

Meeting Agenda
February 9, 2021
11:30 a.m. – 1:00 p.m.



Location: ***Zoom registration link***

https://us02web.zoom.us/join/9tZDpceCqgz4tEtNiOeRgAqBZza_hclLDEx10

The mission of Los Angeles Chapter of the WaterReuse Association is to increase the amount and safe beneficial uses of recycled water in and around Los Angeles County. Its objectives shall be to promote water reclamation and recycling as a sustainable supplemental source of water for the state; to work for the adoption of legislation and regulations that allow the safe use of recycled water; to facilitate the development of technology aimed at improving water recycling; to promote legislation that would increase funding for water recycling projects; to provide mutual assistance and support between and among Chapter members involved with water recycling projects; and to increase public awareness and understanding of related water problems and solutions.

Welcome, Introductions and Instructions..... 11:30 a.m.

1. Host presentation: MWD Regional Recycled Water Program (*Raymond Jay/Metropolitan Water District of Southern California*)
2. Technical Topic: Update on PFAS Occurrence and Treatment Evaluation (*Nicole Blute/Hazen*)
3. Water Recycling Legislative/Regulatory Updates (*Raymond Jay*)
4. Regulatory Agency Update
 - a. Los Angeles Regional Water Quality Control Board (*Steven Webb*)
 - b. LA County Department of Public Health (*Glenn Van Eekhout*)
 - c. SWRCB Division of Drinking Water (*Mir Ali*)
5. California State Section Update (*Rafael Villegas*)
6. Chapter Updates (*Judi Miller*)
 - a. Approval of December, 2020 Member Meeting Summary
 - b. Young Member Committee Update (*Alex Waite*)
7. Membership Roundtable (*Jared Lee*)
8. Next Meetings
 - April 13, 2021
 - June 8, 2021
9. Adjournment 1:00 p.m.

Los Angeles Chapter Officers for 2019/2021

Fred Gerring, President	626-319-1107
Jared Lee, Vice President	626-379-8443
Judi Miller, Secretary/Treasurer	213-228-8236
Rafael Villegas, Chapter Trustee	213-367-1289
Raymond Jay, Past-President	213-217-5777

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Metropolitan's Regional Recycled Water Program

A NEW source of water for Southern California

Raymond Jay – Metropolitan Water District of Southern California

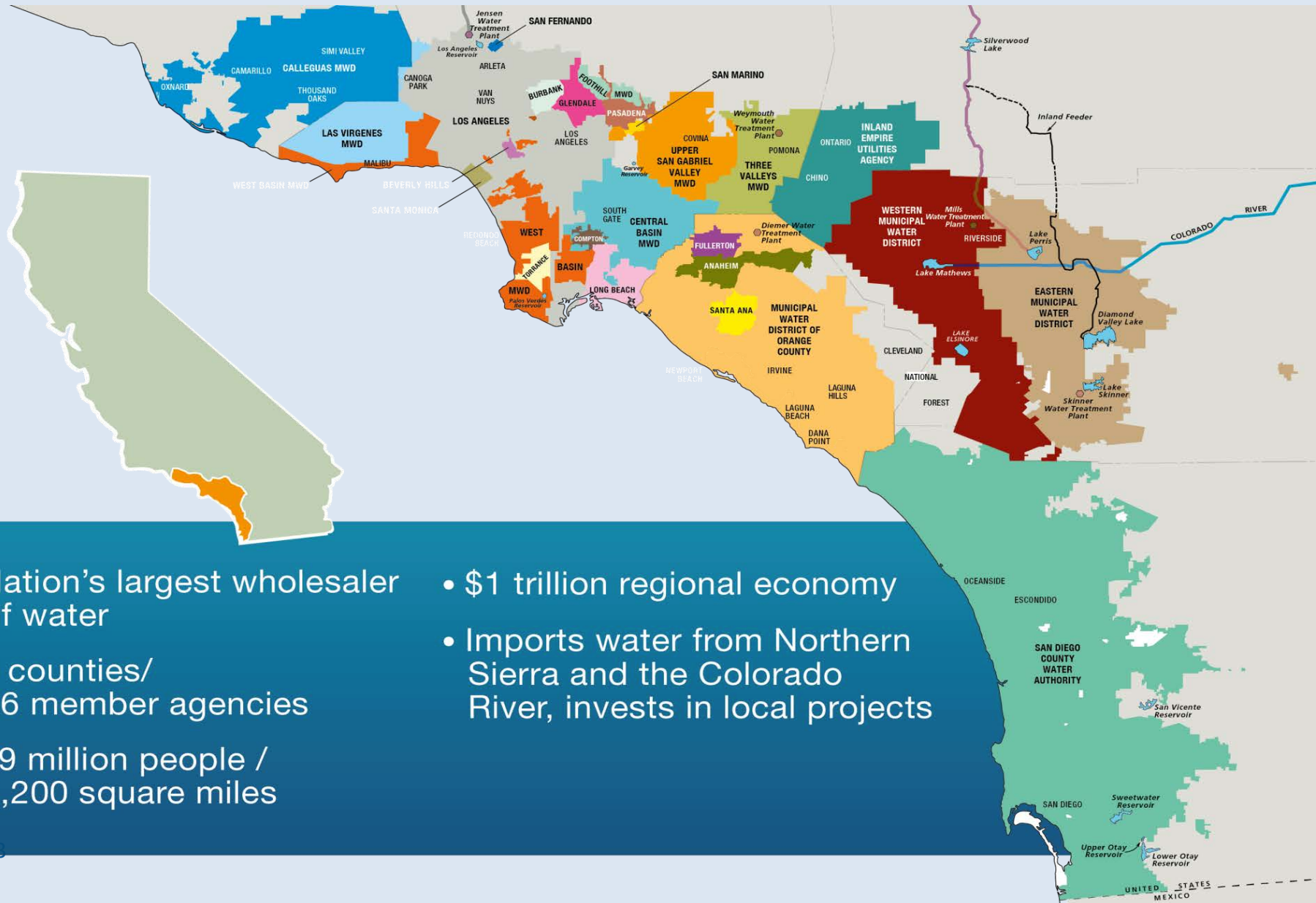
WaterReuse Los Angeles Chapter Meeting
February 9, 2021

Agenda

- Metropolitan Overview
- RRWP Background
- Agency Coordination
- Potential Funding
- Schedule
- Questions and Discussion



