City of Santa Monica

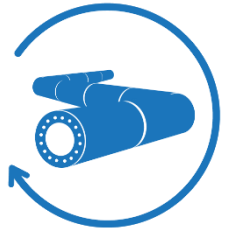
Leveraging Innovation for a Climate Resilient Water Supply

City of Santa Monica – Water Resources Division

93,000+ residents
2,700+ commercial customers

Drinking water and fire protection

groundwater (local)
surface water (MWD)



Sewer collection and recycled water

---

9 million gallons
of high-quality drinking water daily

14 million gallons
of wastewater captured and delivered for treatment each day

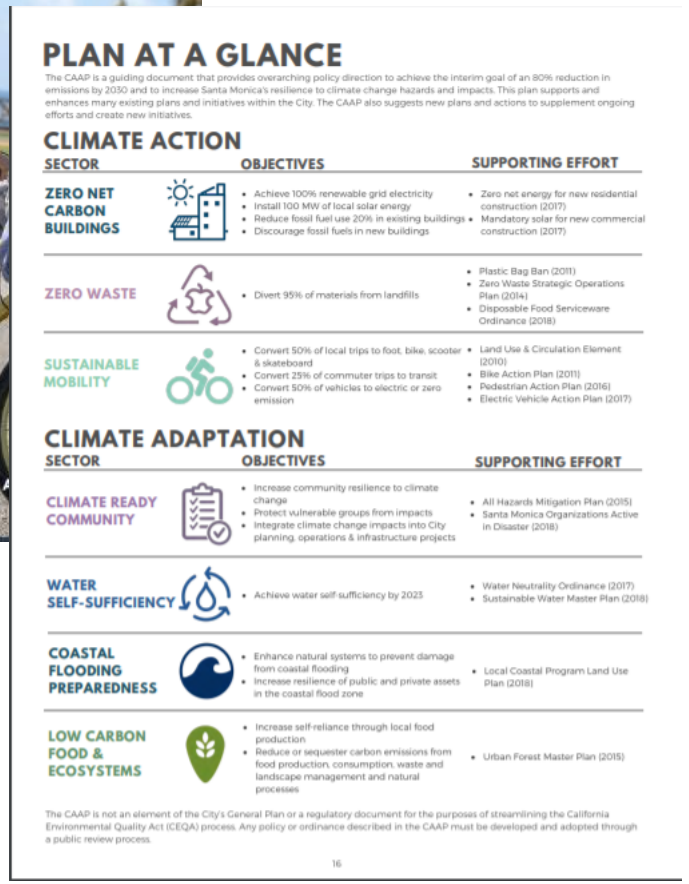
Up to 1.5 million gallons
per day of recycled water

4 water storage reservoirs
totaling 40 million gallons

City of Santa Monica

Goals of the City's Sustainable Water Master Plan

- Long term cost benefits for rate payers
- Diverse, sustainable, & drought resilient water supply to support a sustainable community
- Reduction of energy footprint to support carbon reduction goals for the City



PLAN AT A GLANCE

The CAAP is a guiding document that provides overarching policy direction to achieve the interim goal of an 80% reduction in emissions by 2030 and to increase Santa Monica's resilience to climate change hazards and impacts. This plan supports and enhances many existing plans and initiatives within the City. The CAAP also suggests new plans and actions to supplement ongoing efforts and create new initiatives.

CLIMATE ACTION

SECTOR	OBJECTIVES	SUPPORTING EFFORT
ZERO NET CARBON BUILDINGS	• Achieve 100% renewable grid electricity • Install 100 MW of local solar energy • Reduce fossil fuel use 20% in existing buildings • Discourage fossil fuels in new buildings	• Zero net energy for new residential construction (2017) • Mandatory solar for new commercial construction (2017)
ZERO WASTE	• Divert 95% of materials from landfills	• Plastic Bag Ban (2011) • Zero Waste Strategic Operations Plan (2014) • Disposable Food Serviceware Ordinance (2018)
SUSTAINABLE MOBILITY	• Convert 50% of local trips to foot, bike, scooter & skateboard • Convert 25% of commuter trips to transit • Convert 50% of vehicles to electric or zero emission	• Land Use & Circulation Element (2010) • Bike Action Plan (2011) • Pedestrian Action Plan (2016) • Electric Vehicle Action Plan (2017)

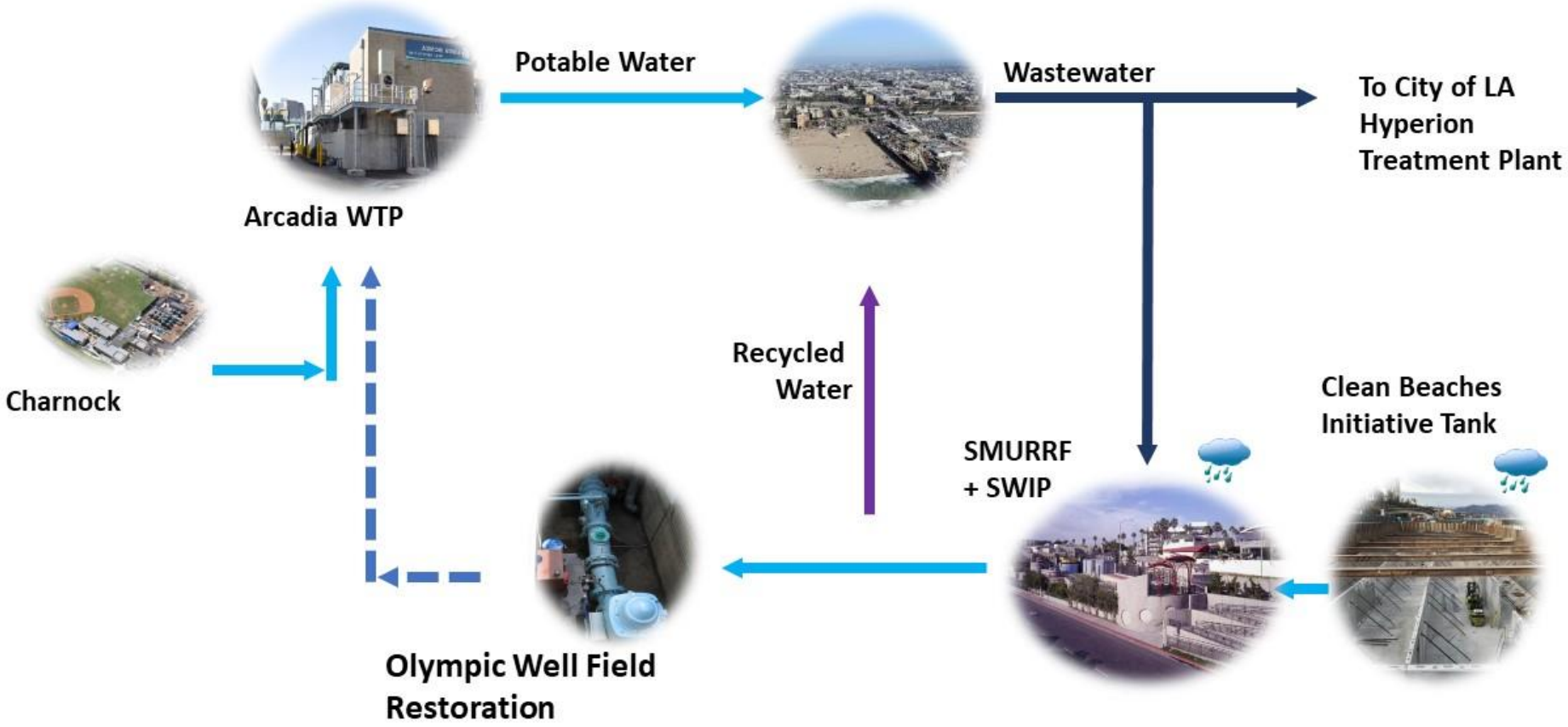
CLIMATE ADAPTATION

SECTOR	OBJECTIVES	SUPPORTING EFFORT
CLIMATE READY COMMUNITY	• Increase community resilience to climate change • Protect vulnerable groups from impacts • Integrate climate change impacts into City planning, operations & infrastructure projects	• All Hazards Mitigation Plan (2015) • Santa Monica Organizations Active in Disaster (2018)
WATER SELF-SUFFICIENCY	• Achieve water self-sufficiency by 2023	• Water Neutrality Ordinance (2017) • Sustainable Water Master Plan (2018)
COASTAL FLOODING PREPAREDNESS	• Enhance natural systems to prevent damage from coastal flooding • Increase resilience of public and private assets in the coastal flood zone	• Local Coastal Program Land Use Plan (2018)
LOW CARBON FOOD & ECOSYSTEMS	• Increase self-reliance through local food production • Reduce or sequester carbon emissions from food production, consumption, waste and landscape management and natural processes	• Urban Forest Master Plan (2015)

The CAAP is not an element of the City's General Plan or a regulatory document for the purposes of streamlining the California Environmental Quality Act (CEQA) process. Any policy or ordinance described in the CAAP must be developed and adopted through a public review process.

16

One Water Approach to Maximize Local Water Resources



Component 1 – Conservation
Component 2 – Alternative Water Supply
Component 3 – New Local Groundwater

City of Santa Monica

Key Projects and Innovations - Sustainable Water Infrastructure Project

Sustainable Water Infrastructure Project (SWIP)

6

- Element 1
  - 1.5 MG Clean Beaches Tank
  - SMURRF Upgrades
- Element 2
  - New 1 MGD SWIP AWTF
  - 30/70 Blend of Stormwater and Wastewater
- Element 3
  - New 1.5 MG Stormwater capture tank

City of Santa Monica

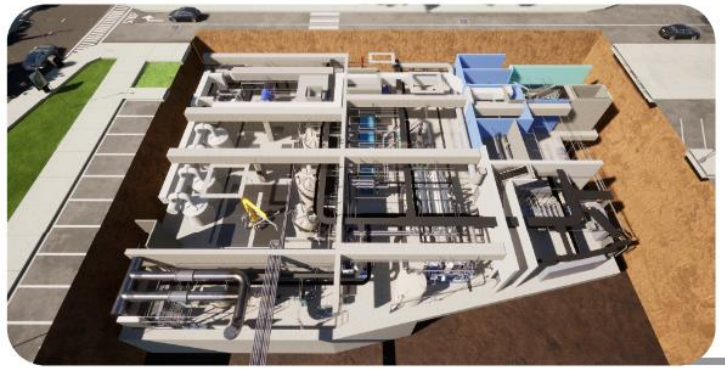
SWIP's Multiple Benefits

- Improves beach water quality
- Provides EWMP/MS4 compliance
- Drought resilient water supply
- Diversifies City's water supply portfolio
- Increases recycled water production
- Augments local groundwater supply
- Creates ~1,600 AFY of local water supply for the City

City of Santa Monica

SWIP Advanced Water Treatment Facility

0 FT.



-20 FT.

-45 FT.

Ground Level

At the surface, the Civic Center Parking Lot is restored to serve the surrounding community.

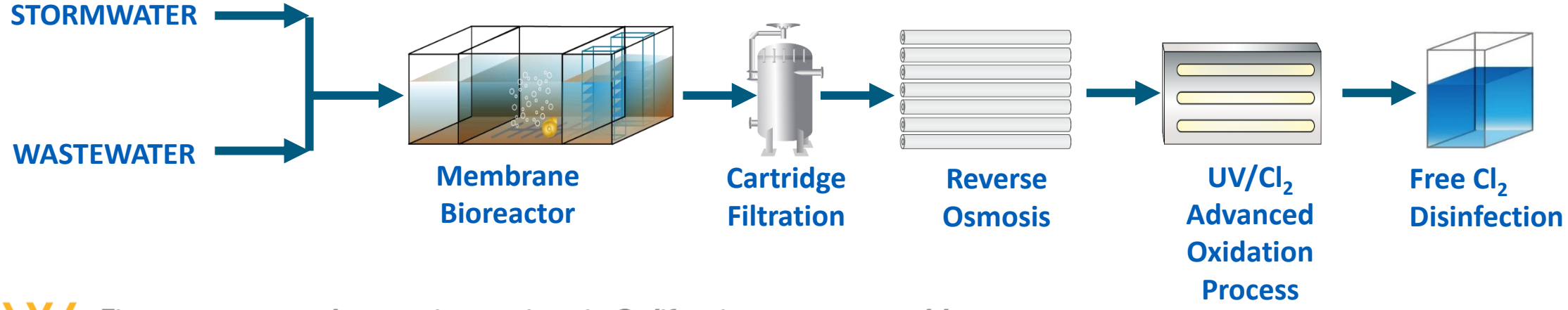
Subsurface Operating Floor (Level One)

The first subsurface level of the SWIP AWTF houses the headwork screens, odor control facility, bulk chemical storage, Membrane Bioreactor, cartridge filters, RO system, UV AOP system, control room, and electrical room.

Subsurface Operating Floor (Level Two)

The SWIP AWTF's treatment process basins are located on subsurface level 2, including the biological basins, chlorine disinfection tank, and waste return and evacuation sump.

First of Its Kind Advanced Water Recycling Facility in CA

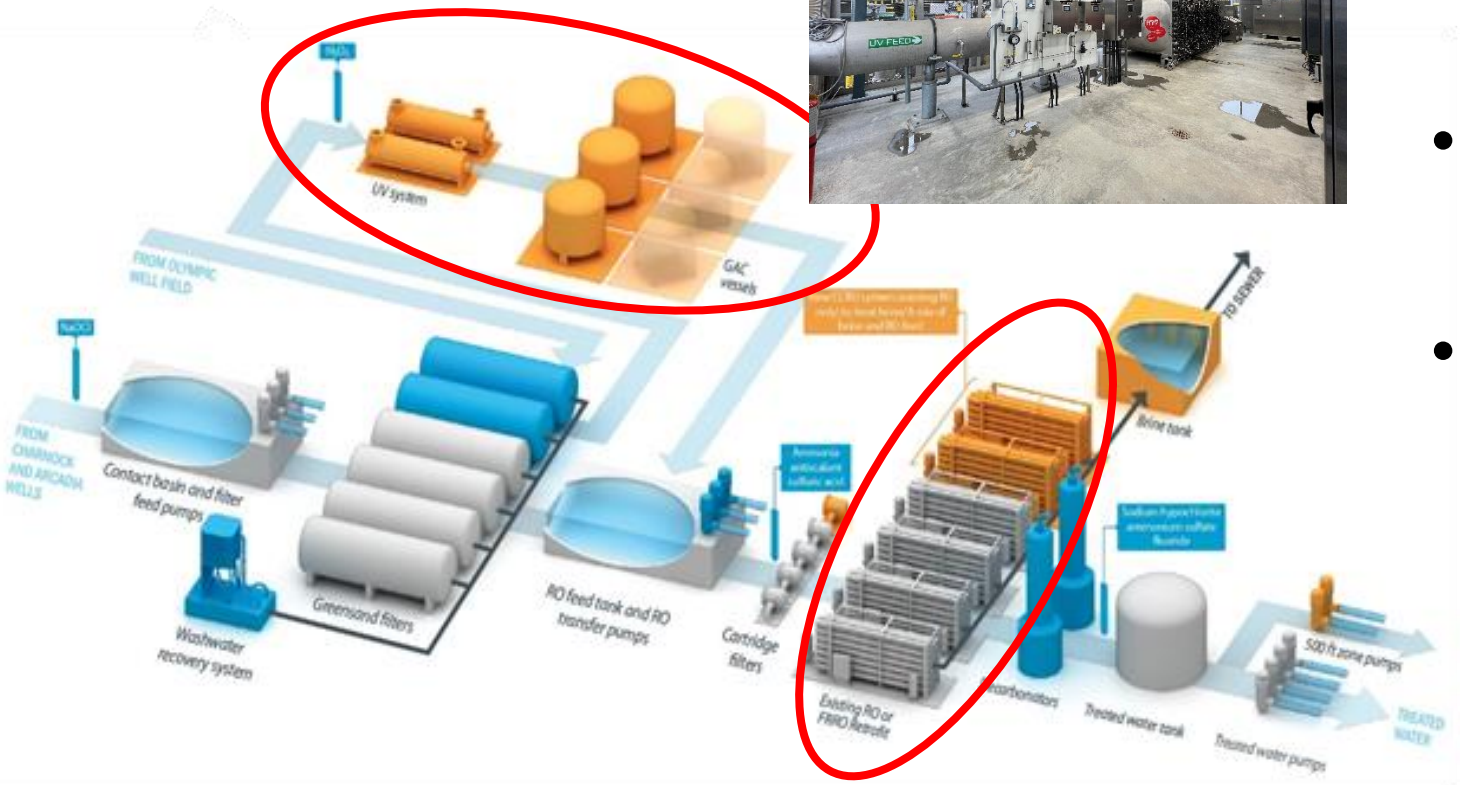


- *First stormwater harvesting project in California to meet potable reuse standards and directly inject the treated stormwater into the groundwater aquifer.*
- *First membrane bioreactor and cartridge filter system in California to be granted pathogen removal credits for potable reuse applications.*
- *First below-grade AWTF designed to treat raw wastewater and stormwater to groundwater recharge standards all within one facility.*

