

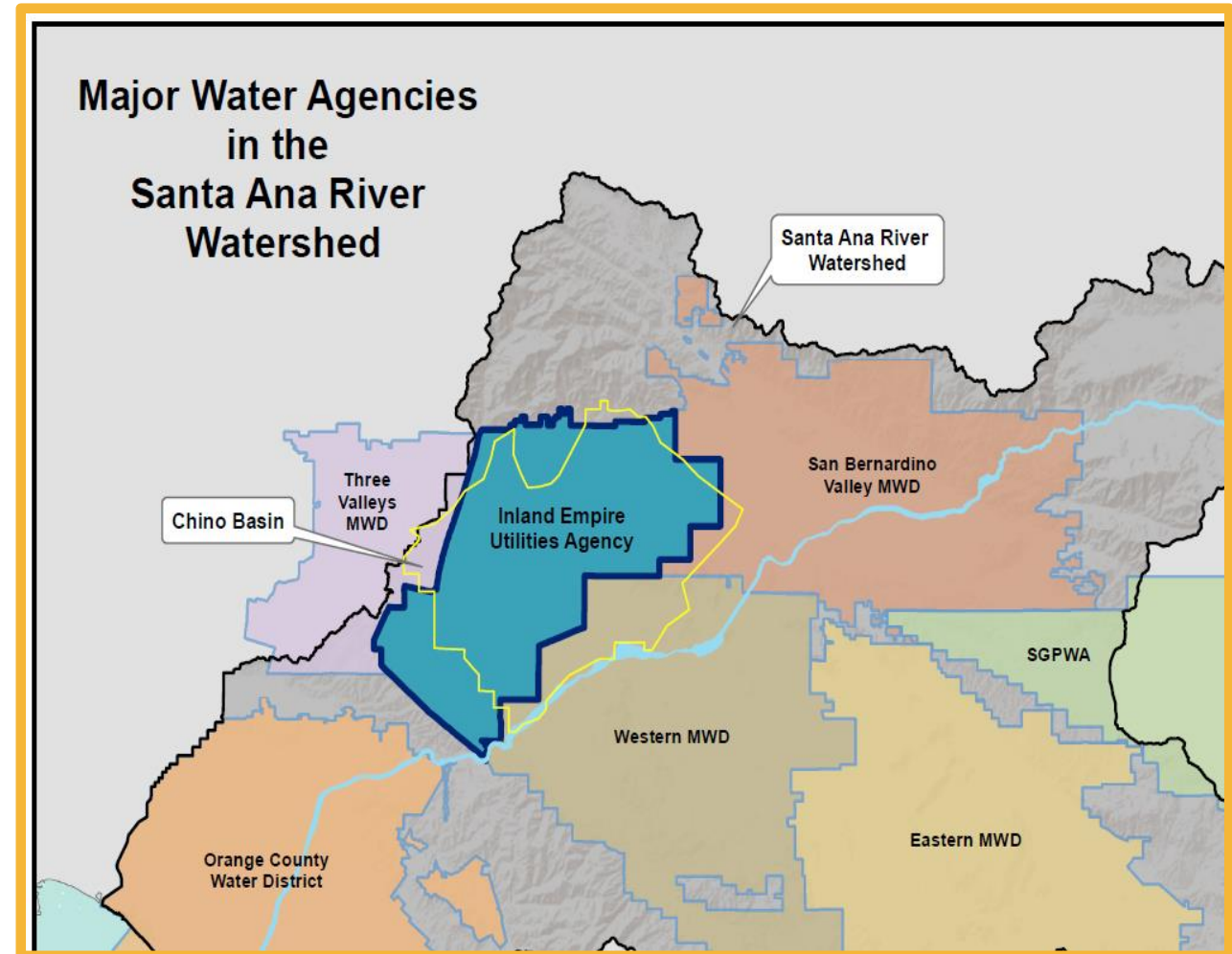
RP-5 Expansion Project Update:

August 2021
Project Nos. EN19001 and EN19006

Brian Wilson, P.E.
Senior Engineer
August 2021

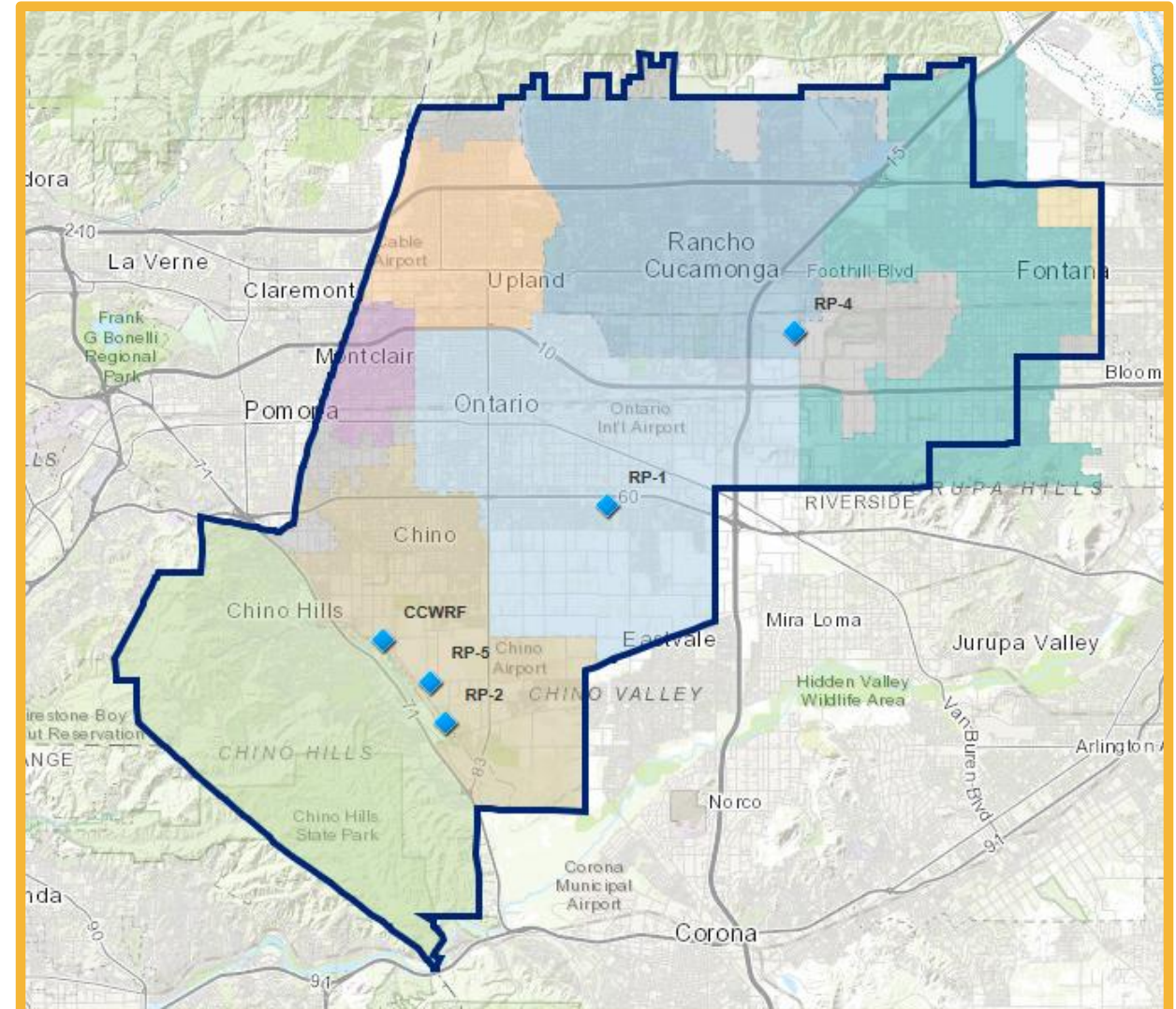
About IEUA: Location

- **County: San Bernardino**
- **Service area: 242 square miles**
- **Residents: 875,000 residents**



