

Approaches adopted by Southern California water agencies to overcome current drought conditions

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California's Water Supply: Diverse but Challenged

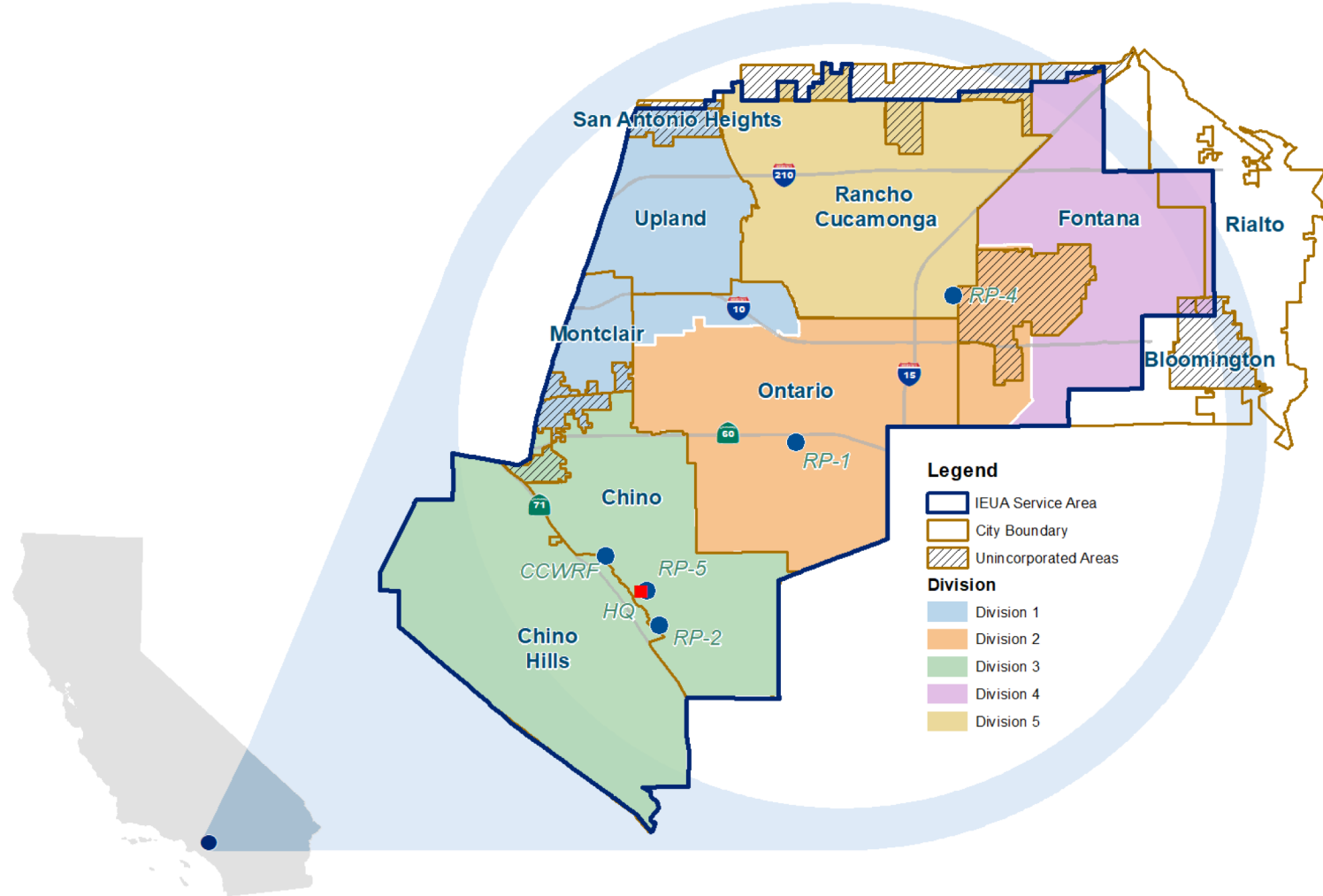


Water Supply Options in CA

- Imported Supplies
- Groundwater
- Stormwater
- Water Transfers
- Desalination
- Water Recycling

IEUA Service Area

- Located in the southwestern portion of San Bernardino County
- 875,000 residents in our service area
- 242 square miles - approximately 627 square kilometres



Major Programs



Composting
(IERCF)



Wastewater
Treatment



Water Supply



Renewable
Energy



Recycled Water
Supply &
Distribution



Groundwater
Recharge



Education,
Outreach and
Water-Use
Efficiency

First Class Water and Wastewater Operations

- Wholesaler of Imported Water
 - Delivers more than 60,000 AF (acre-feet)/ 74,008,800 cubic meters of imported water
- Recycled Water Pioneers - One of the First to Develop
 - Delivers 32,000 AF / 39,471,360 cubic meters of recycled water
 - More than 850 connections
 - 17% of region's water supply
- Wastewater Treatment
 - Approximately 53 million gallons (MGD) / 201 million liters of water per day is received for treatment



FACT: One acre-foot / 1,233 cubic meters is enough water to provide to three families for an entire year.