City of Santa Monica

Key Projects and Innovations - Olympic AWTF + Flow Reversal RO Retrofit

Key Project Elements:

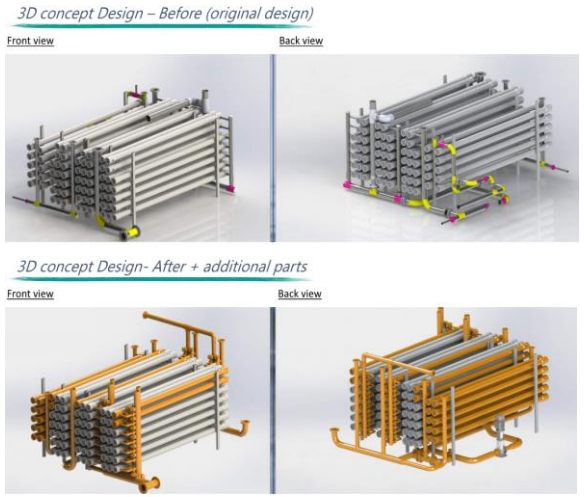


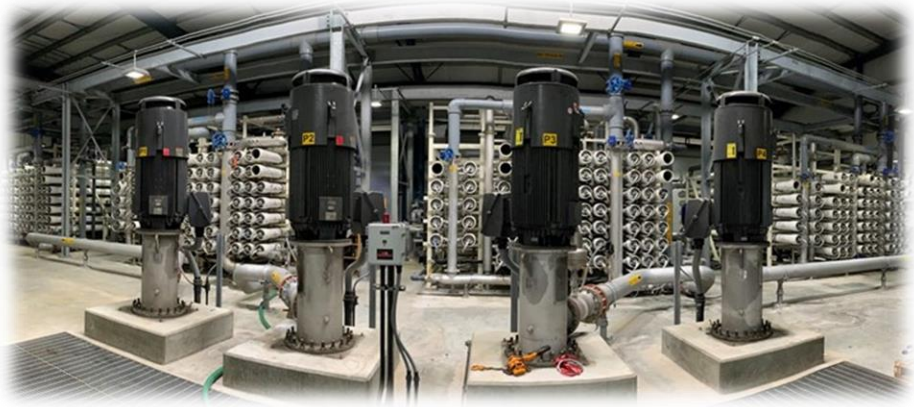
- New 3 mgd UV-AOP + GAC treatment system to restore Olympic Well Field
- Expand brackish desalter from 10 to 13 mgd
- Increase RO recovery to ≥90%

City of Santa Monica

First Municipal Flow Reversal RO in the World

- Increase RO recovery to ≥90%
- Maximize use of existing assets
- Same energy consumption as existing RO
- Operation flexibility
- Low risk profile
- Lower operation and life-cycle cost while increasing production

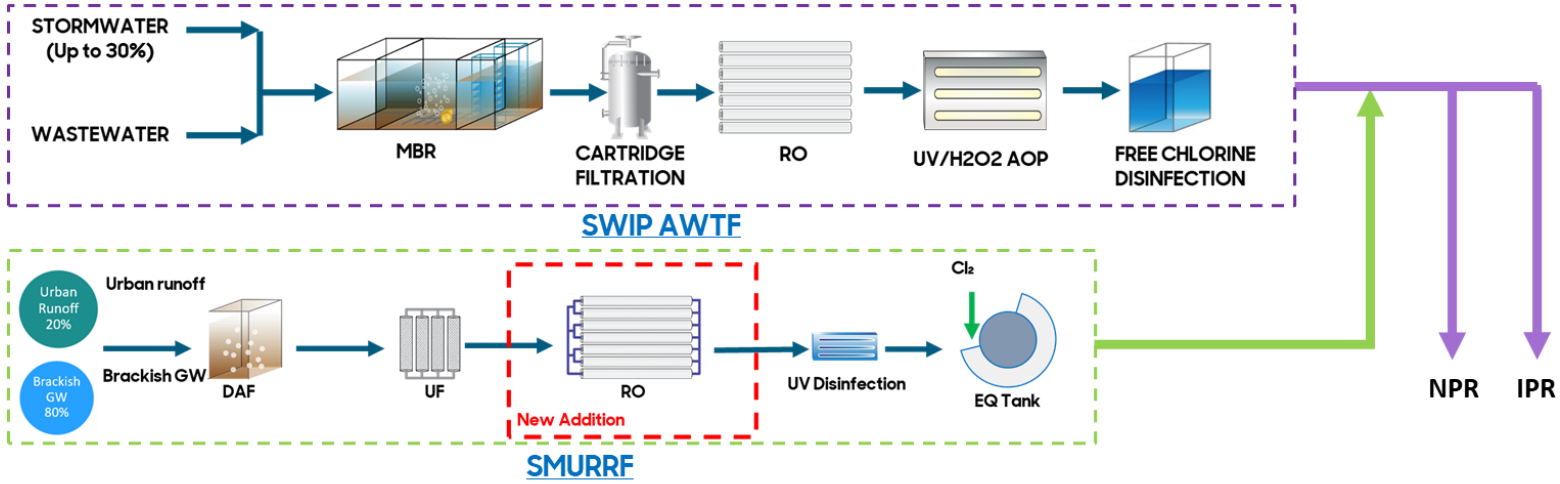




City of Santa Monica

Looking to the Future

City of Santa Monica's Sustainable Water Infrastructure Project

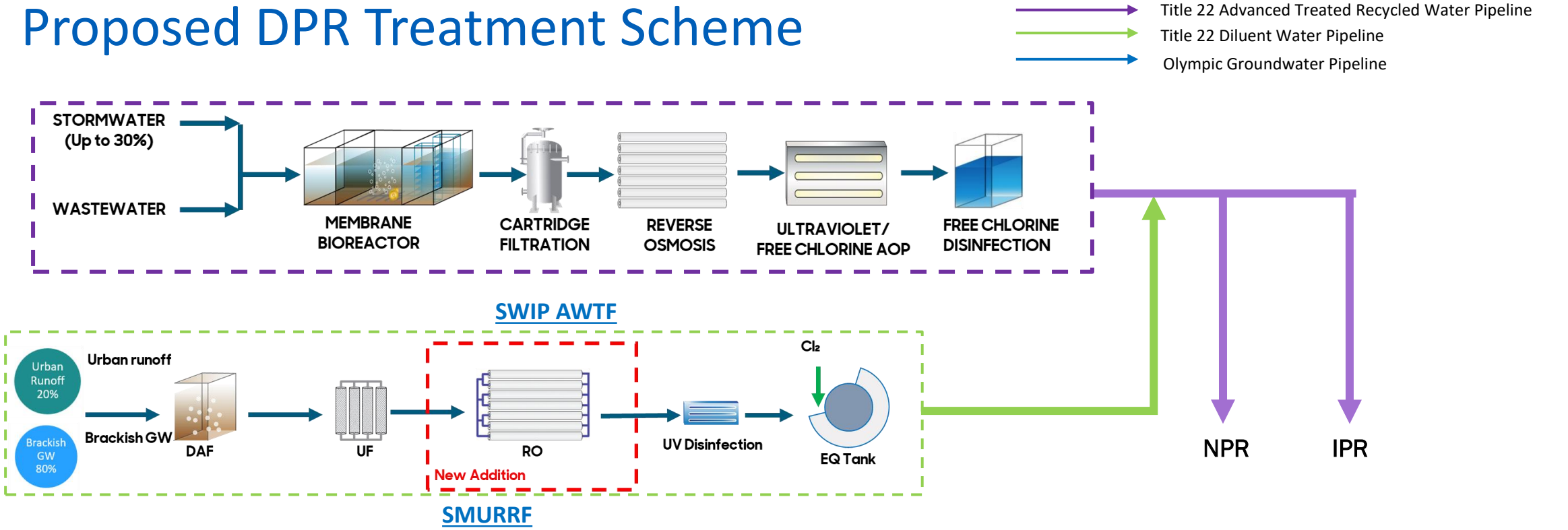


Current Log Removal Credits

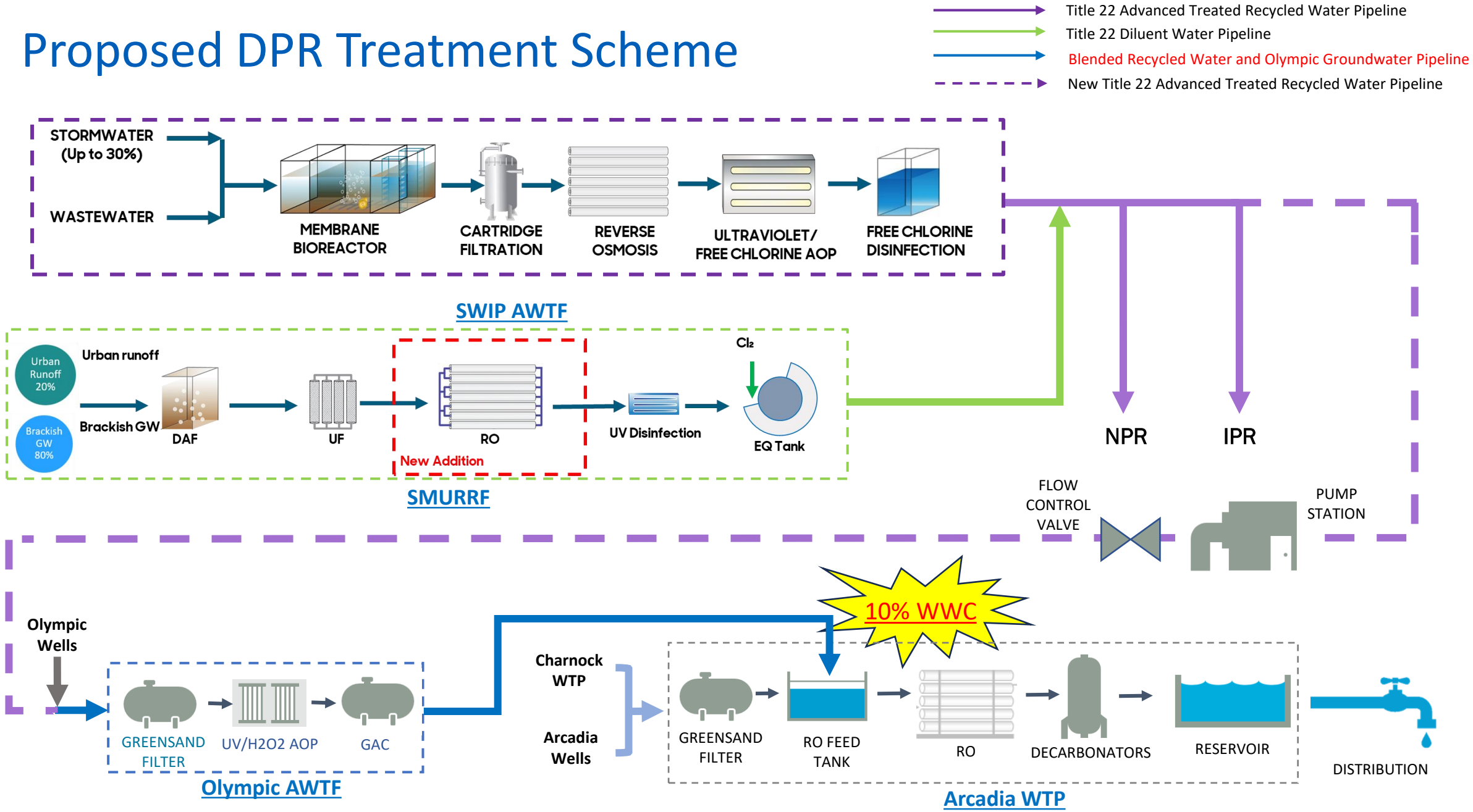
Plant	Process	Virus	Giardia	Crypto
SWIP	MBR	1.0	2.5	2.5
	CF	-	2.0	2.5
	RO	1.5	1.5	1.5
	UV/Cl2 AOP	6.0	6.0	6.0
	Cl2	5.0	-	-
	Total	**13.5**	**12.0**	**12.5**
	Required	**20**	**14**	**15**

- *First stormwater harvesting project in California to meet potable reuse standards and directly inject the treated stormwater into the groundwater aquifer.*
- *First membrane bioreactor and cartridge filter system in California to be granted pathogen removal credits for potable reuse applications.*
- *First below-grade AWTF designed to treat raw wastewater and stormwater to groundwater recharge standards all within one facility.*

