

THANK YOU FOR JOINING US

**WaterReuse Orange County
Chapter Meeting**

WILL BEGIN SHORTLY

Agenda

- ▶ **Call to order** – 12:00 PM
- ▶ **Welcome:** Scott Lynch, Chapter Vice President
- ▶ **Presentations**
 - **Inland Empire Brine Line and SAWPA Update**
 - Jeff Mosher, General Manager, Santa Ana Watershed Project Authority (SAWPA)
 - **The Headworks DPR Demonstration Project: Implementing DPR for the City of LA**
 - Erik Avila, EIT, Los Angeles Department of Water and Power
 - Erica Wolski, P.E., Woodard & Curran
 - Greg Wetterau, P.E., CDM Smith
- ▶ **Standing Items**
 - Regulatory Updates: DDW/OCHCA
 - Legislative and Regulatory Matters
 - State Section Update: Joone Lopez, MNWD
 - Potential Funding for Projects
- ▶ **Conferences/Webcasts**
- ▶ **Chapter Officer Elections**
- ▶ **Roundtable** (using “Raise Hand” feature to be called on)
- ▶ **Adjournment**

Q&A

Have a question?

Select the “Raise Hand” button or
select *6 on your telephone.

We will get to your questions after each presenter.

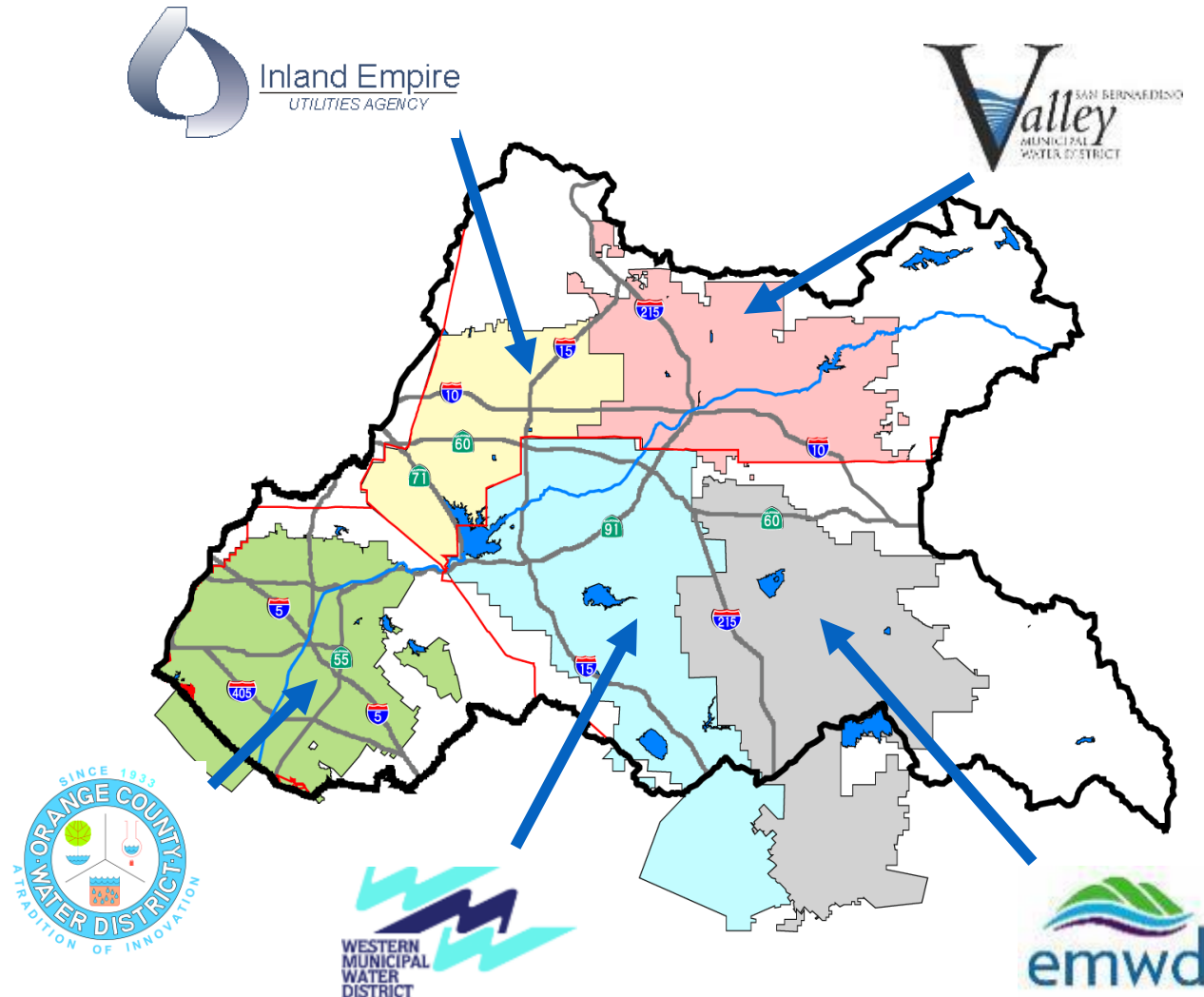


Inland Empire Brine Line and SAWPA Update

Jeff Mosher
General Manager:
Santa Ana Watershed Project Authority

WaterReuse California Orange County Chapter
December 16, 2021

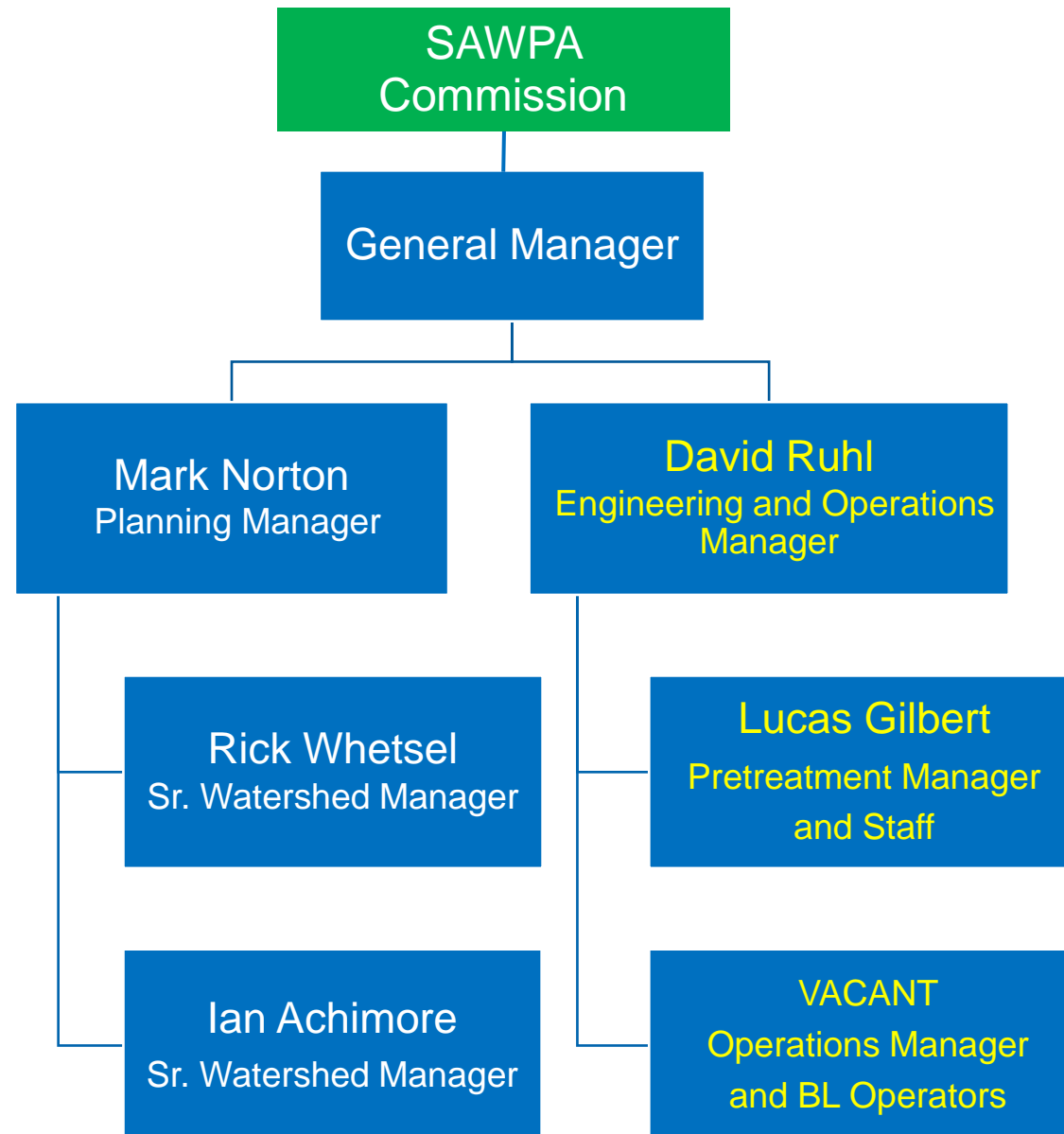
SAWPA: Joint Powers Authority with five Member Agencies



Stakeholders:

- 97 Water-related Agencies
- 4 Counties
- 63 Cities
- State, environmental, and regulatory agencies
- Federal agencies
- Other special districts
- Special interest groups

SAWPA Key Staff



Achieving SAWPA's Vision



Brine Line

- Export of salt from the watershed
- Achieve a salt balance
- Supports the economy



OWOW

- Supports Integrated Regional Water Management (IRWM)
- Brings together stakeholders
- Work collaboratively
- Find solutions to the water resource challenges



Roundtables

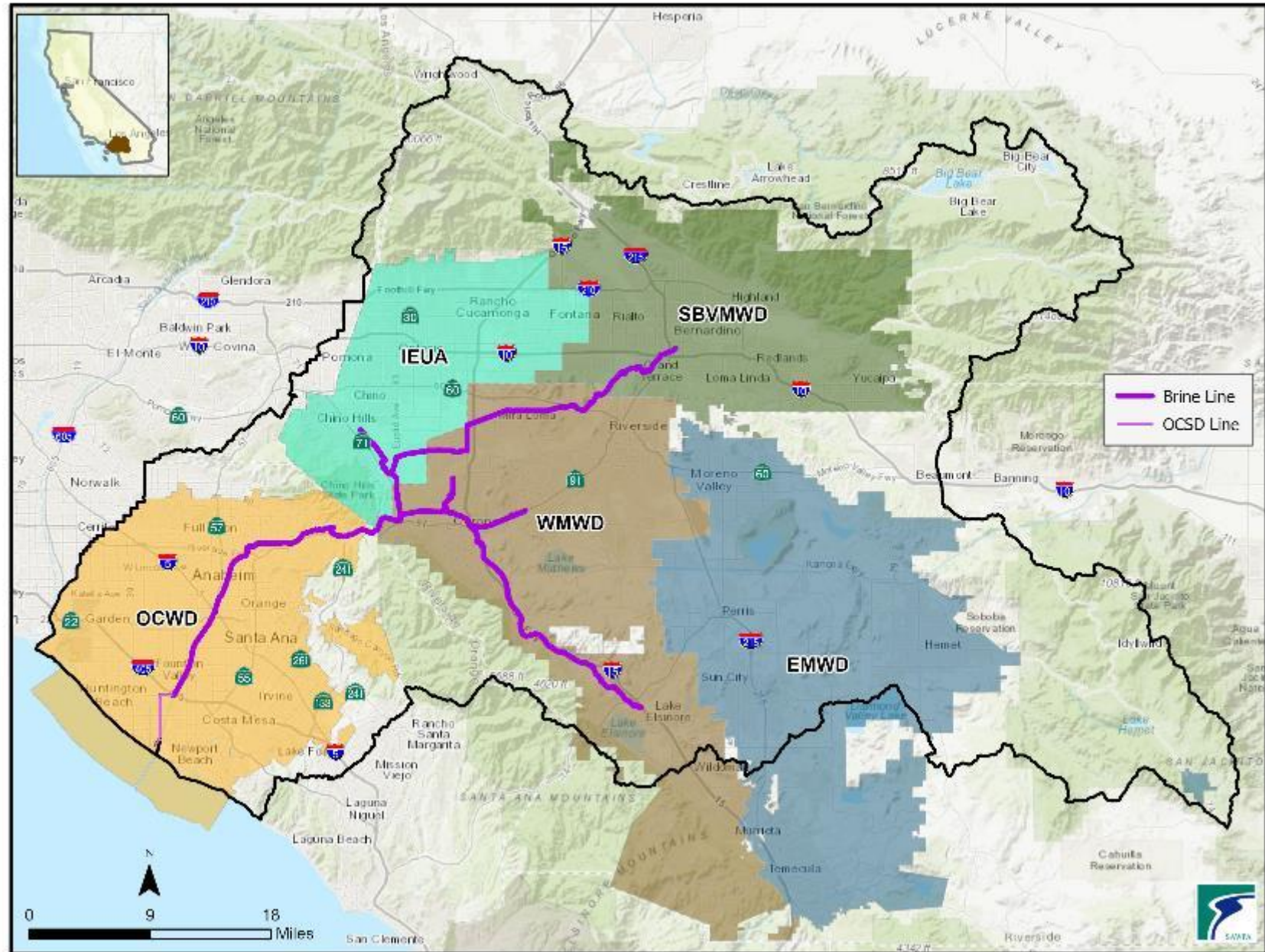
- Forums for agencies and organizations
- Address problems through planning and innovation
- SAWPA serves as the administrator/facilitator

Inland Empire Brine Line

(SAWPA contact: David Ruhl)

Inland Empire Brine Line

- 93 miles
- ~12 MGD (30 MGD capacity)
- Removes ~500,000 lbs of salt per day
- Direct dischargers (31)
- Indirect (trucked disposal)
- Brine and high saline wastewater
 - Desalters
 - Industry/Commercial
- OC San – Partner
 - Conveyance, treatment, and ocean discharge



Project\Mark_Norton\WABrineLineMap\WABrineLineMap.aprx LdMABrineLine SW 3/24

Benefits of Brine Line

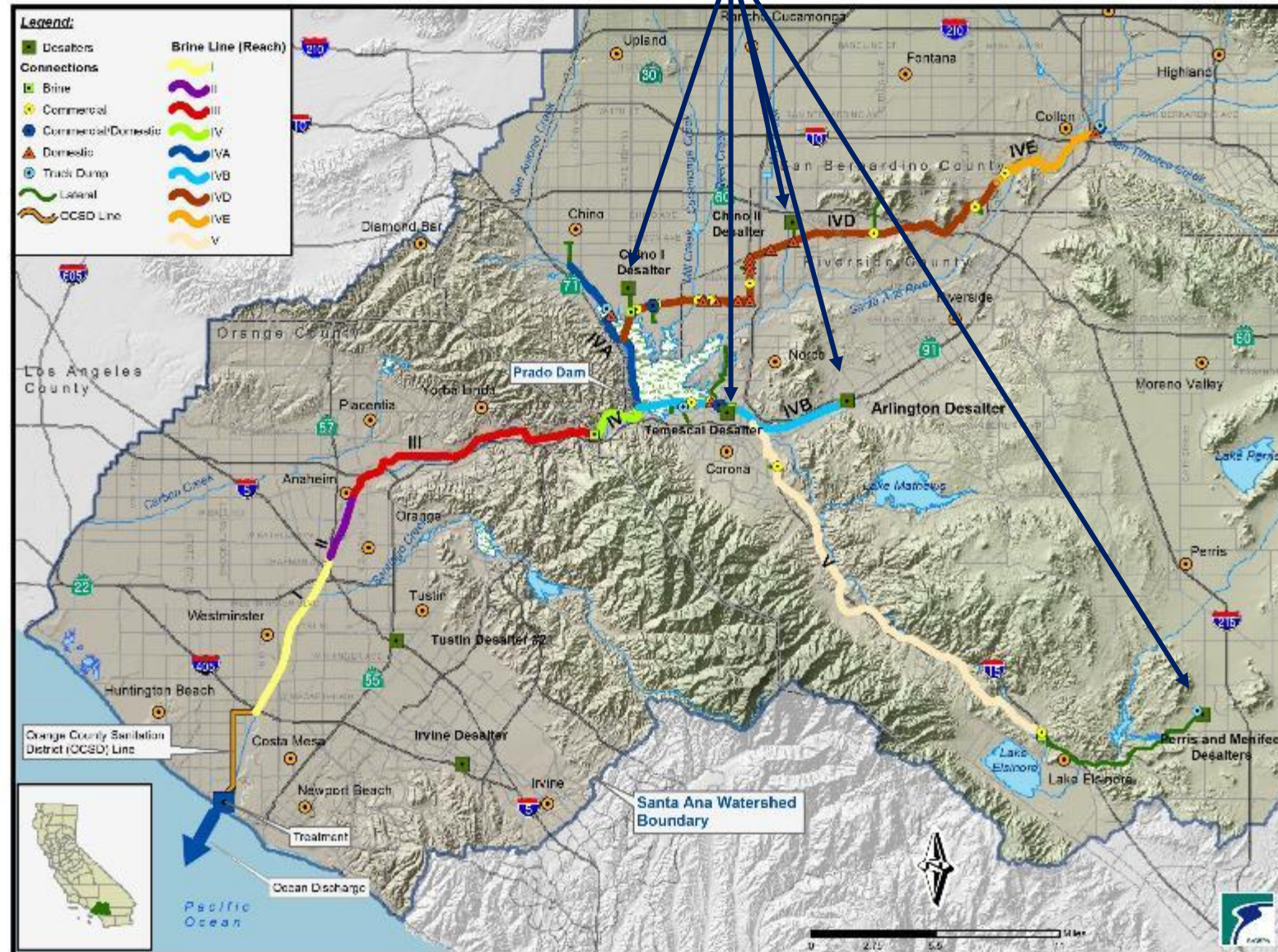
- Purpose
 - Provide public agencies and commercial industries with a cost-effective salinity management option for current and future projects
 - Allows for salt removal from the watershed
 - Help achieve long-term, watershed-wide salinity balance
- WWTP Benefits
 - Disposal of emergency discharges from local WWTPs
- Water Supply Benefits
 - Supports the use of groundwater desalters (brine disposal)
 - Protects Santa Ana River and groundwater basins
- Recycled Water Benefits
 - Keeps industrial effluent with high salinity out of collection systems
 - Maximum Benefit programs support recycled water projects