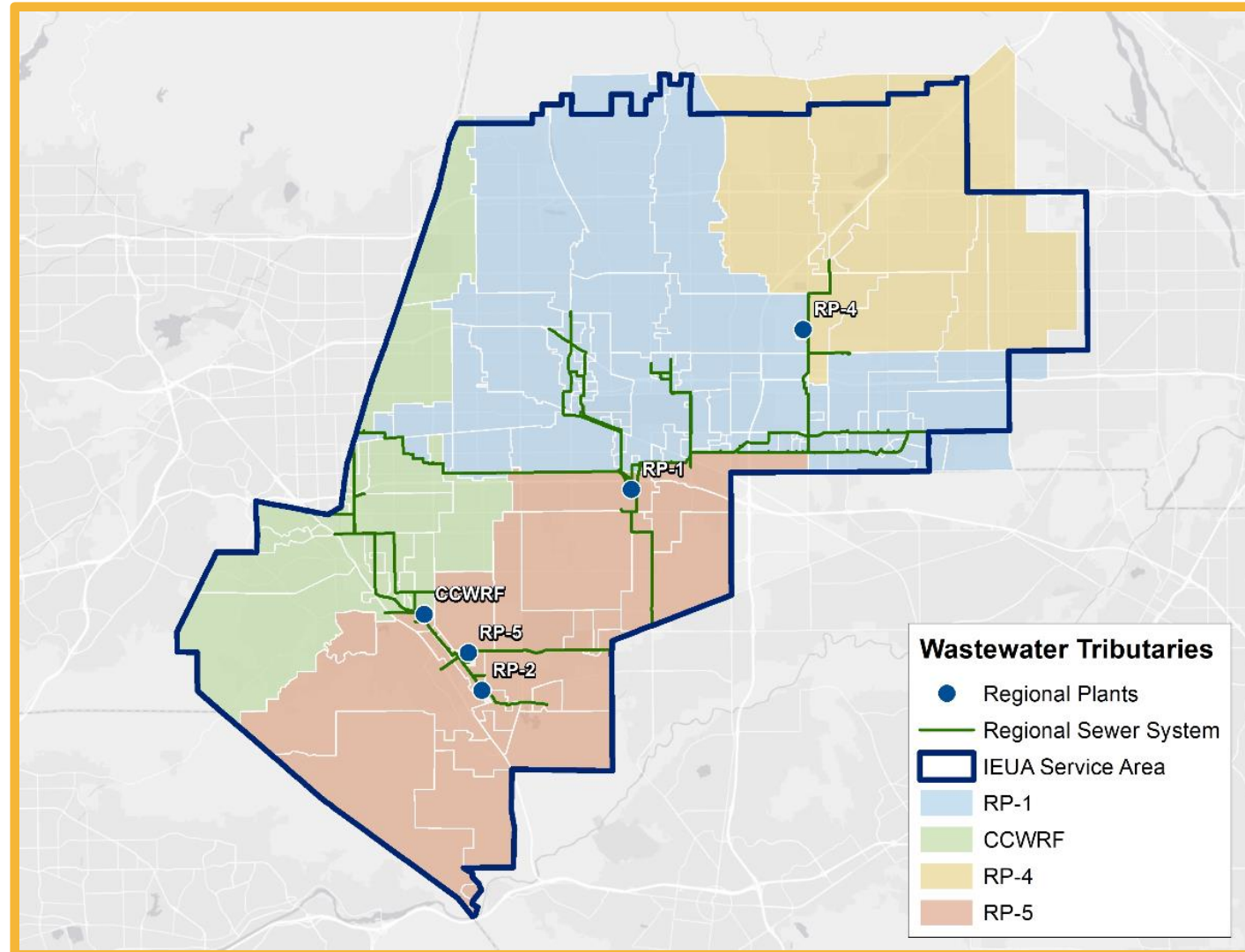
About IEUA: Cities Served

- Chino
- Chino Hills
- Fontana
- Montclair
- Ontario
- Rancho Cucamonga
- Upland



About IEUA: Facilities

- Regional Plant 1 (RP-1)
- Regional Plant 2 (RP-2)
- Regional Plant 4 (RP-4)
- Regional Plant 5 (RP-5)
- Carbon Canyon Recycling Water Facility