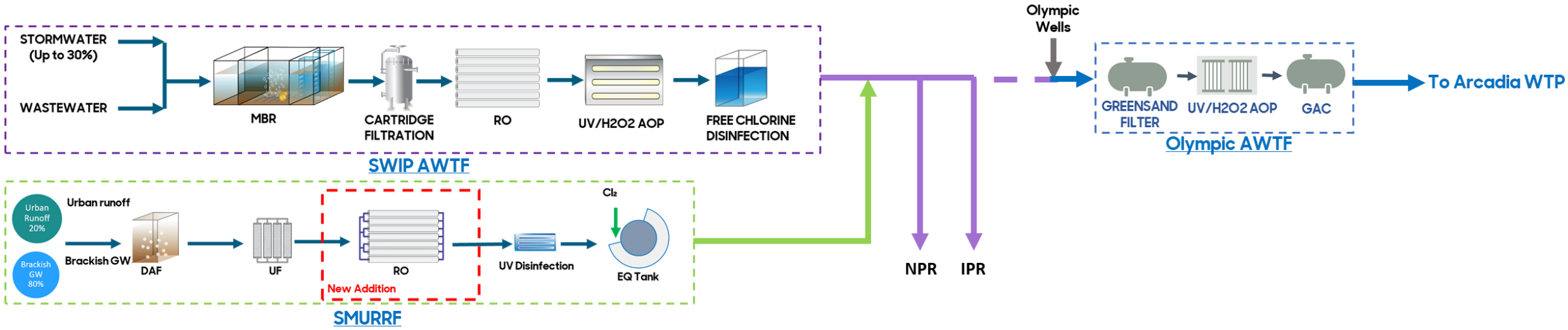
Proposed DPR Treatment Scheme



Proposed DPR Treatment Scheme



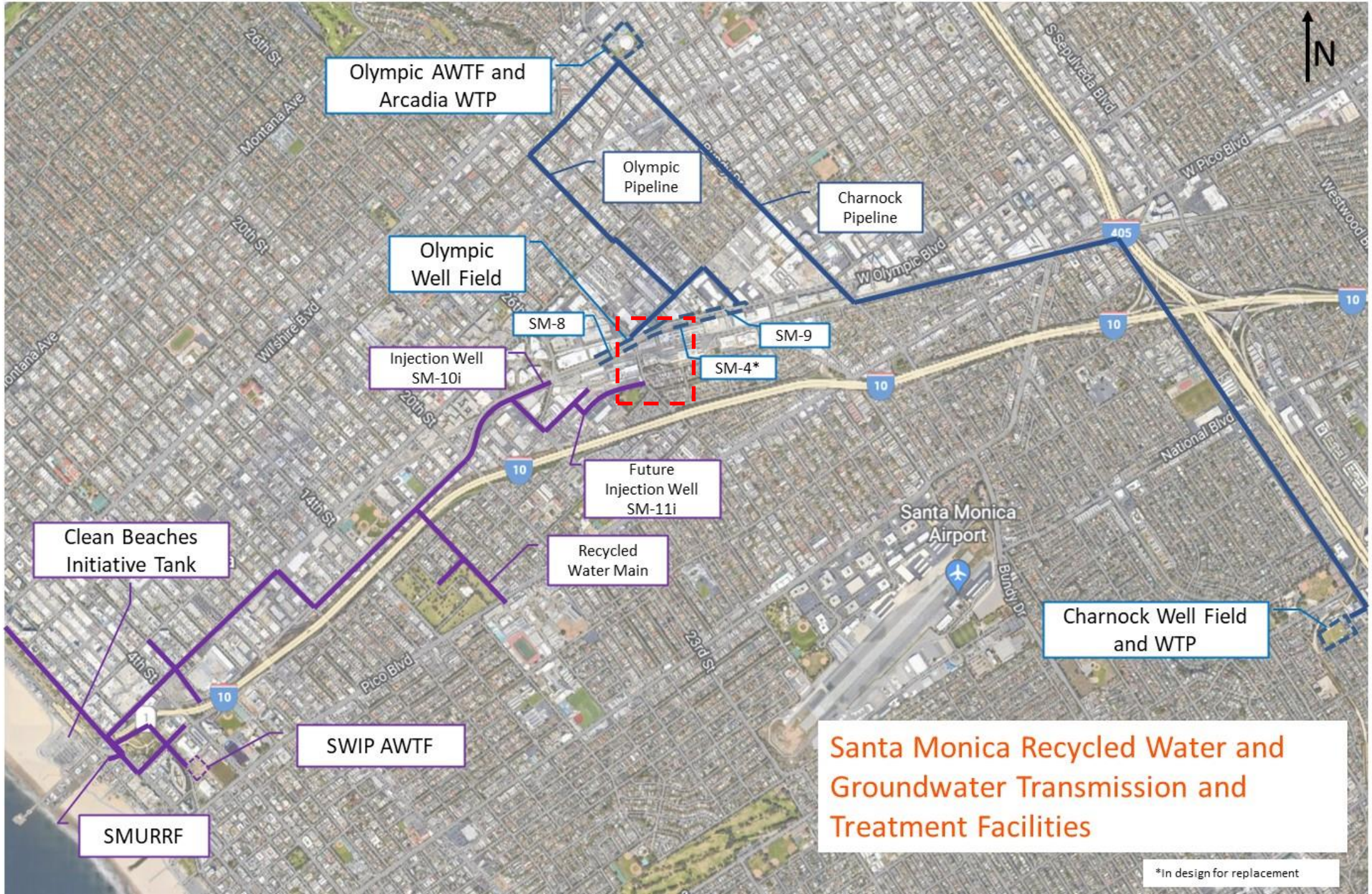
Proposed DPR Treatment Scheme – Log Reduction Values



- SWIP + UV/H2O2 AOP treatment at Olympic AWTF would exceed pathogen removal requirements for giardia and crypto.
- 10:1 dilution available to avoid Ozone/BAC
- Treatment addition needed for Virus LRV and 1 log Crypto via Chemical Pathway (Ozone)

Future Log Removal Credits – DPR

Plant	Process	Virus	Giardia	Crypto
SWIP	MBR	1.0	2.5	2.5
	CF	-	2.0	2.5
	RO	1.5	1.5	1.5
	UV/Cl2 AOP	6.0	6.0	6.0
	Cl2	5.0	-	-
Olympic AWTF	UV/H2O2 AOP	6.0	6.0	6.0
	Total	**19.5**	**18.0**	**18.5**
	Required	**20**	**14**	**15**


Olympic AWTF and Arcadia WTP
Olympic Pipeline
Charnock Pipeline
Olympic Well Field
SM-8
SM-9
SM-4*
Injection Well SM-10i
Future Injection Well SM-11i
Recycled Water Main
Clean Beaches Initiative Tank
SWIP AWTF
SMURRF
Charnock Well Field and WTP
Santa Monica Airport
N
Santa Monica Recycled Water and Groundwater Transmission and Treatment Facilities
*In design for replacement


THANK YOU…

Funding Partners

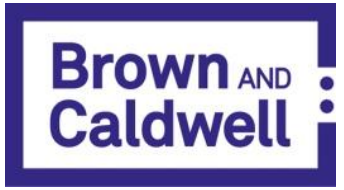
- State Water Resources Control Board: Clean Water SRF $75 million loan for SWIP
- Department of Water Resources: Water Desalination Grant Program - $10 million construction grant for the Production Efficiency Enhancement at Arcadia WTP
- State Water Resources Control Board: Prop 1 Stormwater Grant - $8.77 million for SWIP stormwater tank
- Los Angeles County: Measure W Safe Clean Water Program - $7.5 million to support stormwater capture and treatment components of the SWIP.
- Metropolitan Water District of Southern California: Local Resources Program for $19.6 million over 25 years for water produced by SWIP and the Production Efficiency Enhancement Project.
- Water Revenue Bond - $78 million

City of Santa Monica

Project Partners

CALIFORNIA DEPARTMENT OF
WATER RESOURCES

Kiewit



Advisian
Worley Group

2025 WateReuse CA CONFERENCE SAN DIEGO·CA

IN PARTNERSHIP WITH THE WATER RESEARCH FOUNDATION

OPTIMIZING MEMBRANE BACKWASHING WITH NOVEL COLLOIDAL PARTICLE MEASUREMENT

Kennedy Jenks

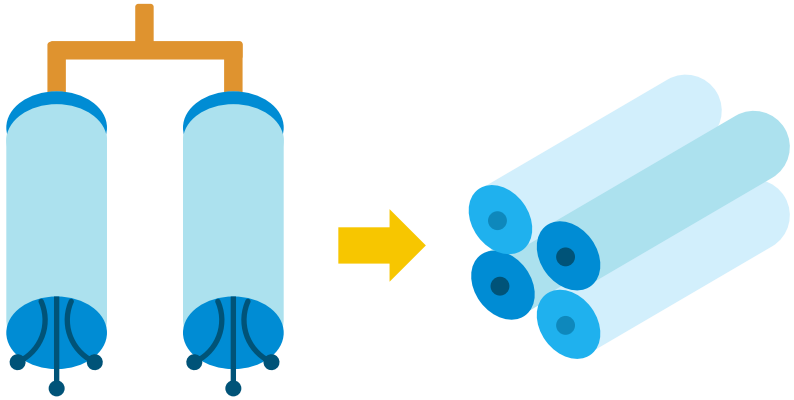
HYPERION ANALYTICAL

BUREAU OF RECLAMATION

REimagine the possibilities

Membranes in Water Reuse Systems

- Critical for Pretreatment
- Use in advanced treatment trains
  - Indirect Potable Reuse
  - Direct Potable Reuse



MF/UF Membranes

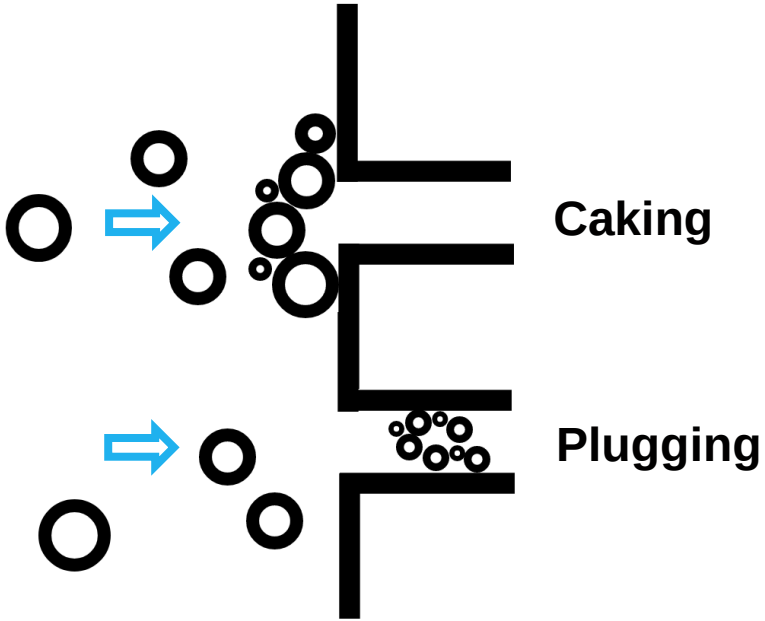
Reverse Osmosis

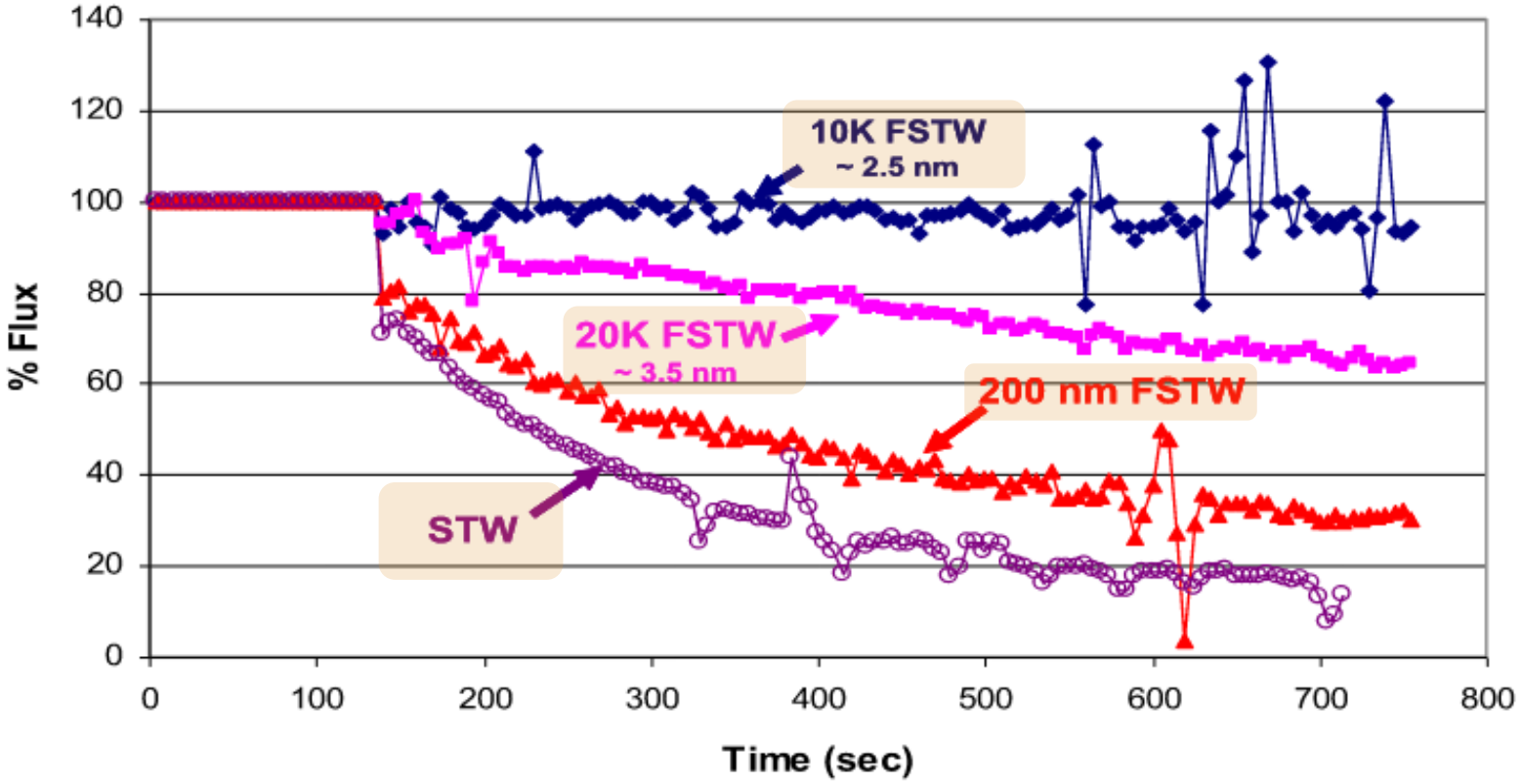
Ultrafiltration in Indirect Potable Reuse

- Microfiltration (MF): 0.1 to 10µm
- **Ultrafiltration (UF): 0.01 to 0.1µm**
- Performance:
  - Energy Use
  - Water Recovery

Types of Membrane Fouling

- Fouling Mechanisms
- Particle Size
  - 3.5-200nm





Safarik. J. and Phipps, D.W. 2009. Proceedings of the National American Membrane Society Conf. Chicago, IL. May 12-17.

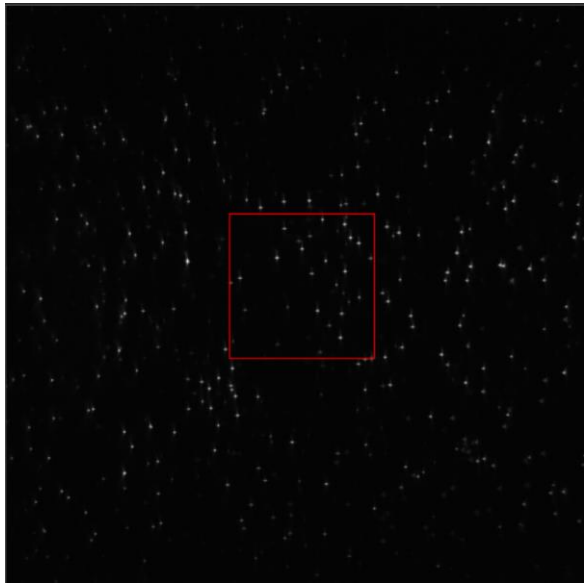
OCWD's Ground Water Replenishment System

- MF/UF → RO → UV/AOP.
- OC San secondary effluent
- World's largest potable reuse system
  - 130 MGD

Particle Analyzers (Hyperion)

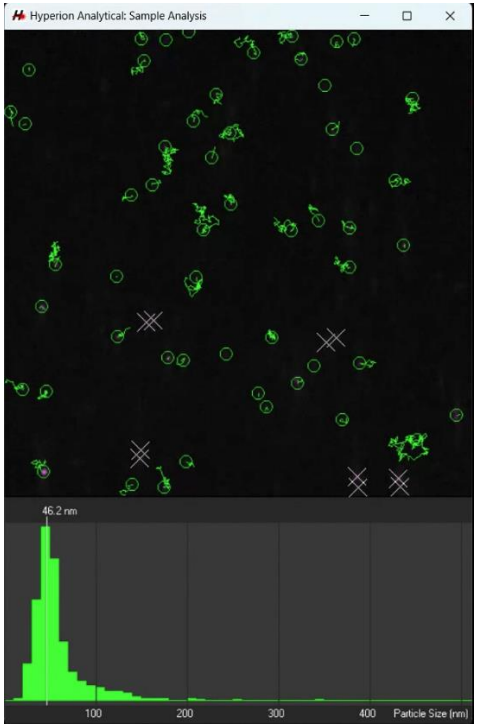
- Novelty of particle measurement device
  - Flow Cell + Laser + Imaging
- Able to detect colloidal particles assumed to be responsible for membrane fouling