List of Desalters

Desalter (Owner/Operator)

- Arlington (WMWD)
- Chino I (CDA / IEUA)
- Chino II (CDA / JCSD)
- Menifee (EMWD)
- Perris (EMWD)
- Perris II (New) (EMWD)
- Temescal (Corona)

Desalters
(brine discharges)



Direct Connection Dischargers (Industrial)

- Mission Linen Supply
- OLS Energy
- Repet, Inc.
- Del Real, LLC
- Magnolia Foods, LLC
- Metal Container Corporation
- SCE Mira Loma Peaker Plant
- City of Colton – Aqua Mansa Power Plant
- Mountainview Generating Station
- Rialto Bioenergy Facility, LLC
- Aramark Uniform & Career Apparel, LLC
- Dart Container Corporation
- Frutarom USA, Inc.
- Wellington Foods, Inc.

- Industries with:
 - Large Water Softeners
 - Large Cooling Towers
 - Large Boilers
 - Ultra-pure water



WELLINGTON FOODS
INCORPORATED



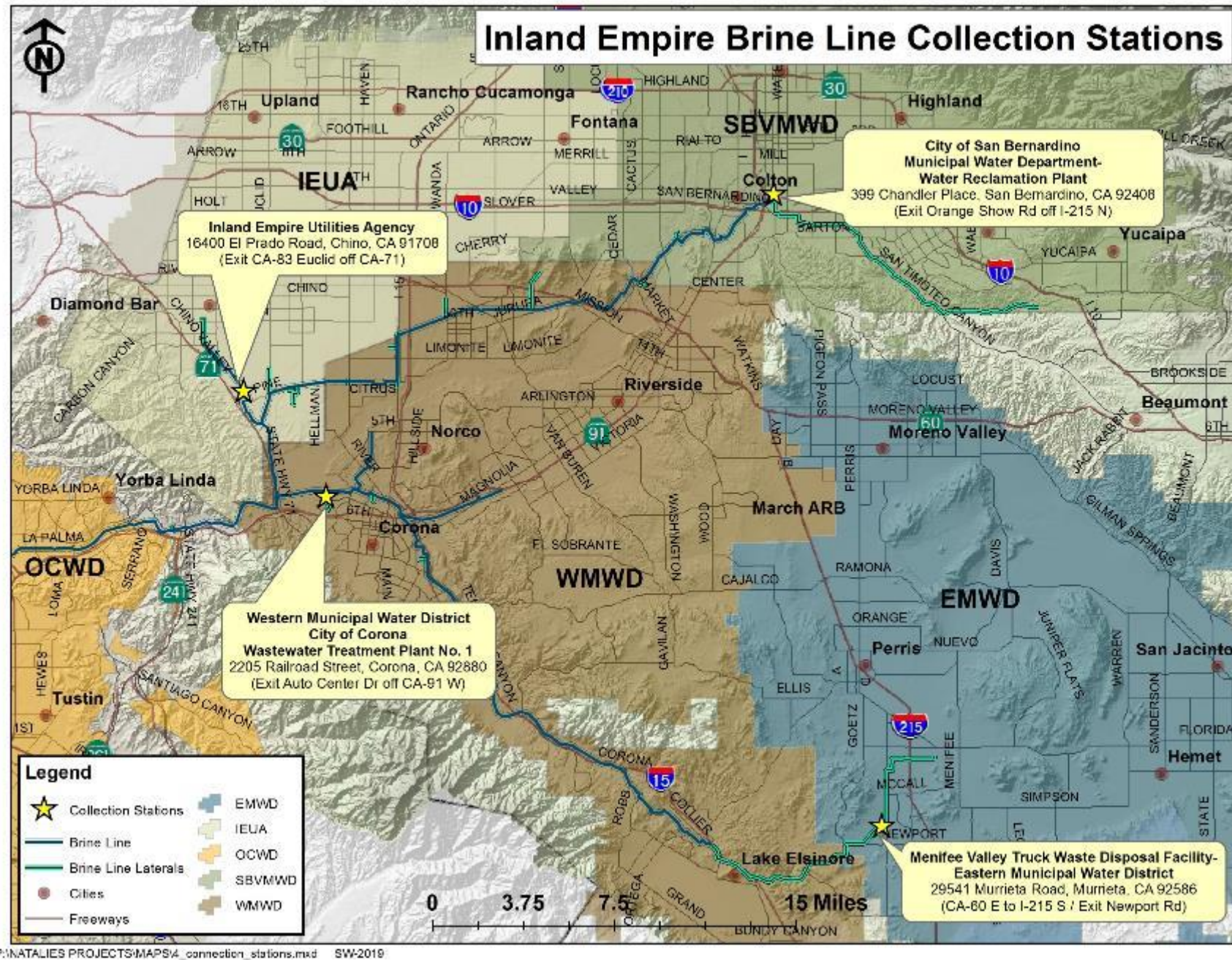
**Metal Container
Corporation**

ONE OF THE ANHEUSER-BUSCH COMPANIES

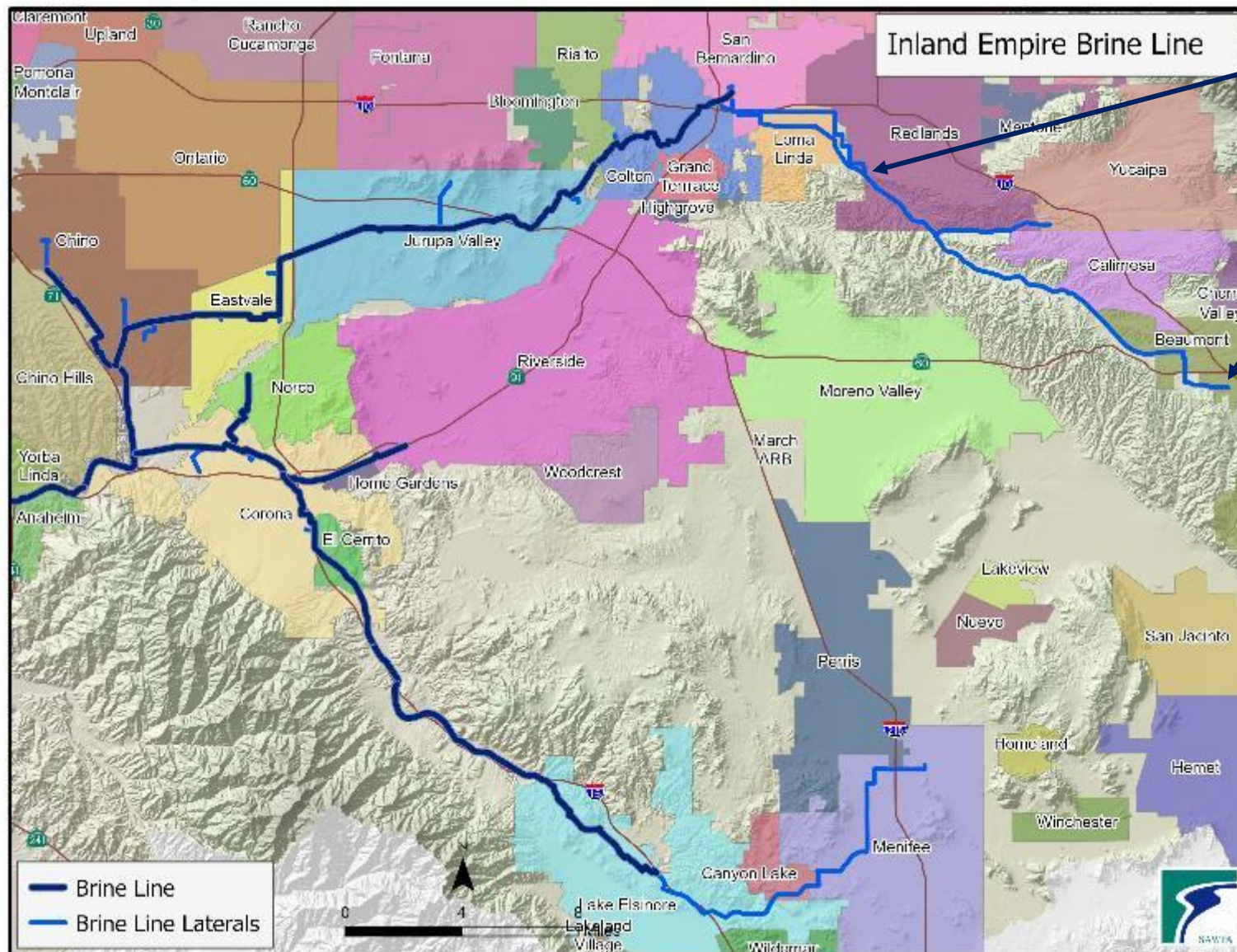


4 Brine Collection Stations

- Angelica
- Corona Regional Medical Center
- C.C. Graber Company
- Decra Roofing
- Indian Oaks Campground, LLC
- Infineon Technologies
- Eastside Water Treatment Plant
- La Sierra University
- Loma Linda University Power Plant
- Loma Linda VA Medical Center
- Niagra Bottling, LLC
- Prudential Overall Supply
- Qualified Mobile, Inc.
- Rayne Water Conditioning
- San Antonia Regional Hospital
- Saratoga Foods, Inc.
- Sierra Aluminum Company