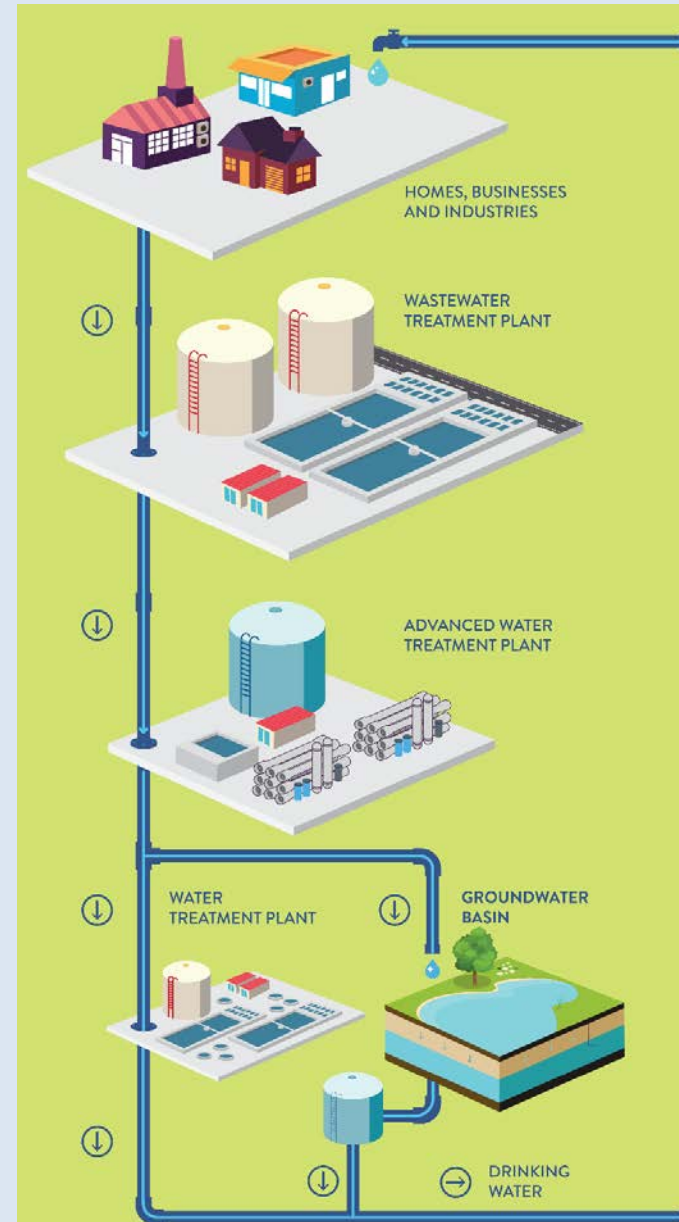
METROPOLITAN WATER DISTRICT



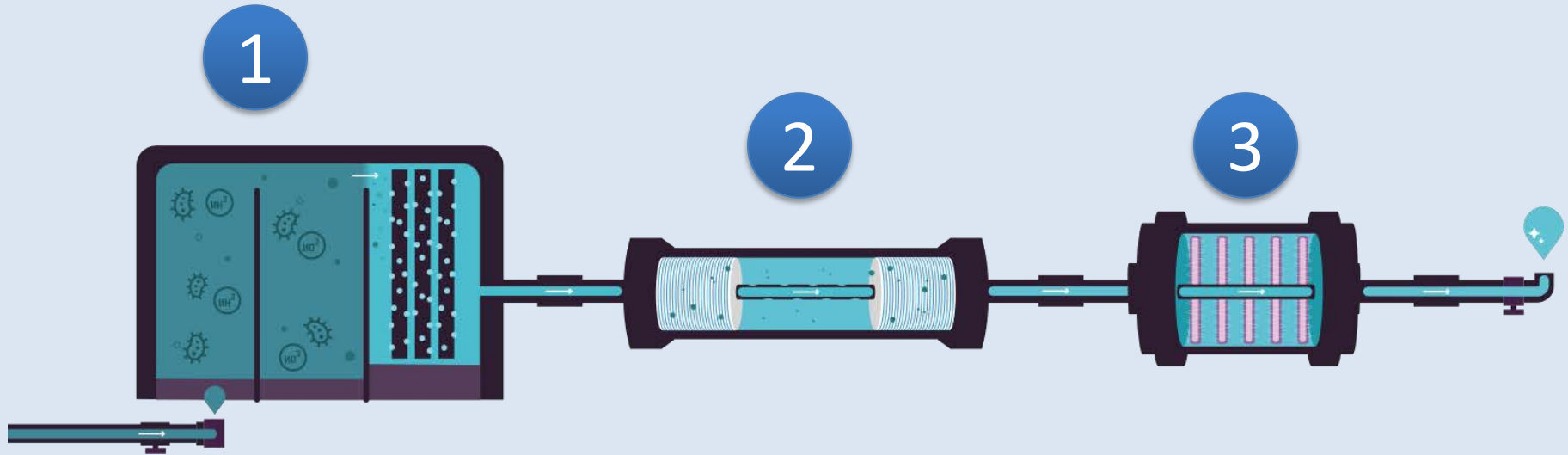
- Nation's largest wholesaler of water
- 6 counties/
26 member agencies
- 19 million people /
5,200 square miles
- \$1 trillion regional economy
- Imports water from Northern Sierra and the Colorado River, invests in local projects

REGIONAL RECYCLED WATER PROGRAM

- Development of a new regional water source
 - Up to 150 mgd (168,000 AFY) of purified recycled water
 - Replenish groundwater basins
 - Provide water to industries
 - Connect to Metropolitan's water treatment plants



Proposed Treatment Process



Membrane Bioreactors

Treated primary or secondary effluent
Microorganisms remove ammonia
Membranes filter tiny particles

Reverse Osmosis

Pressurized membranes further remove microscopic materials, eliminating more than 99% of all impurities

Ultraviolet/Advanced Oxidation Process

Ultraviolet light/ oxidant destroy any remaining viruses and trace chemical compounds.



Program Benefits



Earthquake

Prepares the Southland for the event of a catastrophic earthquake by increasing local water supplies.



Drought

Produces a drought-proof source of water, readily available rain or shine.



Groundwater

Replenishes groundwater basins, which provide 30% of Southern CA's water supply and have seen levels drop to historic lows in recent years.



Economy

Helps meet needs of region's growing economy and population at a cost comparable to other local water resources.



Wastewater

Uses region's largest untapped source of wastewater, currently sent to the ocean.



RRWP Role in Regional Planning

Integrated resources plan

25-year plan to ensure reliability

Evolves over time

2020 IRP will include scenario planning

Changed conditions in past 5 years

Declining demand

Unmet local resource goal

Climate change

Constituents of concern

RRWP

Increases local supplies

Supports GW & DPR

Has regional benefits

Has stakeholder support

Studies and Reports

- Pilot Scale Studies (2012)
- Feasibility Study Report (2016)
- Conceptual Planning Studies Report (2019)
- Demonstration Plant (2019)
 - Tertiary MBR Testing (2020)
 - Secondary MBR Testing (2021)
 - Proposed DPR Testing (2023-2024)
- Environmental Planning Phase (current)



