EAST BAY MUNICIPAL UTILITY DISTRICT

Orinda Water Treatment Plant Disinfection Improvements Project

Orinda Masonic Lodge

August 26, 2019

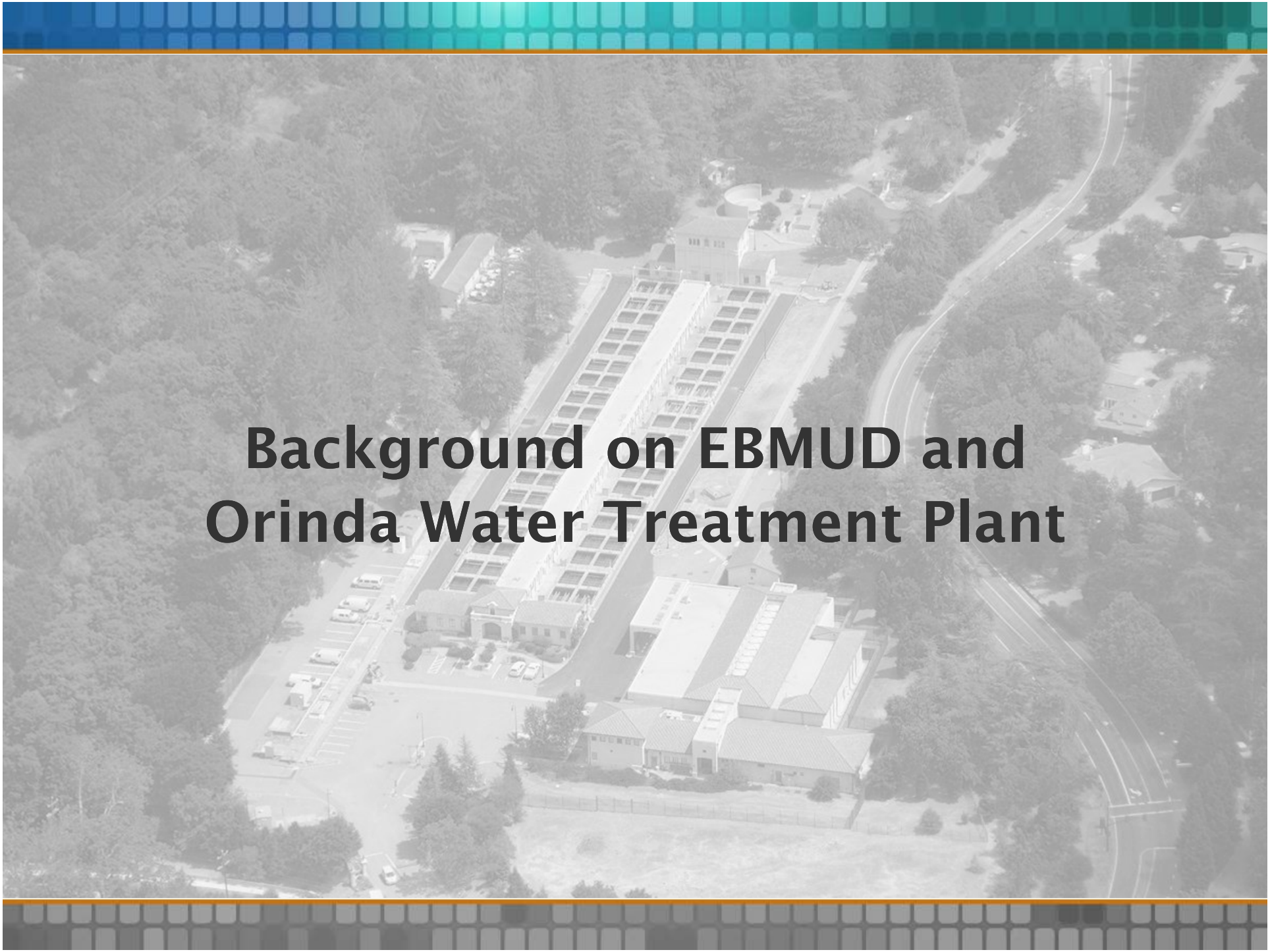
Project Team

- EBMUD
  - David Rehnstrom, P.E., Division Manager
  - Jeni McGregor, P.E., Senior Engineer
  - Chien Wang, P.E., Project Manager
  - Kathryn Horn, Community Affairs
  - Jeff Bandy, P.E., Design Project Manager
- Consultants

  Environmental Science Associates (ESA), CEQA Environmental Vision, Visual Simulations