RP-5 Expansion Project

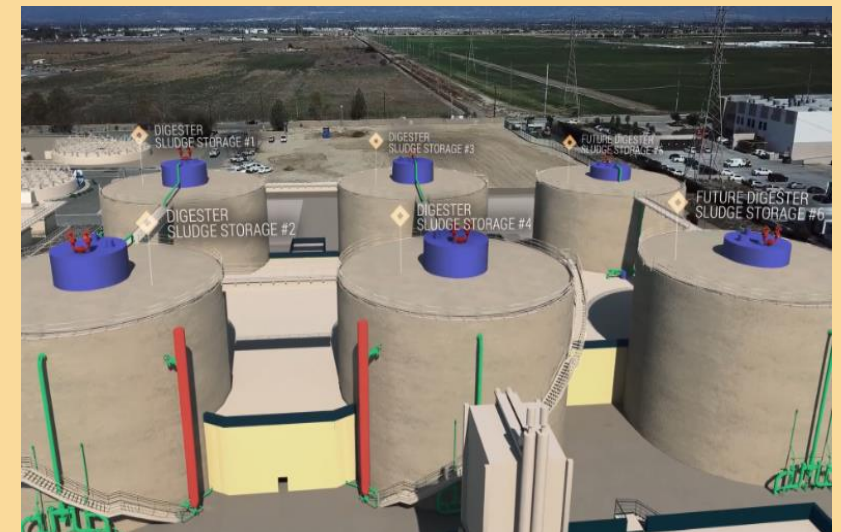


RP-5 Facility

**Liquid
Expansion**



**Biosolids
Facility**



RP-5: Liquids Expansion

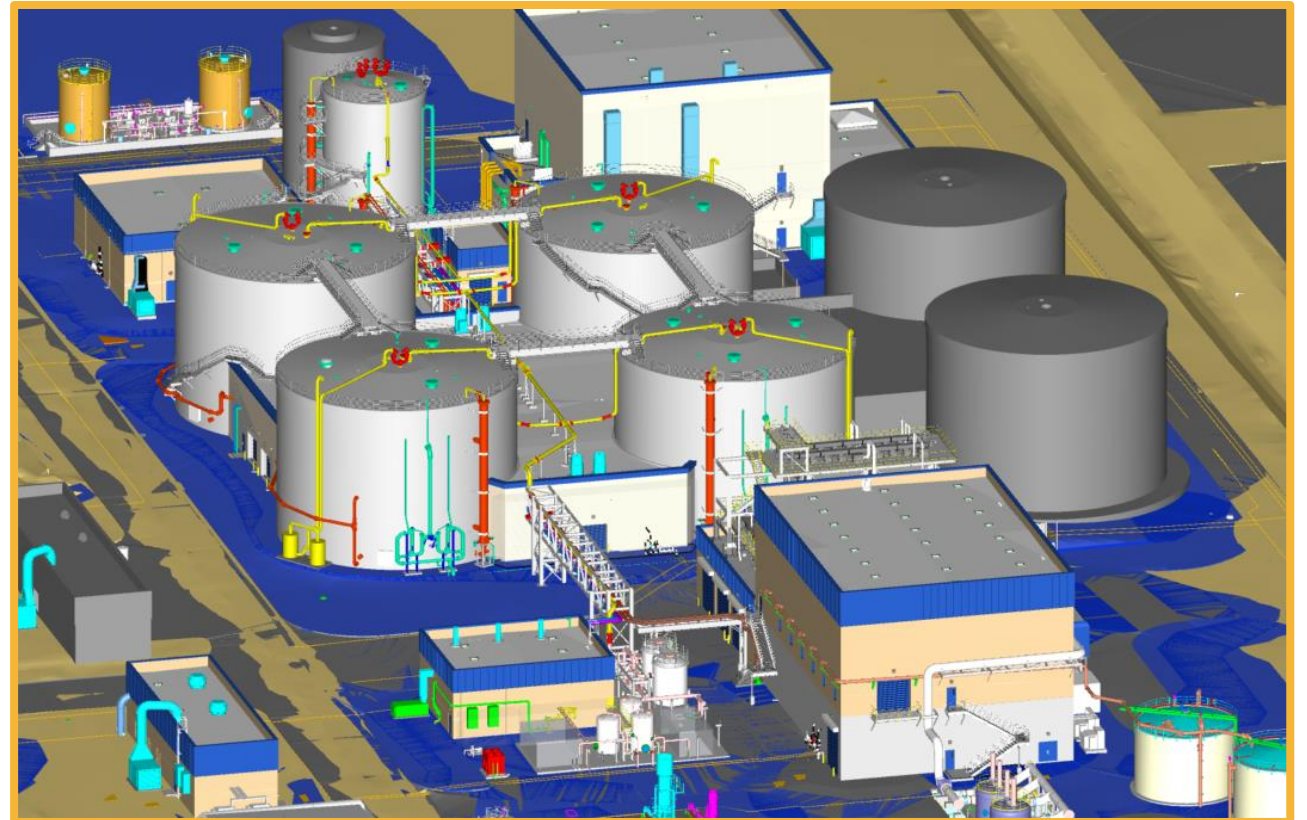
- **Support Growth (flow and concentration)**
 - **Flow Treatment Capacity Increase from 15 to 22.5 MGD**
 - **Concentration Capacity Increase**
- **Major work**
 - Influent pump station expansion
 - Headworks improvements
 - Fine screen facility
 - Two new primary clarifiers
 - Existing aeration basin improvements
 - New Membrane Bioreactor (MBR) system