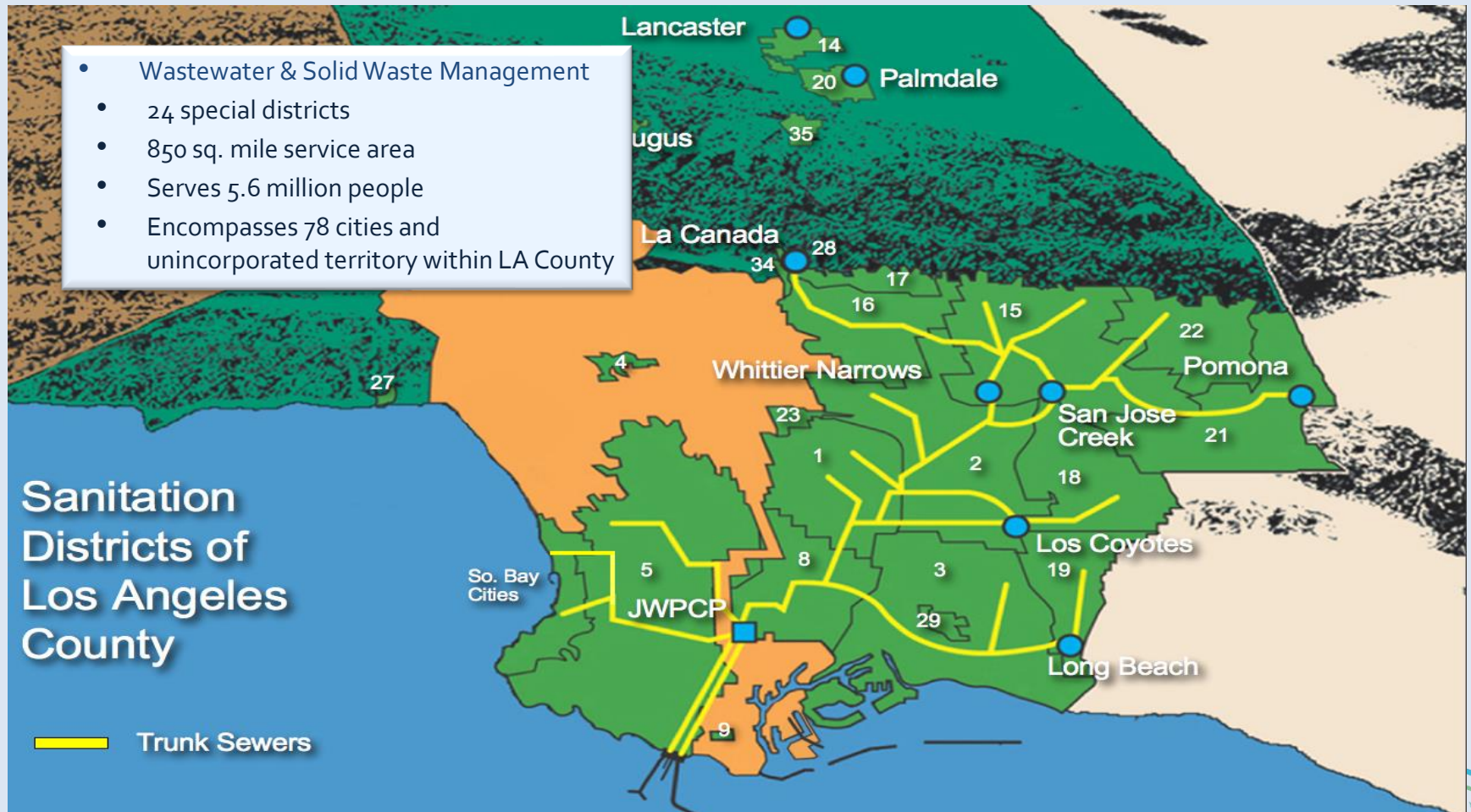
MBR



Reverse Osmosis



LOS ANGELES COUNTY SANITATION DISTRICTS

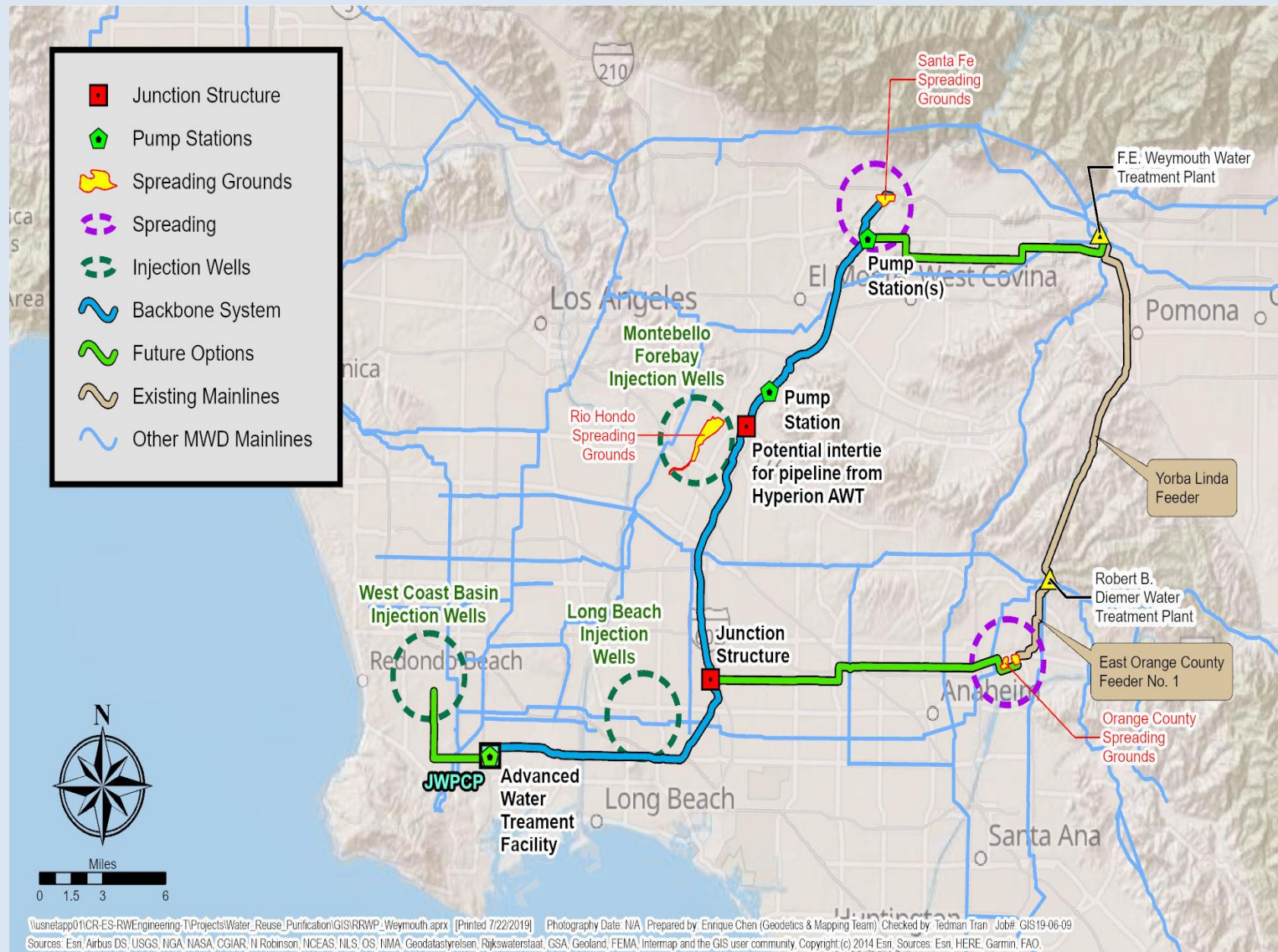


Joint Water Pollution Control Plant

- 2017 average flow of ~260 MGD
- Permitted capacity of 400 MGD
- Primary and secondary treatment
- Currently discharges to the ocean