State of the Art IEUA Treatment Facilities

Tours available upon request

City of Ontario



RP-1

Treatment capacity of 44 million gallons per day of wastewater

RP-2



City of Chino

Will be decommissioned following RP-5 expansion

City of Chino



Carbon Canyon

Treatment capacity of 11.4 million gallons per day of wastewater

RP-4



City of Rancho Cucamonga

Home of the 1 megawatt wind turbine and the Inland Empire Regional Composting Facility

RP-5



City of Chino

Expansion project started Oct. 2020

Groundwater Recharge Critical to Local Reliability and Water Quality

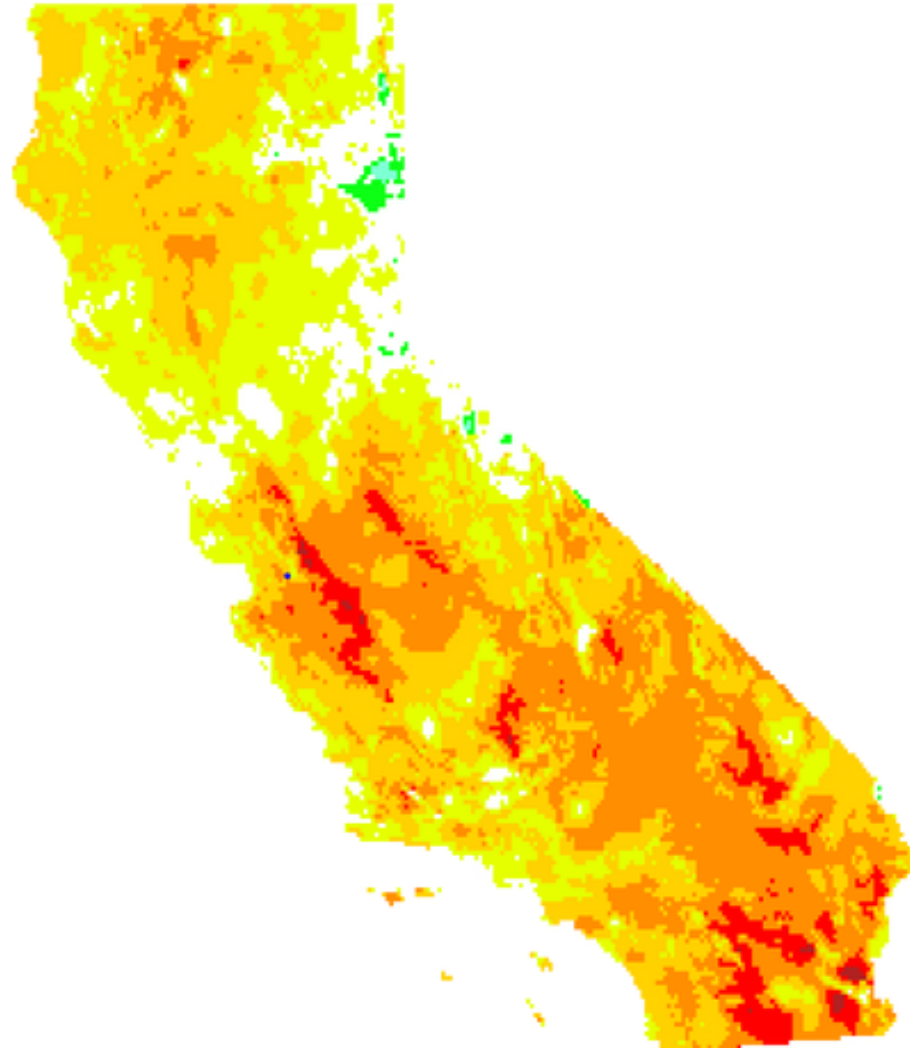
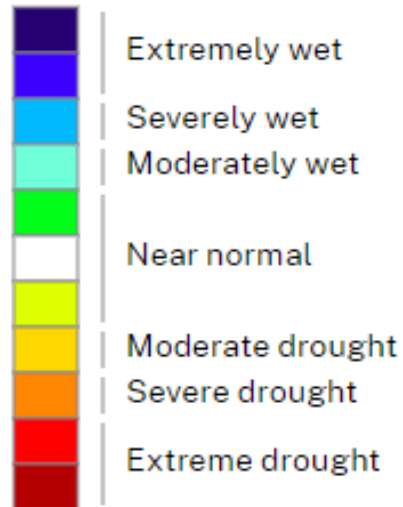
- Enhances water supply reliability and improves drinking water quality throughout the greater Chino Basin
- 18 recharge sites
- Captures runoff from storms, imported water from the State Water Project and high-quality recycled water from IEUA's distribution system
- **FY 2020/2021:** IEUA recharged 16,253 AF / 20,047,750 cubic meters of recycled water and 4,883 AF / 6,023,083 cubic meters of stormwater/local runoff



