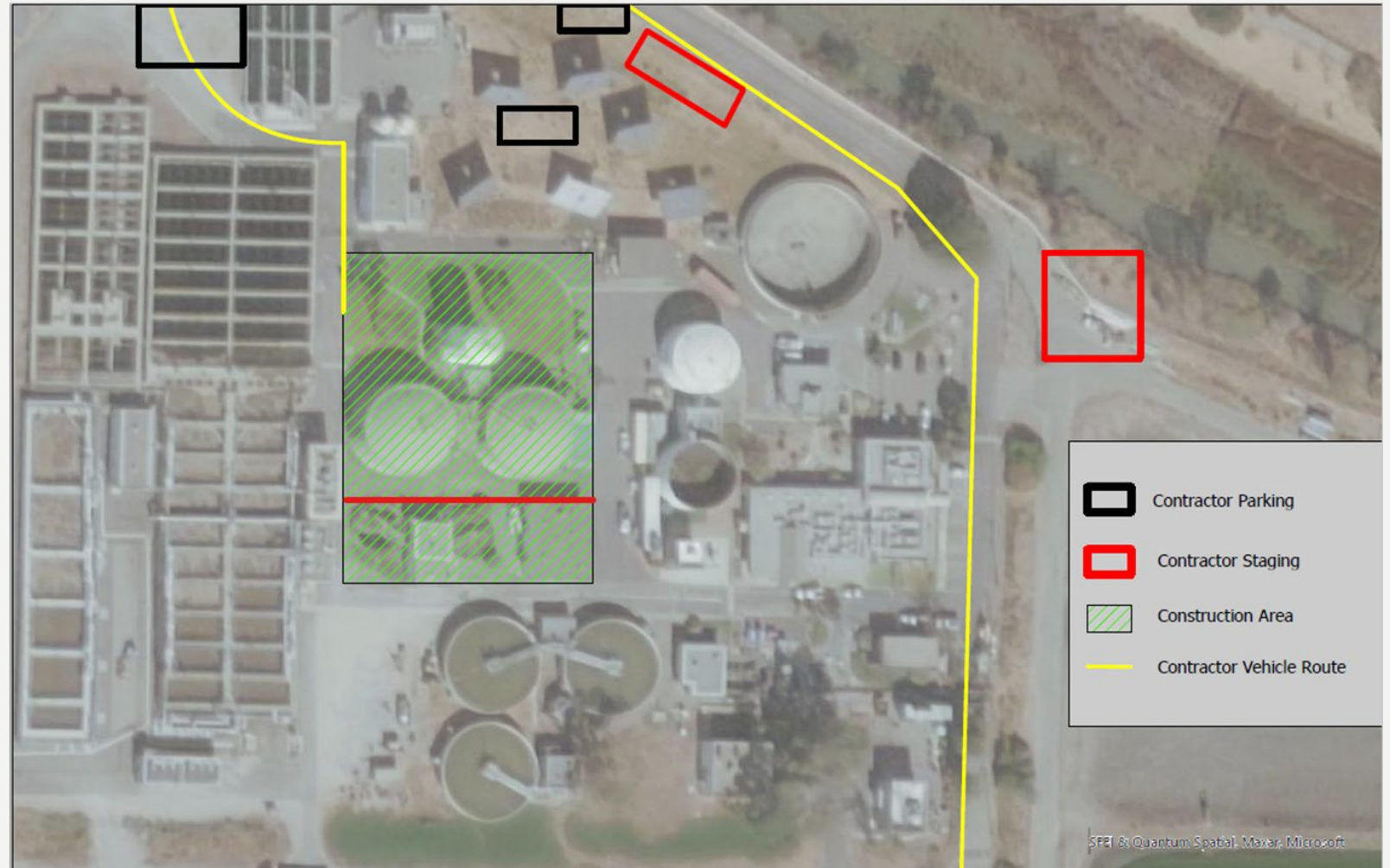
Adopt infrastructure maintenance and modernization strategies

- Adopt infrastructure maintenance and modernization strategies
- Environmental Steward
- Community Engagement



CLEAN & GREEN

- Demolition of existing digesters
- New digesters and appurtenant equipment
- New dryer building and appurtenant equipment
- Headwork channels
- Modifications to existing thickener building
- Modifications to Primary Clarifier Pump Stations
- Aeration Blower