New MBR Basin Model

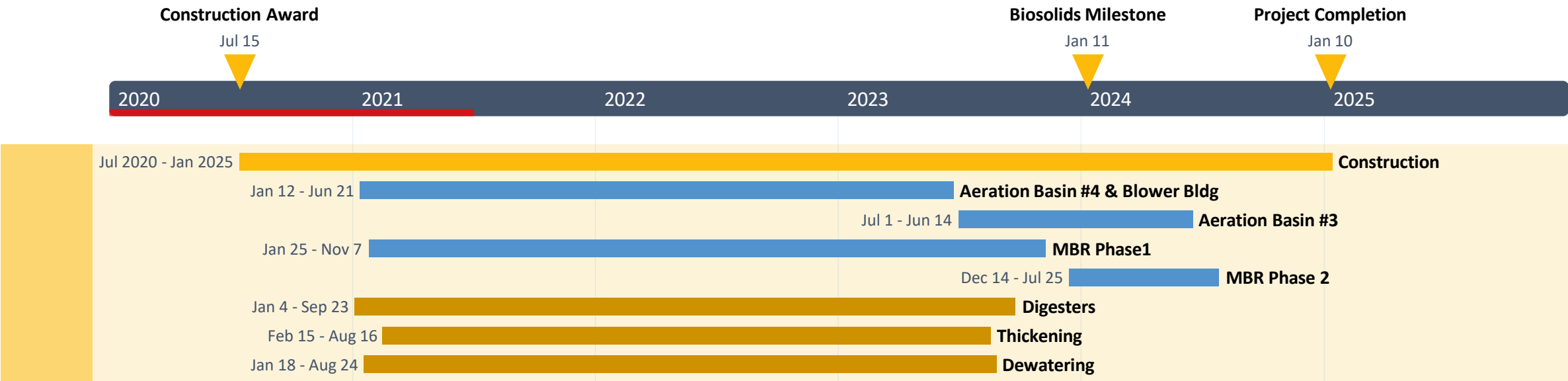
RP-5: Biosolids Facility

- Replace RP-2 (Prado Dam Floodplain)
- Support Growth
- Major work
 - Food waste receiving
 - Sludge thickening building
 - Digester facilities (Acid and Gas)
 - Dewatering building
 - Boiler building
 - Digester gas treatment and flaring
 - REEP Energy Improvements