Particle Imaging

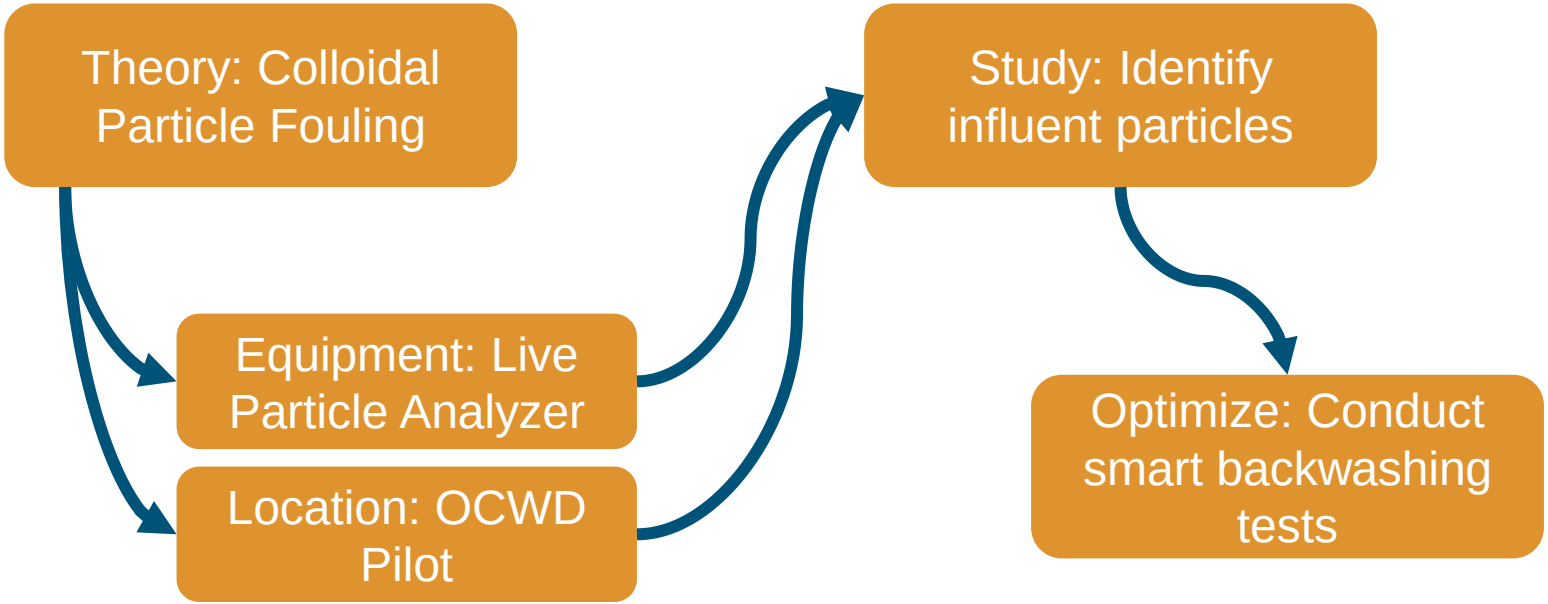


Minimum
10 - 30 nm

Maximum
1000 nm



Study Objectives



System Characterization

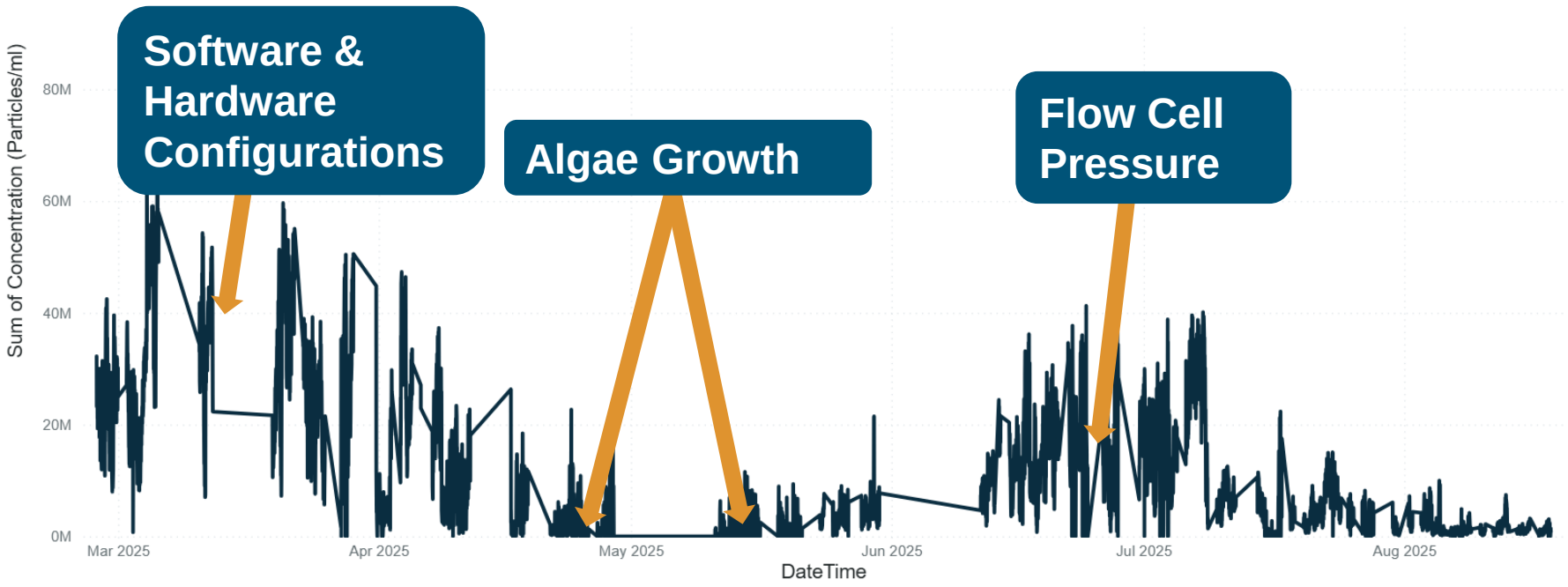
Fouling Indication

- Turbidity
- Organics
- Membrane Flux

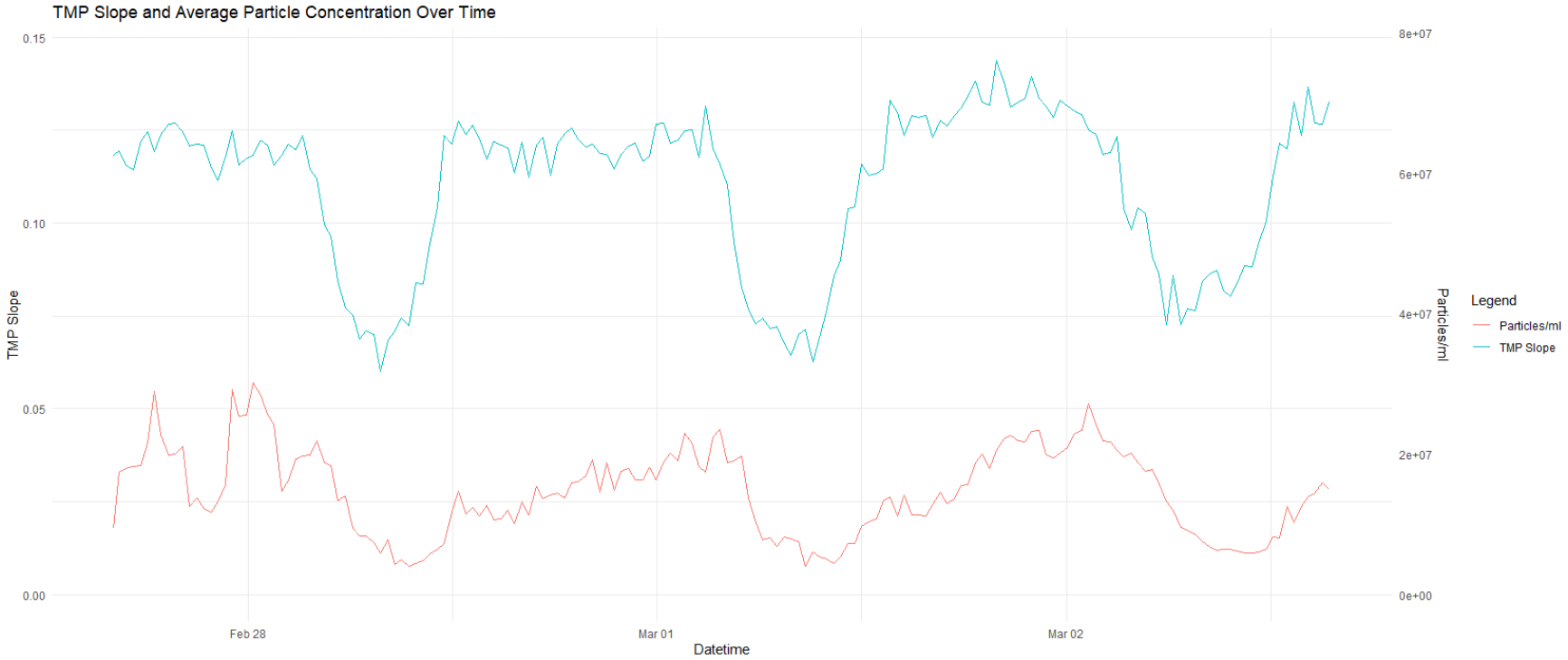
Variability

Adaptation made to flow cell and software

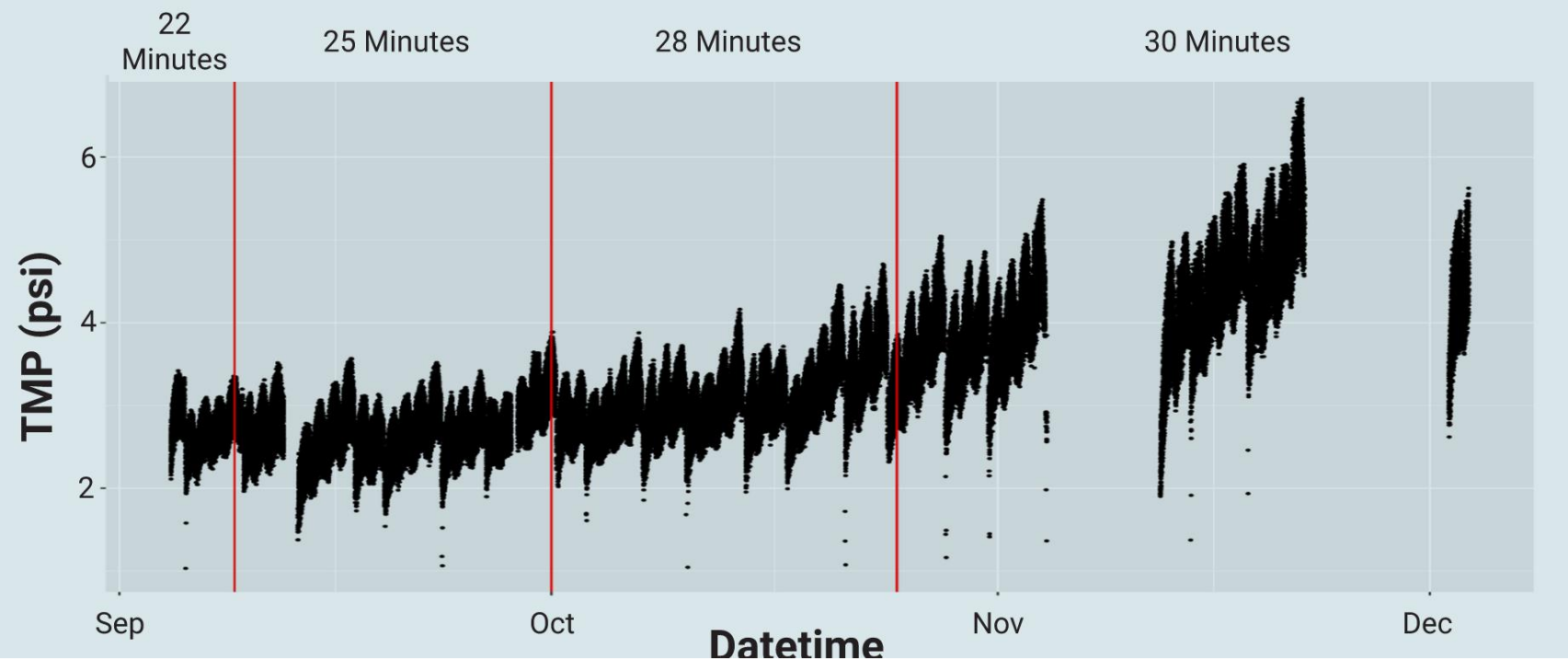
Historical Challenges



Reliable Data – Diurnal Variation

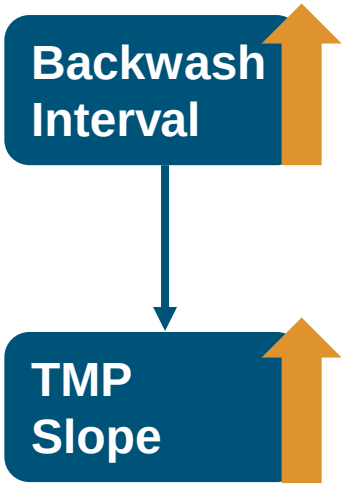


Effect of Backwashing



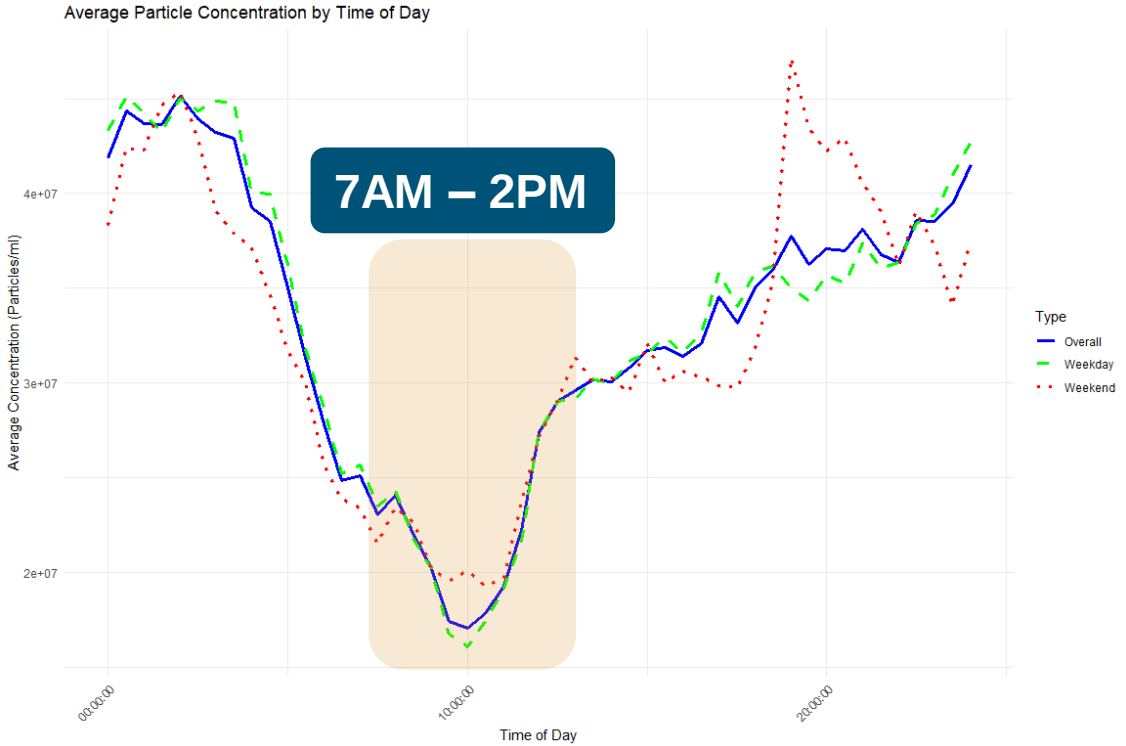
Effect of Backwashing

Backwash Interval	Mean Slope of TMP Gain	Error (+/-)
22 Minutes	0.0288	0.0036
25 Minutes	0.0311	0.0044
28 Minutes	0.0301	0.0058
30 Minutes	0.0467	0.0091