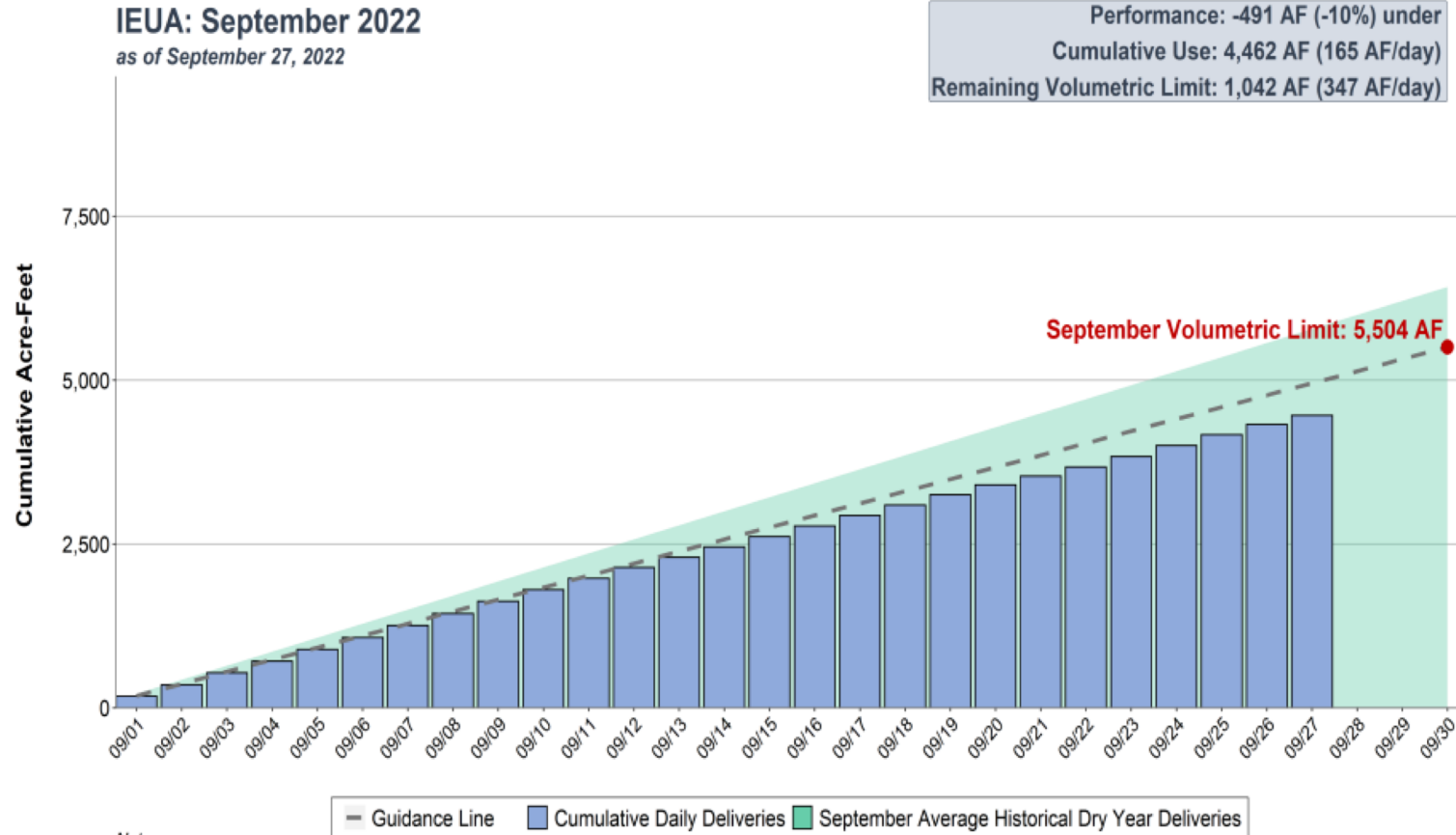
Hickory Basin

Majority of California in Moderate to Severe Drought

12 month SPEI



IEUA Customers Meet & Exceed the Challenge



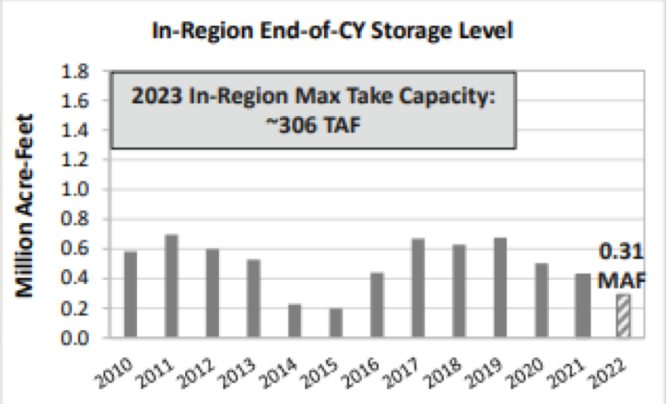
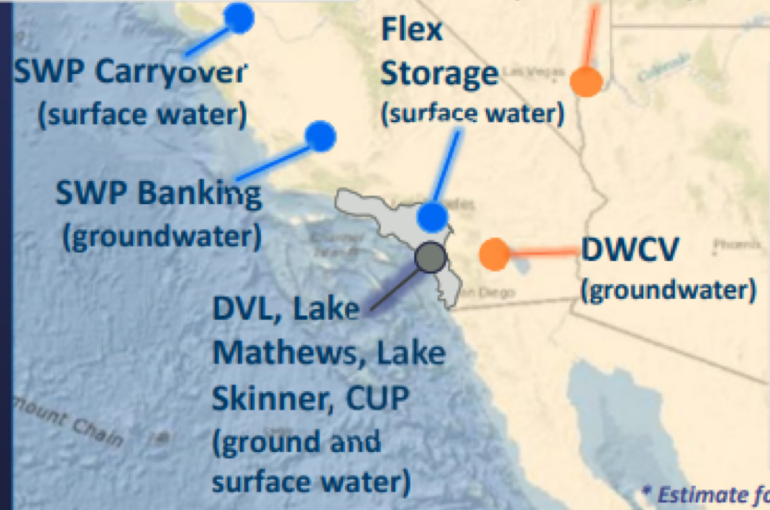
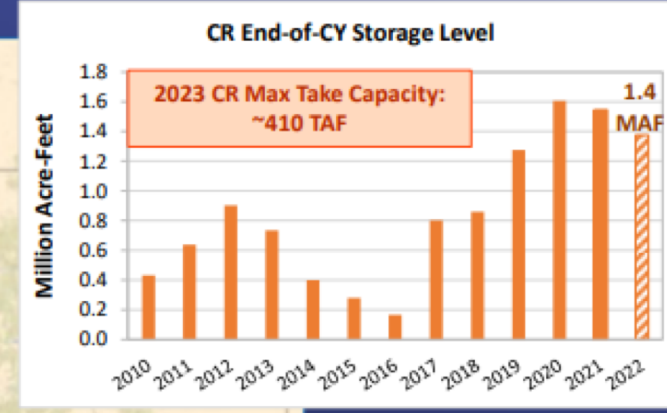
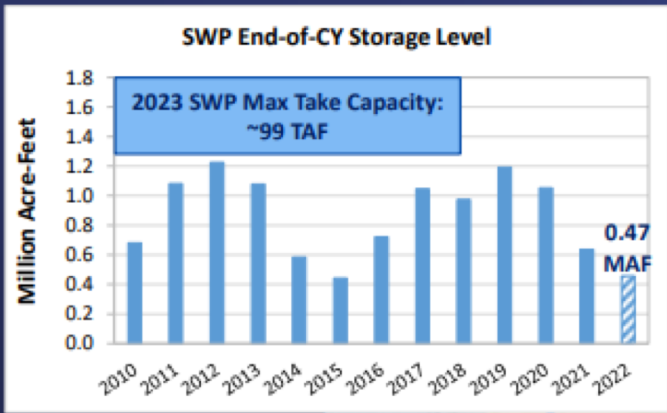
Notes:

1. Guidance line is a representation of the monthly volumetric limit on a cumulative daily basis (not used for penalty assessment).
2. Performance is the acre-foot and corresponding percent deviation from the guidance line, per as of date.
3. For Path 2 agencies, penalties are assessed on a monthly basis.
4. Average historical dry year deliveries are calculated with the years 2014, 2015, 2020, and 2021.
5. The historical dry year average is intended to be a representation of dry year demand but may be influenced by operations or conditions that affect the use within particular months or particular years used in the average.

Disclaimer: Data presented is preliminary and subject to change based on monthly reconciled billing data.

California Water Storage will Still Drop Despite Conservation Efforts

End of Year Storage Estimates by Region



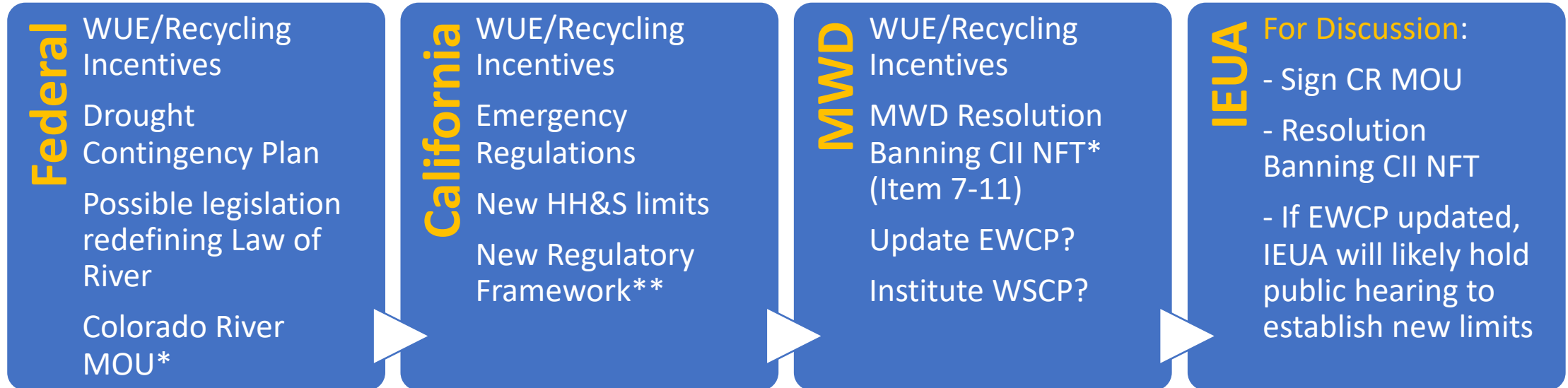
* Estimate for 2022. Does not include emergency storage.

Sept. 30, 2022

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Review of Conservation Actions