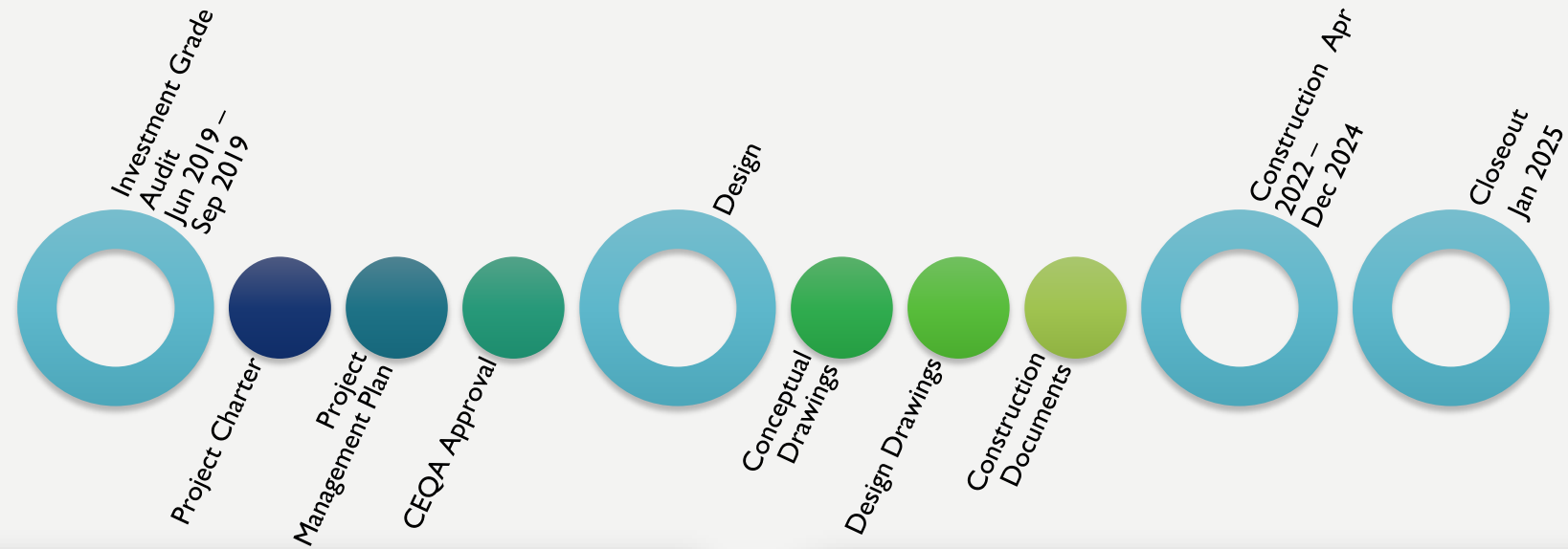
Water Quality Resource and Recovery Plant

CLEAN & GREEN



Solar

CLEAN & GREEN



Clean + Green Project

FORCE MAIN REPAIR & REPLACEMENT

The purpose of the Force Main Repair and Replacement program is to improve operational safety and efficiency by installing a dual force main system to allow the diversion of flow from the primary line to the redundant line should a failure occur.

This goal is consistent with the goals of the West County Wastewater Strategic Plan:

- Adopt infrastructure maintenance and modernization strategies that maximize performance, reduce risk and ensure reliable service



FORCE MAIN OVERVIEW



Lakeside

- Richmond (Hilltop **Lake**)
- **3,214 LF**
- Jan 2021 – Sept 2022



Hilltop Green

- Richmond (**Hilltop Park**)
- 1,744 LF
- 11/21-2/23

FORCE MAIN REPAIR & REPLACEMENT



Lakeside Force Main

FORCE MAIN REPAIR & REPLACEMENT



Hilltop Green

SEA LEVEL RISE PROTECTION

The purpose of the project is to protect critical infrastructure and to implement best practices with multi-agency coordination as this project will have impacts across the region.

These goals are consistent with the goals of the West County Wastewater strategic plan:

- Adopt infrastructure maintenance and modernization strategies
- Environmental Steward
- Community Engagement

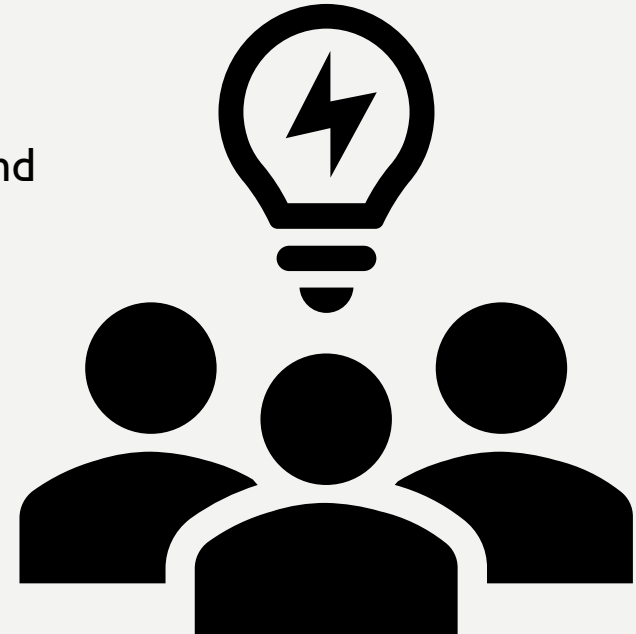


AGENCY COORDINATION

West County Agency

Utility Coordination

- Emergency Response
- Design Review
- Permitting
- Inspections
- Moratoriums
- Specifications and Standards
- Regional Utility Coordination Meetings led by City of Richmond





THANK YOU