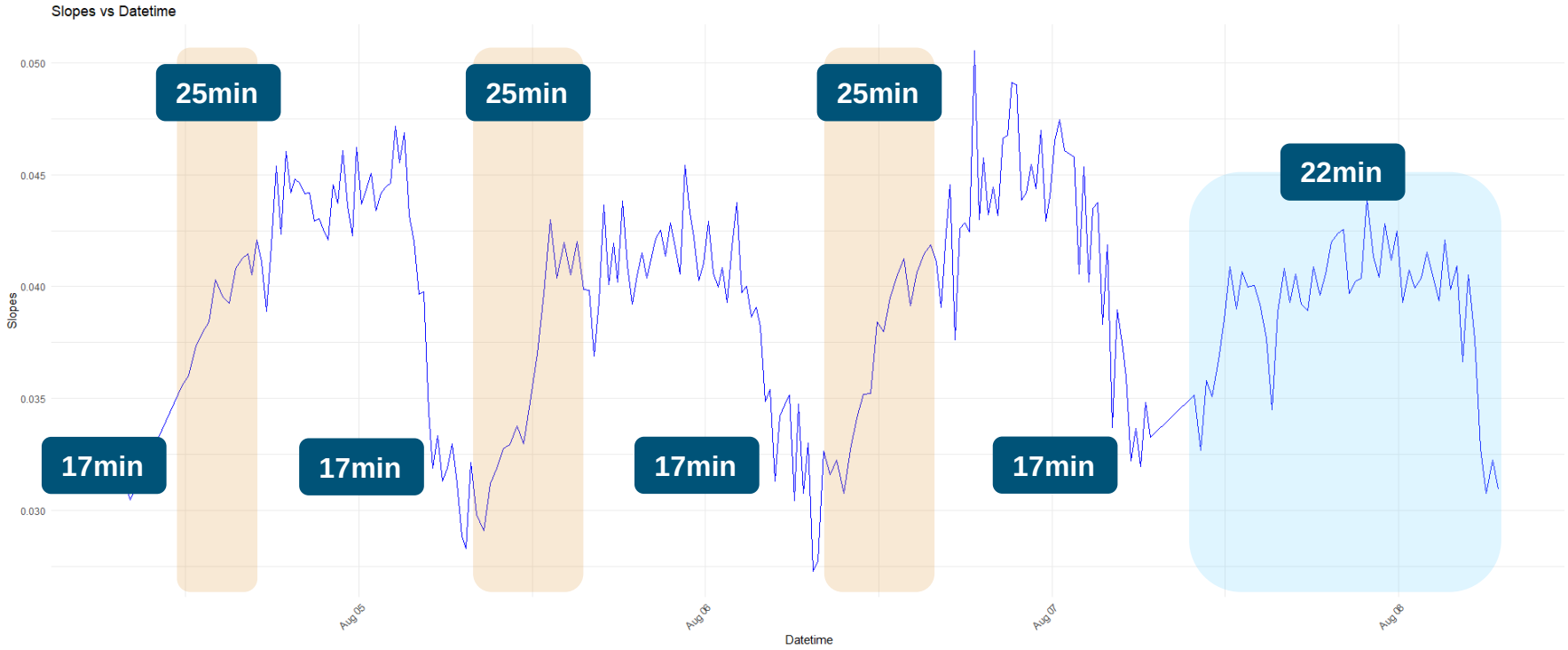


Backwash timings

- Backwash
  - 17 min
  - **22 min (typ)**
  - 25 min
  - 30 min



Smart Backwashing: 17min & 25 min



Smart Backwashing: 22min & 35min

Potential Savings

Current tests show the potential of

10% water savings

of membrane backwashing without increasing TMP

For a system like OCWD GWRS, this could lead to savings of

1 - 2 MGD

With further potential savings to be examined in more rigorous testing

Next Steps

Conduct more **smart-backwash** tests

Pathogen removal surrogate testing

Process **performance indicator**

Acknowledgements

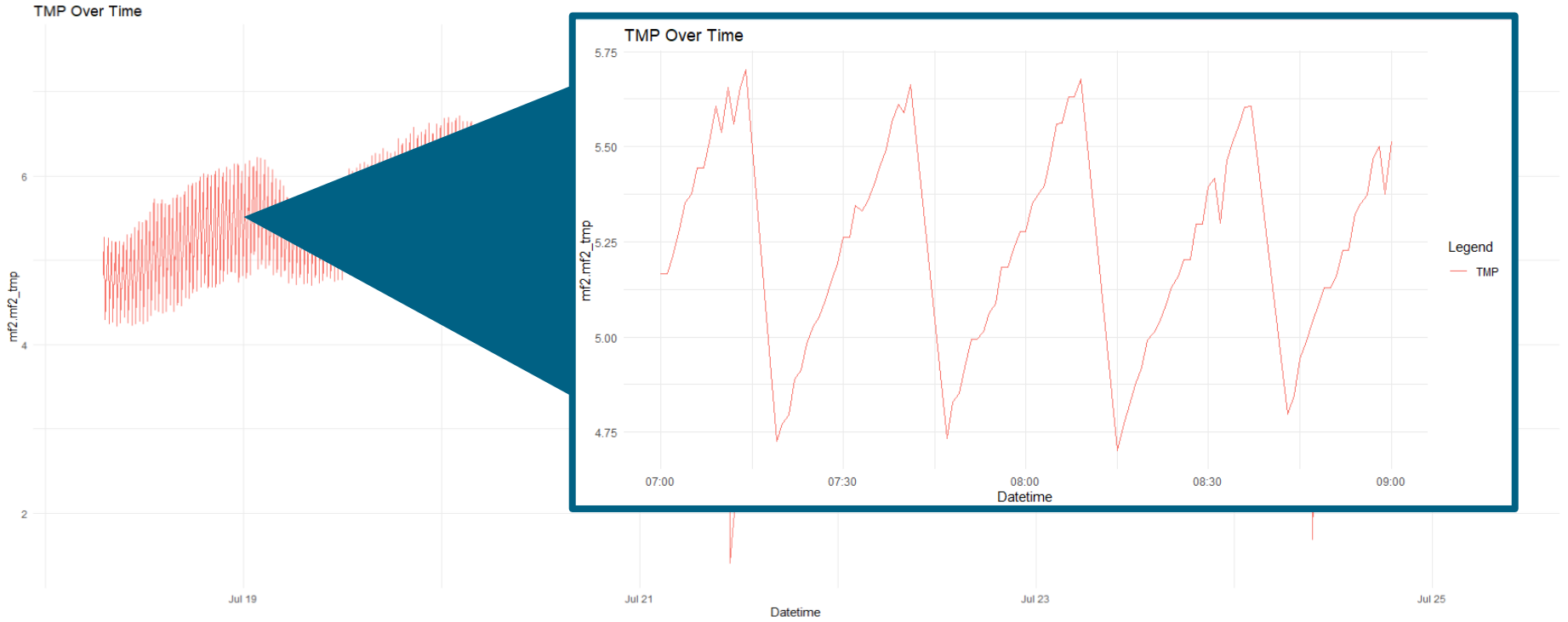
Jana Safarik, Andrew Huang, Don Supernaw

BUREAU OF RECLAMATION
Funding!

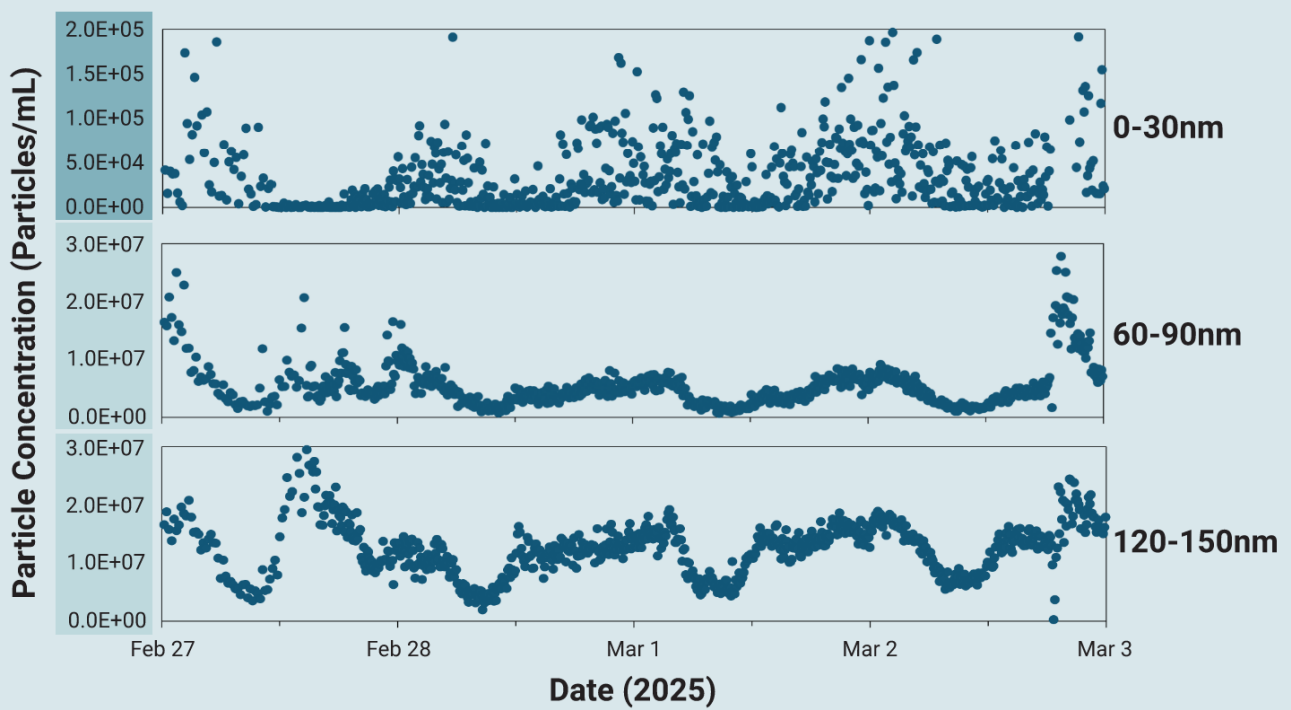
Serina Erxleben, William Schroeder, Shima de Horta, Duncan Griffiths

Erica Wirski, Charlie Liu, Janice Sloan, Devashri Karve

Measuring Fouling Through TMP Slope

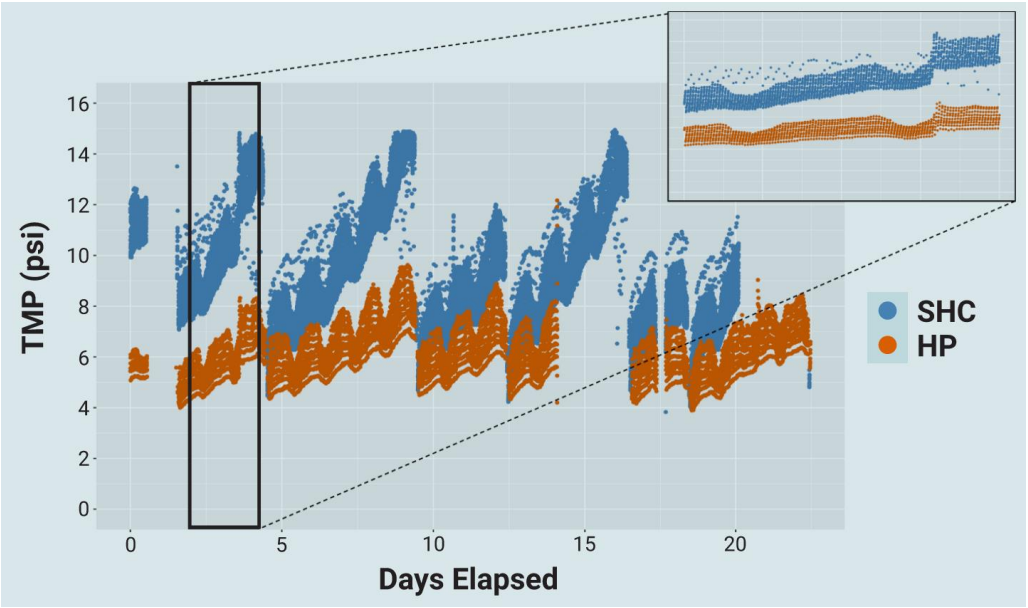


Accuracy by Particle Size



Oxidant Dosing to Reduce Biofouling

- SHC vs HP
  - No Oxidants = more fouling & poor resolution



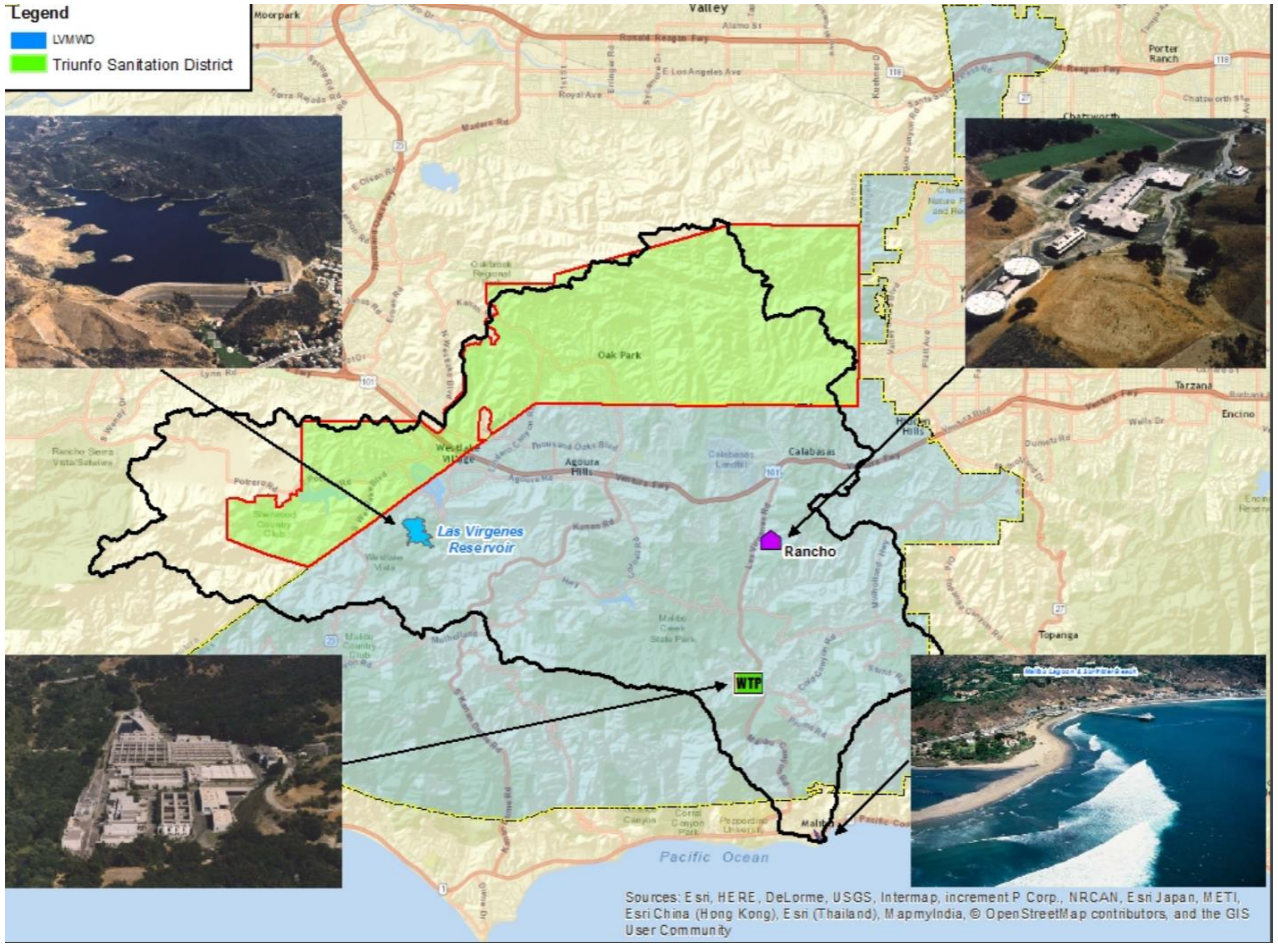
Brown AND Caldwell

Las Virgenes-Triunfo Pure Water Advanced Purification Facility

Agenda

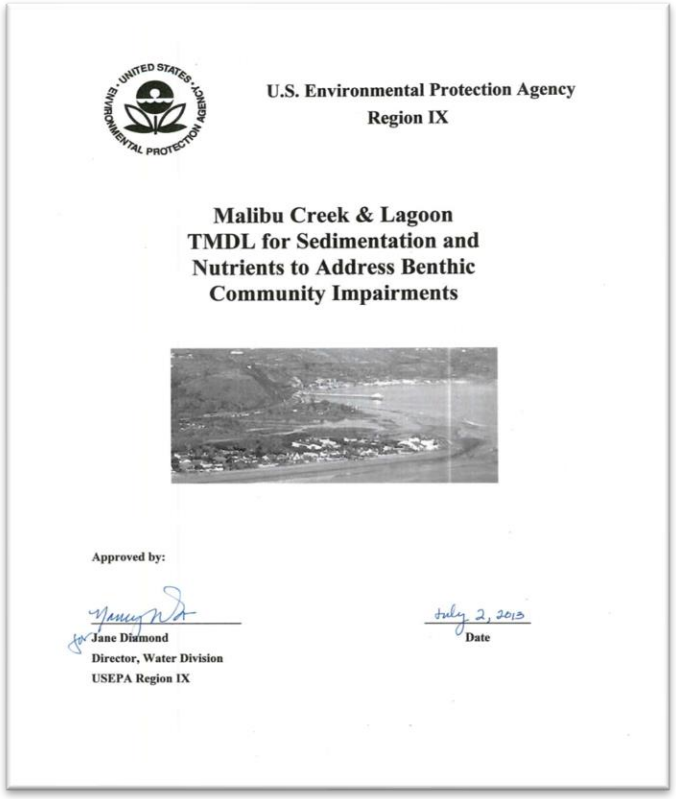
- Project Background
- Demonstration Facility
- Overall Treatment Process
- High-Level Process Overviews
- Conveyance Pipelines Overview