RP-5: Project Status July 2021

Day 381 of 1640 = 23.2%



Contractor	Contract	Total Paid	% Complete
WM Lyles	\$330M	\$59M	18%

Data date: 7/31/2021

Model flyover



July 2021 Fly over



RP-5: Major Activity Areas January 2021



RP-5: Major Activity Areas July 2021

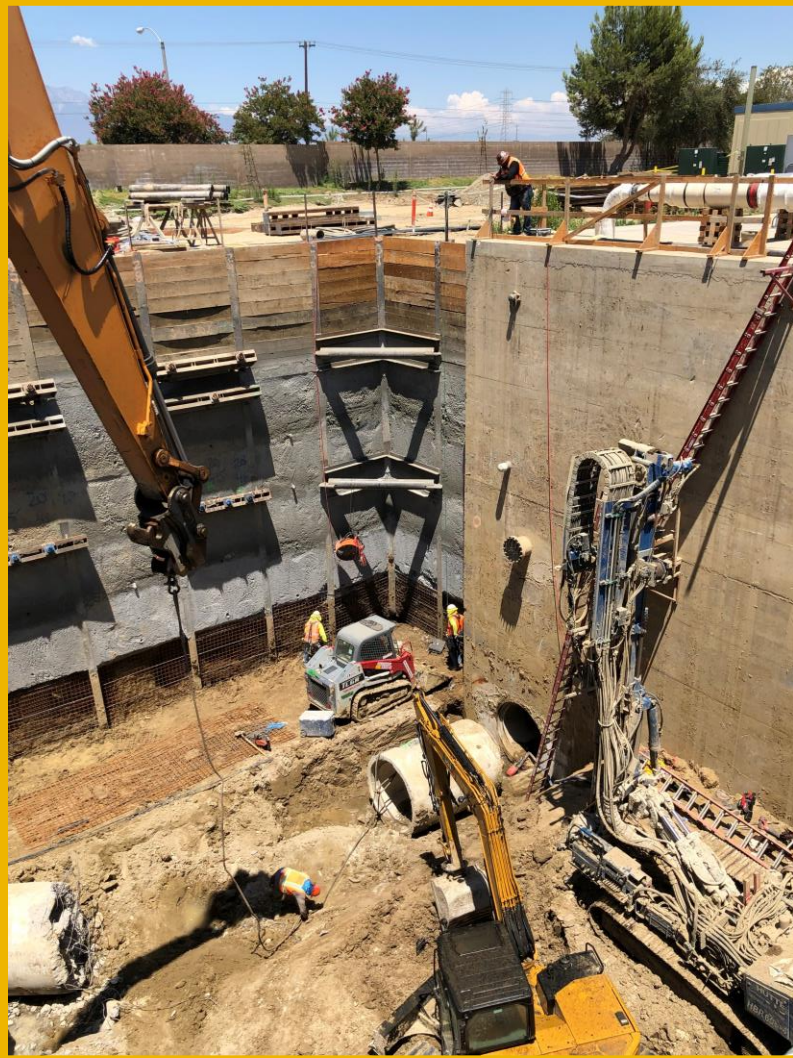
Construction Staff

- WML Craft: 144
- WML Project: 28
- IEUA & CM: 15