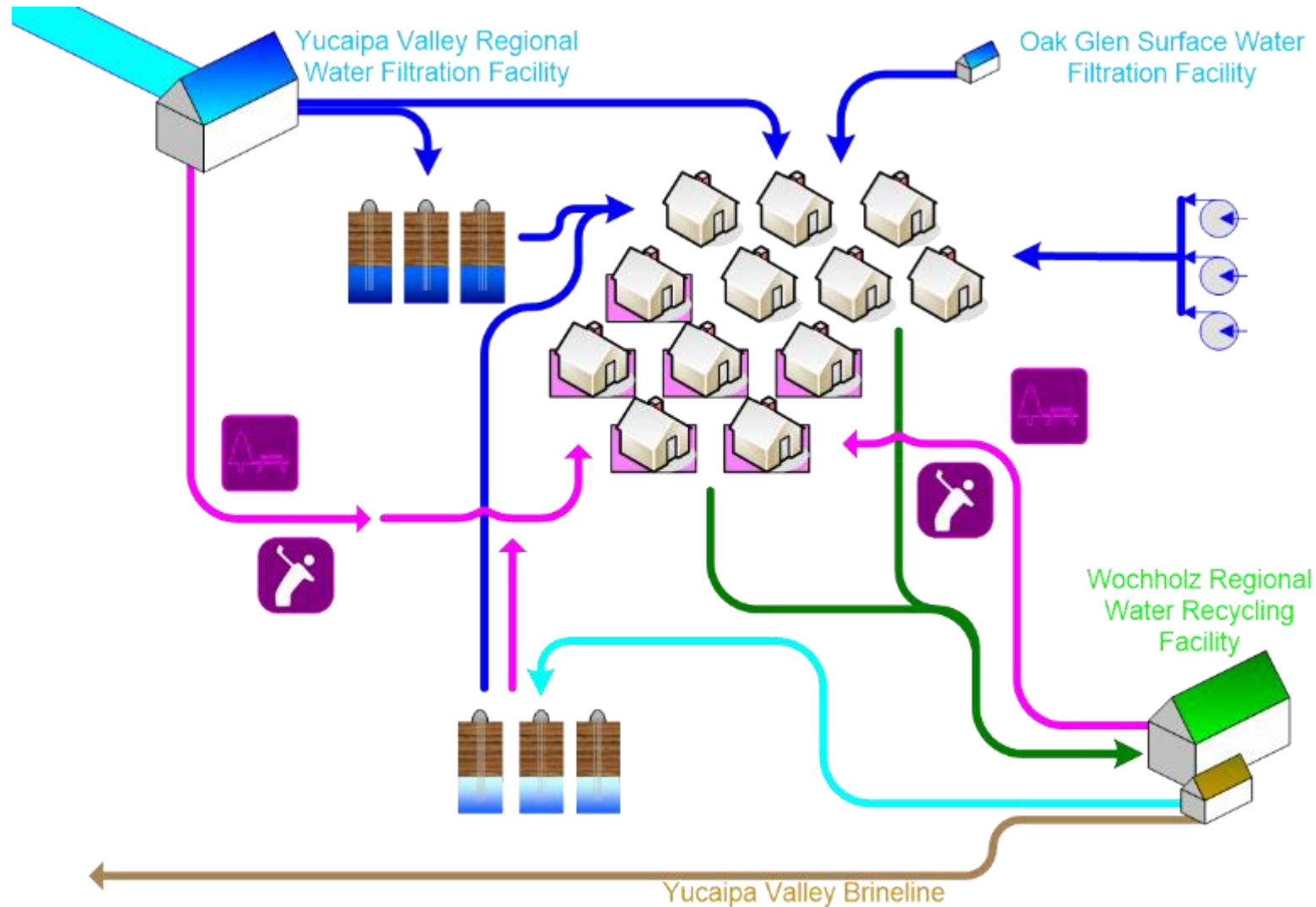
Wastewater RO Concentrate Dischargers



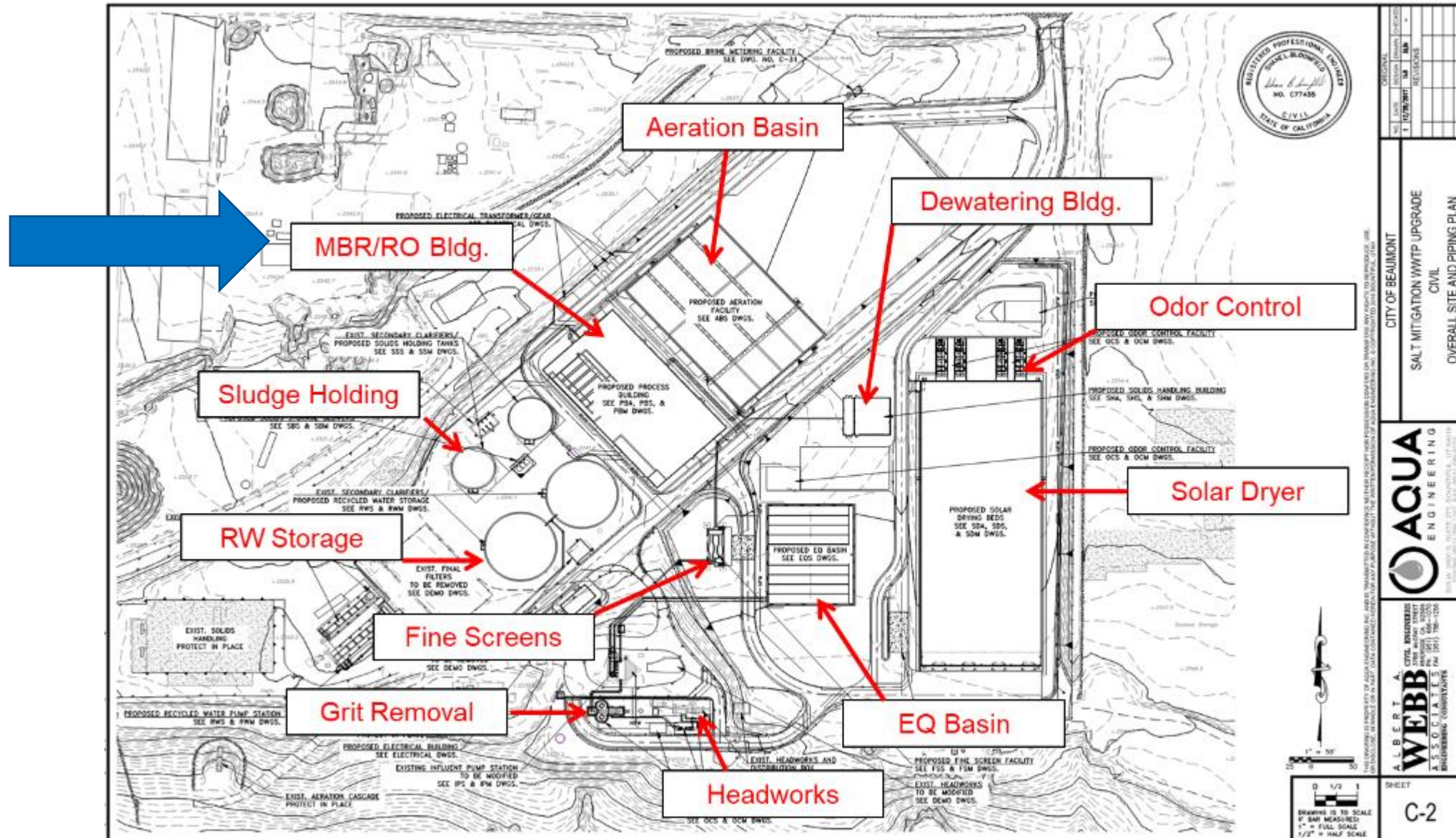
Yucaipa Valley Water District
Henry Wochholz Regional
Water Recycling Facility

City of Beaumont Wastewater
Treatment Plant

Yucaipa Valley Water District (courtesy of YVWD)



City of Beaumont WWTP (courtesy of City of Beaumont)



WWTP RO required for Salt Management (source: YVWD and Beaumont)

Santa Ana River Basin Plan (Santa Ana RWQCB)