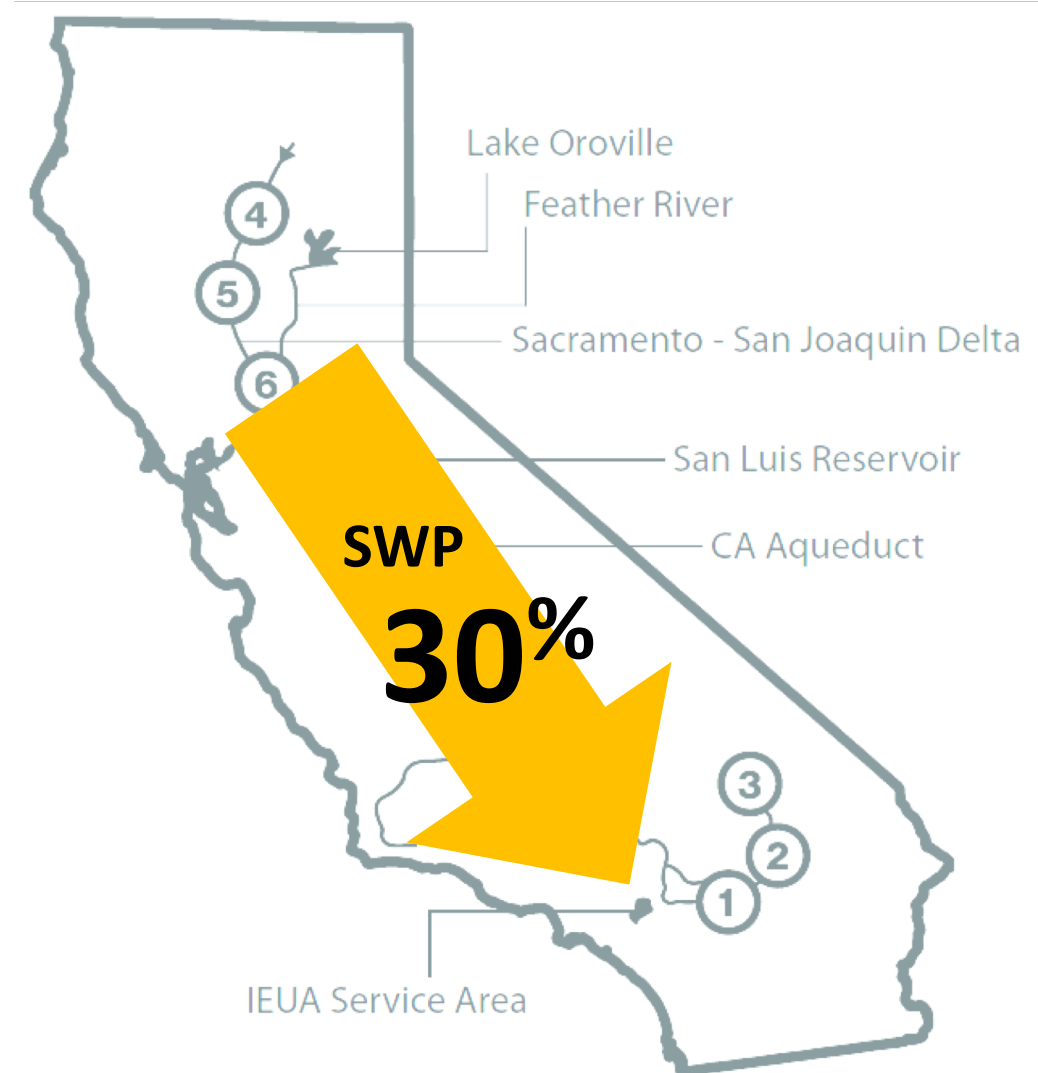
Theme: Reduce Irrigation by 30%



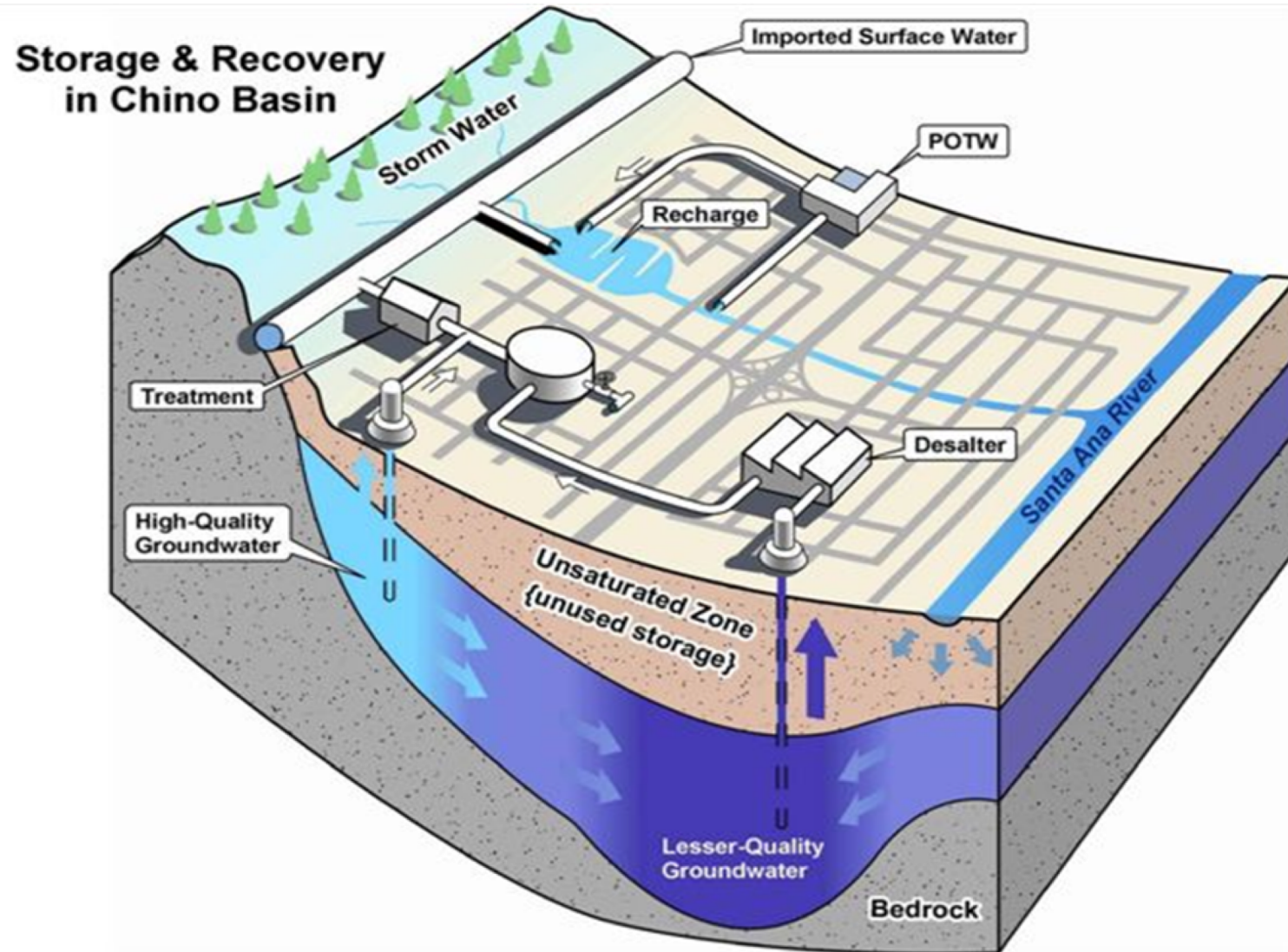
* MWD (and IEUA) can strongly recommend that all Member Agencies and local jurisdictions within Metropolitan’s service area amend their regulatory codes and ordinances, as appropriate, to implement these principles in a manner consistent with each jurisdiction’s legal authority