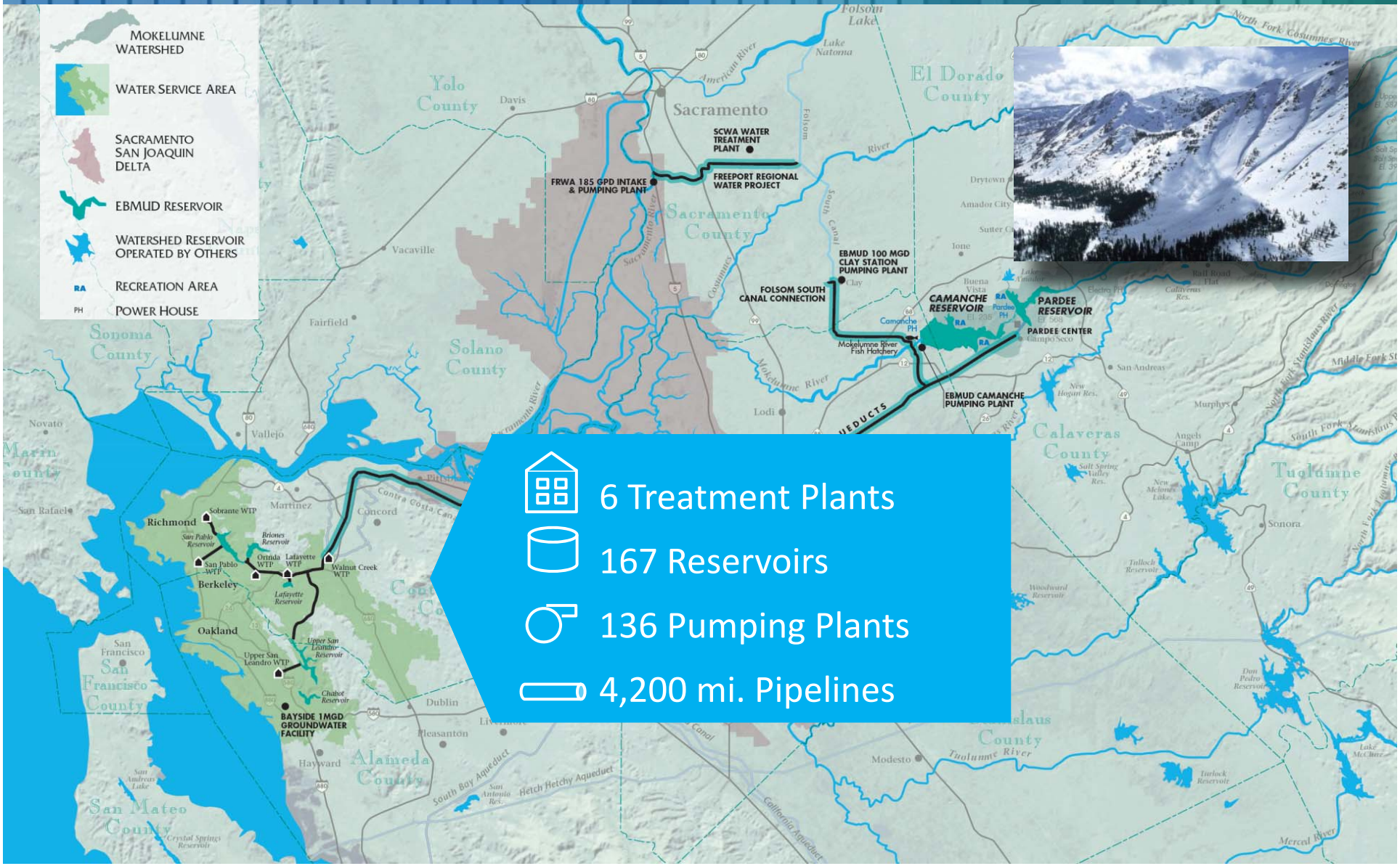
Agenda

- Background
- Project Purpose and Site Planning
- Visual Simulations
- Environmental Outreach and Next Steps
- Q & A