Las Virgenes Municipal Water District and Triunfo Water and Sanitation District JPA collaboratively protect the Malibu Creek Watershed



In 2013, the EPA established a new TMDL for Malibu Creek with stringent nitrogen and phosphorus limits

- Implemented by LARWQCB May 2017
- Summer Limits (April 15 – November 15)
  - 1 mg/L (total nitrogen) & 0.1 mg/L (total phosphorous)
  - By May 16, 2022
- Winter Limits (November 16 – April 14)
  - 4 mg/L (total nitrogen) & 0.2 mg/L (total phosphorous)
  - By November 16, 2030



U.S. Environmental Protection Agency
Region IX

Malibu Creek & Lagoon
TMDL for Sedimentation and
Nutrients to Address Benthic
Community Impairments

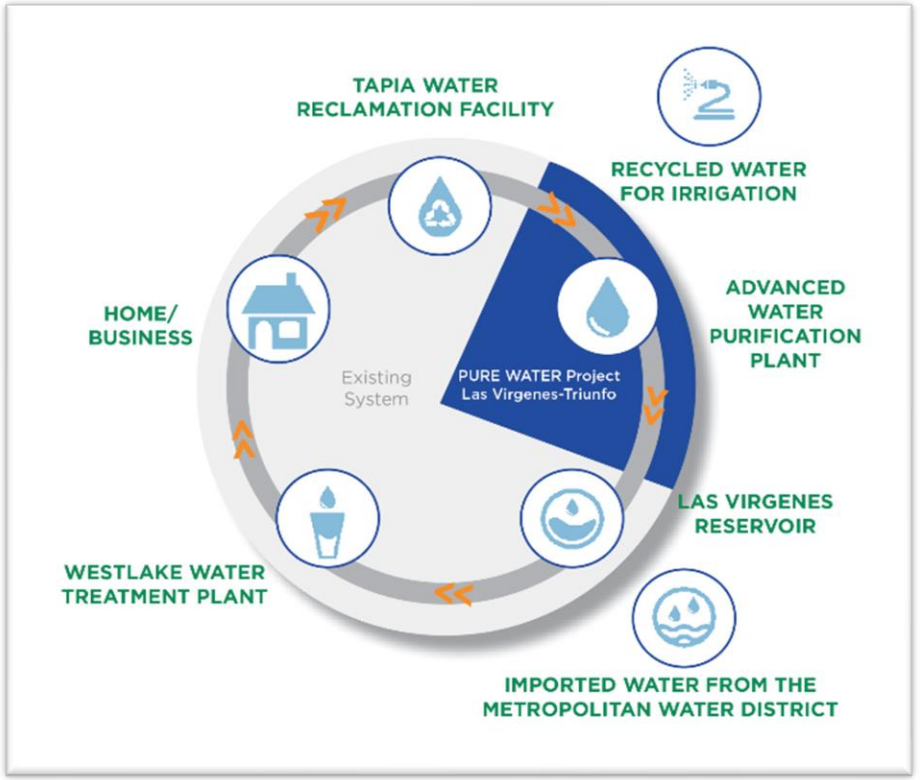
Approved by:

Jane Diamond
Director, Water Division
USEPA Region IX

July 2, 2013
Date

Why the Pure Water Project?

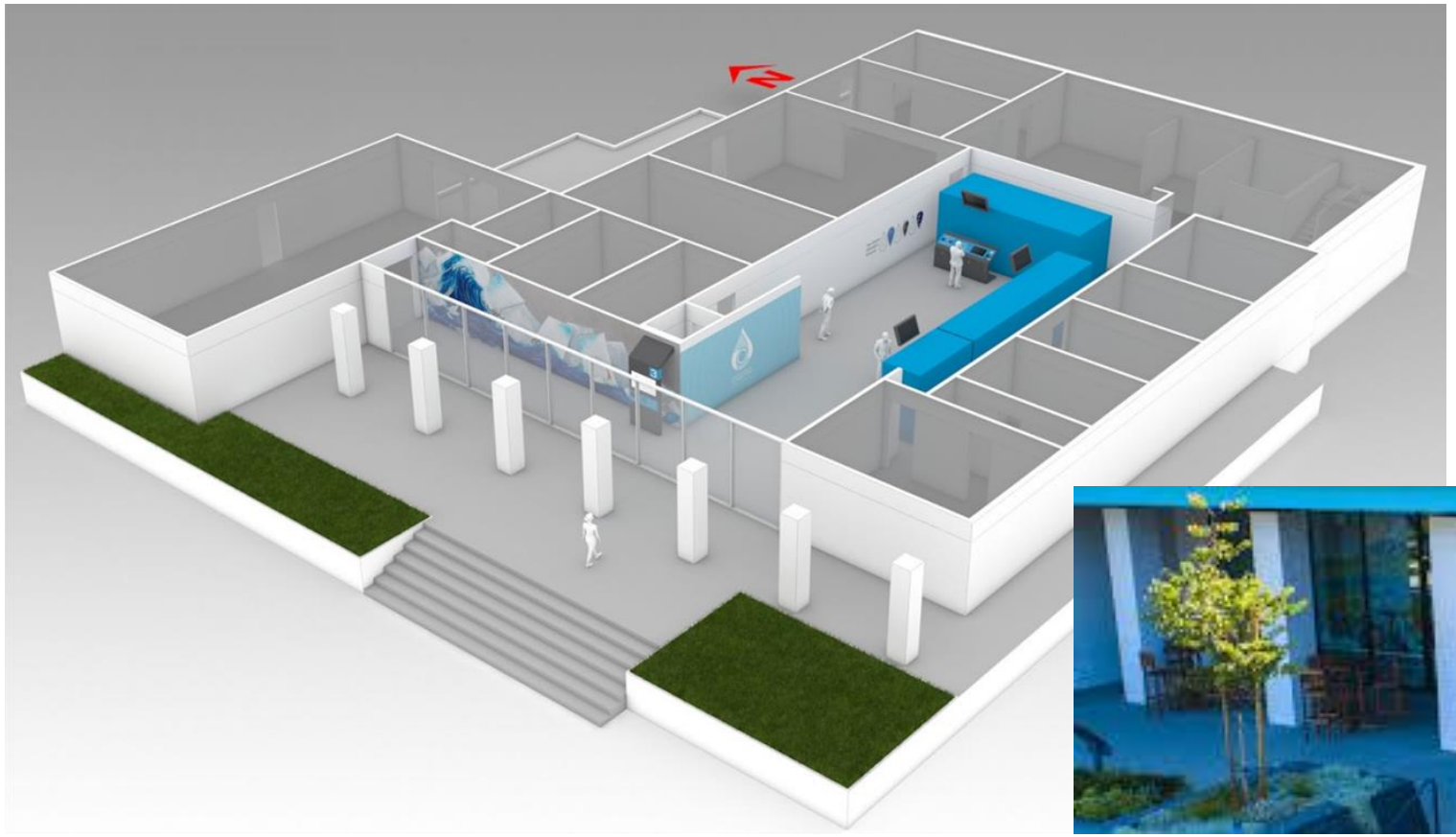
- Boosting Regional Water Supply
- Responding to Shortages
- A More Secure Water Future



Pure Water Program Demonstration Facility

- 50 GPM pilot train
- Inform full scale AWPF design
- Open platform UF system
- Versatile 2 or 3 stage RO
- Chlorine UV/AOP
- Tasting station for public tours

Think Big/Build Small - Demo Project was Developed in Old Admin Building

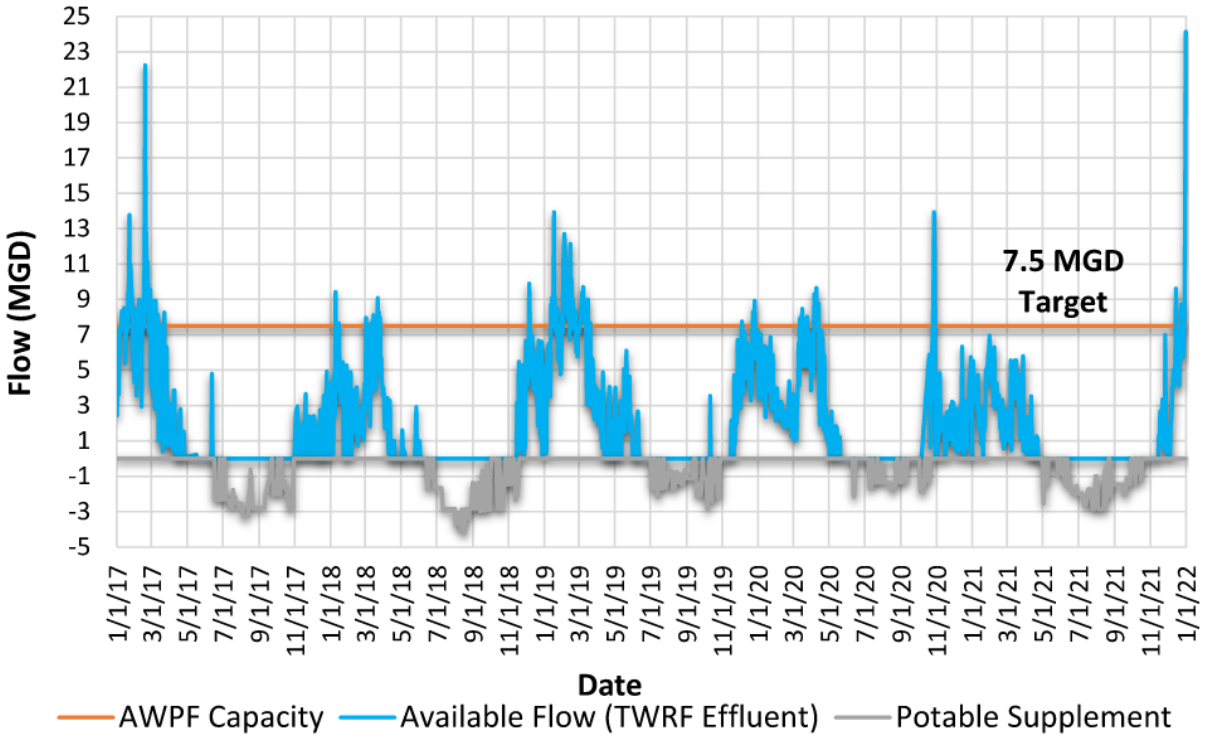


Surface Water Augmentation Project

Historic Flow Ranges

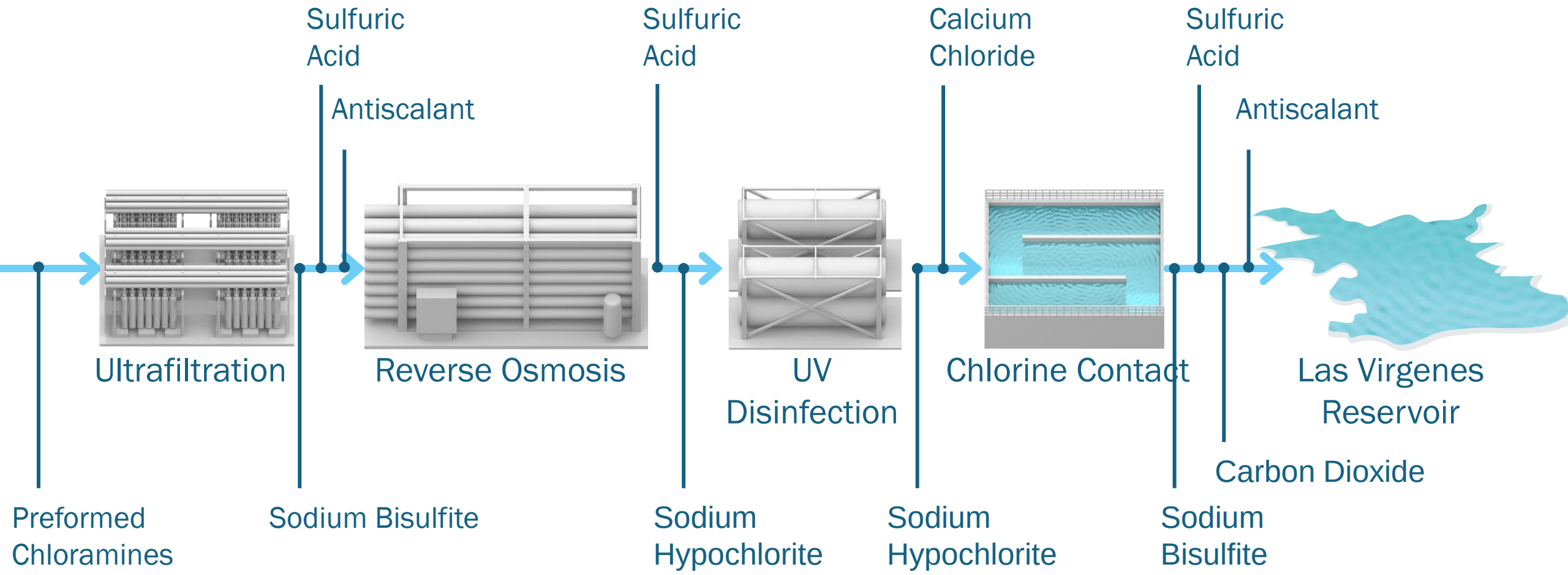
- Malibu Creek Restriction
  - April 15 to November 15
    - Exception of minimum instream flow requirements of 2.5 cfs (1.6 mgd)
- Recycled Water > Demand:
  - April 15 to mid-June
  - Mid-October to November 15
- AWPF Operation:
  - Mid-October to mid-June

Flow Condition	Influent Flow (CDR)
Maximum, mgd	7.5
Average, mgd	3.2
Minimum, mgd	1.0