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graph TD; A[Santa Ana River Basin Plan (Santa Ana RWQCB)] --> B[Basin Plan Amendment (RB-2004-0001) creating "Maximum Benefit" program for TDS management (groundwater basins) and water reuse]; B --> C[To accommodate recycled water projects, alternative water quality (Max Benefit) objectives were established for groundwater basins]; C --> D[In return, commitments for salt removals were made to ensure beneficial uses of groundwater basins]; D --> E[Max benefit requirements includes WWTP water quality standards for recycled water and effluent to Santa Ana River and tributaries];
```

Basin Plan Amendment (RB-2004-0001) creating "Maximum Benefit" program for TDS management (groundwater basins) and water reuse

To accommodate recycled water projects, alternative water quality (Max Benefit) objectives were established for groundwater basins

In return, commitments for salt removals were made to ensure beneficial uses of groundwater basins

Max benefit requirements includes WWTP water quality standards for recycled water and effluent to Santa Ana River and tributaries

Overview of Brine Line Costs

- Costs of disposal based on:
 - Volume discharged
 - Pounds of BOD
 - Pounds TSS
 - Fixed capacity charges
 - Type of connection (direct or indirect)
 - **But not TDS!**
- Direct discharger brine (industrial)
 - **\$184 per 100,000 gallons*** (25 mg/L BOD and 25 mg/L TSS)
- Desalter brine
 - **\$170 per 100,000 gal*** (5 BOD and 5 TSS)
- POTW RO concentrate
 - **\$176 per / 100,000 gal*** (15 BOD 10 TSS)
- Indirect cost for brine disposal:
 - **\$0.016 per gallon or \$80 for a 5,000 gal truck*** (<100 BOD and <100 TSS).
 - Does not include hauling costs.

* Plus SAWPA Member Agency administrative cost (if applicable)

Brine Line – Current Activities

Brine Line Master Plan

- Long-term planning document that addresses facility needs
 - Manage and implement the growth and expansion to best serve the watershed and our Member Agencies and current and future BL dischargers
- Benefits
 - Consistency in decision making
 - Ability to make informed decisions
 - Focus resources and prioritize projects
 - Promote economic development
 - Maintain System Reliability
 - Accommodate future growth
 - Meet future regulatory requirements
- Scope under development
 - RFP expected 1st Quarter 2022



Brine Line O&M Activities

- Pipeline inspection (CCTV)
- Maintenance access structure inspections
- Line cleaning
- Valve exercising
- Air vacuum valve maintenance
- USA DigAlert markings
- Contractor coordination,
- Meter readings
- Meter maintenance



Maintenance access structure inspections and repairs



Coordination with other Agency contractor's working near Brine Line



Right of way maintenance - Prado

Brine Line PFAS Monitoring

- Six samples planned (Monthly: July-Dec)
- Results for first 3 months (38 total PFAS parameters analyzed)
 - 11 – 13 above reporting limit
 - 25 – 27 below reporting limit and/or non-detect
- Results for PFOA and PFOS (range of first 3 samples)

Parameter	Result	Units
Perfluorooctanoic Acid (PFOA)	89 – 130	ng/L
Perfluorooctanesulfonic Acid (PFOS)	97 – 150	ng/L

Other SAWPA Activities

(SAWPA Contact: Mark Norton)

Prop 1 Round 2 Integrated Regional Water Management (IRWM)

Schedule:



DWR Releases Final
R2 Grant Guidelines
and PSP (Dec 2021)



OWOW Steering
Committee Approves
R2 Projects (Aug 2022)

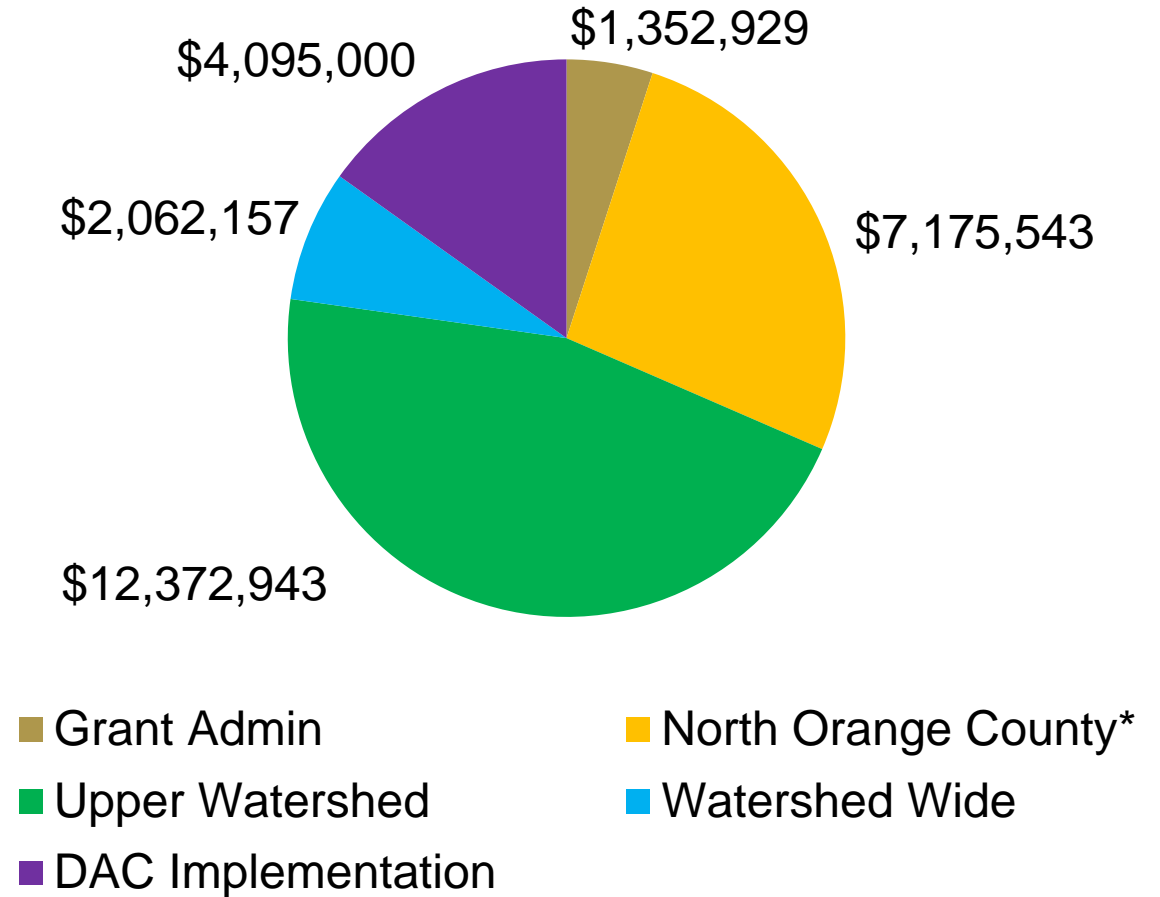


R2 Application
Submittal to DWR
(Sept 2022)



SAWPA finalizes grant
agreement for R2
(2023)

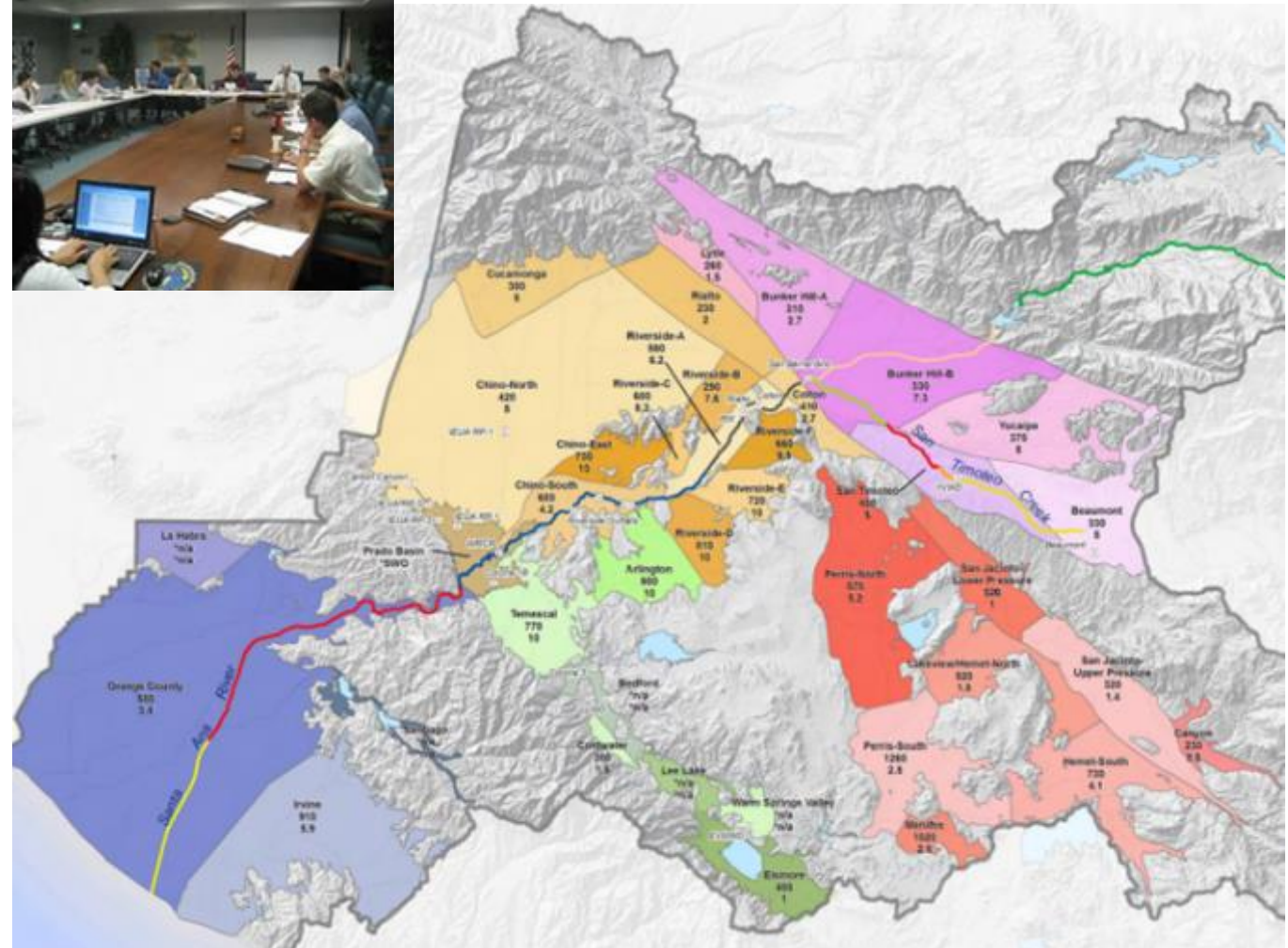
Round 2 Amounts By Category



Total = \$27,058,572

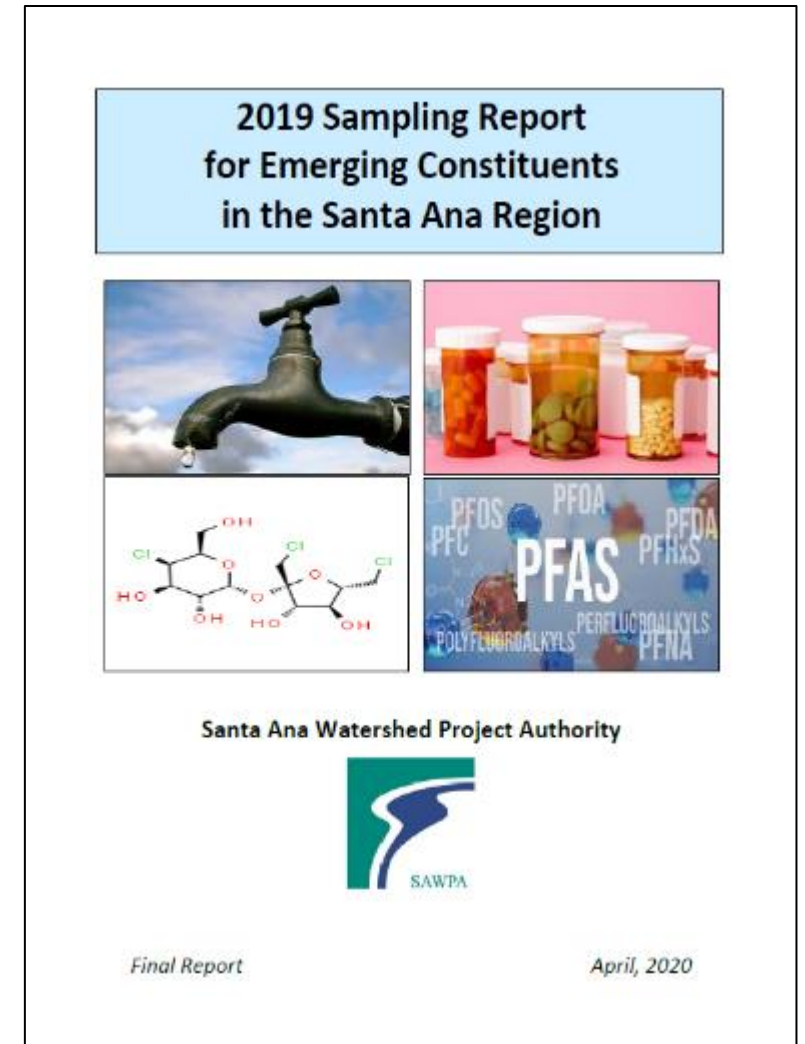
Basin Monitoring Program Task Force (TDS and Nitrate)

- SAR Wasteload Allocation
 - Confirm compliance of river discharges with ground water quality objectives
- Basin Plan Amendment reflecting Wasteload Allocation
 - **Regional Board passed in Dec. 2021)**
- For FY 21-22:
 - Ensure compliance with Salt Nutrient Management Plans



Emerging Constituents (EC) Program Task Force

- Background
 - Complies with Regional Board Resolution for Imported Water Recharge
 - Voluntary Annual Sampling reports
- Current activities
 - 2019 Sampling Study
 - Report was shared with the Regional Board
 - Quarterly meetings
 - Annual EC and PFAS data compilation report (Spring 2022) using data from available sources

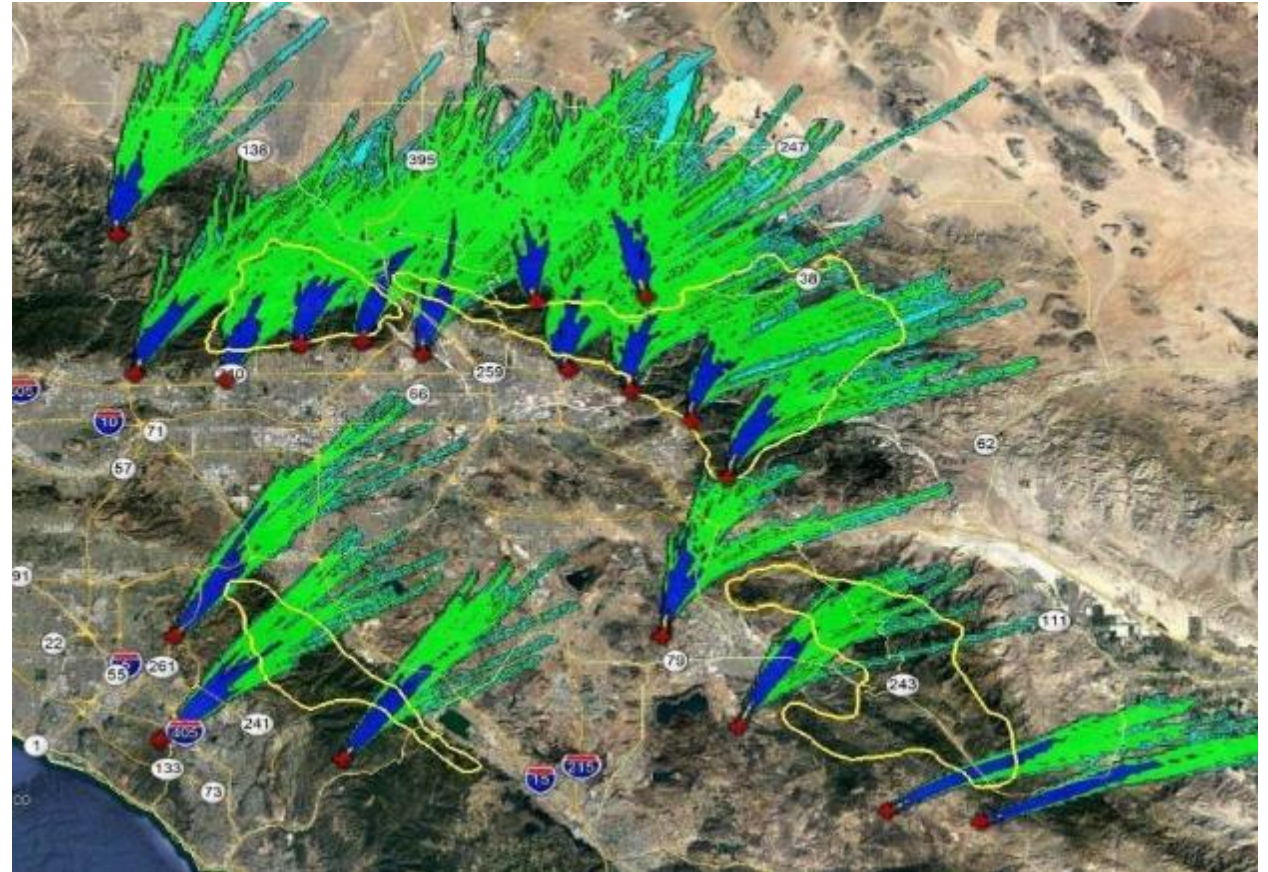


SAWPA Weather Modification Pilot Program: Cloud Seeding



Weather Modification Pilot Program Status

- Underway:
 - CEQA
 - Ground-based site selection
- Outreach to stakeholders and the public
- Prop 1 Round 2
 - Proposal for funding
- Pilot Program
 - Commence 2022-2023



SAWPA Feasibility Study: Ground Based Seeding Dispersion Model



Thank you!

Jeff Mosher
jmosher@sawpa.org



Orange County WaterReuse
Chapter Meeting

Thursday, December 16, 2021

The Headworks DPR Demonstration Project: Implementing DPR in the City of LA

Erik Avila - LADWP

Greg Wetterau – CDM Smith



AGENDA

- LA Water System Background
- Project Background
- Treatment Approach
- Pathogen Removal
- Chemical Removal
- Project Schedule and Summary

A microscopic view of numerous small, clear water droplets of varying sizes, some showing internal reflections, set against a light blue background. This image is part of a horizontal band that also contains a solid blue section with the word 'Background'.

Background

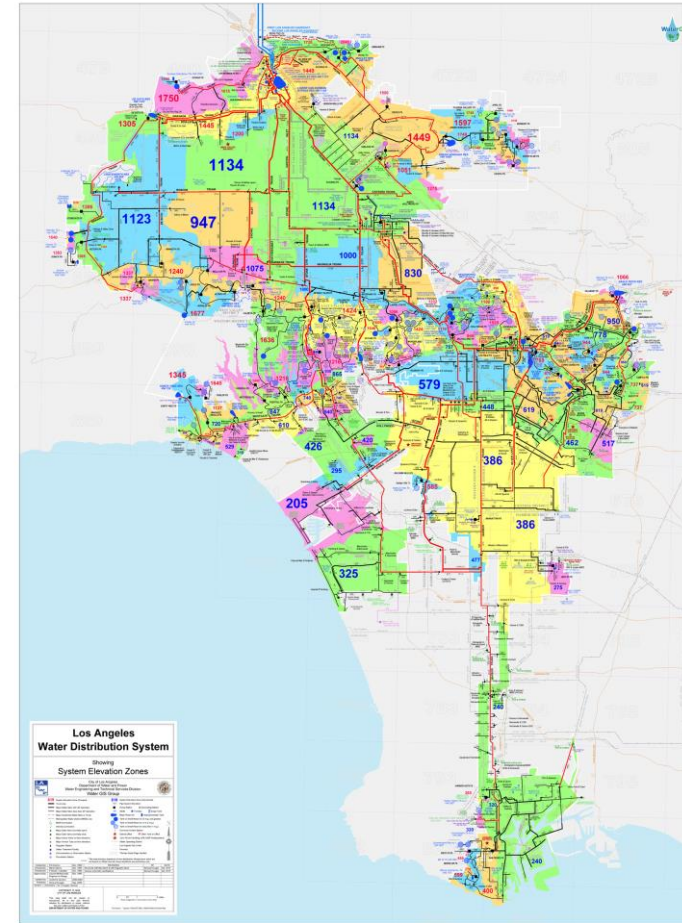
LADWP Potable Water System Overview

159 Billion Gallons of Water Annually

435 million gallons per day (GPD)

7,336 miles of Distribution Mains and Trunk Lines

Over 730,000 active water service connections



LADWP Recycled Water System Overview

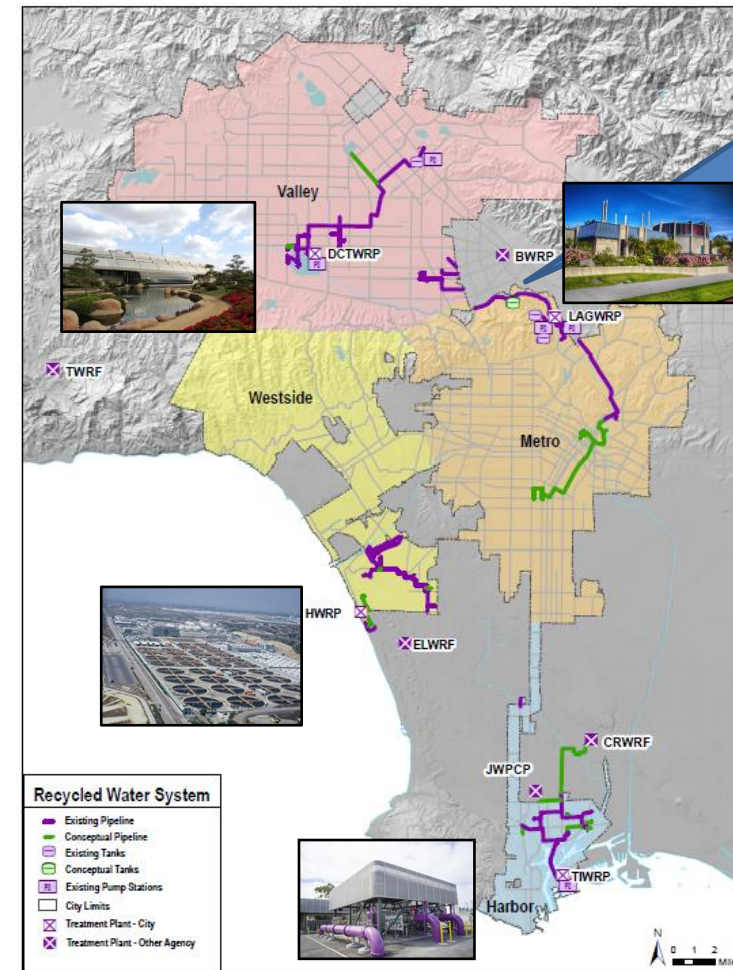
Extensive history of water reuse

Over 67 miles of purple pipeline installed

4 Service Areas (Valley, Metro, Westside, Harbor)

10,000 AFY Delivered

Headworks
DPR Project



LA's Path to Reuse

Non-Potable Reuse



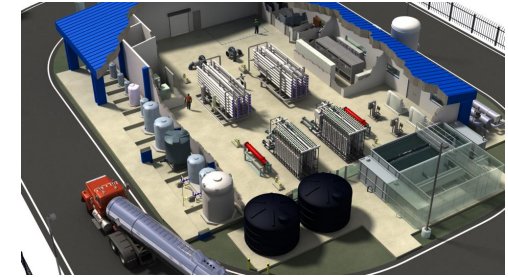
- Irrigation
- Industrial Uses
- Environmental

Indirect Potable Reuse



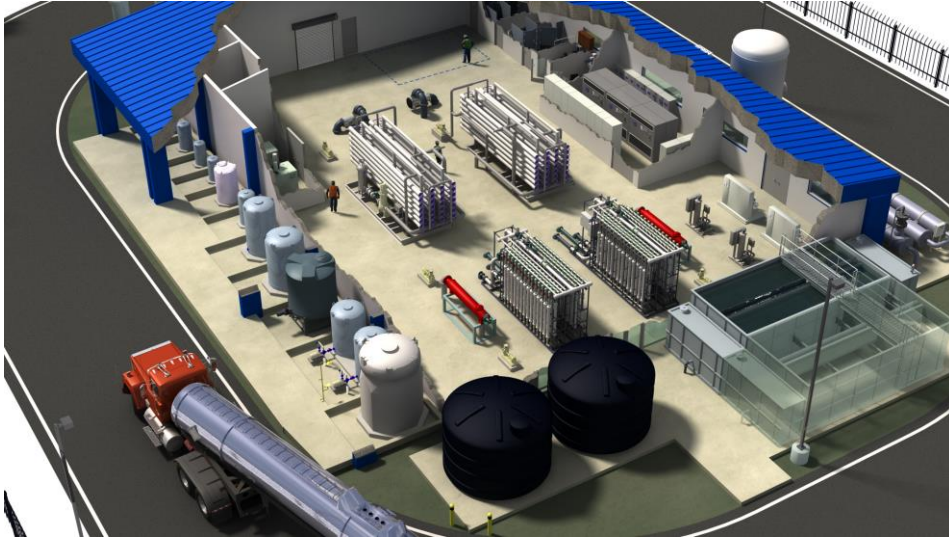
- Terminal Island
- Donald C. Tillman
- Operation NEXT

Direct Potable Reuse



- Headworks DPR
- Operation NEXT

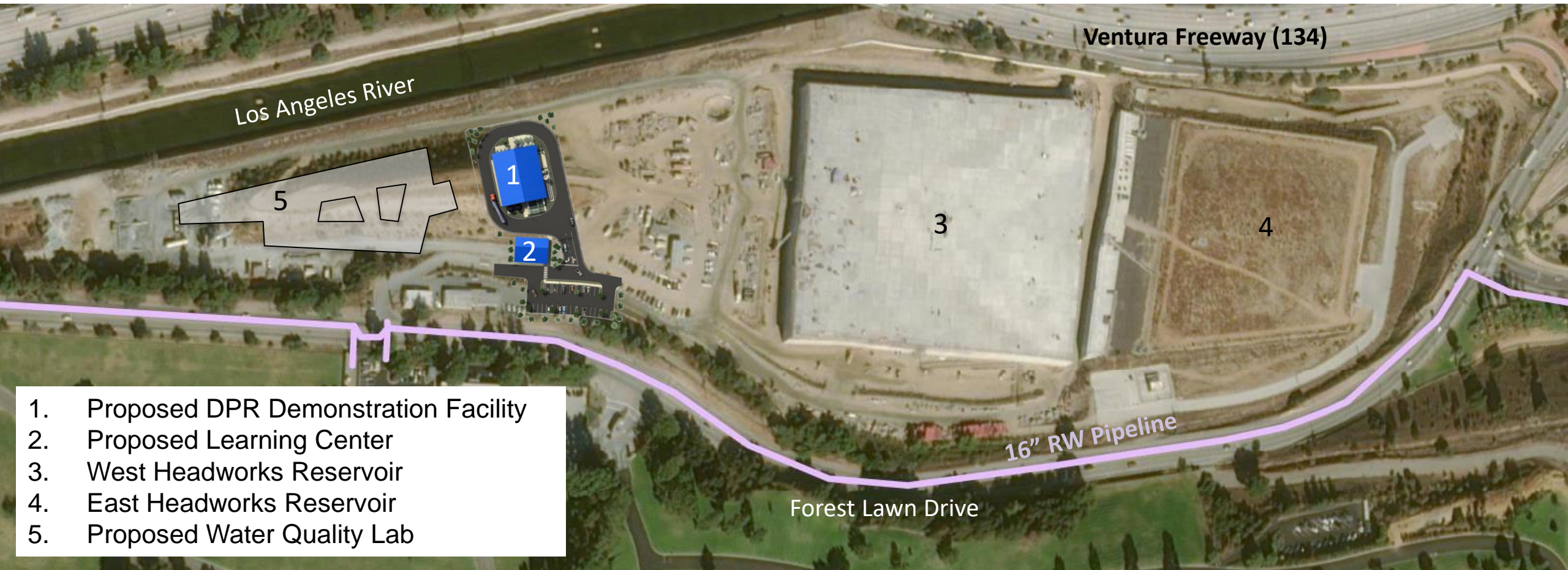
Headworks Project Overview



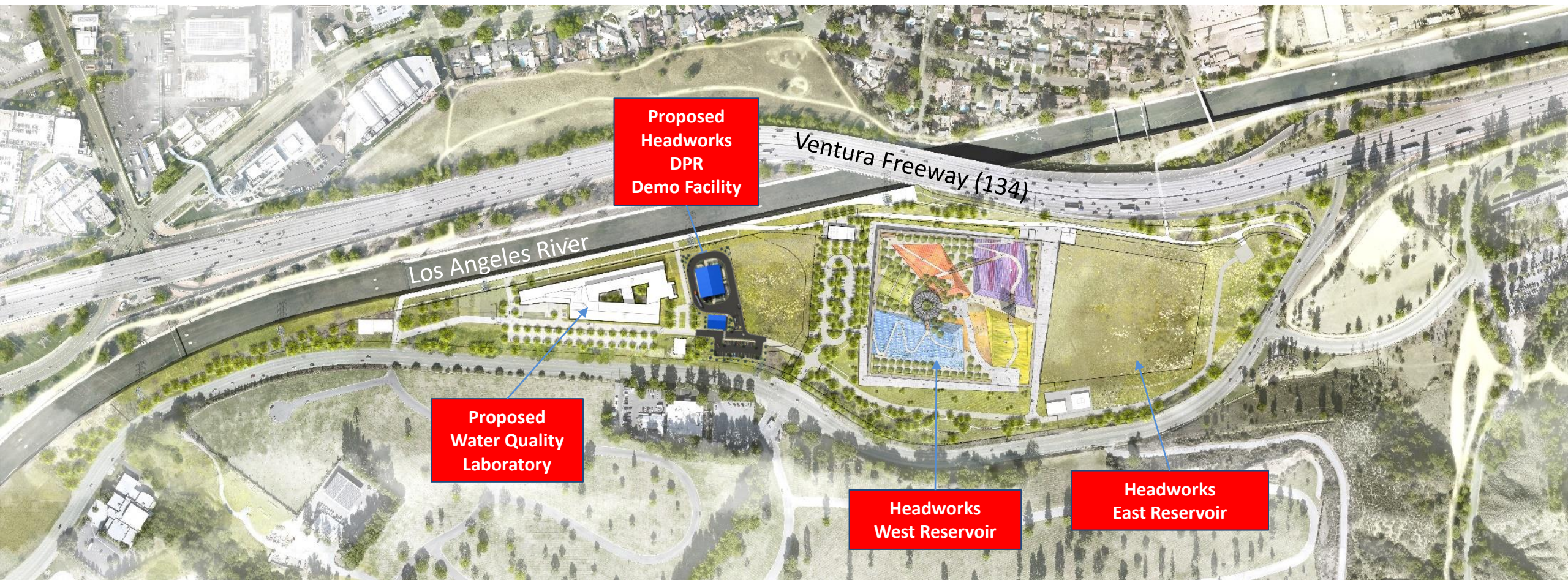
- 1 MGD DPR Facility
- Learning Center
- Phased Approach



Headworks Demonstration Facility Location

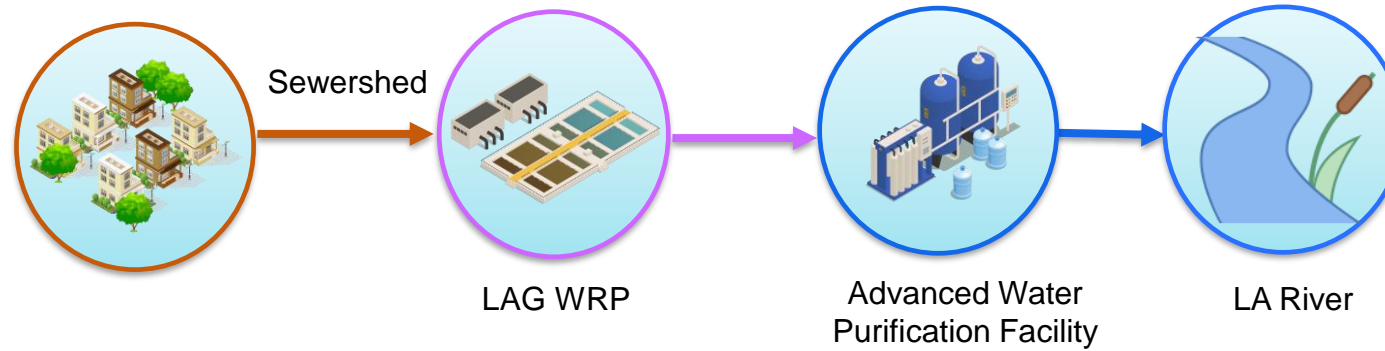


Envisioned Development

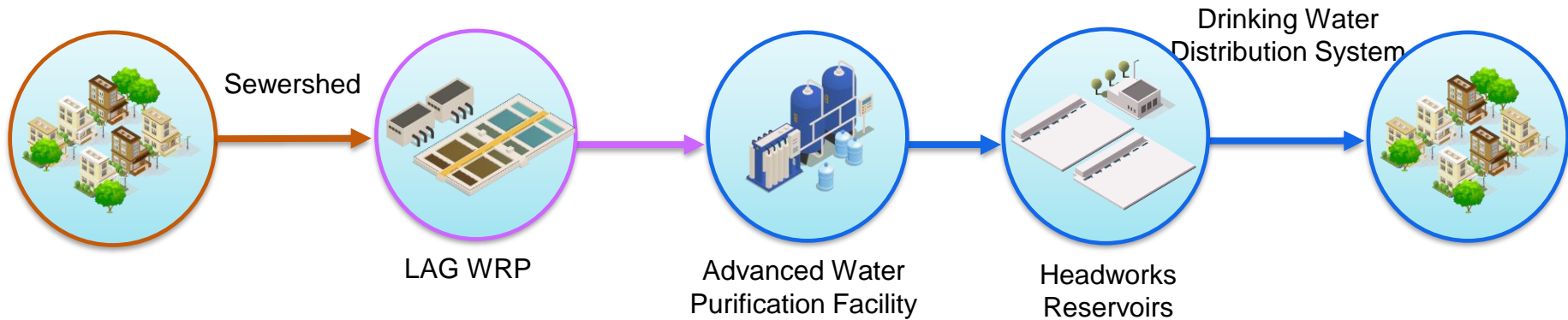


Project Phases

Phase 1 – Demonstration Facility (1 MGD)



Phase 2 – Initial DPR Operation (1 MGD)



Goals of Demonstration

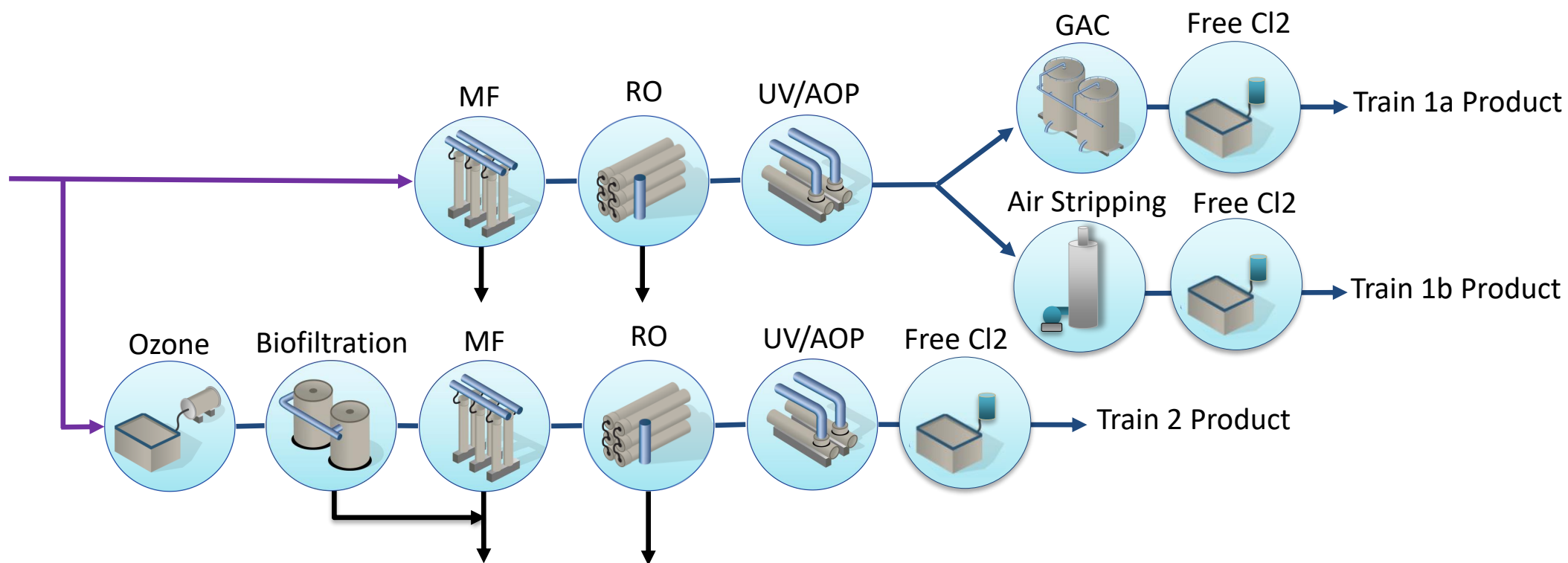
- Establish LADWP's DPR program
- Provide operator training
- Public and regulatory engagement
- Demonstrate integrity monitoring for critical control points
- Optimize unit processes for Phase 2 operation

A microscopic view of water droplets, showing numerous small, spherical droplets of varying sizes, some with visible internal structures, set against a blue background.

Treatment Approach

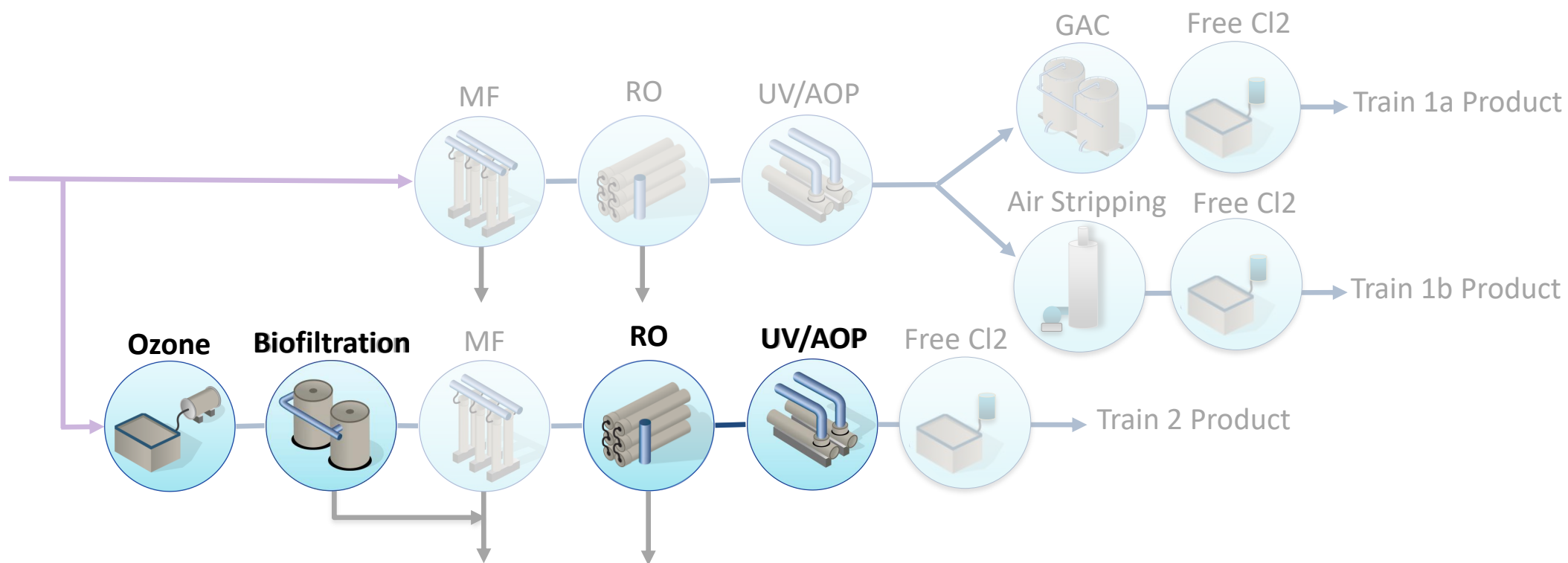
Demonstration Facility Treatment Approach

- Concurrent operation with 3 process trains



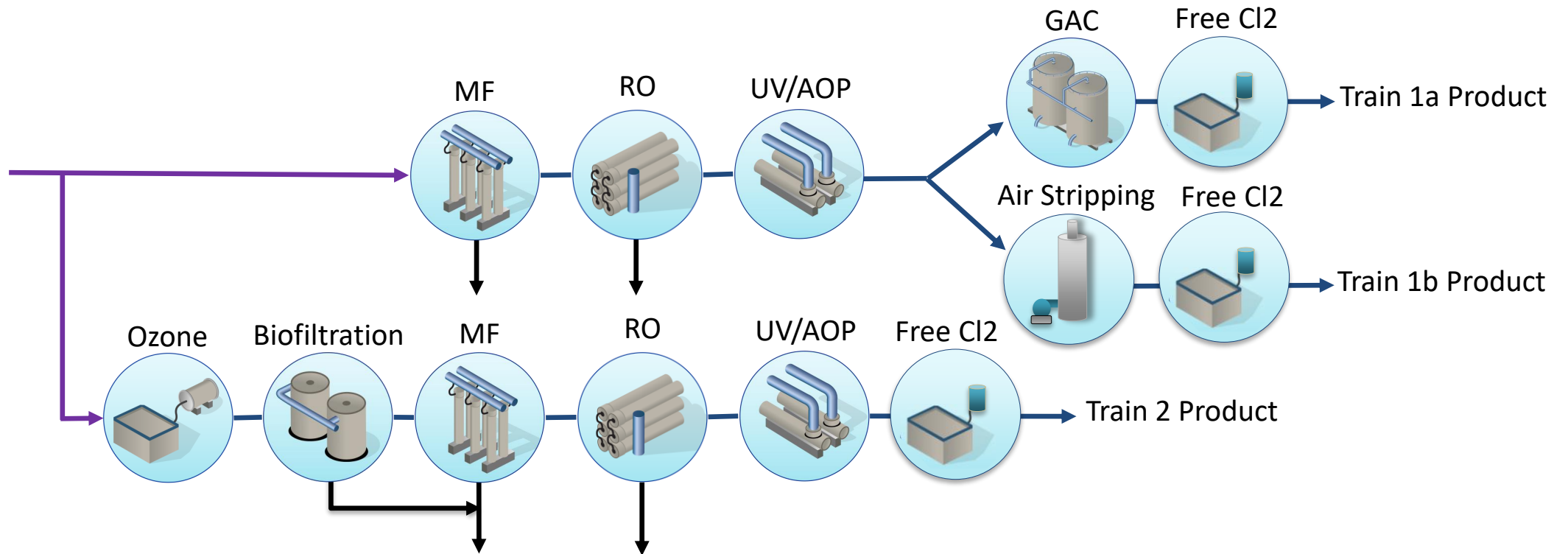