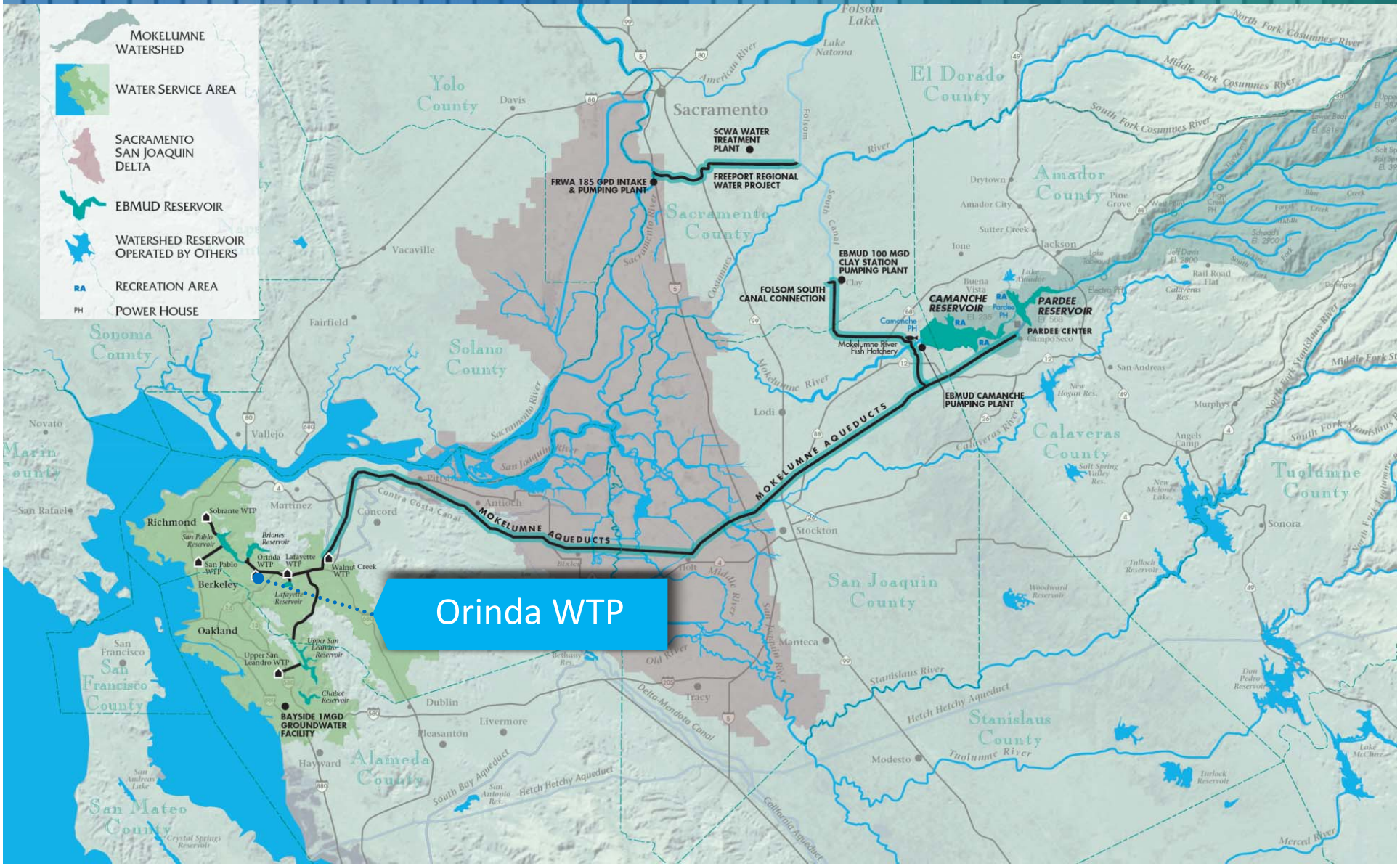


Background on EBMUD and Orinda Water Treatment Plant

EBMUD Water System



EBMUD Water System



Orinda Water Treatment Plant

- In service - 1935
- 190 MGD capacity
- Supplies water to both sides of the Oakland-Berkeley hills
- Operates year-round

Project Purpose and Site Planning

Project Purpose

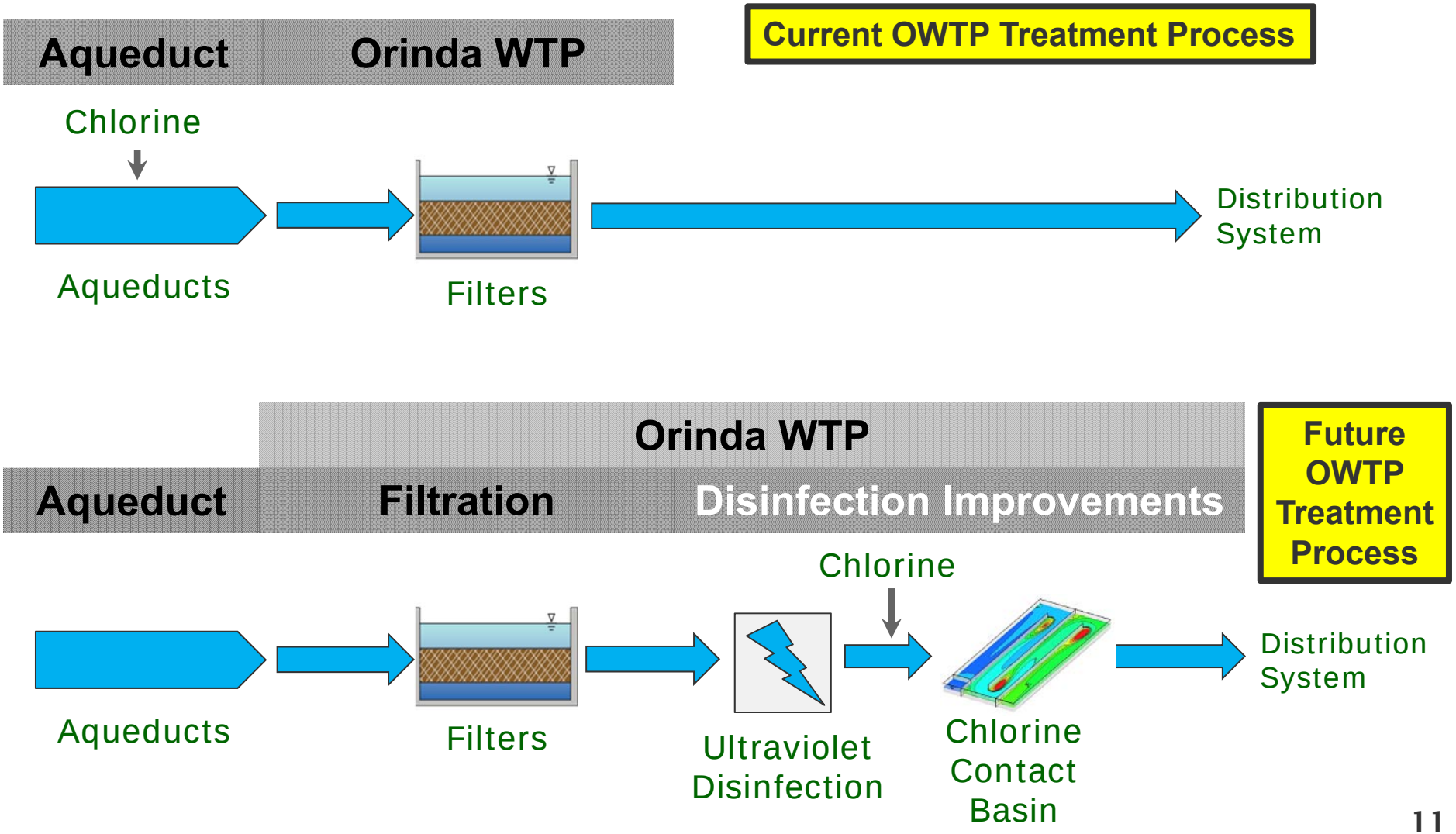
- Improve disinfection reliability to comply with changes in water quality regulations
- Better protect public health by adding a multi-barrier treatment process
- Reduce the formation of disinfection byproducts