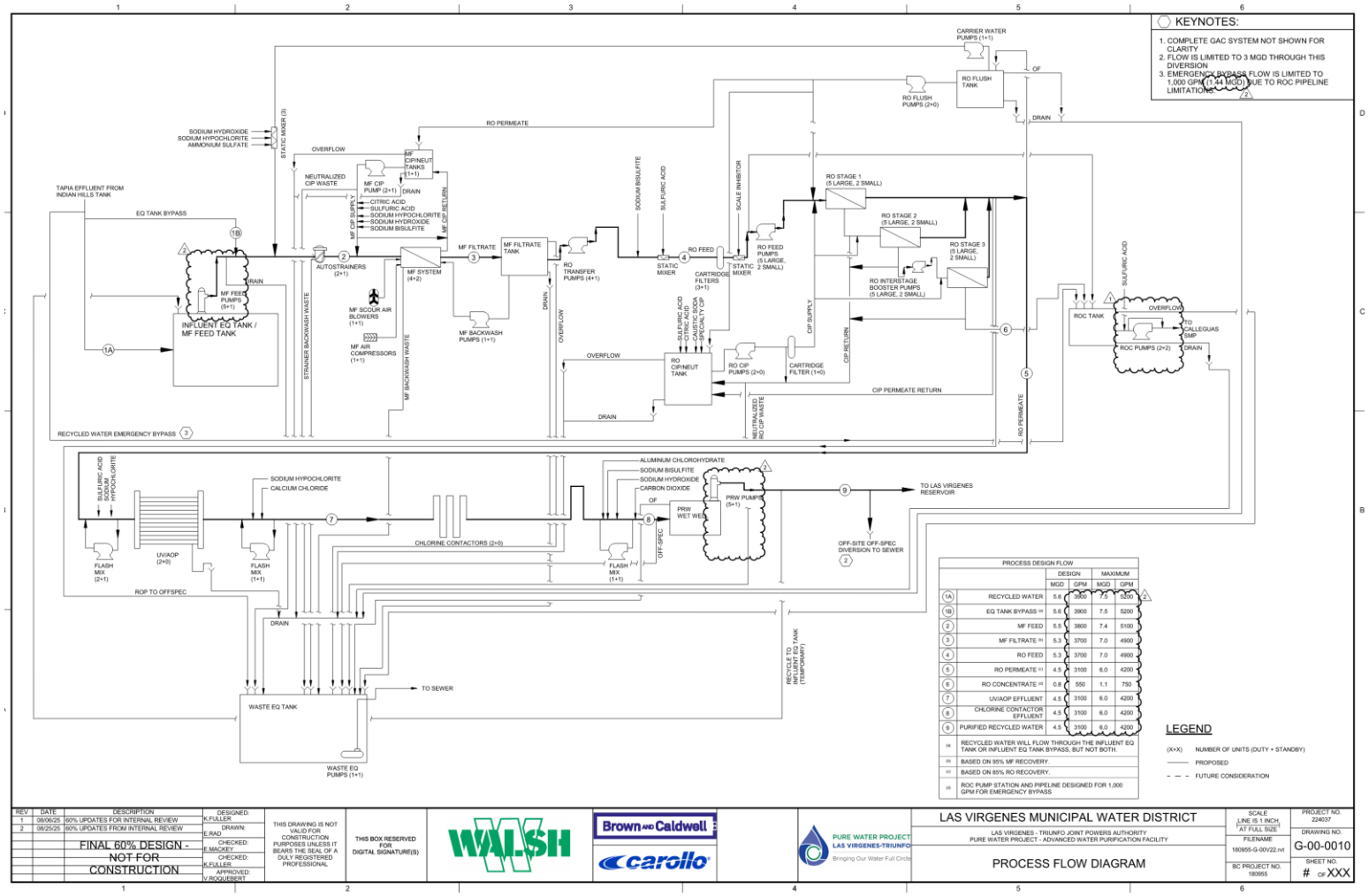


CDR Figure 2-3

High-Level Process Flow Diagram



Detailed Process Flow Diagram



High Level Process Overviews

- Influent EQ Tank/Influent Pump Station
- Autostrainers
- Membrane Filtration
- Reverse Osmosis
- UV/AOP
- Post-Treatment Stabilization

Brown AND Caldwell

Influent Equalization Tank

- Below grade concrete tank
- 80,000 gallon tank (15-minute residence time)
- EQ Tank bypass to allow gravity-feed from RW tank
- Vertical Turbine MF Feed Pumps

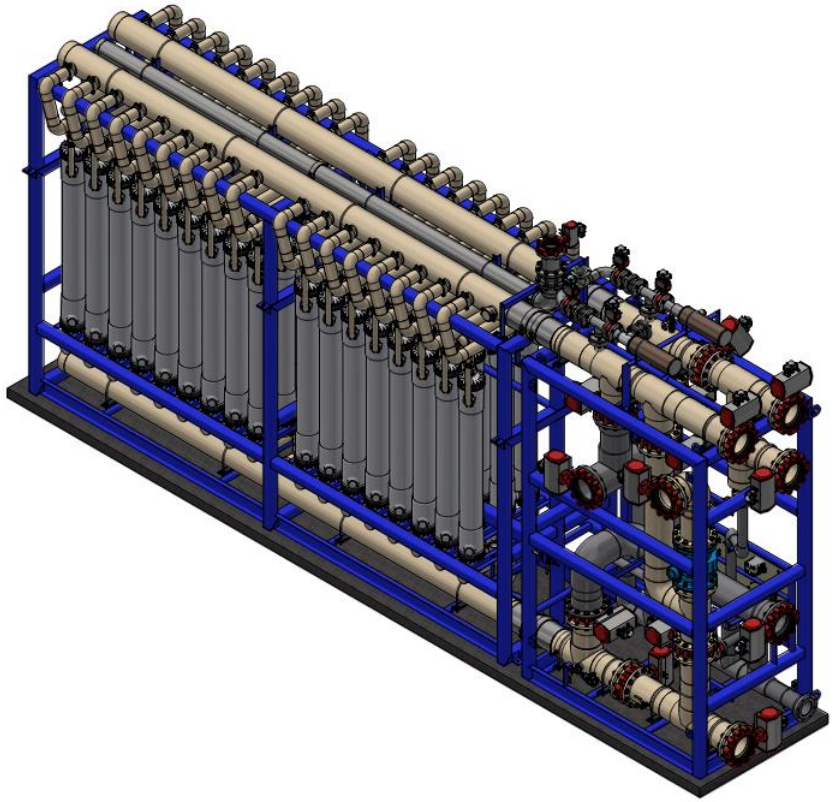
Figure 3-3. MF pump station bypass valve (model 90-01 PRV)

Source: Cla-Val

Figure 3-4. Vertical turbine pump

Membrane Filtration System

- H2O Innovations supplying MF and RO systems
- Toray HFUG-2020AN modules
- Maximum flux = 40 gfd



Reverse Osmosis (RO) System

- 85% recovery
- Three-stage system
- Design average flux = 11.9 gfd
- Toray TMG20D-400 membranes
- Five large trains (1.2-mgd permeate flow) and two small trains (0.6-mgd permeate flow)

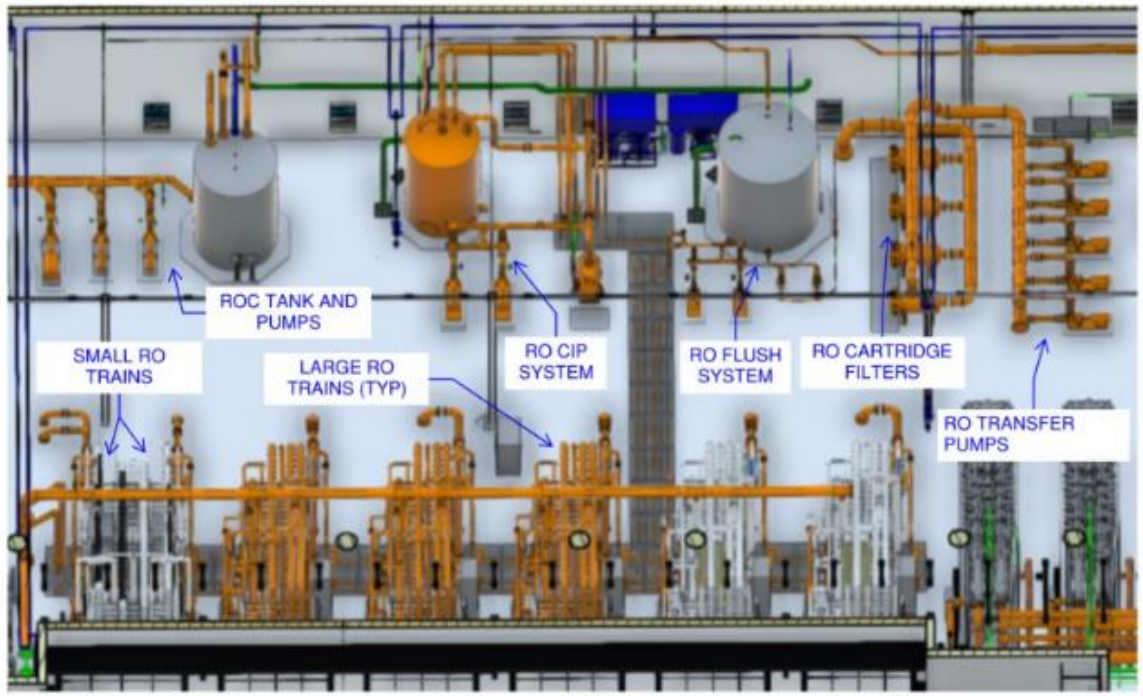
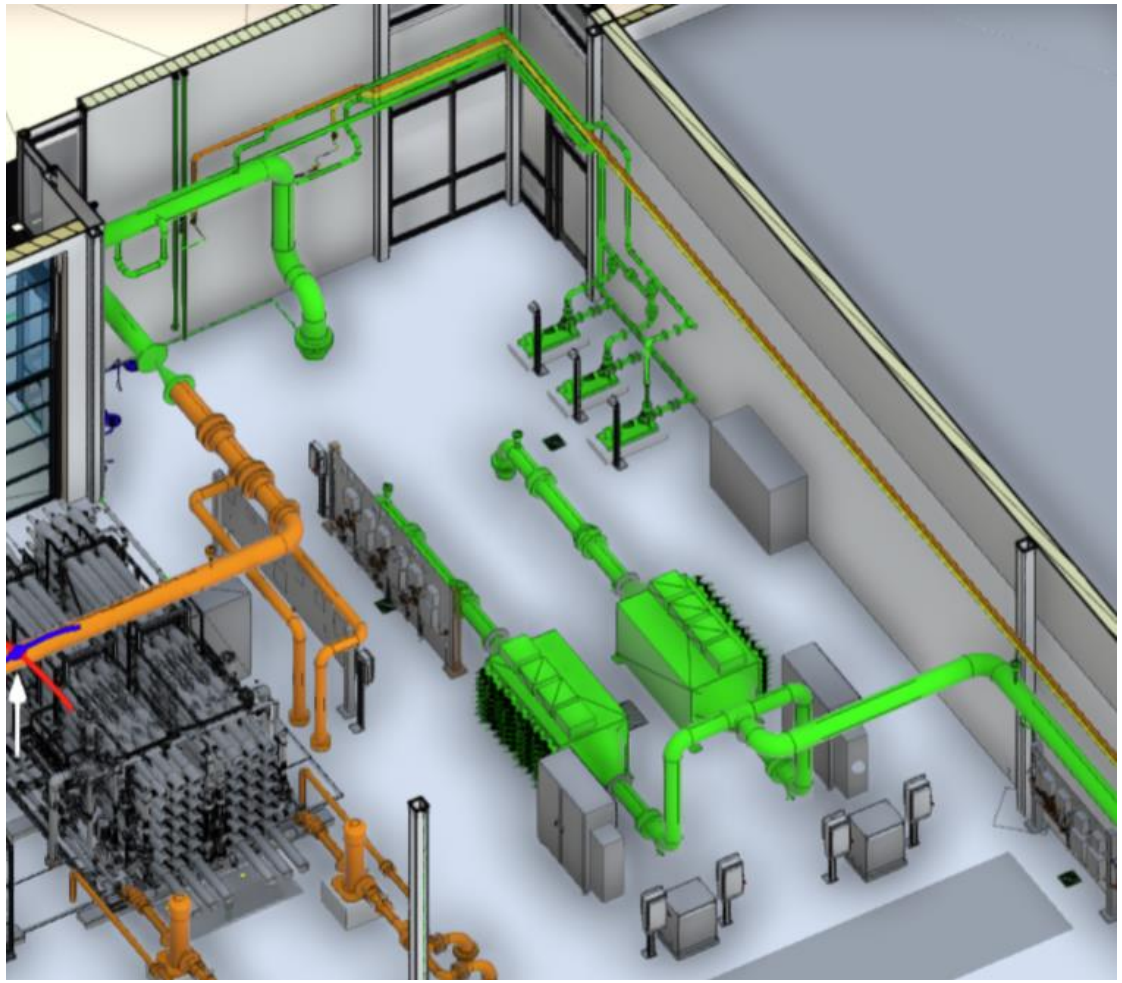


Figure 3-9. Proposed RO train and equipment layout

View facing south

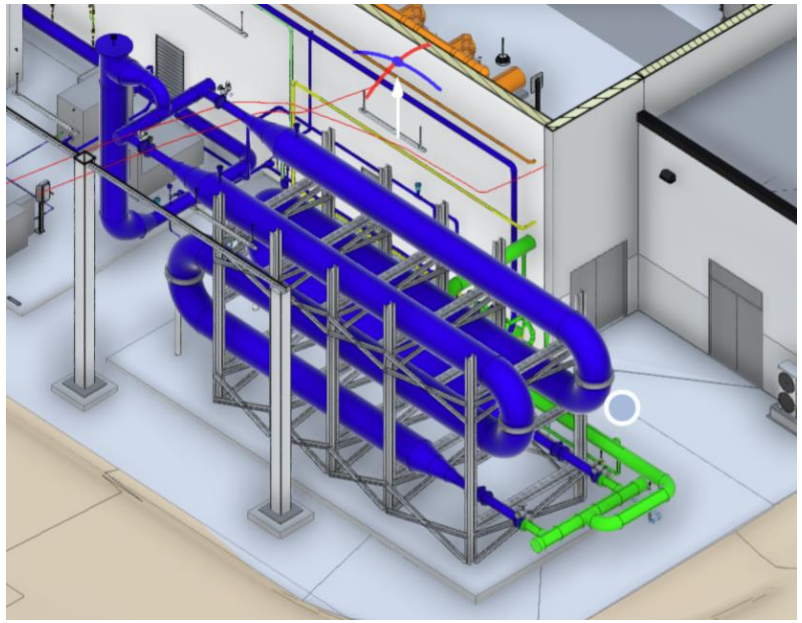
UV/AOP System

Parameter	Units	Trojan
Reactor Model	-	Flex100
Design Flow Rate (each reactor)	mgd	3.0
No. of Sections per Reactor	-	7 + 1
No. of Lamps per Section	-	16
Total No. of Lamps	-	256



Chlorine Contactor

- 4-log virus reduction credit
- UV/AOP effluent pH < 5.5 → CT requirement = 4 mg-min/L



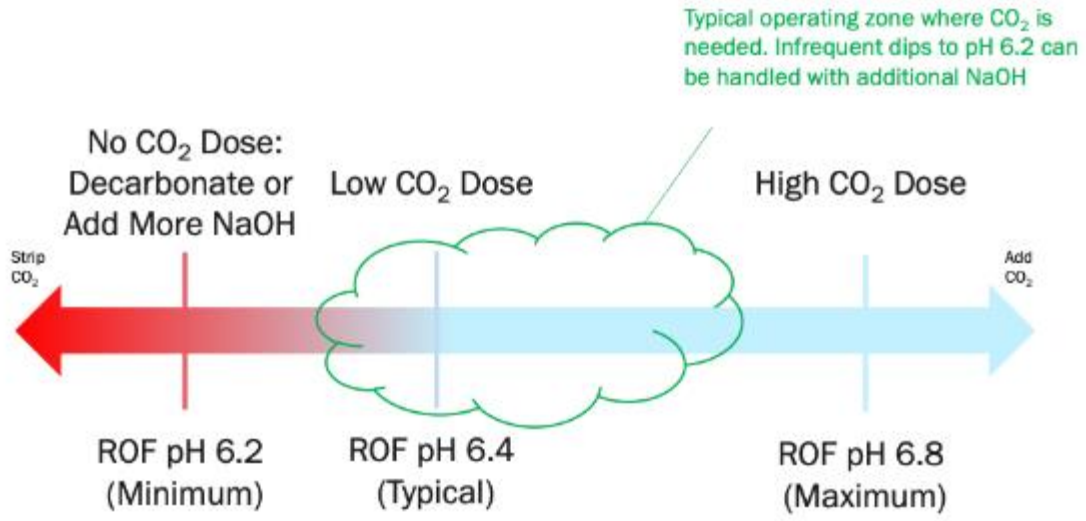
pH	Log_{10} inactivation	≤0.2 NTU				
		5 °C	10 °C	15 °C	20 °C	25 °C
≤7	1	4	3	2	2	1
	2	5	4	3	2	2
	3	7	5	4	3	2
	4	8	6	4	3	2
≤7.5	1	7	5	4	3	2
	2	10	7	5	4	3
	3	13	9	7	5	4
	4	16	11	8	6	4
≤8	1	9	7	5	3	3
	2	14	10	7	5	4
	3	18	13	9	7	5
	4	23	16	12	8	6
≤8.5	1	11	8	6	4	3
	2	17	12	9	6	5
	3	23	16	12	9	6
	4	29	21	15	10	8
≤9	1	13	9	6	5	3
	2	20	14	10	7	5
	3	28	19	14	10	7
	4	35	25	17	12	9