Demonstration Facility Treatment Approach

- Concurrent operation with 3 process trains
 - Train 2 based on core processes in DDW Draft DPR Regulations



Demonstration Facility Treatment Approach

- Concurrent operation with 3 process trains
 - Train 2 based on core processes in DDW Draft DPR Regulations
 - Testing will confirm equivalency of alternative trains



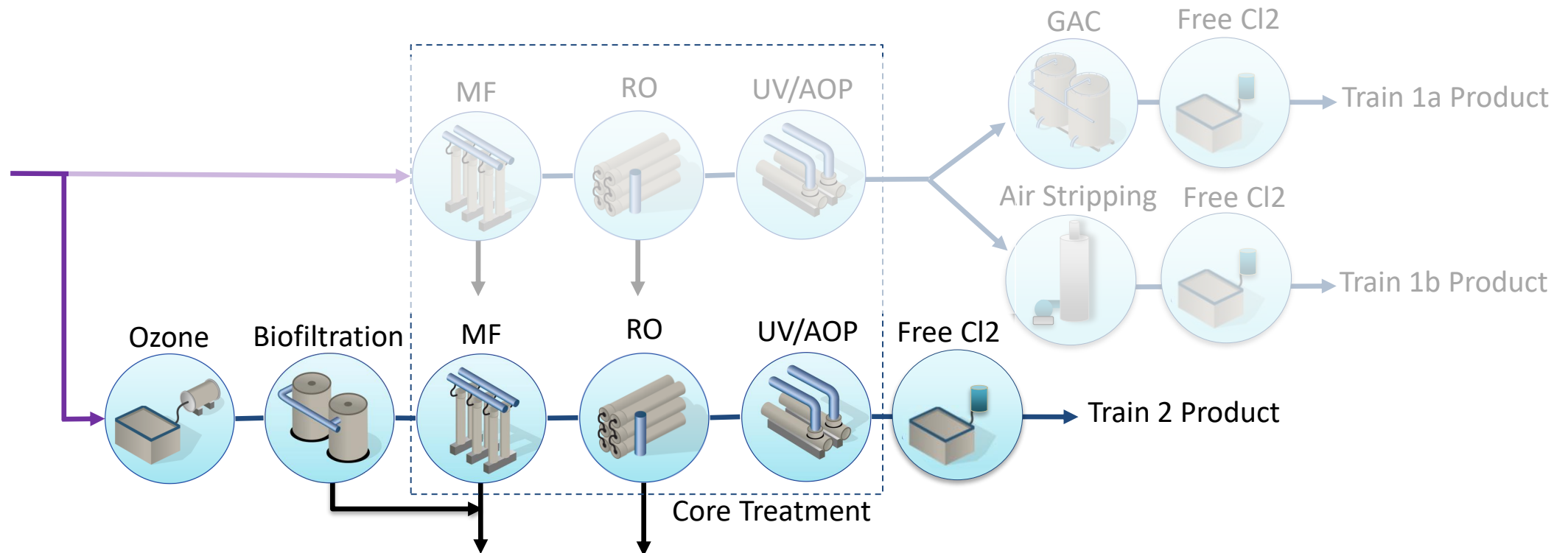
A microscopic view of water droplets, showing numerous small, spherical droplets of varying sizes, some with visible internal structures, set against a blue background.

Pathogen Removal

Train 2 Pathogen Removal

- Achieves 20-14-15 with minimum 4 barriers for each pathogen
- Credits per process similar to existing full-scale plants

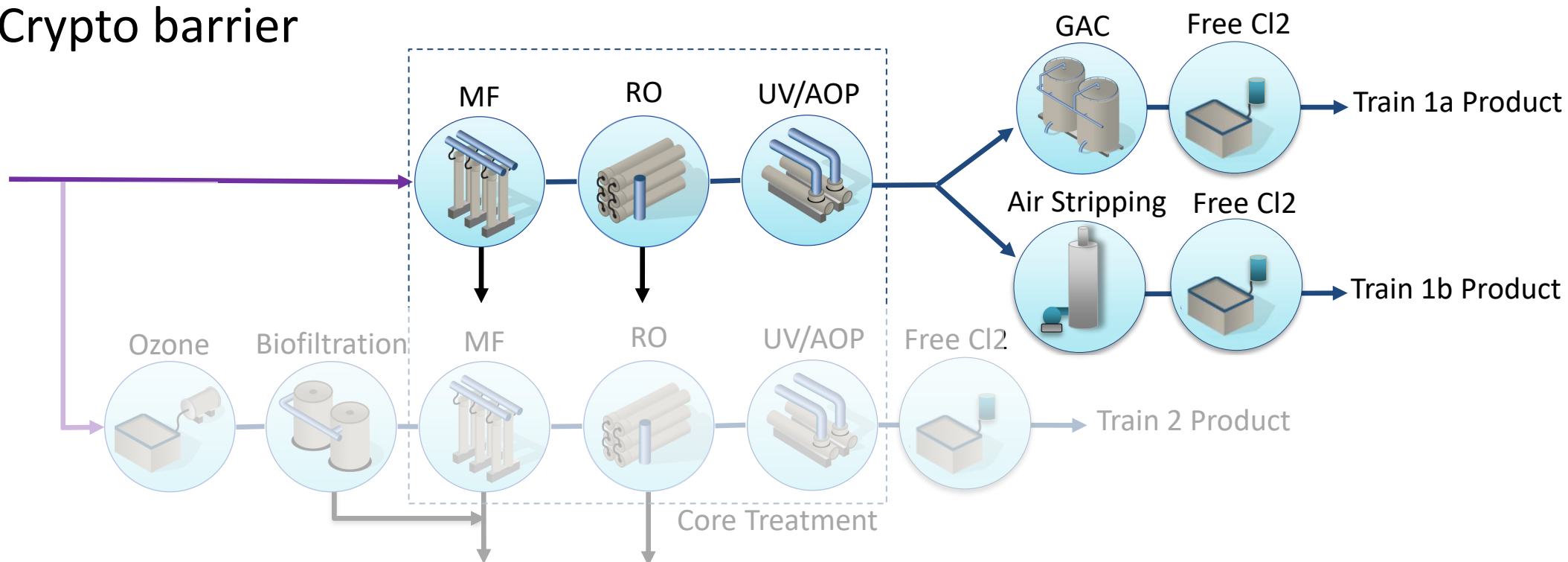
Process	Virus	Crypto
Ozone	6	1
MF	0	4
Cartridge Filters	0	2
RO	2	2
UV	6	6
Free Chlorine	6	0
Total	20	15



Train 1 Pathogen Removal

- Requires enhanced credits for MF and RO to achieve 20-14-15
- Cartridge filters provide 4th Crypto barrier

Process	Virus	Crypto
MF + Cl2	5	5
Cartridge Filters	0	2
RO	3	3
UV	6	6
Free Chlorine	6	0
Total	20	16

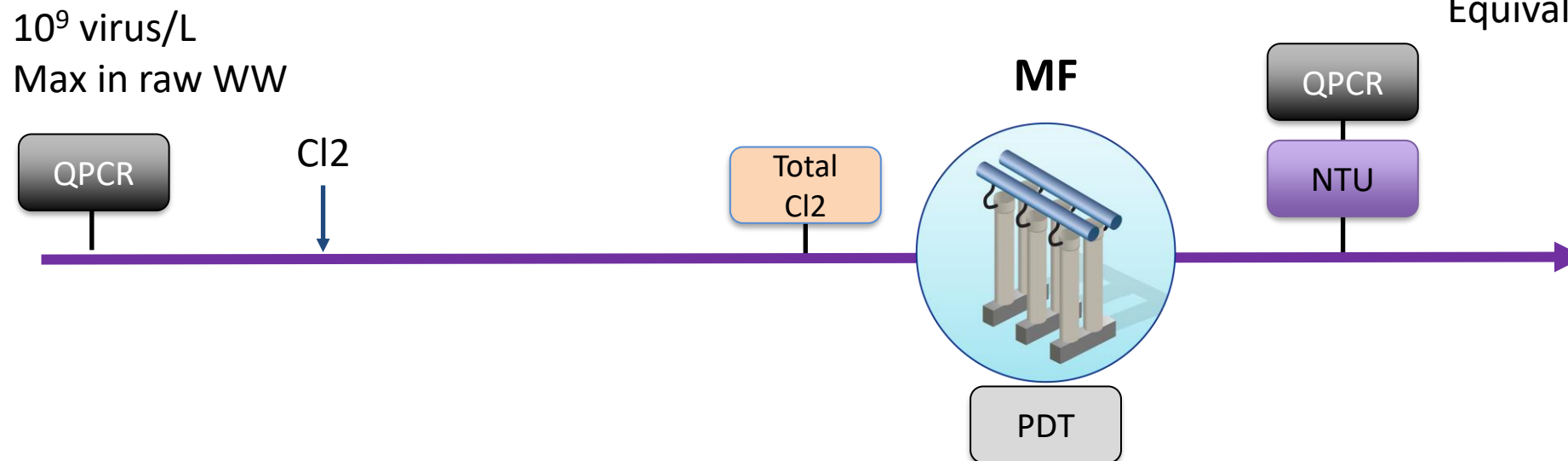


Pathogen Removal for MF

- Giardia/Crypto confirmed using daily PDT and continuous turbidity, targeting 5-log
- qPCR evaluated for virus reduction
 - Directly measure viruses in raw WW and MF permeate daily, seeking credit for combined processes rather than single unit process
 - Targeting ND values for 5-log virus credit
 - Somatic coliphage or norovirus being considered



Confirm < 1 virus/mL (10^3 /L)
Equivalent to 6-log reduction

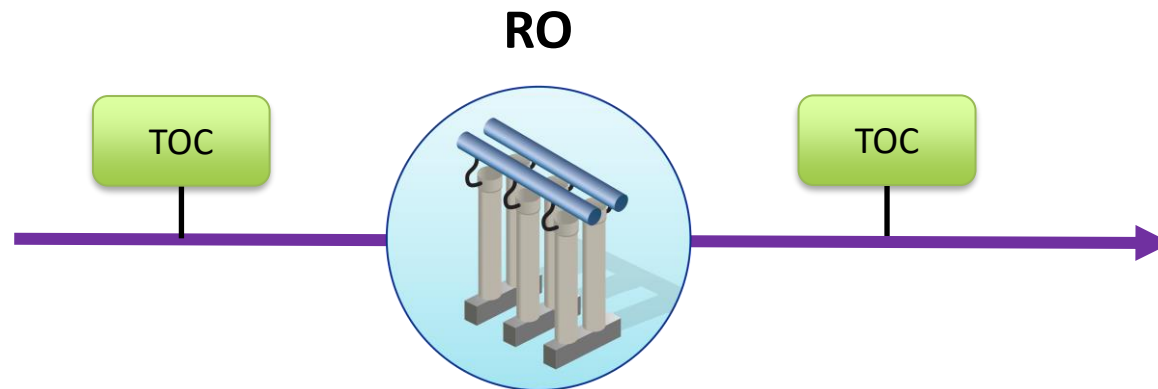


A microscopic view of numerous small, clear water droplets of varying sizes, some showing internal reflections, against a light blue background.

Chemical Removal

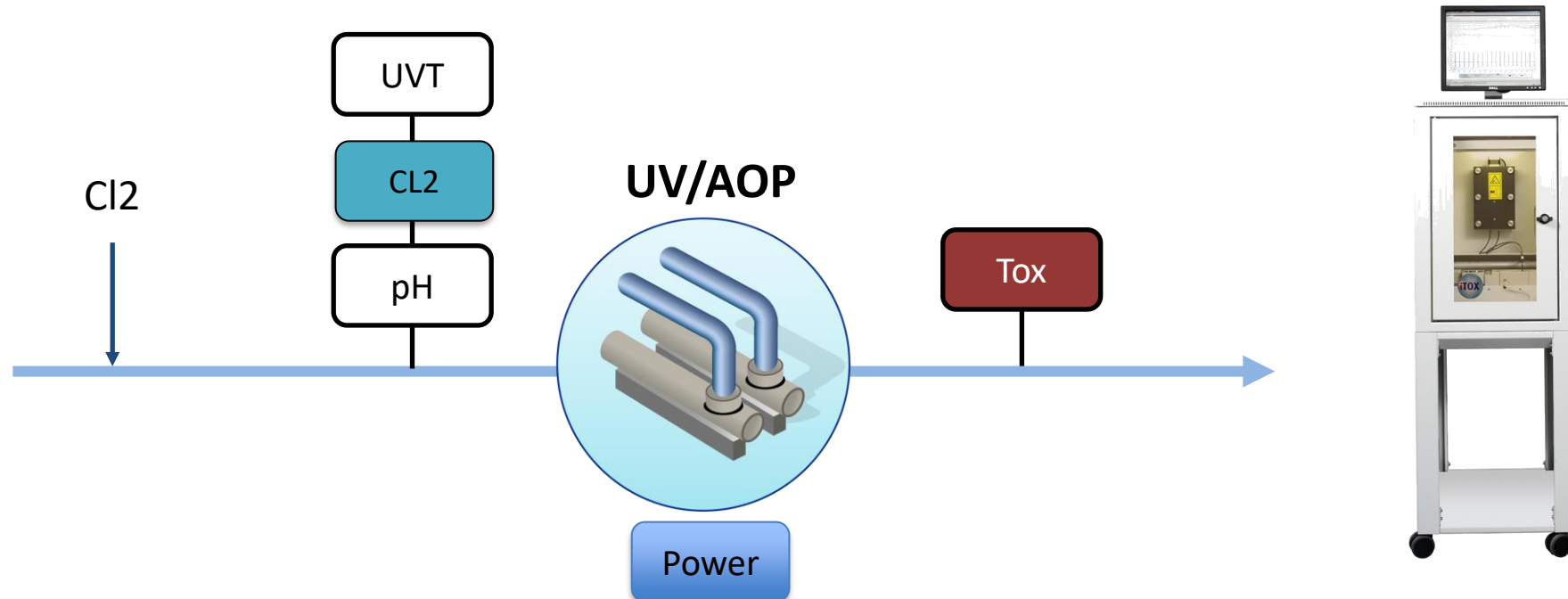
Chemical Removal - RO

- > 99% reduction of bulk organic chemicals
- Comply with DPR requirements for TOC
 - Maintain TOC < 0.5 mg/L at all times
 - 95% of samples < 0.25 mg/L
 - Evaluate integrity (vessel probing) if > 0.15 mg/L



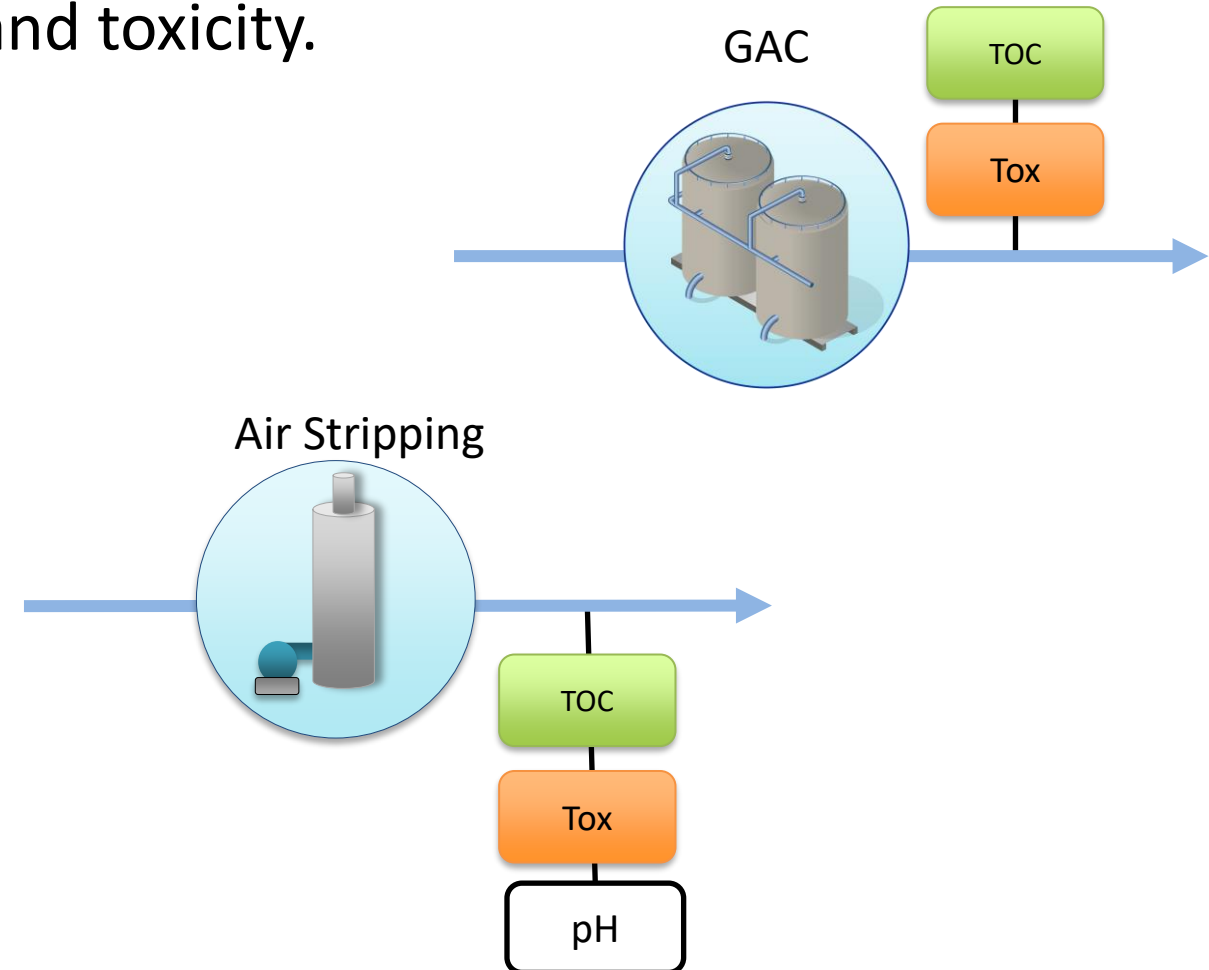
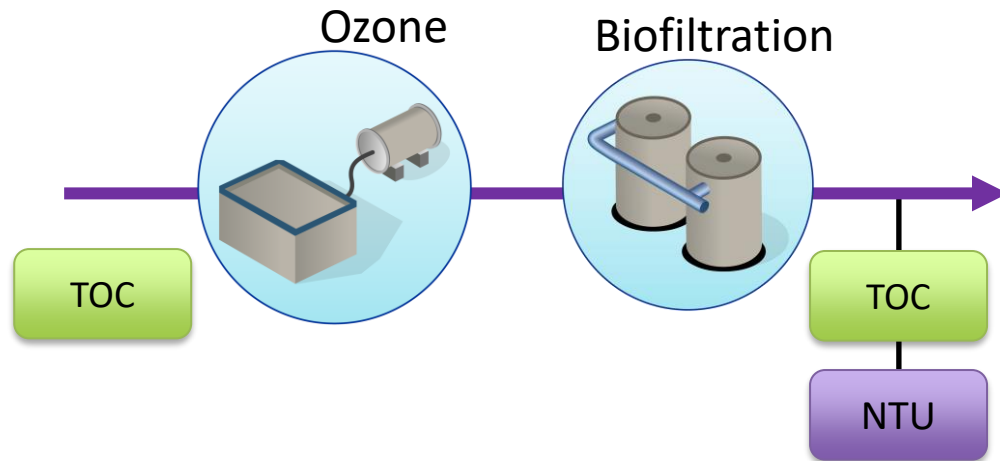
Chemical Removal - AOP

- Continuous monitoring of pH, free Cl₂, and UVT upstream of UV
- Spiking study to demonstrate 0.5-log reduction of 1,4-dioxane and develop correlation of UV-chlorine dose product
- Online bioassay of product using MicroLAN iTOX, serving as additional confirmation for toxicity spikes



Chemical Removal – Supplemental Process

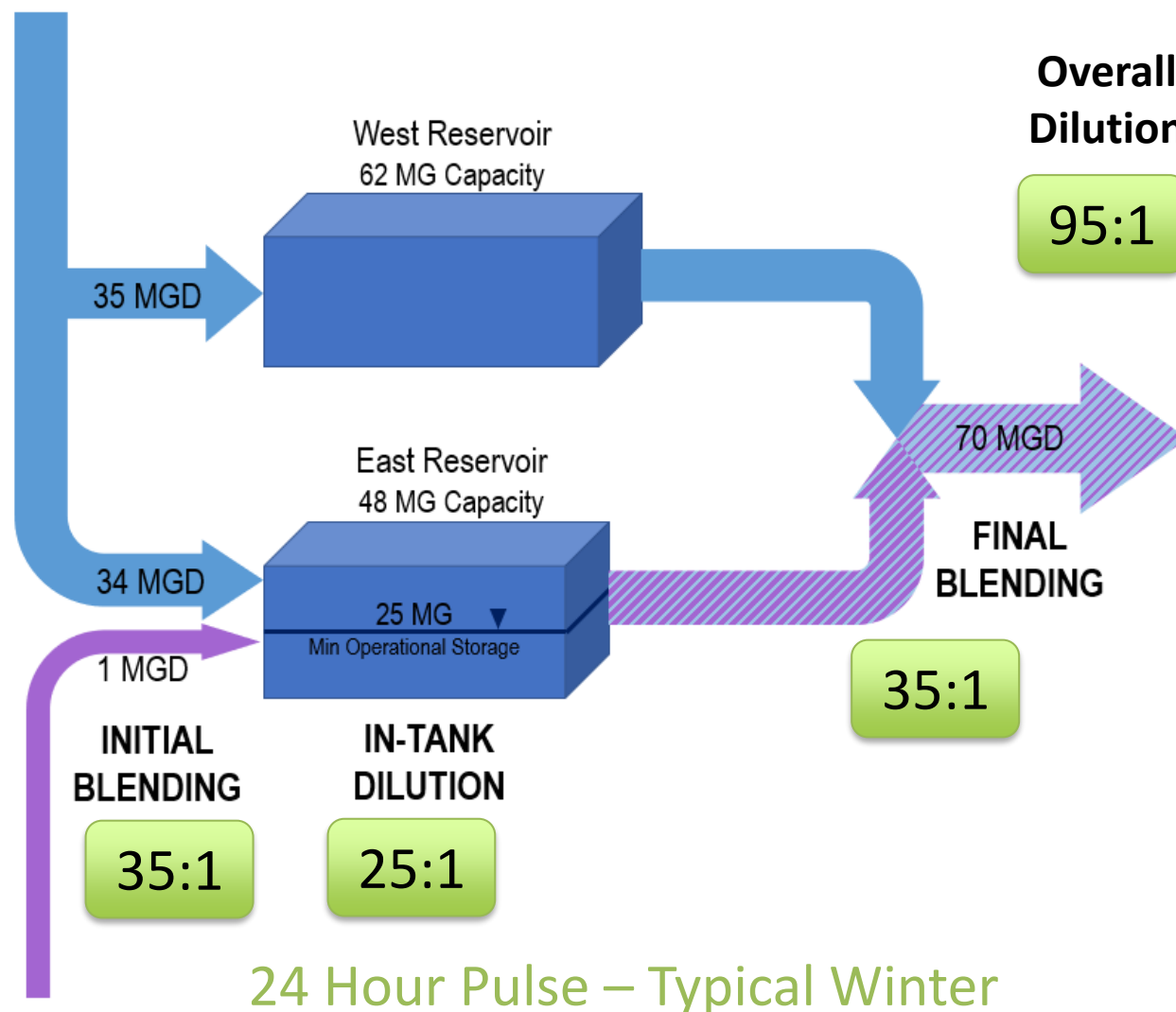
- O3-BAF will monitor TOC and turbidity
- GAC and Air stripping monitor TOC and toxicity.
 - Air stripping also monitors pH



Blending Provides Final Barrier to Chemical Spikes

Demand Scenario	Blending Ratio (Total Flow to Purified Water Flow)
Typical Summer Day	83:1
Typical Winter Day	70:1

Winter Flow Scenario Duration of Off Spec Pulse, Δt (hour)	In-Tank Dilution Factor ($t_r / f * \Delta t$)
1	601:1
2	300:1
4	150:1
8	75:1
12	50:1
16	38:1
24	25:1



Chemical Spiking

- Focus on low MW organic compounds that are also poorly biodegraded
- Target compounds with lower K_{OH}^* than 1,4-dioxane
- Evaluate 2-3 compounds in addition to formaldehyde and 1,4-dioxane

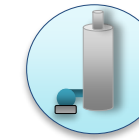
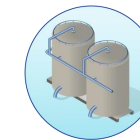
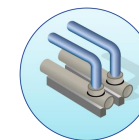
Chemical	Regulatory Limit (ug/L)	Removal w/ RO	Removal w/ AOP	Removal w/ GAC	Removal w/ AS
		Molecular Weight (Dalton)	Hydroxyl Radical Rate (Log K_{OH}^*)	Hydrophobicity (Log K_{OW})	Henry's Law Coefficient H_c (atm-L/mol)
Formaldehyde	100*	30	9.30	0.35	0.0003
1,4-dioxane	1*	88	9.37	-0.27	0.0048
Acetone	N/A	58	7.99	-0.24	0.035
Acetonitrile	0.059**	41	6.54	-0.34	0.0345
Benzene	1	78	9.89	2.1	5.6
Chloroform	80	119	7.15	2.0	3.7
MTBE	13	88	9.17	0.94	0.59

* Notification level

** Priority pollutant

Testing with DBP Related Compounds

- Looking at formation of byproducts in process trains
- Key question:
 - Is it better for form DBPs/OPs before RO than in UV/AOP?



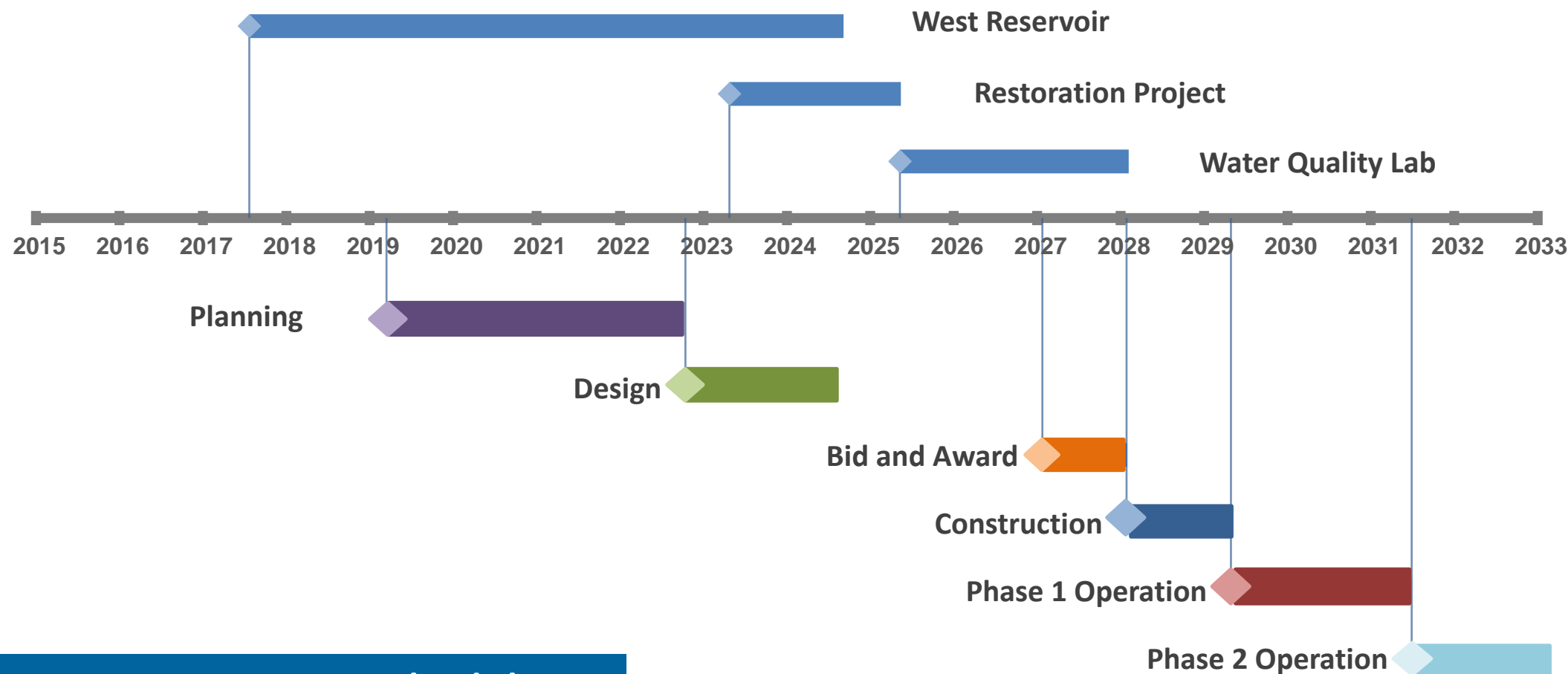
Chemical	Molecular Weight (Dalton)	Hydroxyl Radical Rate (Log K_{OH^*})	Hydrophobicity (Log K_{OW})	Henry's Law Coefficient H_c (atm-L/mol)
Formaldehyde	30	9.30	0.35	0.0003
Chloroform	119	7.15	2.0	3.7
NDMA	153	9.10	-0.38	0.0365
Dimethylamine	45	10.69	-0.38	0.018
Bromide	80	N/A	N/A	N/A
Chromium-3	52	N/A	N/A	N/A

A horizontal blue bar spanning the width of the slide. The left portion of the bar features a close-up photograph of numerous water droplets of varying sizes, creating a textured, bubbly appearance. The right portion of the bar is a solid, uniform blue color.

Project Schedule

Project Schedule

Headworks Construction Activity



DPR Demonstration Schedule

Headworks DPR Demo Project

Summary

- Multi-phase Approach
- Outreach Opportunities
- Testing Platform

*First Step in Developing
LADWP's DPR Program*



Thank You



Standing Items

▶ State Section Update

—Joone Lopez (MNWD)

▶ Regulatory Updates

—DDW

—OCHCA

▶ Legislative and Regulatory Matters

▶ Potential Funding for Projects

Legislative/Regulatory Update



2022 California Legislative Calendar

- Jan. 1 Statutes take effect
- Jan. 4 Legislature reconvenes
- Jan. 10 Governor submits budget to Legislature
- Feb. 18 Last day for bills to be introduced
- Apr. 29 Last day policy comm. to report fiscal bills
- May 6 Last day fiscal comm. to report fiscal bills
- June 4 Last day for bills to pass house of origin
- June 15 Last day to pass budget
- Sept. 10 Last day for any bill to be passed
- Sept. 30 Last day for Governor to sign or veto bills
- See: <http://assembly.ca.gov/legislativedeadlines>

WateReuse Leg/Reg committee mtg on Friday Dec. 17

► WateReuse Leg/Reg committee mtg on Friday Dec. 17

- WateReuse's recycled water funding budget strategy for 2022-23, which includes increasing recycled water funding and decoupling it from groundwater cleanup funds. The committee will also discuss creating a new large project funding category and the January budget release.
- The final indoor residential water use standard and AB 1434 (Friedman), which also deals with indoor water use will be discussed. AB 1434 is currently in the Appropriations committee and there are efforts to hold or come up with alternatives to the bill by organizations, such as ACWA.
- Discuss a concept for expanding the potable reuse bonus incentive to 15%.
- Status of AB 836 (Gabriel) that deals with onsite reuse. Currently, WateReuse has an oppose position on AB 836

Local, State and Federal Funding Opportunities

PROGRAM	Total allocation	Funding available this Round	Purpose	Eligible Projects	Status	Anticipated Timeline	Notes
On-Site Retrofit Program (OSRP)	\$2M per year		Provides financial incentives directly to customers	Public and private owners to convert potable water irrigation or industrial water systems to utilize recycled water.	SOLICITATIONS OPEN	First come first serve basis starting 7/1 through 6/30 or until funds are exhausted.	Contact: Jessica Arm, Assistant Resource Specialist II (213) 217-6819 http://www.bewaterwise.com/on-site-retrofit-program.html