Project Drivers

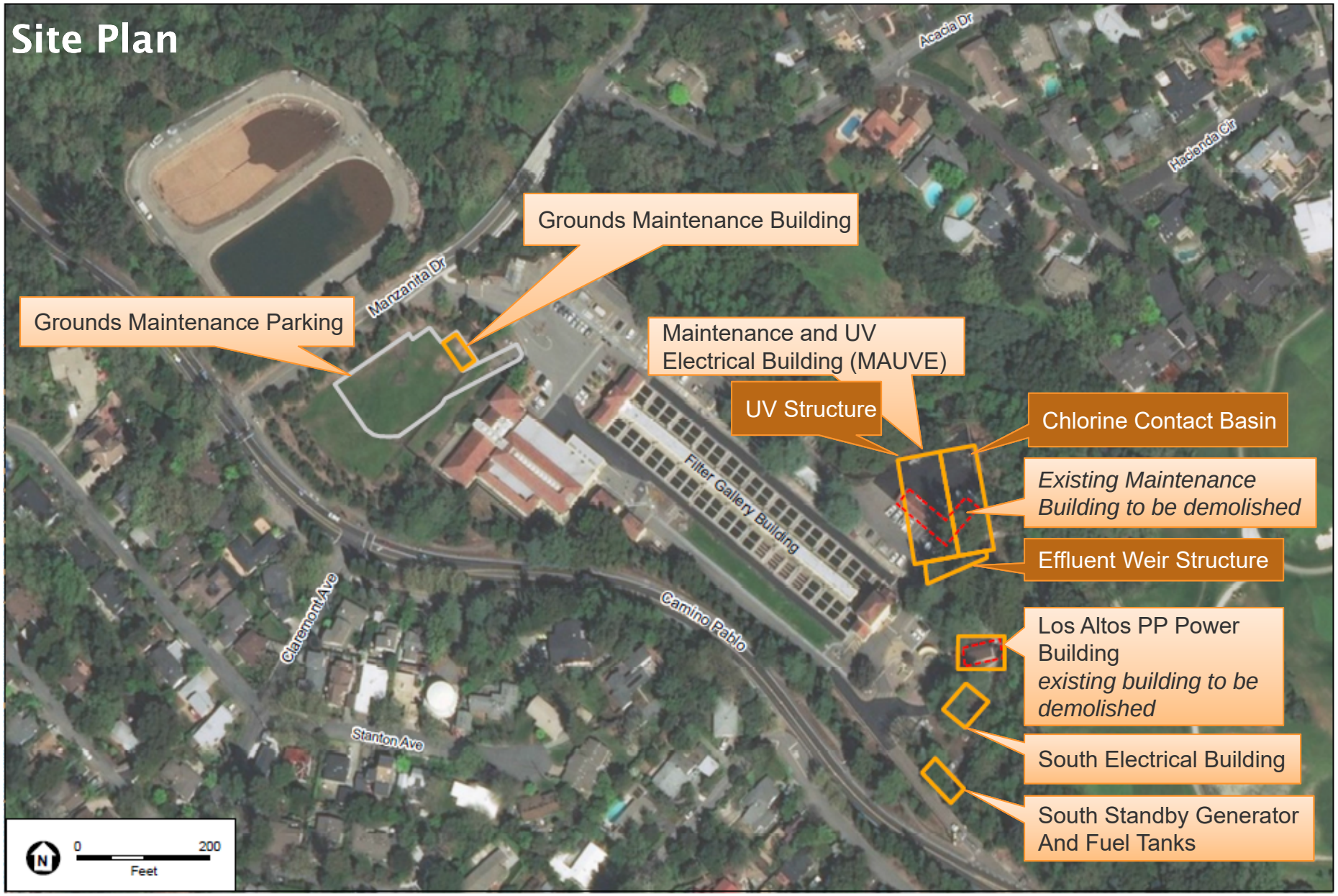
Disinfection Byproducts

- Trihalomethanes (THMs) are formed when chlorine reacts with naturally-occurring organic matter in water.
- Elevated trihalomethanes (THM) levels in EBMUD distribution system in the winter of 2016-2017, largely a result of the historic four-year drought.
- Immediate actions:
  - Increased sampling and system flushing
  - Adjusted water treatment operations
- Water quality tests since have shown reductions in levels of THMs
- The Project will make the Orinda WTP more adaptive to changes in source water quality which we anticipate will continue due to warming climates, fires in the watershed, and future droughts.