We All Have to Do More!

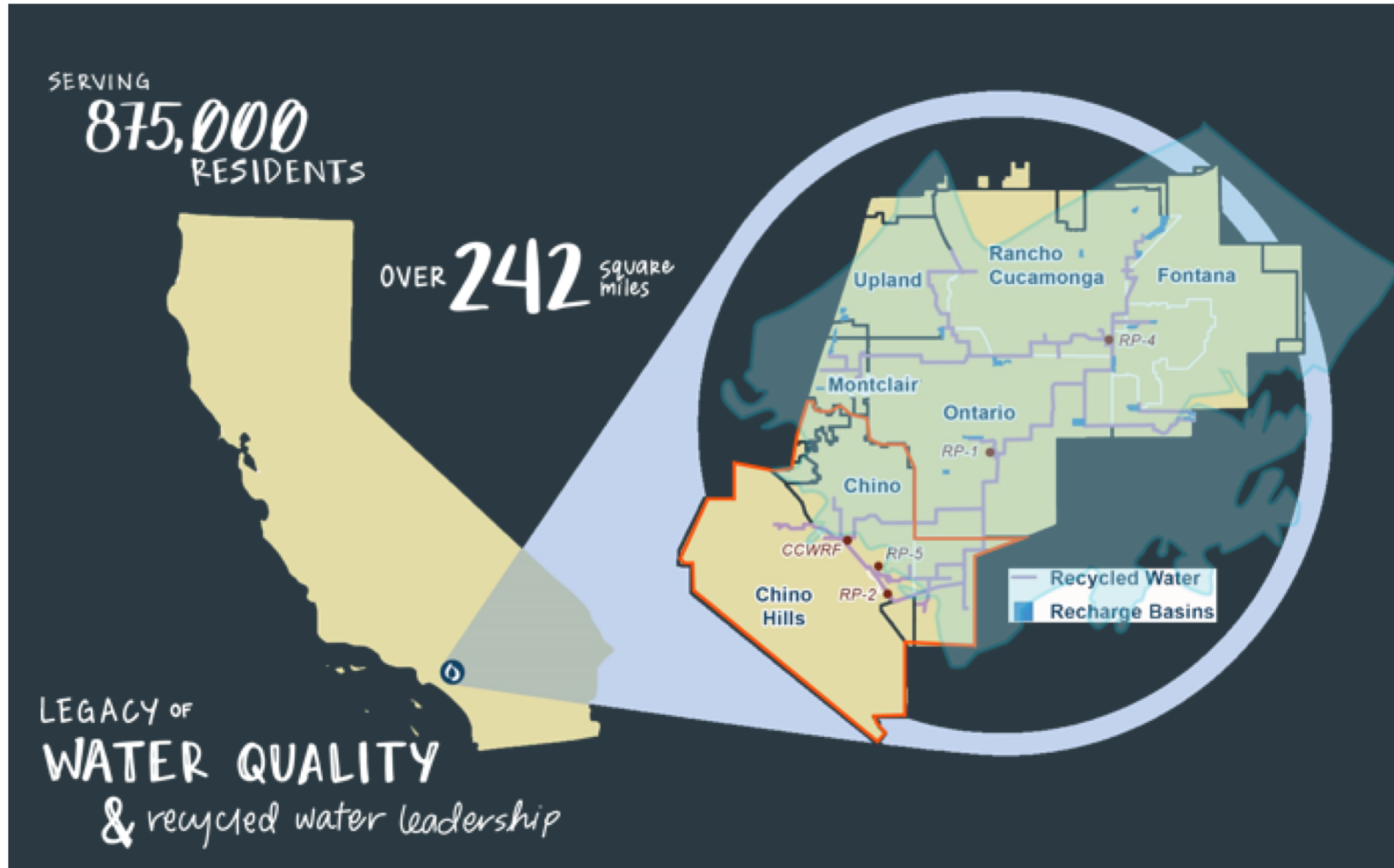
- Today, the Chino Basin relies upon imported water from the State Water Project (SWP) for **30% of its water supplies**
- Sometimes, drought restrictions limit the amount of water available from the SWP
- What will we rely on when water imports are limited?