Conceptual Facilities

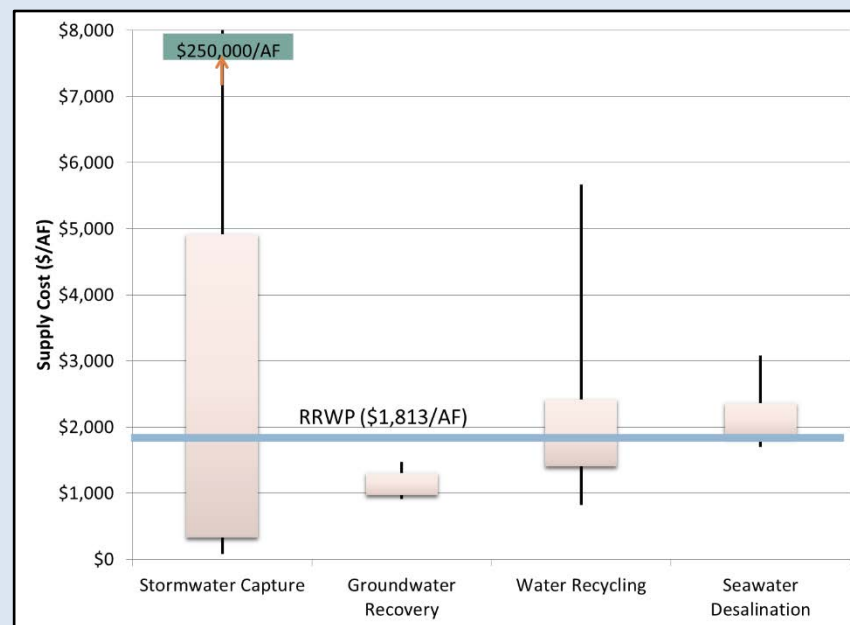


Program Costs & Alternatives

Program Costs

Item	Phase 1 Backbone (2018 Dollars)	Full Program (2018 Dollars)
Production Capacity (mgd)	100	150
Capital Program Cost	\$2.6 billion	\$3.4 billion
Annual O&M Cost (\$/year)	\$69 million	129 million
Program Unit Cost of Yield (\$/AF)	\$1,813	\$1,826
Capital Unit Cost (\$/AF)	\$1,181	\$1,054
O&M Unit Cost (\$/AF)	\$631	\$772

Alternatives



How to Pay for the Program



Direct
Recipients



Everyone



Area Tax
Base



Hybrid

MWD Board to determine the payment approach



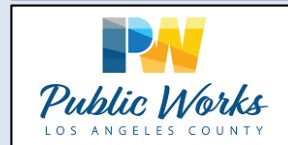
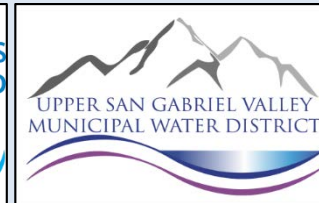
Agency Coordination

- Collaboration partners
- Letters of Intent (LOI)
- Joint technical studies
- Future purified water purchase
- Funding partners



**LOS ANGELES COUNTY
SANITATION DISTRICTS**

Converting Waste Into Resources



Collaboration and Funding

More than \$ 2 million in Grants Awarded to Date

Program	Amount
USBR Title XVI Reuse Research Grant	<ul style="list-style-type: none">• Awarded \$750,000 to study MBR pathogen removal
California Water Recycling Funding Program (WRFP) State Prop 1	<ul style="list-style-type: none">• Awarded \$1M for Demonstration Plant• Awarded \$300,000 for four groundwater basin planning studies



Collaboration and Funding

Potential Future Grants and Loans

Program	Type	Amount
USBR Title XVI	Grant	Up to \$20M for construction
California Water Recycling Funding Program (WRFP) State Prop 1 /68	Grant	Up to \$5M for construction
USEPA Water Infrastructure Finance and Innovation Act (WIFIA) program	Loan	Up to 49% of eligible costs
California Clean Water State Revolving Fund (CWSRF)	Loan	Up to 50% of eligible costs



Recent Actions

November 2020 Board Actions

Board Action 1

- Authorize staff to commence Environmental Planning phase for RRWP

Board Action 2

- Amend existing LACSD Agreement
- Provide support for the RRWP Environmental Planning phase

Board Action 3

- Adopt SNWA Agreement
- Provide support for RRWP Environmental Planning phase

Board Action 4

- Amend existing NWRI Agreement
- Provide continued support for Demo Plant testing program