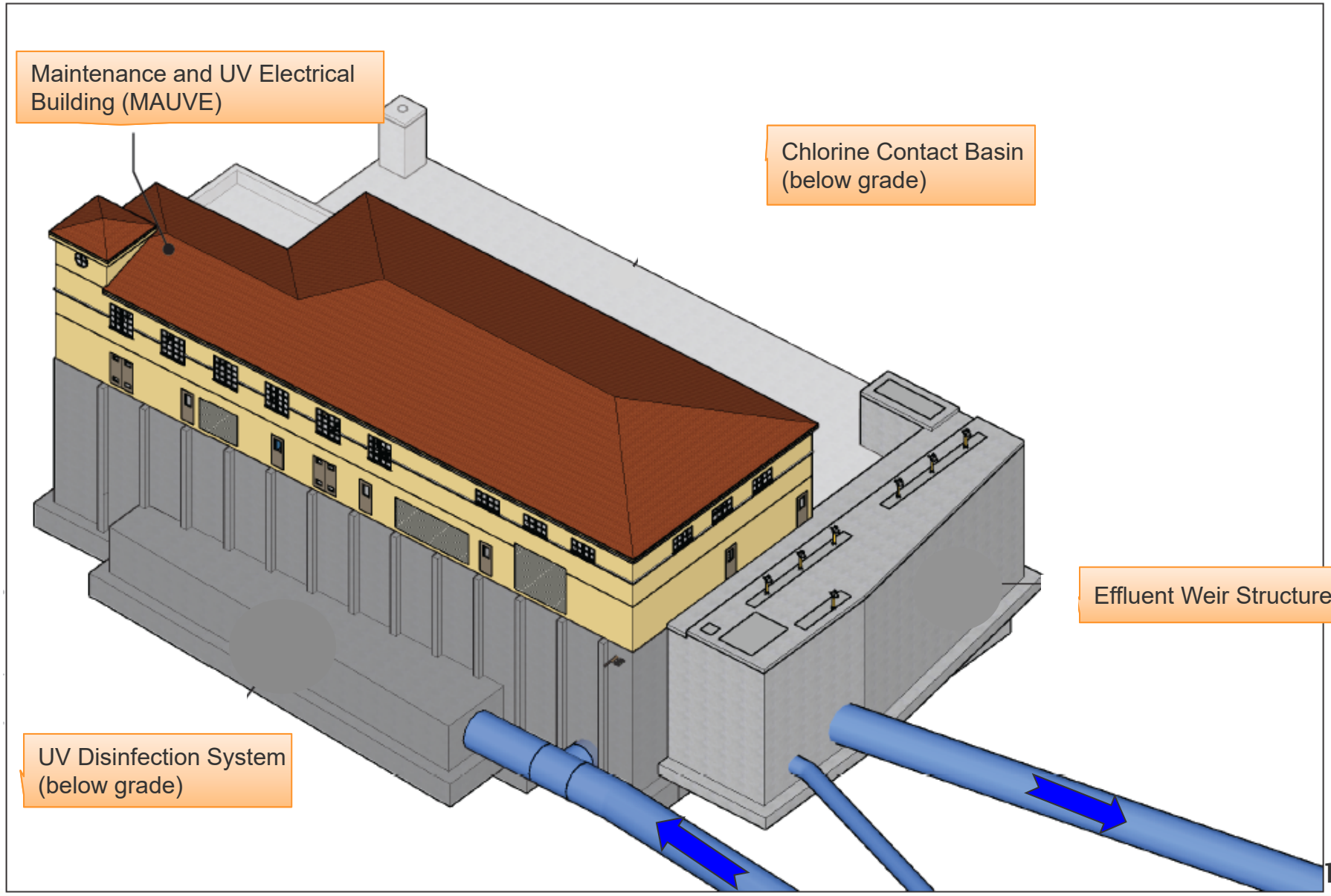
Project Description: Treatment Process



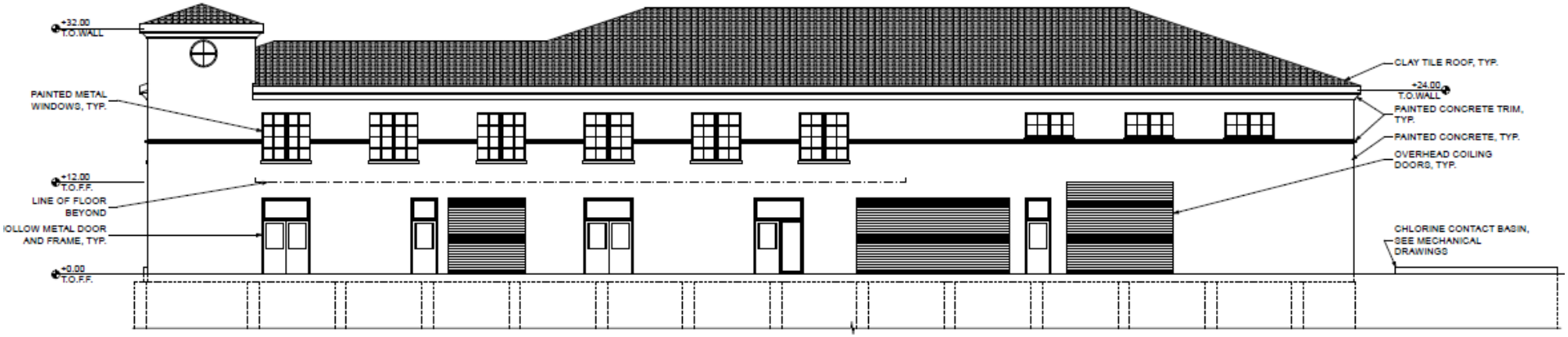
Site Plan


Acacia Dr
Hacienda Cir
Manzanita Dr
Grounds Maintenance Building
Grounds Maintenance Parking
Maintenance and UV Electrical Building (MAUVE)
UV Structure
Chlorine Contact Basin
Filter Gallery Building
Existing Maintenance Building to be demolished
Effluent Weir Structure
Claremont Ave
Camino Pablo
Los Altos PP Power Building
existing building to be demolished
Stanton Ave
South Electrical Building
South Standby Generator And Fuel Tanks
0
200
Feet