How is IEUA Planning for the Future? Innovative Solutions through Regional Collaboration



One Solution to Increase Local Supply Reliability



Imported water from Metropolitan is 30% of water supplies

- State Water Project constrained area
- 2022: 5% allocation
- Subject to environmental flow restrictions

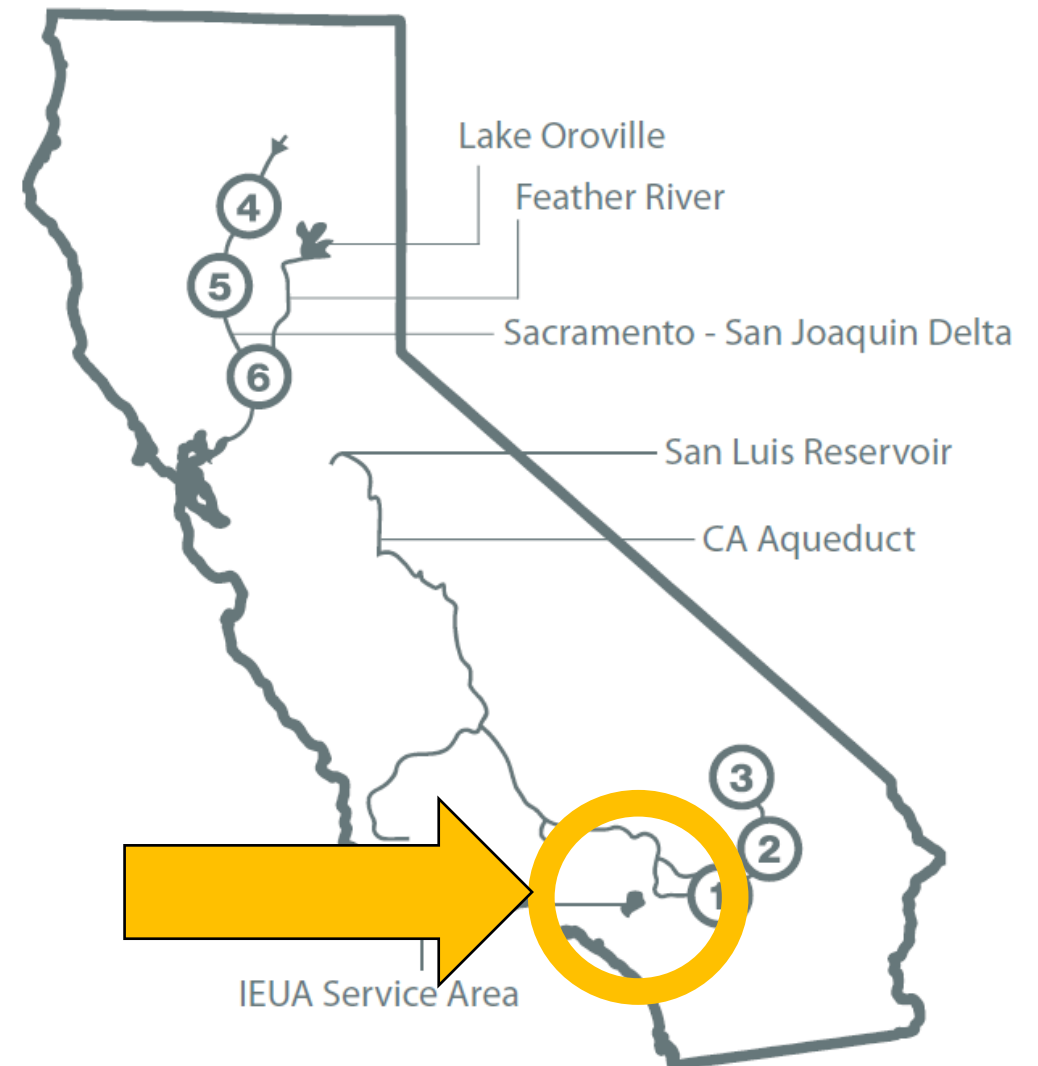
Local need for Advanced Water Purification Facilities (AWPF)

- Wastewater permit compliance by 2030
- Meet Basin Plan commitments
- Opportunity to build infrastructure for future Direct Potable Reuse

Chino Basin Program Increases Reliability, Access, and Water Quality

Chino Basin Program (CBP) adds infrastructure so we can treat and store water locally:

- CBP builds **Advanced Water Purification Facilities** to treat recycled water, providing access to currently untapped supply
- CBP builds **injection and extraction wells** to store and retrieve the treated water
- CBP builds a **distribution system** to convey the treated water