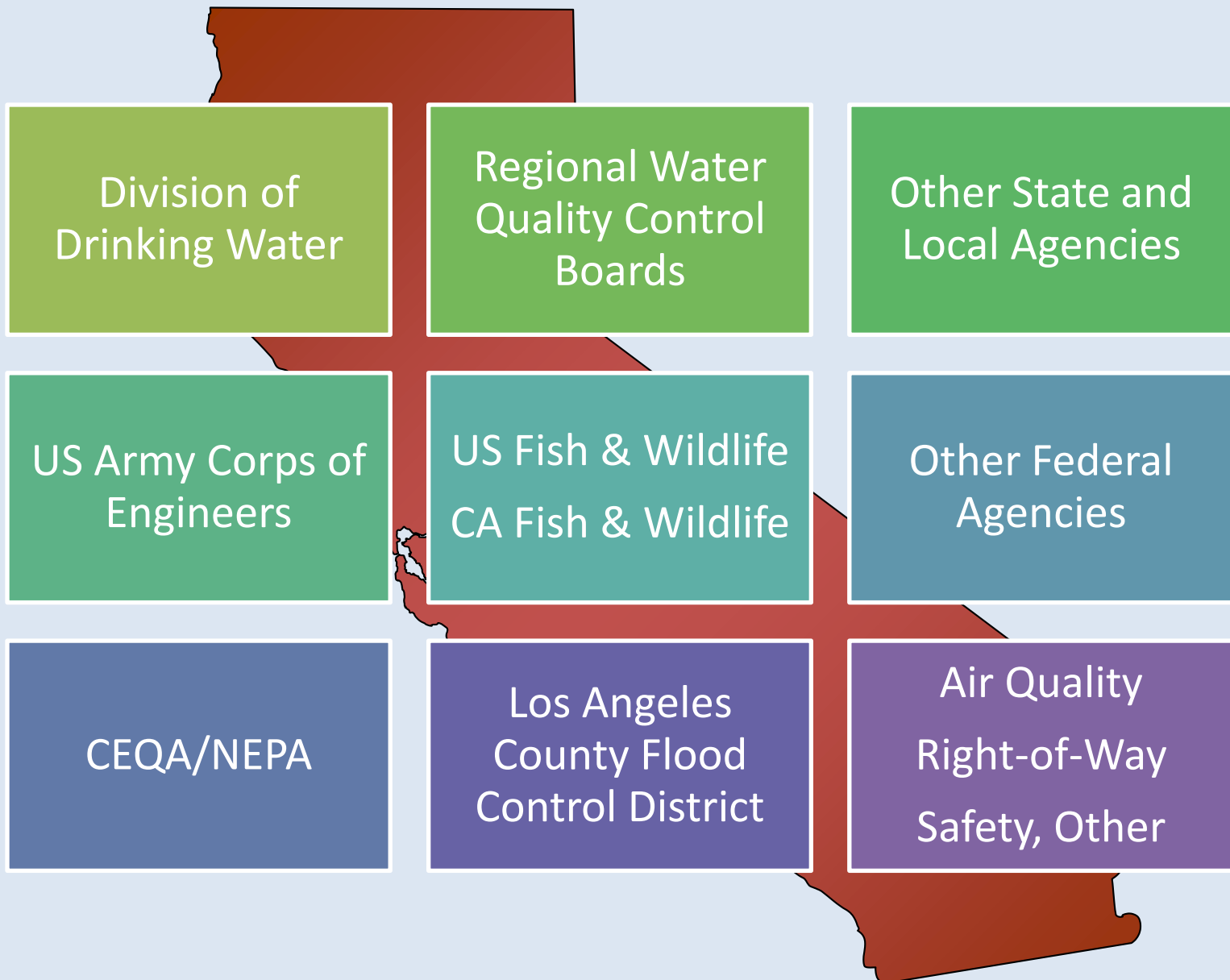


Environmental Planning Phase

- Proposed Scope of Work
 - Program Environmental Impact Report
 - Engineering & Technical Support Studies
 - Treatment
 - Conveyance
 - Public Outreach support
- \$30 million included in approved 2020/21 and 2021/2022 biennial O&M budget
- Potential contributions from Program partners



Environmental Planning/Permitting



— Los Angeles County Sanitation Districts —

- 2015 Agreement for demonstration plant and term sheet for future full-scale projects
- Amendment added Environmental phase work
- Scope will cover the following:
 - CEQA documentation
 - Engineering assistance
 - Associated technical studies
 - Public outreach
- Potential LACSD financial contribution \$5M - \$6M
- FORCO remediation up to \$50 million



Southern Nevada Water Authority

- Letter of Intent approved in March 2020
 - Work together to implement the RRWP
 - Provide resources to assist with the planning, design, and construction
 - Discuss exchanges of water volumes
 - Non-binding
- Agreement approved in November 2020
 - Funding contribution for environmental phase
 - Partnership and collaboration for environmental phase work
 - Additional terms to be considered



National Water Research Institute

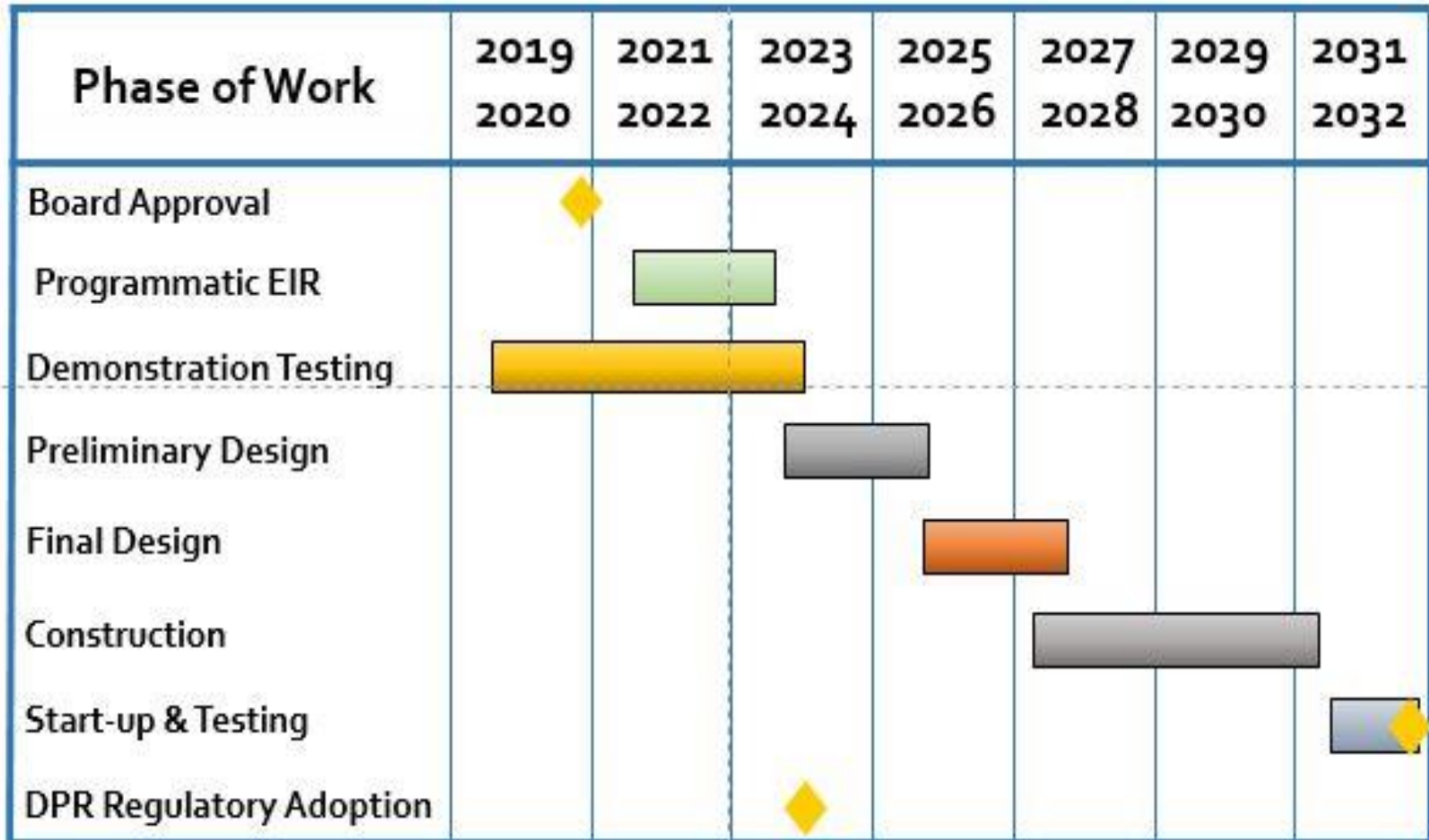
- Independent Scientific Advisory Panel (ISAP) facilitation
 - Supports ongoing work at Demonstration Plant
- Agreement signed in 2018
 - Initial Budget: \$245,000
- Approved amendment in November 2020
 - Additional workshops and reports
 - \$200,000 already included in O&M budget
 - Time extension through June of 2022