Figure 3-17. WaterVal chlorine CT tables for <=0.2 NTU

Post-Treatment Stabilization

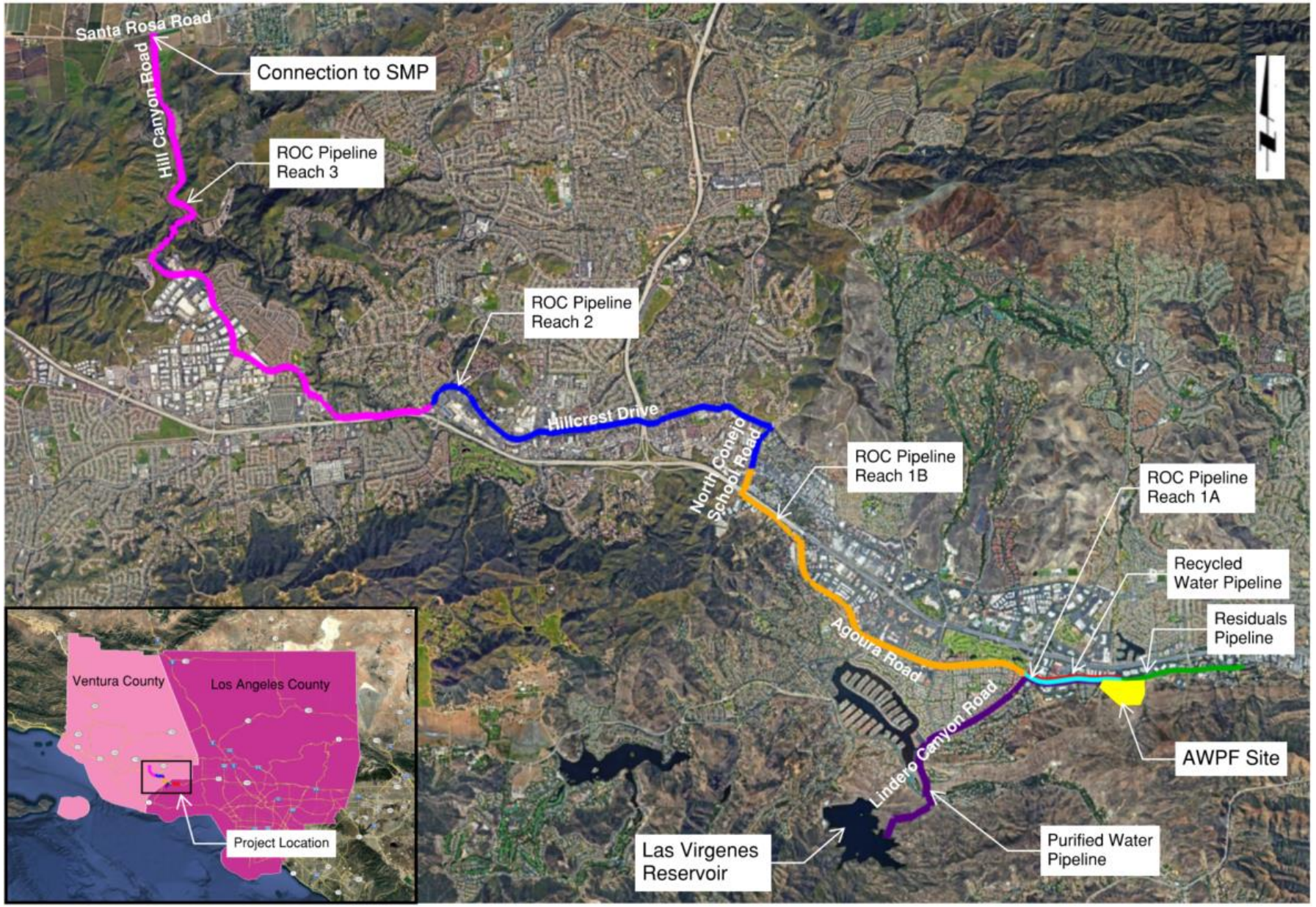
- Sodium hydroxide + calcium chloride addition
- CO2 addition

Table 3-40. Post-treatment Chemical Design Criteria				
Parameter	Units	Minimum	Design	Maximum
Sodium Hydroxide Dose	mg/L	44	77	125
Calcium Chloride Dose	mg/L	14	35	150
Carbon Dioxide Dose	mg/L	1.5	10	62



Conveyance Pipelines

- Reverse osmosis concentrate (ROC)
- Recycled Water (RW)
- Purified Recycled Water (PRW)
- Residuals (RES)



Thank you.

Questions?

Brown AND Caldwell

LOS ANGELES COUNTY
SANITATION DISTRICTS
Converting Waste Into Resources

WateReuse Legislative Update, LA Chapter

Phillip Vander Klay

Legislative Liaison, LACSD

December 9, 2025

Federal Update

FY 2026 Budget

- Shutdown, like we expected. Health care impasse
- Massive staffing cuts, including EPA
- Massive funding cuts/claw backs targeting Dem states
- Other previously unlawful maneuvers
- Completely unclear when it ends

Government is Open!

- Republicans got a mostly “clean” Continuing Resolution
- Democrats forced agency rehiring

But don’t get too excited…

- Funding runs out January 31
- No solution on healthcare
- SNAP funded for FY 26
- Another shutdown?

California in the Crosshairs

- We continue to be a target for the Trump Administration
- Break first, figure out solution later
- WIFIA under threat?
- Large-Scale WR Bill reintroduced, led by NV and AZ

The 2026 Legislative Session

- Legislative Analyst Office projects $18 billion deficit
- Once more up the PFAS hill?
- AI – Water, energy, people, & products
- AFFORDABILITY

Regulatory Update

Onsite Treatment and Reuse of Nonpotable Water Regulations - adopted

Safe Drinking Water Plan – final adopted

Volumetric Annual Report of Wastewater and Recycled Water - 2026

LOS ANGELES COUNTY
SANITATION DISTRICTS
Converting Waste Into Resources

Questions?

Phillip Vander Klay

phillipvanderklay@lacsd.org

(562) 783-1965

Updates on the Region's Recycled Water Program

December 9, 2025

CALIFORNIA
Water Boards

Los Angeles Regional Water Quality Control Board

Notification Level and Response Level Updates

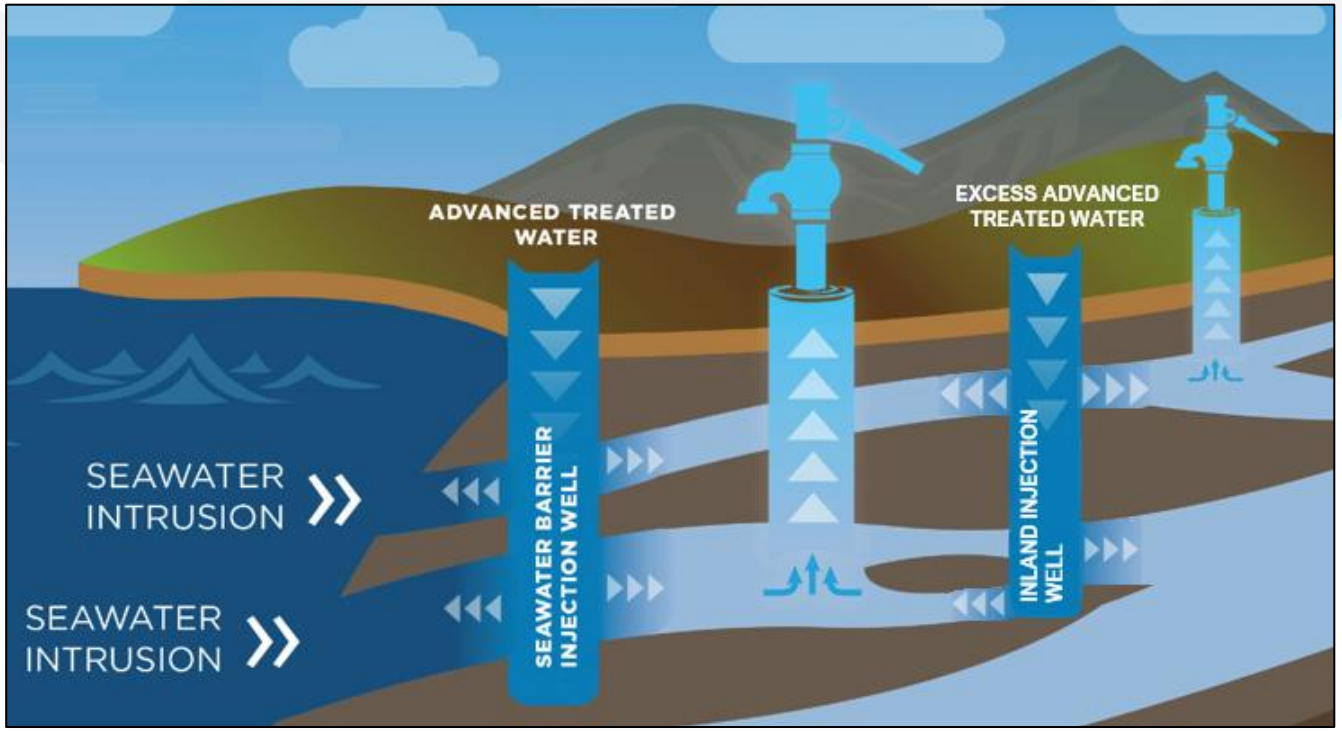
Constituent	Previous Notification Level	Previous Response Level	New Notification Level	New Response Level*
PFOA	5.1 ppt	10 ppt	4 ppt	10 ppt
PFOS	6.5 ppt	40 ppt	4 ppt	40 ppt
PFHxS	3 ppt	20 ppt	3 ppt	10 ppt
PFHxA	Not established	Not established	1 ppb	10 ppb

ppt = parts per trillion or nanograms per liter
ppb = parts per billion or micrograms per liter
response levels are in running annual averages and are based on four consecutive quarterly samples

- Implications
  - New NLs and RLs will be implemented into IPR and DPR projects
  - Updates are based on OEHHA's peer-reviewed health risk assessments
- DDW is currently proposing revised NLs and RLs for manganese at 50 ppb and 200 ppb, respectively.

ABP and Inland Injection Facilities Permit Update

- The Water Replenishment District's Leo J. Vander Lans Advanced Water Treatment Facility produces up to 8 MGD of ATW
- Regulated under Order No. R4-2014-0111



Order Update

- Incorporates the Inland Injection Facilities Project with the existing Alamitos Seawater Intrusion Barrier Project
- Provide additional aquifer replenishment into the Central Basin
- Scheduled for December 18, 2025 Board Hearing: https://www.waterboards.ca.gov/losangeles/board_info/meetings/

1987 Non-Potable Permit Amendments

- October 23, 2025, Board Meeting
- Amended Water Reclamation Requirements (WRRs) for 7 facilities that use recycled water for non-potable uses:
  - San Jose Creek Water Reclamation Plant (WRP)
  - Long Beach WRP
  - Saugus WRP
  - Valencia WRP
  - Ventura Water Reclamation Facility (WRF)
  - Simi Valley Water Quality Control Plant
  - Tapia WRF
- Updates WRRs to be more consistent with Title 22 of the California Code of Regulations and the Recycled Water Policy
- Interim strategy while the Division of Drinking Water (DDW) reviews and approves the non-potable Title 22 Engineering Reports that are needed to enroll facilities in the General Order

Chapter Trustee Updates
WATEREUSE LA Chapter – December 9, 2025

Last Board of Trustees Meeting: November 7, 2025

WRCA Managing Direct Report

- Organization Implementation Strategy
  1. Complete Organizational design Project
  2. Identify WRCA capabilities & Gaps
  3. Implement Organizational Changes
- Direct Potable Reuse Committee
  - Strong interest with over 50 individuals
- Conference Planning Committee
  - 2026 WateReuse Conference – San Francisco

Chapter Trustee Updates
WATEREUSE LA Chapter – December 9, 2025

Last Board of Trustees Meeting: November 7, 2025

FY2026 Proposed Budget

- Total Proposed Revenue: $1,208,000
  - Largest Revenue Category – Conference: $633,000
- Total Proposed Expenses: $1,321,990
  - Largest Expense Category – Staff: $586,215
- Projected net loss: $113,990

CalVal Update

- Developing unform guidance for permitting, implementation, and operation of potable reuse projects across CA

CalVal FOCUS AREAS

- Pathogen Removal in Treatment Plants.
- Membrane Technologies (Ultrafiltration, Microfiltration, Reverse Osmosis).
- Disinfection (UV, UV-AOP, Ozone, Chlorine Dioxide, Free Chlorine).
- Biological Activated Carbon Filtration.
- Reservoir & Groundwater Modeling for Reuse Projects.

KEY BENEFITS

- Trust & Transparency from open, collaborative process
- Informed decision-making
- Consistent safety standards

Chapter Trustee Updates
WATEREUSE LA Chapter – December 9, 2025

Last Board of Trustees Meeting: November 7, 2025

2026 WateReuse Symposium

- Los Angeles, CA – InterContinental Los Angeles Downtown
  - March 8th – 11th , 2026
- Keynote Speaker: Philippe Cousteau
- 41st annual WateReuse Symposium
- **Advanced Registration: Dec 17 – Feb 18, 2026**

Chapter Trustee Updates
WATEREUSE LA Chapter – December 9, 2025

Last Board of Trustees Meeting: November 7, 2025

Committee Updates

- Conference Committee
  - HYATT Regency San Francisco (August 24-26, 2026)
  - JW Marriot Dessert Springs (October 27-29, 2027)
  - San Diego Marriott Marquis (August 23-25, 2028)
- Potable Reuse Committee
  - Over 50 people interested showing strong statewide support.
  - WRCA is formalizing Chair/Co-Chair roles; Leadership selection announcement soon.
- Agriculture Reuse Committee
  - Collecting data on views of recycled water by farmers.

Chapter Trustee Updates
WATEREUSE LA Chapter – December 9, 2025

Last Board of Trustees Meeting: November 7, 2025

Proposed 2025 WRCA Special Projects

1. Water Loop Videos
   - Produce engaging video series to showcase the potential of watereuse
2. Strategic Plan Implementation
   - Deliver the NEW strategic plan 1st quarter of 2025
3. Southern California Water Coalition Video
   - WRCA & SCWC to develop videos focused on improving perception of DPR
4. Reuse Implementation Set Aside
   - WRCA workshop 11/7/2025 focusing on implementation needs for DPR
5. Regulation Guidebook
   - WRCA to develop regulatory guidebook for other states

LA Chapter Updates

- Communications Chair: *Oliver Slosser* *oslosser@lvmwd.com*
- Ad Hoc Urban Irrigation Manual Update Co-Chairs: *Monica Sanchez, Erika Bensch, and Jesus Gonzalez* *monicasanchez@lacsd.org*
- *Rising Professionals Committee Chair: Wen Cong* *wenc@trusselltech.com*
- Technical Topics Chair: *Dinaz Kureishy*

  Dinaz.Kureishy@santamonica.gov

WATEREUSE LOS ANGELES