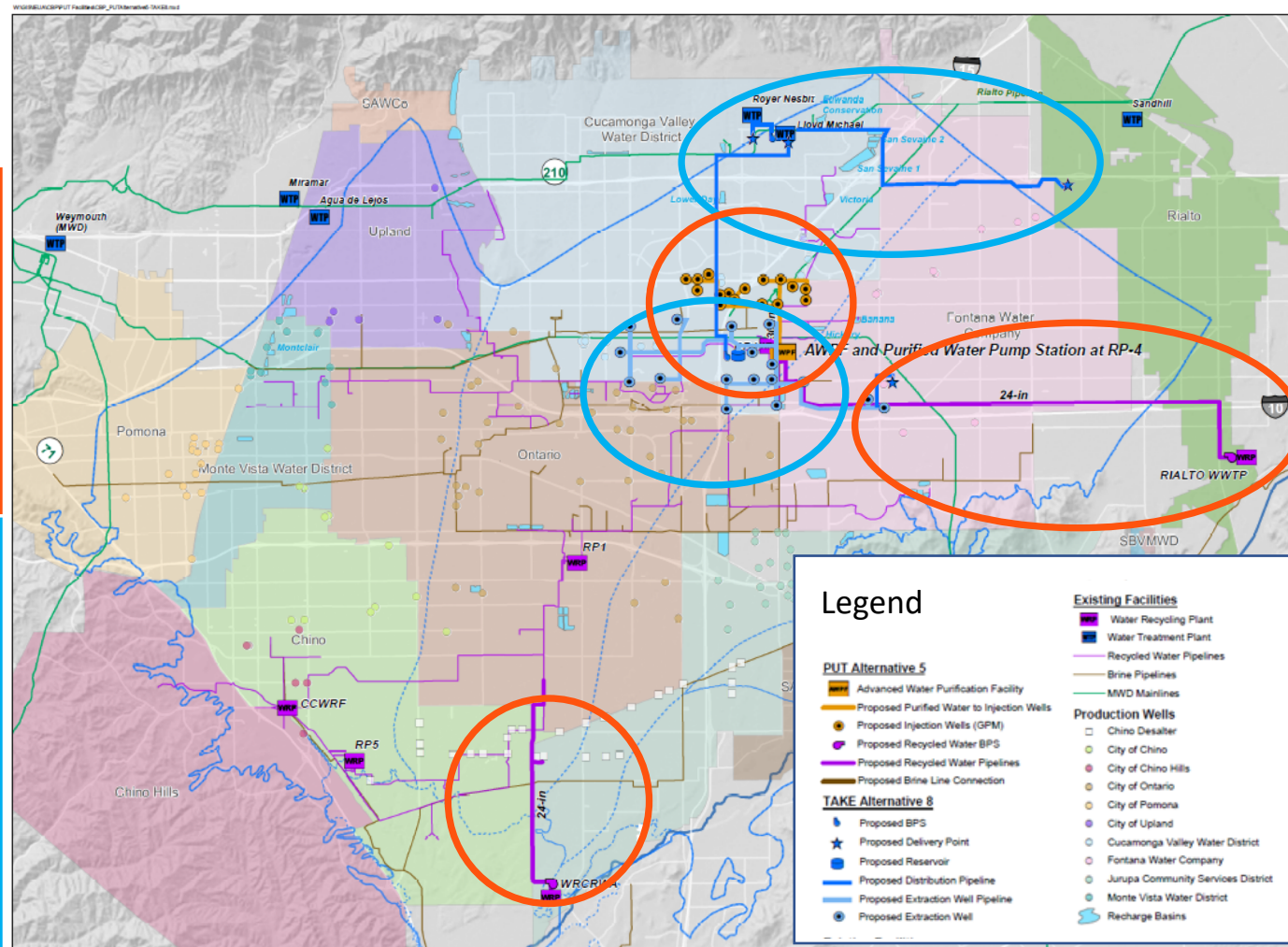


CBP– Local Facilities Overview

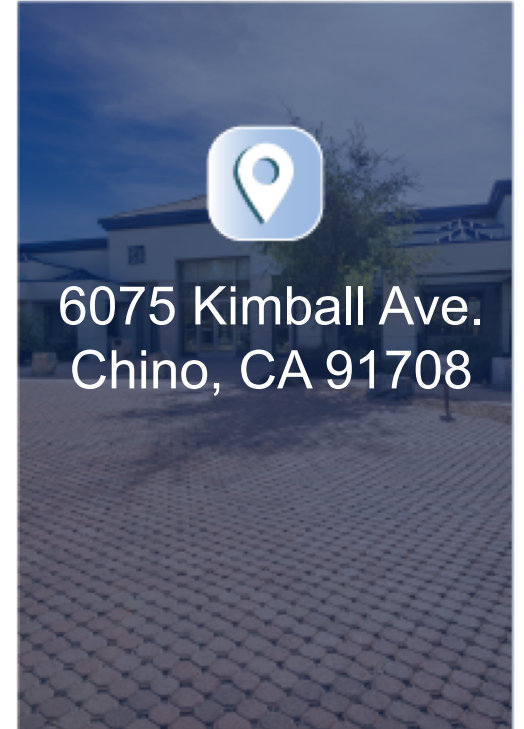
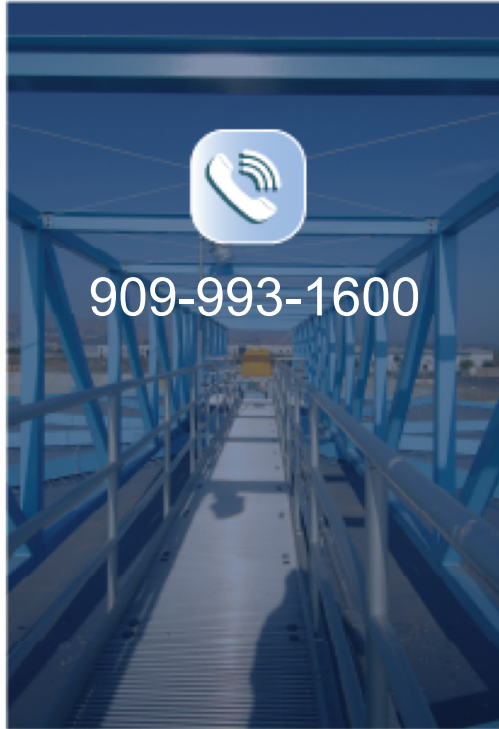
Facilities:

- 17,000 AF (20,969,160 cubic meters)/year AWWP at RP-4
 - 11,000 AF (13,568,280 cubic meters)/year IEUA partners' recycled water
 - 6,000 AF (7,400,880 cubic meters)/year external water supply sources

- Advanced treated recycled water pipeline
- Injection wells
- 40,000 AF (493,392,000 cubic meters)/year Extraction wells
- Potable water pipelines & Reservoir
- Interconnection to Metropolitan's Rialto Pipeline



Questions?



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