Orinda WTP Disinfection Improvements Project



MAUVE Building Architecture



Other Building Architecture

Other Building Architecture

Grounds Maintenance Building & Associated Parking

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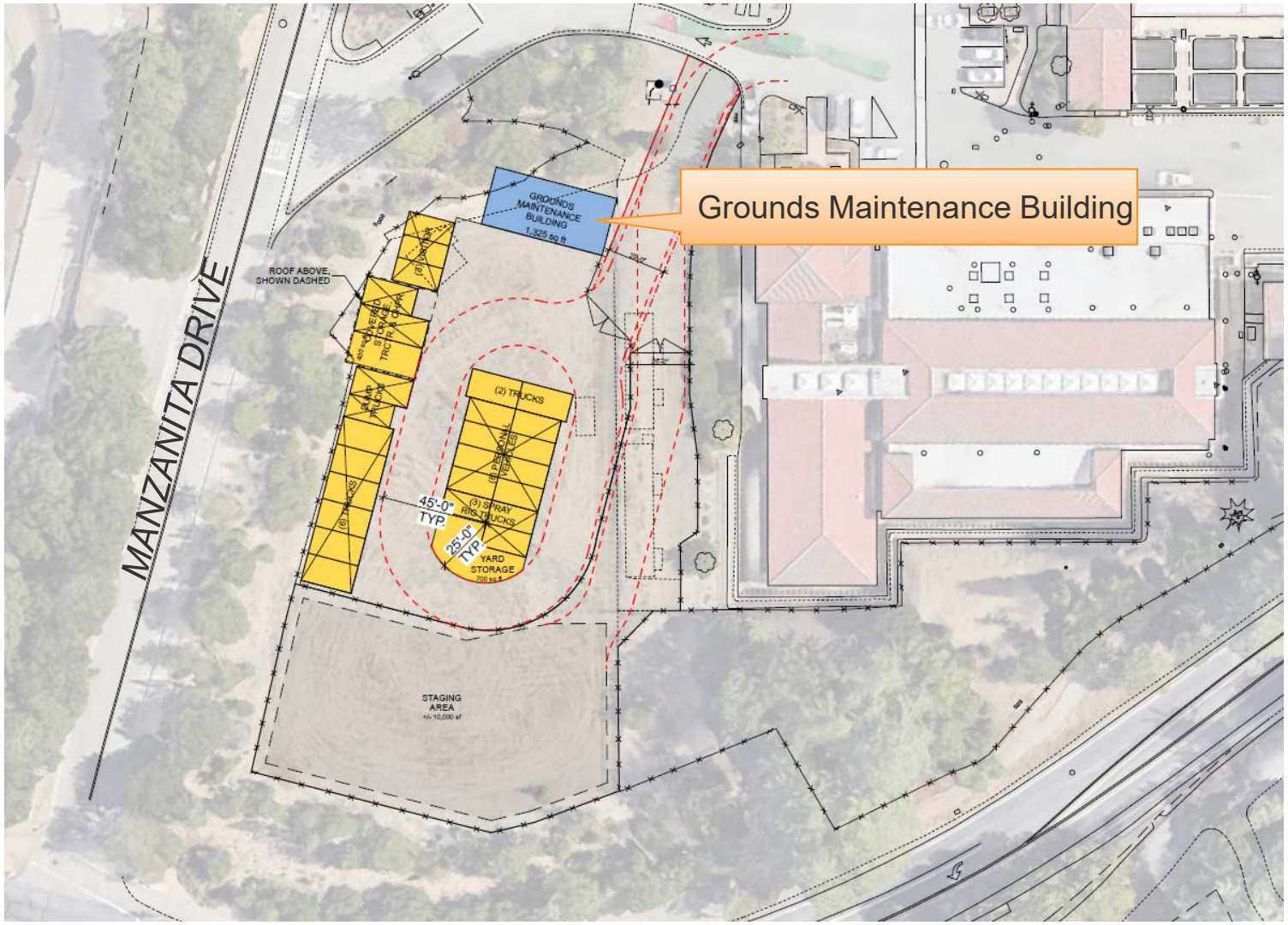
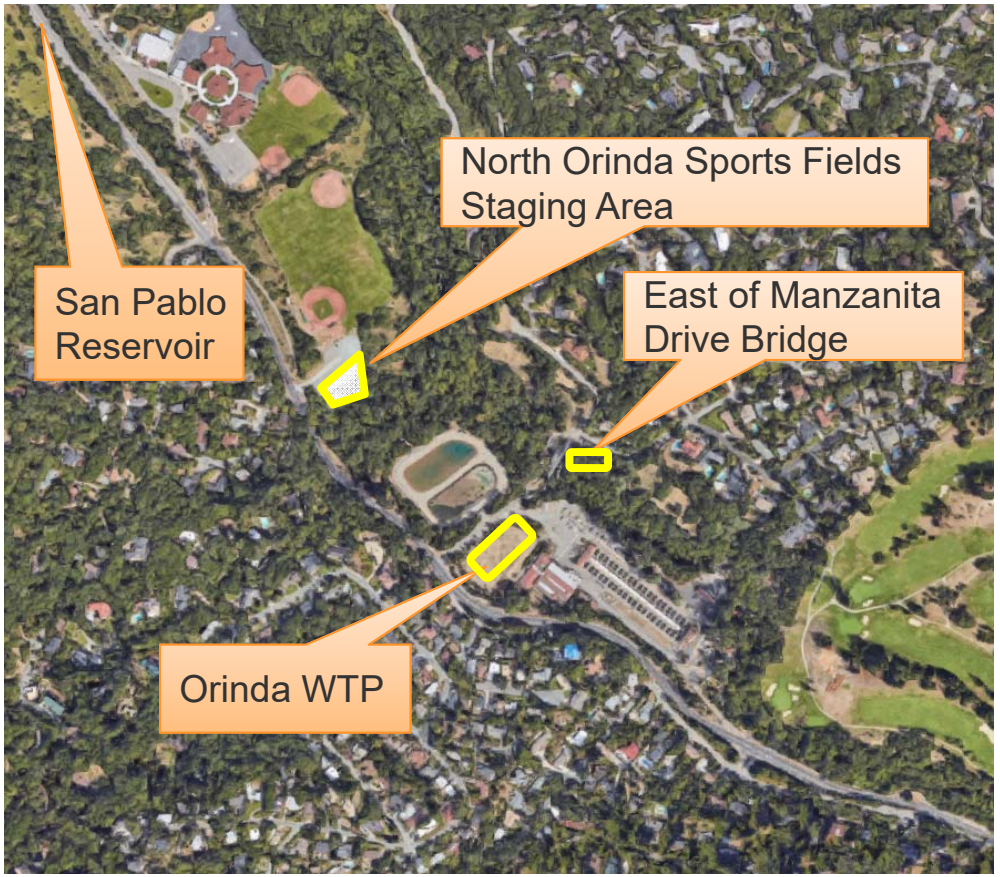