MWD Local Resource Program (LRP)			Provides financial incentives for the development of water recycling, groundwater recovery, and seawater desalination projects.	Projects can include: <ul style="list-style-type: none"> • Water recycling • Groundwater recovery • Seawater desalination Three incentive payment options: <ul style="list-style-type: none"> • Sliding scale incentives up to \$340/AF over 25 years, • Sliding scale incentives up to \$475/AF over 15 years, or • Fixed incentive up to \$305/AF over 25 years. 	SOLICITATIONS OPEN	First come first serve basis starting 7/1 through 6/30 or until funds are exhausted.	Contact: Kira Alonzo Senior Engineer (213) 217-6489 http://www.mwdh2o.com/AboutYourWater/Planning/Funding-Programs/Local-Resource-Program-Funding
Water Savings Incentive Program			Open to all commercial, industrial, agricultural, institutional and large Landscape customers	Project examples: <ul style="list-style-type: none"> • Replacement of older, less water-efficient equipment, • Comprehensive changes to industrial processes that reduce water consumption, • Improvements to existing irrigation systems and landscaping to improve water use efficiency. 	SOLICITATIONS OPEN	Payment amount is up to \$0.60 per 1,000 gallons saved per year over the project live, up to a maximum of 10%. Incentives are limited to 50% of eligible project costs	

PROGRAM	Total allocation	Funding available this Round	Purpose	Eligible Projects	Status	Anticipated Timeline	Notes
SoCal Water\$mart		Dependent on type of project	Business and residential rebates to help encourage water efficiency and conservation	Commercial Projects: Plumbing Fixtures Landscaping Equipment Food and HVAC Equipment Medical and Dental Equipment Residential Projects: Turf Removal Residential Devices	SOLICITATION OPEN		https://socalwatersmart.com/en/commercial https://socalwatersmart.com/en/residential
MWD Stormwater for Direct Use Pilot Program	\$5M		Beginning early 2020, The MWD will evaluate local stormwater capture projects to better understand their performance and regional water supply benefits. This program will financial incentives to develop, monitor and assess up to 10 new or existing stormwater recharge projects across the district's service area.	To be eligible, project must: <ul style="list-style-type: none"> • Include meter(s) for measurement of capture and use • Offset potable or reclaimed water use • Be within Metropolitan's service area • Have an estimated minimum design capture and use of one acre-foot per year • Have completed CEQA documents, if needed • Submit project schedule • Submit original project construction cost at the time of application (for retrofit projects only) 	SOLICITATIONS OPEN	First come first serve basis starting 7/1 through 6/30 or until funds are exhausted.	Matt Hacker Senior Resource Specialist (213) 217-6756 https://www.mwdh2o.com/media/6883/stormwater-for-recharge-monitoring-equip-installation-project-application-sample.pdf
MWD Stormwater for Recharge Pilot Program	\$7.5M		Beginning early 2020, The MWD will evaluate local stormwater capture projects to better understand their performance and	To be eligible, project must: <ul style="list-style-type: none"> • Measure capture and recharge • Demonstrate how stored water recharges usable groundwater • Describe how the project will increase groundwater production 	SOLICITATIONS OPEN	First come first serve basis starting 7/1 through 6/30 or until funds are exhausted.	Matt Hacker Senior Resource Specialist (213) 217-6756 https://www.mwdh2o.com/media/20

PROGRAM	Total allocation	Funding available this Round	Purpose	Eligible Projects	Status	Anticipated Timeline	Notes
			regional water supply benefits. This program will financial incentives to develop, monitor and assess up to 10 new or existing stormwater recharge projects across the district's service area.	<ul style="list-style-type: none"> or decrease Metropolitan demand • Possess the right to capture and recharge stormwater in the area of the proposed project and not impact downstream users • Have an estimated design capture of at least 40 acre-feet per year • Be located within Metropolitan's service area • Create new water supply by increasing total recharge to a groundwater basin and decreasing stormwater flows to the ocean • Submit a minimum of three annual monitoring reports 			711/mwd_recharge_final.pdf
DWR Water Use Efficiency: CalConserve Revolving Fund (Proposition 1)	\$10M	\$10M	Sustainable funding source for urban water use efficiency projects.	Projects including but not limited to: <ul style="list-style-type: none"> • Dish/clothes washer upgrades • Water-saving plumbing fixtures • Hot-water recirculating pumps • Leak detection & repair • Landscape irrigation upgrades • Commercial, institutional, and industrial water efficiency 	Solicitation Open and proposal accepted through GRanTS application	Continuously	Funding will be split: <ul style="list-style-type: none"> • \$1.75 million is to be loaned out for water use efficiency upgrades • \$5 million is to be loaned out for fixing expensive and difficult to repair customer leaks
DWR IRWM Grant Program Implementation (Proposition 1, Round 2)	\$418M statewide \$98M for LA Region	TBD	Projects and programs that support IRWM.	<ul style="list-style-type: none"> • Water reuse & recycling • Water conservation • Surface storage/GW recharge • Conjunctive use • Water conveyance 	DWR released of DRAFT Proposal Solicitation Package (PSP) for Public	Open	See link below for website: https://www.water.ca.gov/Work-With-Us/Grants-And-

PROGRAM	Total allocation	Funding available this Round	Purpose	Eligible Projects	Status	Anticipated Timeline	Notes
				<ul style="list-style-type: none"> Watershed restoration and protection SW resource management Desalination WQ improvements 	Comment Period (45-day minimum)		Loans/IRWM-Grant-Programs/Proposition-1
DWR Urban and Multi-Benefit Drought Relief Program	\$190M (\$95M to Urban Community Fund and \$95 M to Multi-benefit Projects Fund)	\$190M with no match requirement		<p>For the purposes of this GL/PSP, “project” means all planning, design, engineering, acquisition of real property interests, construction and related activities undertaken to implement a discrete action to be funded under this Program. Eligible project types include:</p> <ul style="list-style-type: none"> o Hauled water o Installation of temporary community water tanks o Emergency water interties o New wells or rehabilitation of existing wells o Construction or installation of permanent connection to adjacent water systems, recycled water projects that support immediate relief to potable water supplies o Drought resiliency planning (not applicable to Multibenefit Drought Funds) o Other projects that support immediate drought response that satisfy the criteria and eligibility outlined in the GL/PSP 	OPEN	Due: 12/17/21	<p>Projects must be completed by March 31, 2026.</p> <p>Each applicant must use the application form available on the Program website, and submit a complete application to DWR using the following e-mail address: Urbandrought@water.ca.gov</p>

PROGRAM	Total allocation	Funding available this Round	Purpose	Eligible Projects	Status	Anticipated Timeline	Notes
DWR IRWM Grant Program Planning (Proposition 1, Round 2)	\$5M	TBD	Projects and programs that support IRWM.	Planning projects that accomplish: <ul style="list-style-type: none"> • Development of an IRWM plan that meets the IRWM Plan Standards • Compliance with recent legislation • Improvement of an existing IRWM plan. 	Waiting for DWR to release of DRAFT Proposal Solicitation Package (PSP)	March 2022	See link below for website: https://www.water.ca.gov/Work-With-Us/Grants-And-Loans/IRWM-Grant-Programs/Proposition-1