Environmental Community Support

“In the interest of assuring this important resource can be developed and operational in a reasonable period” the environmental community encouraged Metropolitan to move forward with RRWP CEQA review



SCHEDULE



◆ Milestone

Note: Assumes Late 2020 Board Approval



Metropolitan Recycled Water Website



INTRODUCTION HOW IT WORKS PROCESS BENEFITS STRATEGY MILESTONES RESOURCES PARTNERSHIP



Regional Recycled Water

Advanced Purification Center

A NEW SOURCE OF WATER FOR SOUTHERN CALIFORNIA

Water is too precious to use just once. So the Metropolitan Water District of Southern California is making a major investment in a potential water recycling project that will reuse water currently sent to the ocean.

www.mwdh2o.com/RRWP

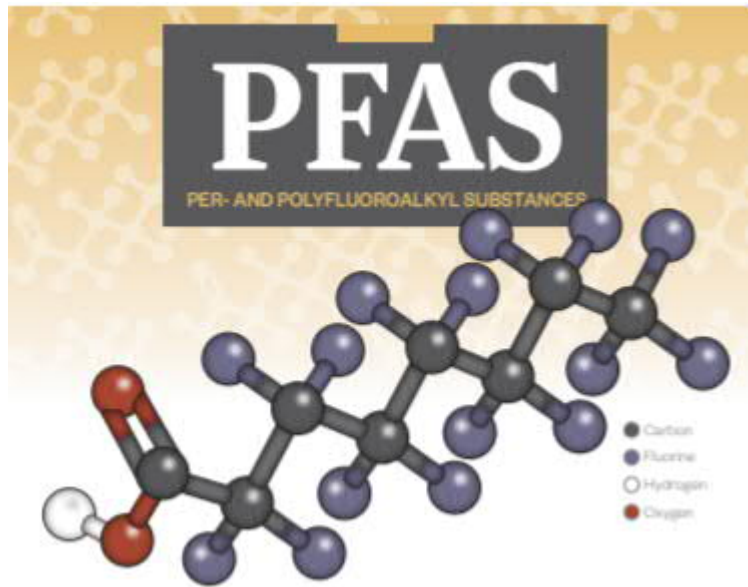


Regional Recycled Water Program

WaterReuse California - Los Angeles Chapter

Raymond Jay
Metropolitan Water District of Southern California
700 N Alameda Street
Los Angeles, CA 90054
(213) 217-5777
rjay@mwd.h2o.com

February 9, 2021
For social media: Use #recycledwater, tag @mwdh2o



Update on PFAS Occurrence and Treatment Evaluation

Nicole Blute, PhD, PE

February 9, 2021

Presentation at WaterReuse Los Angeles Meeting

PFAS Sources

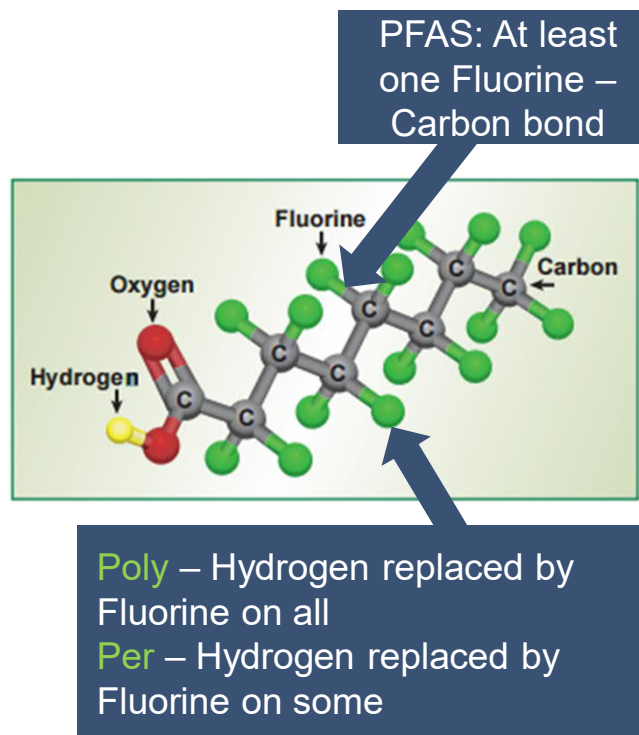
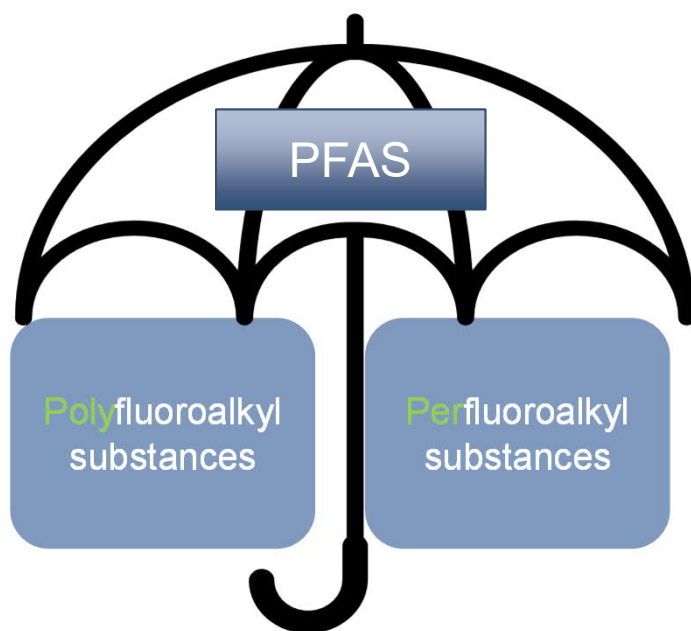


PFAS Monitored for UCMR 3	Source of PFAS
Long-Chains	
Perfluorooctanoic acid (PFOA)	Nonstick Surfaces
Perfluorooctane sulfonate (PFOS)	Fabric Protection, Firefighting Foam
Perfluorononanoic acid (PFNA)	Surfactant for Plastic Production
Short-Chains	
Perfluorohexane Sulfonic Acid (PFHxS)	Firefighting Foam
Perfluorohexanoic Acid (PFHxA)	Degradation Product of PFHxS
Perfluorobutyrate Acid (PFBA)	Photographic Film