Staging Areas During Construction

- EBMUD San Pablo Reservoir overflow parking lots may be used for equipment and materials storage
- East of Manzanita Drive Bridge Area may be used for construction trailers and parking
- North Orinda Sports Fields Staging Area will be used for temporary relocation of maintenance staff during construction



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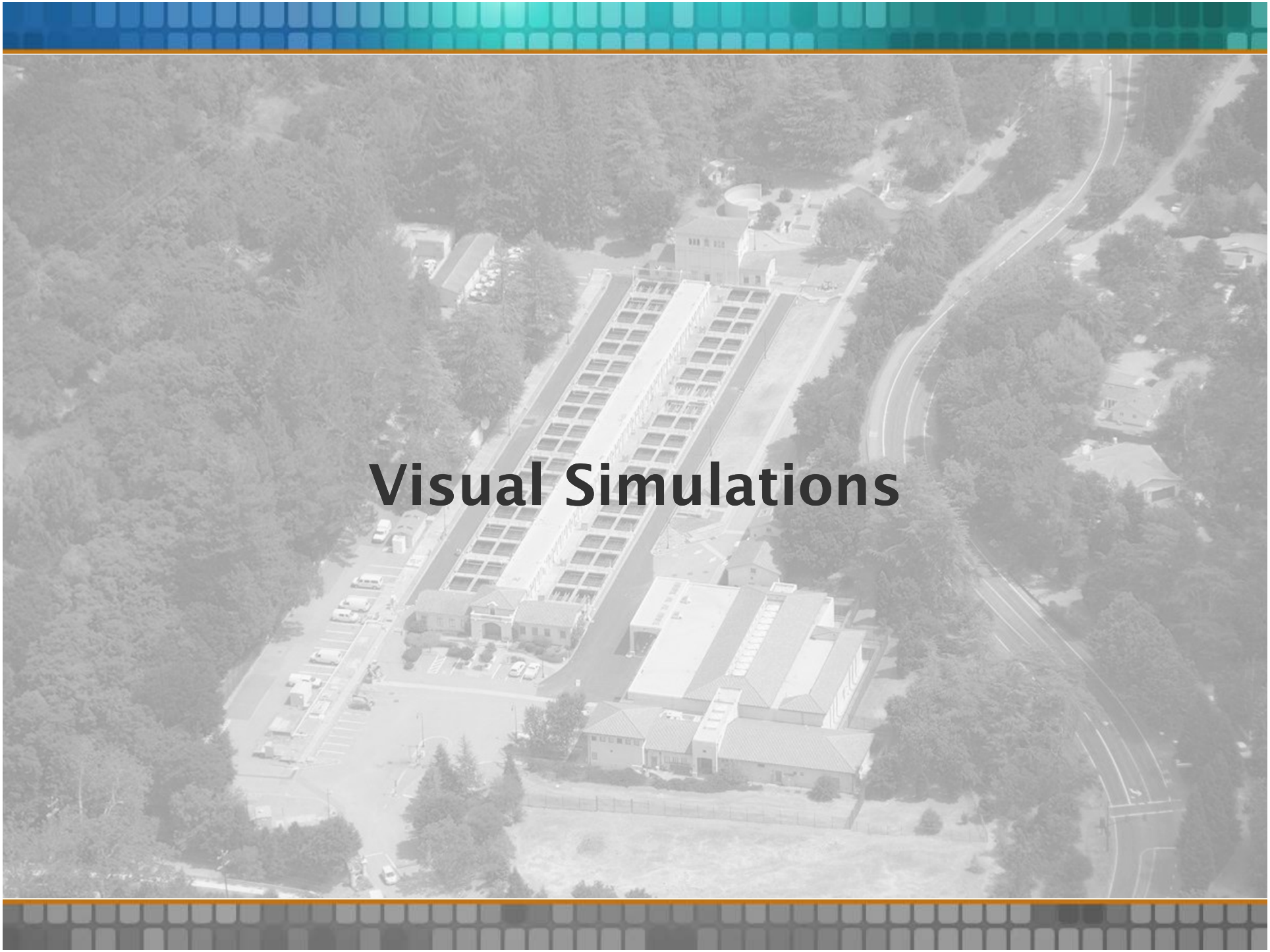

Visual Simulations


Viewpoints Map
VP 9
VP 13
VP 7
Grounds Maintenance Building
MAUVE/UV/CCB Complex
Two Electrical Buildings
South Standby Generator
VP 3
VP 1
Filter Gallery Building
Camino Pablo
Claremont Ave
Stanton Ave
Acacia Dr
Hacienda Cir
0
200
Feet

Existing View from Camino Pablo at Orinda WTP south entrance (VP 1)

Visual Simulation with Project

View from Camino Pablo at Orinda WTP south entrance

Viewpoints Map

Existing View from Camino Pablo near North Lane (VP 3)

Visual Simulation with Project

View from Camino Pablo at North Lane

Viewpoints Map

Existing View from Camino Pablo at Manzanita Drive (VP 7)

Visual Simulation with Project

View from Camino Pablo at Manzanita Drive

Viewpoints Map

Existing View from Manzanita Drive sidewalk at Orinda WTP north entrance (VP 9)