DWR IRWM Grant Program DAC Involvement (Proposition 1)	\$51M statewide \$9.8 M for LA Region	\$9.8M for LA Region	Projects and programs that support IRWM.	Projects ensuring DAC involvement in IRWM planning efforts, including but not limited to eligible projects described in the Implementation Grant list.	Solicitations Continuously Open	SOLICITATION OPEN	
USEPA Water and Infrastructure Finance and Innovation Act (WIFIA) Program	\$20M minimum project size for large communities \$5M minimum project size for small communities (<25,000)	Funding available now 49% maximum portion of eligible project costs that WIFIA can fund	<ul style="list-style-type: none"> • Local, state, tribal and federal government entities • Partnerships and joint ventures • Corporations and trusts • CWSRF and DWSRF programs 	<ul style="list-style-type: none"> • Wastewater conveyance and treatment projects • Drinking water treatment and distribution projects • Enhanced energy efficiency projects at drinking water and wastewater facilities • Desalination, aquifer recharge and water recycling projects • A combination of eligible projects secured by a common security pledge or submitted under one application by an SRF program. 	EPA announces WIFIA funding availability and application process details in the Federal Register and on its website (www.epa.gov/wifia)	CLOSED	NEPA, Davis-Bacon, American Iron and Steel and all federal cross-cutter provisions apply. Includes acquisition of property if it is integral to the project or will mitigate the environ. impact of a project.

Local, State and Federal Funding Opportunities

PROGRAM TITLE	Description	Eligible Applicants	Federal/Non-Federal Cost Share	Current Status
WaterSMART Grants – FY 2022 Drought Resiliency Projects	Purpose: Funding for on-the-ground projects and modeling tools that will increase water reliability and improve water management.	States, Indian tribes, irrigation districts, water districts, or other organizations with water or power delivery authority located in the Western United States or United States Territories specifically: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming (the “Western United States”), and American Samoa, Guam, the Northern Mariana Islands, the Virgin Islands, and Puerto Rico (“Territories”) (collectively “Western United States or Territories”). Nonprofit conservation organizations that are acting in partnership and with the agreement of an entity described above.	Total Funding Available: \$16.5M Funding Request: Funding Group I: Up to \$500,000 per agreement for smaller, on-the-ground projects that should be completed within 2 years Funding Group II: Up to \$2,000,000 per agreement for larger, phased on-the-ground projects that may take up to 3 years to complete Non-Federal Cost Share: 50% or greater.	The FY22 Funding Opportunity was closed on Wednesday October 5, 2021 at 3:00 PM (PST) via www.Grants.GOV For more information: https://www.grants.gov/web/grants/view-opportunity.html?oppld=335035
WaterSMART Grants – FY 2022 Water and Energy Efficiency Grants	Purpose: On-the-ground water management improvement projects, including projects that conserve water and address water supply reliability..	States, Indian tribes, irrigation districts, water districts, or other organizations with water or power delivery authority located in the Western United States or United States Territories specifically: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming (the “Western United States”), and American Samoa, Guam, the Northern Mariana Islands, the Virgin Islands, and Puerto Rico (“Territories”) (collectively “Western United States or Territories”). Nonprofit conservation organizations that are acting in partnership and with the agreement of an entity described above.	Total Funding Available: \$15.0M Funding Request: Funding Group I: Up to \$500,000 per agreement for smaller, on-the-ground projects that should be completed within 2 years Funding Group II: Up to \$2,000,000 per agreement for larger, phased on-the-ground projects that may take up to 3 years to complete Non-Federal Cost Share: 50% or greater.	The FY22 Funding Opportunity was closed on November 3, 2021 at 3:00 PM (PST) via www.Grants.GOV For more information: https://www.grants.gov/web/grants/view-opportunity.html?oppld=335103

PROGRAM TITLE	Description	Eligible Applicants	Federal/Non-Federal Cost Share	Current Status
WaterSMART Grants – FY 2022 Small-Scale Water Efficiency Projects	Purpose: To support small water efficiency improvements that have been identified through previous planning efforts.	States, Indian tribes, irrigation districts, water districts, or other organizations with water or power delivery authority located in the Western United States or United States Territories specifically: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming (the “Western United States”), and American Samoa, Guam, the Northern Mariana Islands, the Virgin Islands, and Puerto Rico (“Territories”) (collectively “Western United States or Territories”). Nonprofit conservation organizations that are acting in partnership and with the agreement of an entity described above.	Up to \$75,000 for projects to be completed within two years. Non-Federal Cost Share: 50% or greater.	FY21 selections were announced on August 31, 2021. The FY22 Funding Opportunity schedule is currently under development.
WaterSMART Grants – FY 2022 Water Marketing Strategy Grants	Purpose: Planning activities to develop water marketing strategies that establish or expand water markets or water marketing activities between willing participants.	States, Indian tribes, irrigation districts, water districts, or other organizations with water or power delivery authority located in the Western United States or United States Territories specifically: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming (the “Western United States”), and American Samoa, Guam, the Northern Mariana Islands, the Virgin Islands, and Puerto Rico (“Territories”) (collectively “Western United States or Territories”). Nonprofit conservation organizations that are acting in partnership and with the agreement of an entity described above.	Up to \$200,000 for projects to be completed within two years; or up to \$400,000 for projects to be completed within three years. Non-Federal Cost Share: 50% or greater.	FY21 selections were announced July 1, 2021. The FY22 Funding Opportunity schedule is currently under development.

PROGRAM TITLE	Description	Eligible Applicants	Federal/Non-Federal Cost Share	Current Status