Source: AWWA

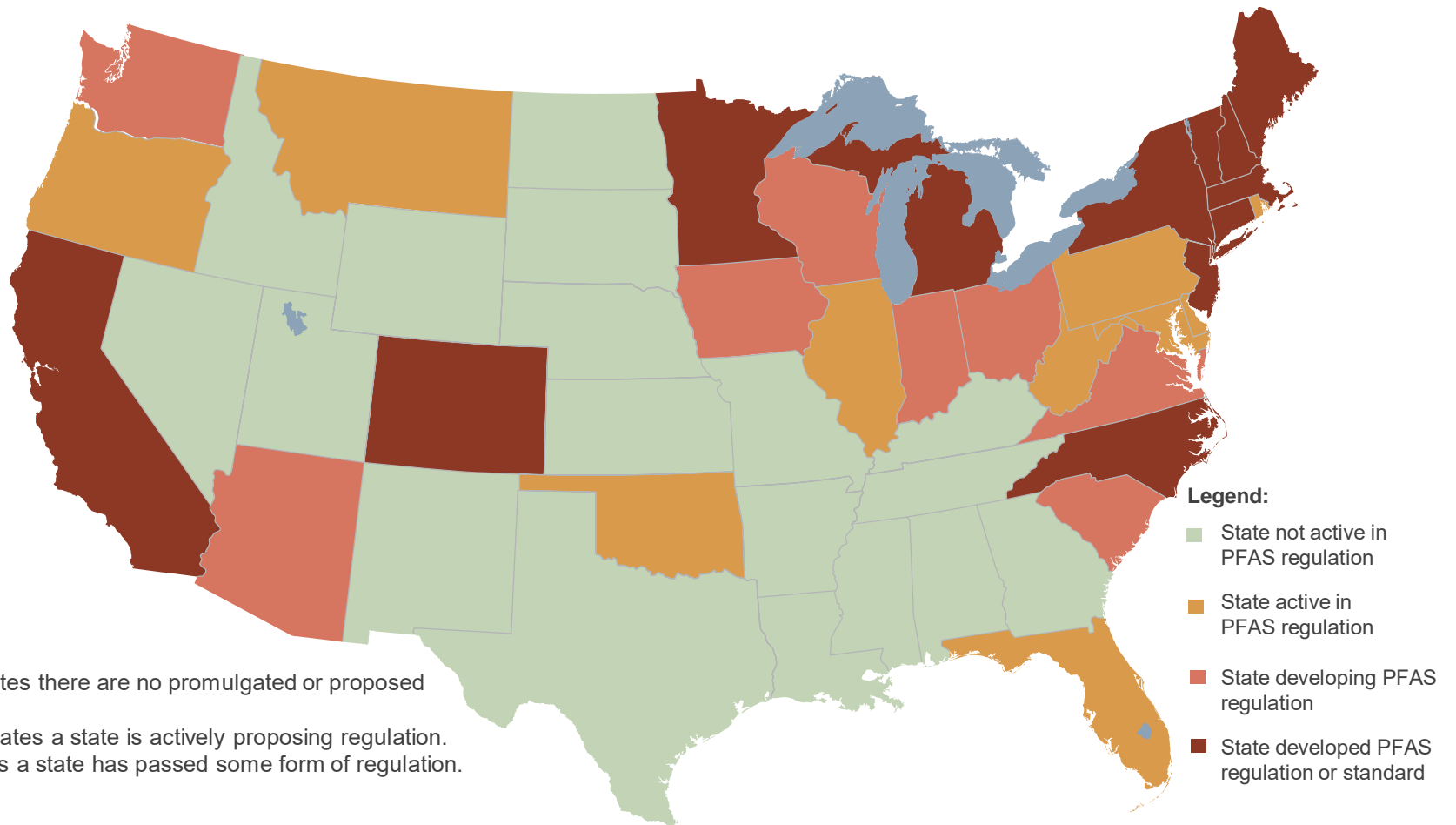
The (Expanding) World of PFAS Compounds

Over 4,000+ compounds



C-F bond is one of the strongest known covalent bonds, and the multiple C-F bonds in PFASs provide their chemical and thermal stability

PFAS Regulatory Approaches Vary Nationwide



State PFAS Regulations Summary

State	Standards/Guidelines
Alabama	Combined 70 ppt PFOA + PFOS HA (long term exposure)
Arizona	Combined 70 ppt PFOA + PFOS
California	Notification Limit for PFOA (5.1) and PFOS (6.5). Response Level for PFOA (10), PFOS (40)
Colorado	Combined 70 ppt PFOA + PFOS + PFNA, 700ppt for PFHxS, and 400,000ppt for PFBS
Connecticut	70 ppt total Alert Level (PFOS, PFOA, PFNA, PFHxS, PFHpA)
Delaware	Combined 70 ppt PFOA + PFOS HA (PFBS GW standard)
Illinois	Proposed standard of PFOA + PFOS < 21 ppt, PFOS (14), PFNA (21), PFHxS (140), PFBS (140,000)
Maine	Combined 70 ppt PFOA and PFOS
Massachusetts	20 ppt total MCL this summer (PFOS, PFOA, PFHxS, PFNA, PFHpA, PFDA)
Michigan	MCL for PFOA (8), PFOS (16), PFNA (6), PFHxA (400,000), PFHxS (51), PFBS (420), GenX (370)
Minnesota	DWGL for PFOA (35), PFOS (15), PFHxS (47), PFBA (7,000), PFBS (2,000)
Montana	Health Advisory for PFOA (41 ppt), PFOS (41 ppt), PFOA + PFOS < 70ppt
New Hampshire	MCL for PFHxS (18), PNFA (11), PFOS (15), PFOA (12) retracted after lawsuit
New Jersey	14 ppt PFOA (MCL), 13 ppt PFOS (MCL), 13 ppt PFNA (MCL)
New York	MCLs for PFOA (10 ppt) and PFOS (10 ppt)
North Carolina	140 ppt GenX
Pennsylvania	Combined 70 ppt PFOA + PFOS HA (MCL under development)
Rhode Island	Combined 70 ppt PFOA + PFOS HA
Vermont	Interim Standard - 20 ppt total for 5 PFAS (PFOA, PFOS, PFHxS, PFHpA, and PFNA)
West Virginia	Combined 70 ppt PFOA + PFOS HA

News Releases from Headquarters > Office of the Administrator (AO)

EPA Delivers Results on PFAS Action Plan

Agency delivers on the historic commitments made in the PFAS Action Plan to address these emerging chemicals of concern and protect public health