- Total: 187



RP-5: Influent Pump Station

- 50' Deep
- Next to Existing



RP-5: Secondary Clarifier 4B / MBR Phase 1



January 26th 2021



March 19th 2021

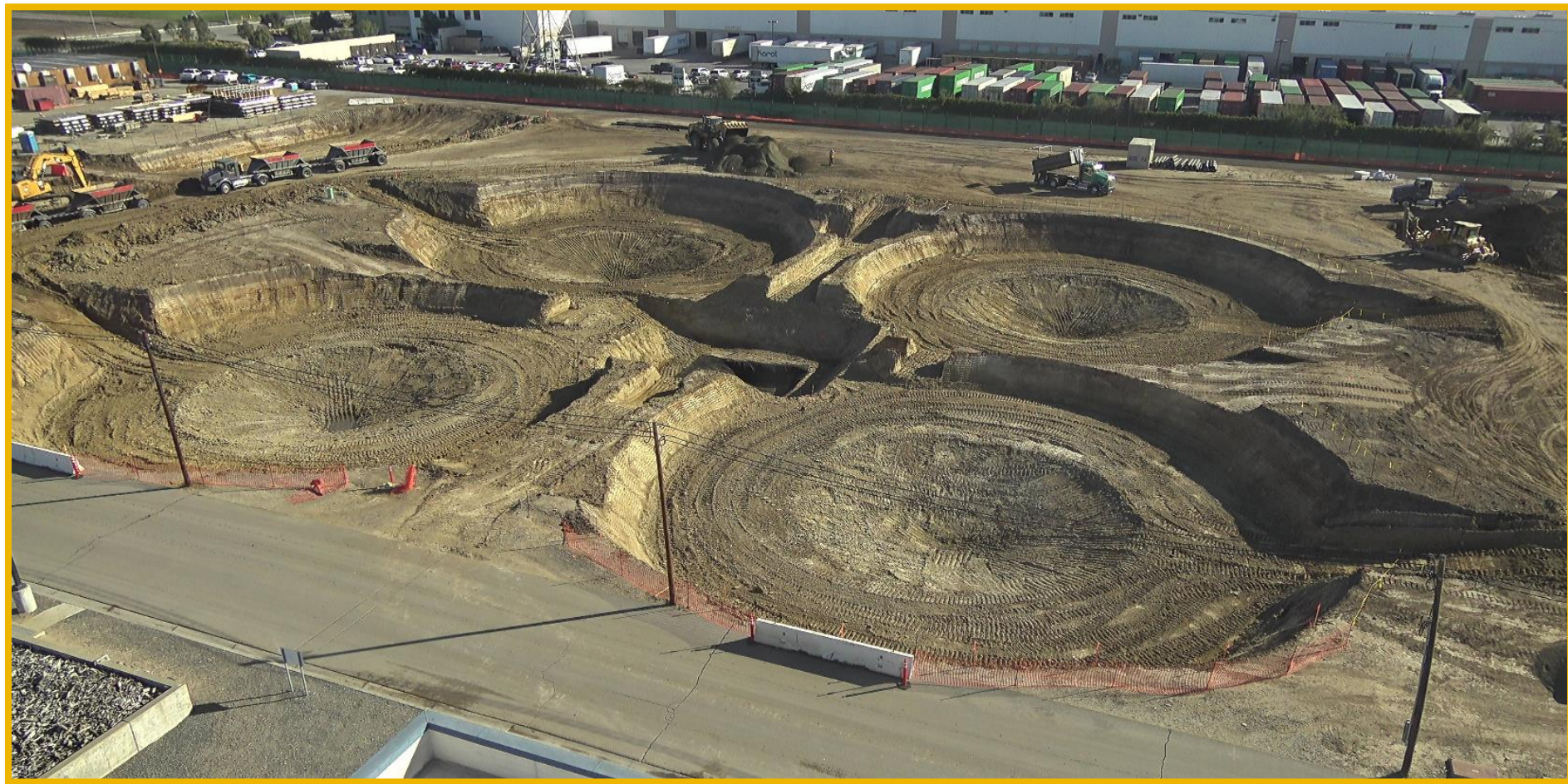
RP-5: MBR Phase 1, July 2021



RP-5: Solids Area Excavation

January Total

- Truck trips: 2,042
- Cubic Yards: 28,588



RP-5: Solids Area July 15th 2021



RP-5: Acid Phase Digester – Wall Rebar