WaterSMART Grants – FY 2022 Environmental Water Resources Projects	Purpose: To support water conservation and efficiency projects that result in quantifiable and sustained water savings and benefit ecological values; water management or infrastructure improvements to mitigate drought-related impacts to ecological values; and watershed management or restoration projects benefitting ecological values that have a nexus to water resources or water resources management.	<p>Category A: States, Indian Tribes, irrigation districts, and water districts; State, regional, or local authorities, the members of which include one or more organizations with water or power delivery authority; and other organizations with water or power delivery authority.</p> <p>Category B: Nonprofit conservation organizations that are acting in partnership with and with the agreement of an entity described in Category A.</p> <p>Category C: Nonprofit conservation organizations submitting an application for a project to improve the condition of a natural feature such as wetlands on Federal land where entities in Category A within the applicable service area have been notified and do not object to the project.</p> <p>Applicants must be located in the Western United States or United States Territories specifically: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming (the “Western United States”), and American Samoa, Guam, the Northern Mariana Islands, the Virgin Islands, and Puerto Rico (“Territories”) (collectively “Western United States or Territories”).</p>	Total Funding Available: \$2.0M per agreement for a project that can be completed within 3 years.	<p>The FY22 Funding Opportunity was closed on August 4, 2021.</p> <p>Applications due: Thursday December 9, 2021 at 3:00 PM (PST) via www.Grants.GOV</p> <p>For more information: https://www.grants.gov/web/grants/view-opportunity.html?oppld=335081</p>

PROGRAM TITLE	Description	Eligible Applicants	Federal/Non-Federal Cost Share	Current Status
Cooperative Watershed Management Program FY19: \$2.25M FY20: \$2.25M FY21: \$4.25M	Phase I Watershed group development, watershed restoration planning, and watershed management project design.	States, Indian tribes, local and special districts (e.g., irrigation and water districts), local governmental entities, and non-profit organizations that are located in the Western United States or Territories. Established watershed groups that represent a diverse group of stakeholders, have completed a watershed restoration plan, are capable of promoting sustainable use of water resources located in the Western United States or Territories.	Up to \$100,000 may be awarded to an applicant per year, for a period of up to two years. Non-Federal Cost Share: No Non-Federal cost-share required.	FY21 selections were announced June 15, 2021. The FY22 Funding Opportunity schedule is currently under development.
Drought Contingency Planning	Funding for development, or update, of comprehensive drought plans.	States, Indian tribes, irrigation districts, water districts, or other organizations with water or power delivery authority located in the Western United States (except Alaska).	Up to \$200,000. Non-Federal Cost Share: 50% or greater.	FY21 selections were announced on April 21, 2021. The FY22 Funding Opportunity schedule is currently under development.
Drought Emergency Response Actions	Emergency response actions undertaken by Reclamation to minimize losses and damages resulting from drought.	States and Indian tribes in the Western United States (except Alaska).	Funding availability is dependent on appropriations.	Reclamation will accept emergency assistance requests on an on-going basis. The FY22 Funding Opportunity schedule is currently under development.

PROGRAM TITLE	Description	Eligible Applicants	Federal/Non-Federal Cost Share	Current Status
Title XVI Program FY19: \$58.6M FY20: \$63.6M FY21: \$63.6M	Title XVI Authorized Projects Funding for planning, design, and construction of specific congressionally authorized water recycling and reuse projects	Sponsors of water reclamation and reuse projects specifically authorized for funding under Title XVI of P.L. 102-575.	Typically, between \$1 million and \$6 million per applicant. Non-Federal Cost Share: 75% or greater.	FY21 selections were announced January 19, 2021. The FY22 Funding Opportunity schedule is currently under development.
	Title XVI WIIN Water Reclamation and Reuse Projects Funding for planning, design, and construction of WIIN Act water recycling and reuse projects	Sponsors of water reclamation and reuse projects with completed feasibility studies that have been submitted to Reclamation for review.	Typically, between \$1 million and \$6 million per applicant. Non-Federal Cost Share: 75% or greater.	FY21 project selections were transmitted to Congress on July 23, 2021. Funding will not be awarded until the projects are named in enacted appropriations legislation.
	Title XVI Feasibility Studies Funding for development of new Title XVI water reclamation and reuse project feasibility studies	Entities with water delivery authority, all located in the Western United States or Territories (except Alaska).	Up to \$150K for studies to be completed in 18 months; up to \$450K for those to be completed within 3 years. Non-Federal Cost Share: 50% or greater.	No funding opportunity is planned this year.

PROGRAM TITLE	Description	Eligible Applicants	Federal/Non-Federal Cost Share	Current Status
Desalination Construction FY19: \$12M FY20: \$12M FY21: \$12 M	Funding for planning, design, and construction of WIIN brackish groundwater and ocean desalination projects	Sponsors of desalination projects located in the Western United States or Territories (except Alaska and Hawaii) with completed feasibility studies that have been submitted to Reclamation for review.	Typically, between \$1 million - \$6 million per applicant. Non-Federal Cost Share: 75% or greater.	FY21 project selections were transmitted to Congress on July 23, 2021. Funding will not be awarded until the projects are named in enacted appropriation legislation.
Basin Study Program FY19: \$5.2M FY20: \$5.2M FY21: \$9.4M (\$3M for Priorities TBD)	Applied Science Grants Projects to develop hydrologic information and water management tools and to improve modeling and forecasting capabilities. (\$2M)	States, Indian tribes, irrigation districts, water districts, universities, non-profit research institutions, organizations with water or power delivery authority, or non-profit organizations located in the Western United States or Territories.	Up to \$200,000 per agreement for a project that can be completed within two years. Non-Federal Cost Share: 50% or greater.	FY21 selections were announced September 2, 2021. The FY22 Funding Opportunity schedule is currently under development.

Upcoming Webcasts, Conferences and Meetings

➤ Conferences & Meetings

- **OC Reuse Chapter Meeting** | February 17, 2022
- **2022 Annual WaterReuse Symposium** | March 6-9, 2022 |
San Antonio, TX

➤ Other Announcements/Discussion Items

See www.watereuse.org to register and for more information.

Chapter Bylaws (Officer Elections)

- **Chapter Officers:**
 - President
 - Vice-President
 - Secretary/Treasurer
 - Chapter Trustee
 - *Immediate Past President*
- **Eligibility: Member of the Association**
- **1-Year Term**
- **Nominations**

Chapter Officer Elections 2022

Scott Lynch P.E., President
Jurupa Community Services District

Hannah Ford P.E., Vice-President
El Toro Water District

Kraig Erickson P.E., Secretary/Treasurer
Woodard & Curran

Joone Lopez, Chapter Trustee
Moulton Niguel Water District

Roundtable: What's going on - All

Have a question?

Select the “Raise Hand” button or
select *6 on your telephone.

THANK YOU

Meeting Adjourned