Visual Simulation with Project

View from Manzanita Drive at Orinda WTP north entrance

Viewpoints Map

Existing View from Manzanita Drive near Camino Pablo (VP 13)

Visual Simulation with Project

View from Manzanita Drive near Camino Pablo

Plant Screening – Preliminary Species

Trees

Redbud
Buckeye
Oak

Shrubs

Coffeeberry
Hollyleaf Cherry
Manzanita
Buckwheat
Lilac
Rock Rose


California Buckeye

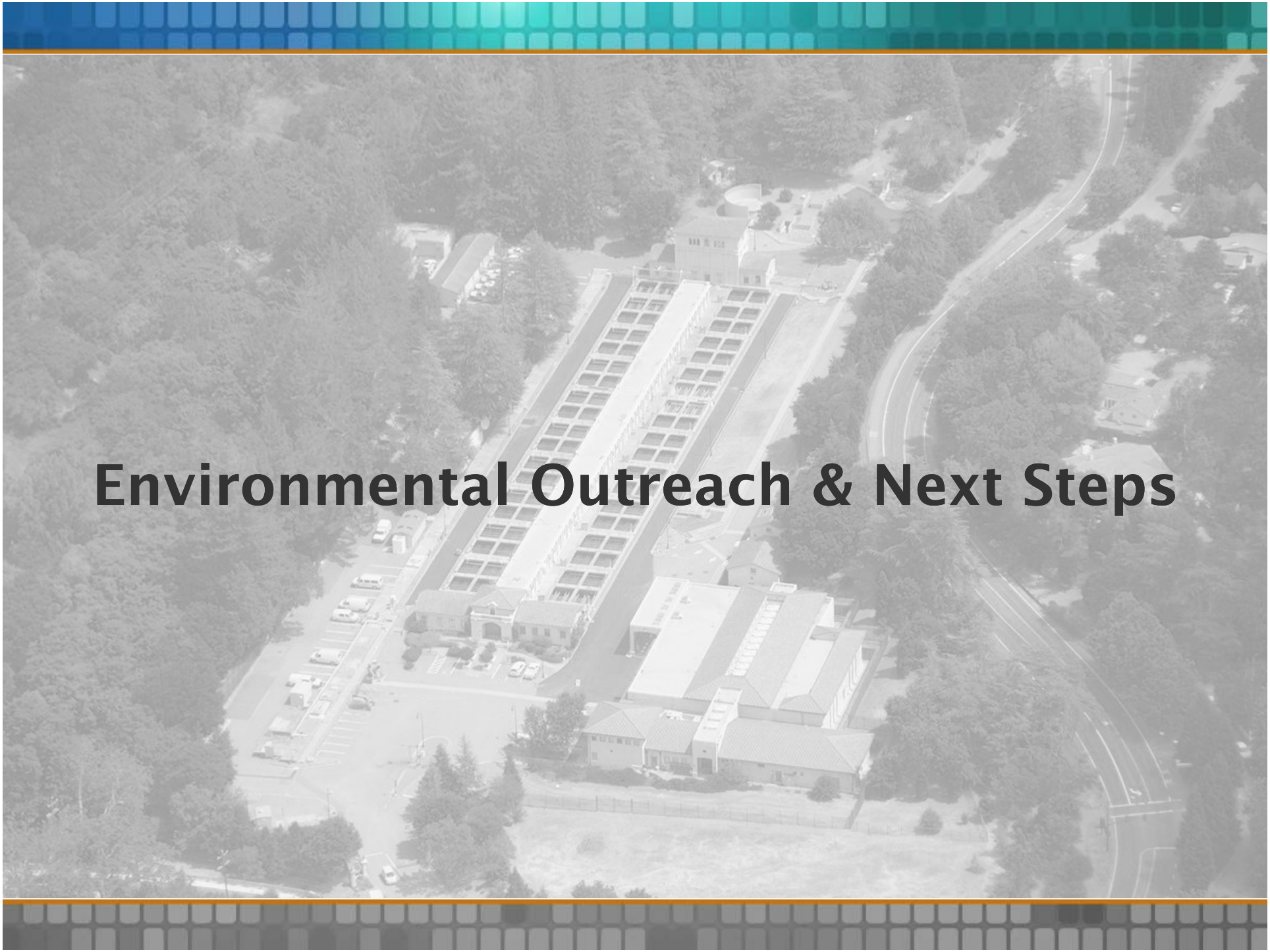

Hollyleaf Cherry


Lilac


Live Oak


Manzanita


Rock Rose



Environmental Outreach & Next Steps

Environmental Outreach

- Water Treatment and Transmission Improvements Program (WTTIP) Environmental Impact Report (EIR) included components of the project
- The WTTIP EIR was certified in 2006
- Project will develop a Supplemental EIR (SEIR) to the WTTIP EIR

What is an EIR?

- Purpose:
  - To inform the public of the environmental consequences of projects
- EIR is required:
  - When there is potential that a project may have significant impacts

SEIR Analysis of Impacts

Environmental Resource Category
Aesthetics
Air Quality
Biological
Cultural
Energy
Geology
Greenhouse Gases
Hazards
Hydrology
Noise
Public Services
Traffic
Wildfire

To be analyzed in the SEIR

Schedule and Next Steps

August 26, 2019
Notice of Preparation (NOP) Scoping Meeting
Community input on visual simulations

October 21, 2019
Community Meeting
Landscaping Presented
Community input on landscaping

2019
Start Environmental Review Process

Spring 2020
Draft Supplemental EIR (SEIR) Preparation

Spring 2020
Draft SEIR Public Meeting
Community input on environmental impact analysis

Fall 2020
Final SEIR & Project Approval

Winter 2020
Design Complete

2021-2025
Construction

Thank You

For additional information

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