RP-5: Acid Phase Digester – Wall Rebar

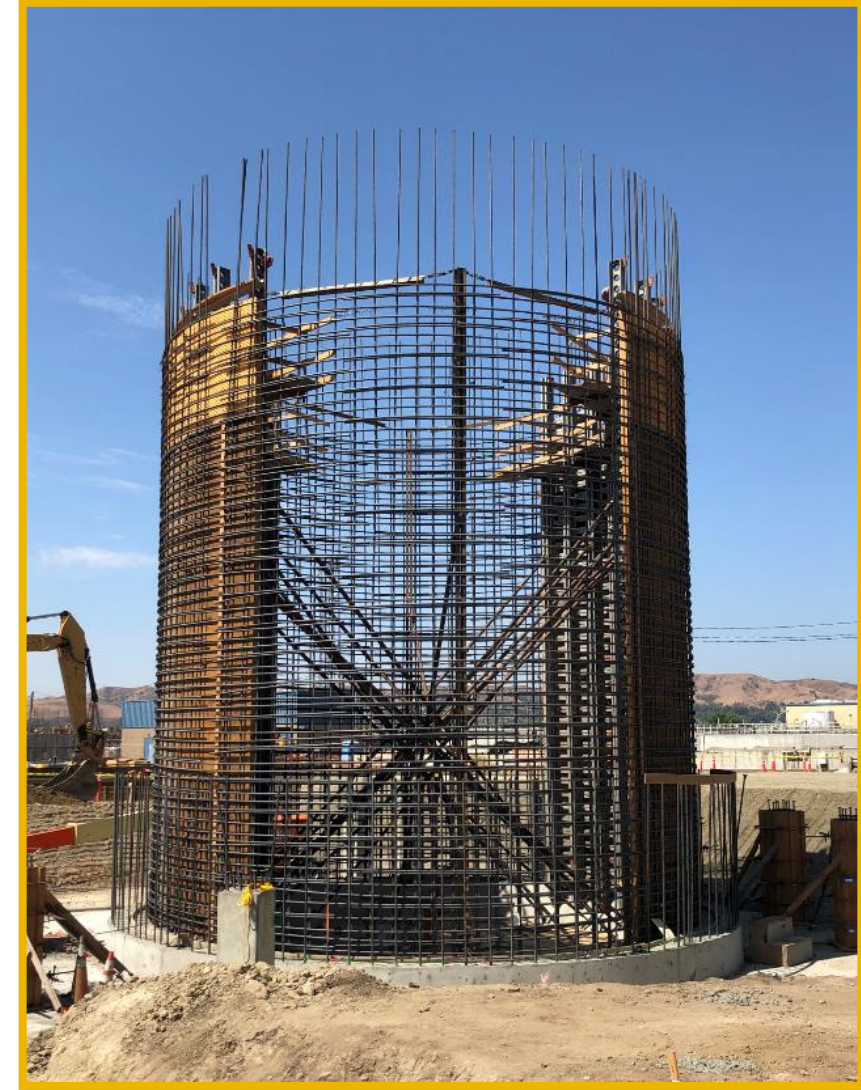
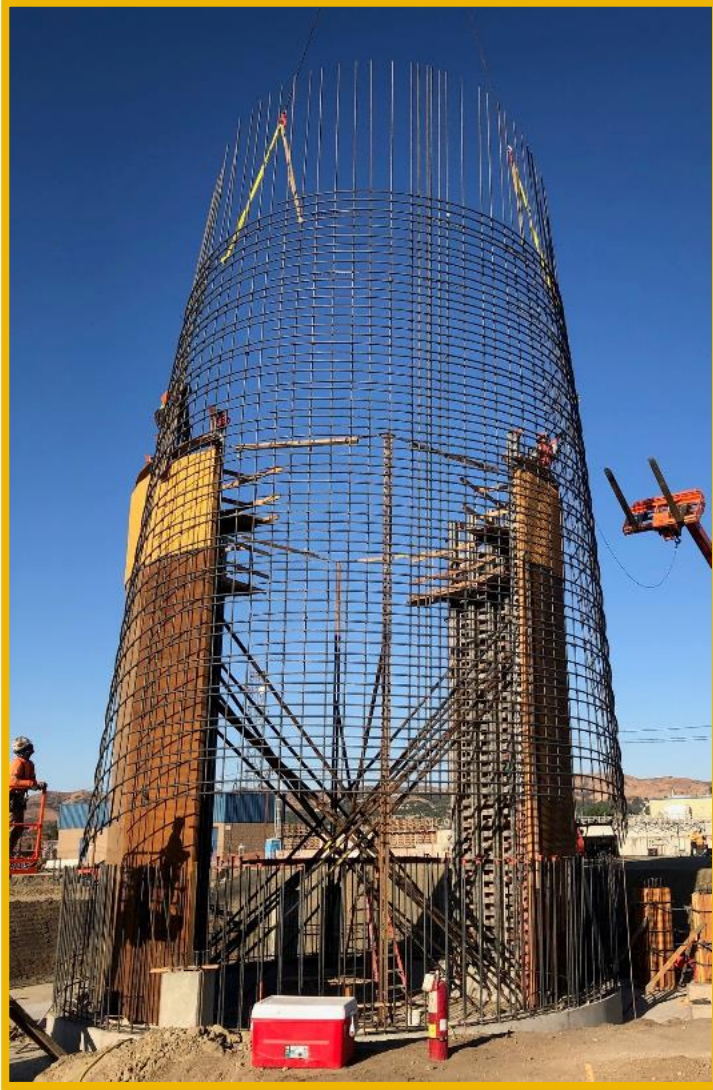


**Approx. 15,000 lb
#9 Bar @ 3.4 lb/ft**

RP-5: Acid Phase Digester – Wall Rebar



RP-5: Acid Phase Digester – Wall Rebar



RP-5: Acid Phase Digester – Wall Rebar



RP-5: Gas Phase Digester – Wall Rebar



RP-5: Solids Time Lapse





Questions?