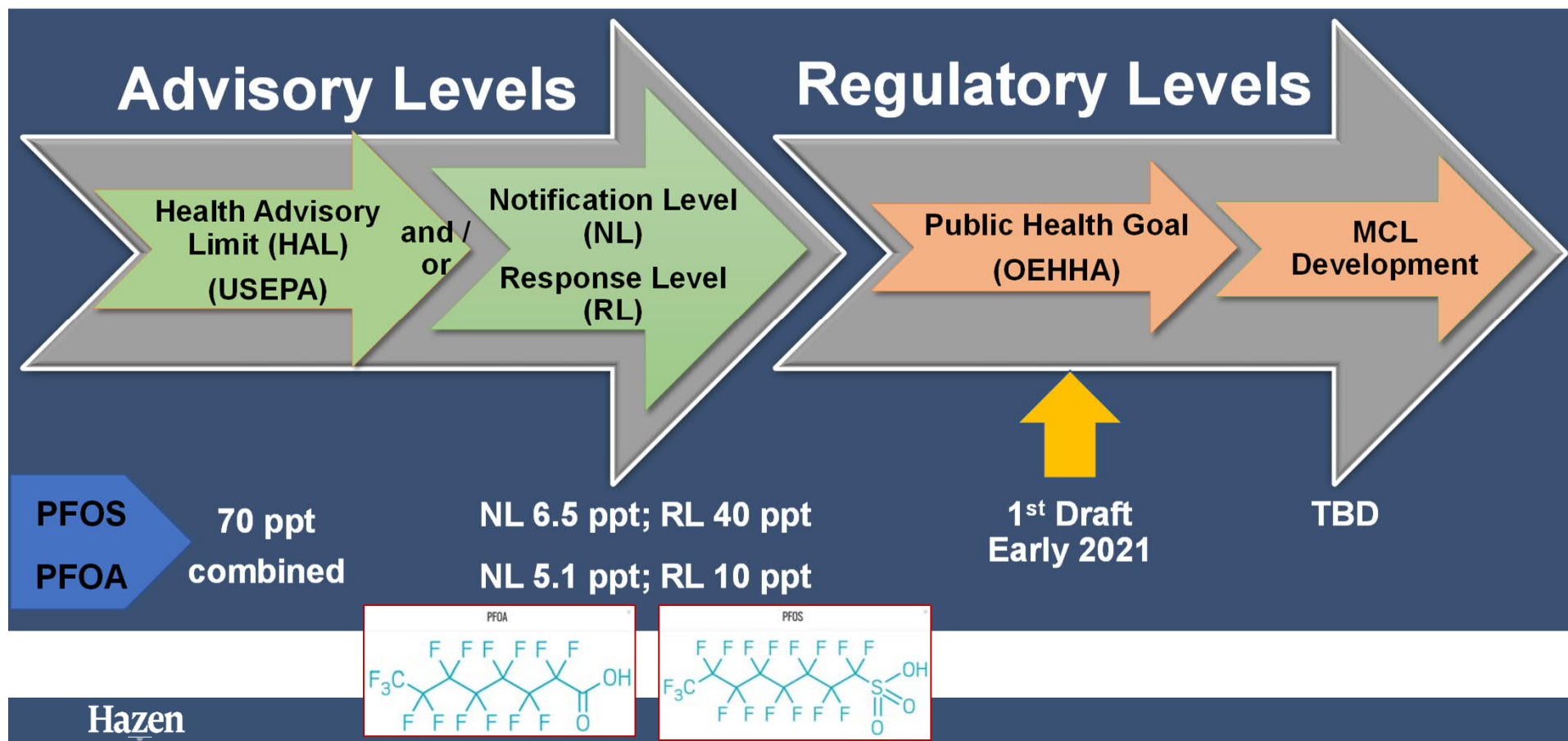
01/19/2021

Moving Forward on Regulating PFOA and PFOS in Drinking Water by Issuing Final Regulatory Determinations

After evaluating more than 11,000 public comments, the agency is taking the next step to regulate these two PFAS under the processes laid out in the Safe Drinking Water Act by issuing final regulatory determinations for PFOA and PFOS. EPA will now initiate the process to develop a national primary drinking water regulation for these two PFAS, which will include further analyses, scientific review, and opportunity for public comment. Additionally, EPA intends to fast track evaluation of additional PFAS for future drinking water regulatory determinations if necessary information and data become available. For additional information: www.epa.gov/safewater

California Regulatory Path to an MCL

Source: Jeff O'Keefe, DDW



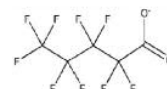
Additional PFAS NLs/RLs Being Considered in California

PFBS

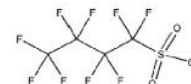
- OEHHA posted recommended NL of 500 ppt on Jan 14, 2021
- NL and RL expected in Spring 2021

Others under consideration:

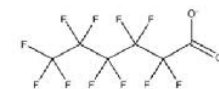
- PFHxS, PFNA, PFHxA, PFHpA, PFDA, and ADONA



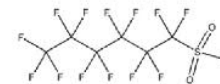
Perfluorobutanoic acid (PFBA)
(C₄F₉CO⁻)



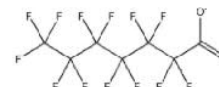
Perfluorobutanesulfonate (PFBS)
(C₄F₉SO₃⁻)



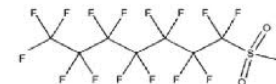
Perfluorohexanoic acid (PFHxA)
(C₆F₁₃COO⁻)



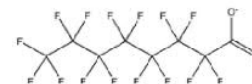
Perfluorohexanesulfonate (PFHxS)
(C₆F₁₃SO₃⁻)



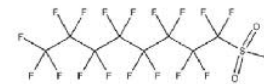
Perfluoroheptanoic acid (PFHpA)
(C₇F₁₅COO⁻)



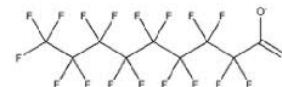
Perfluoroheptanesulfonate (PFHpS)
(C₇F₁₅SO₃⁻)



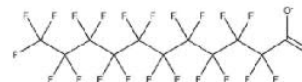
Perfluorooctanoic acid (PFOA)
(C₈F₁₇COO⁻)



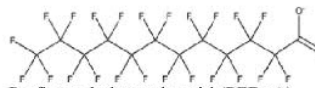
Perfluorooctanesulfonate (PFOS)
(C₈F₁₇SO₃⁻)



Perfluorononanoic acid (PFNA)
(C₉F₁₉COO⁻)



Perfluoroundecanoic acid (PFuDA)
(C₁₁F₂₃COO⁻)



Perfluorododecanoic acid (PFDoA)
(C₁₂F₂₅COO⁻)

Proposed UCMR5 Monitoring

29 PFAS compounds, and Lithium

29 Per- and Polyfluoroalkyl Substances (PFAS)

11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	perfluoro-4-methoxybutanoic acid (PFMBA)	perfluorooctanesulfonic acid (PFOS)
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	perfluorobutanesulfonic acid (PFBS)	perfluorooctanoic acid (PFOA)
1H, 1H, 2H, 2H-perfluorohexane sulfonic acid (4:2 FTS)	perfluorobutanoic acid (PFBA)	perfluoropentanesulfonic acid (PFPeS)
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	perfluorodecanoic acid (PFDA)	perfluoropentanoic acid (PFPeA)
4,8-dioxa-3H-perfluorononanoic acid (ADONA) ¹	perfluorododecanoic acid (PFDoA)	perfluoroundecanoic acid (PFUnA)
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)	perfluoroheptanesulfonic acid (PFHpS)	n-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)
hexafluoropropylene oxide dimer acid (HFPO-DA) (GenX)	perfluoroheptanoic acid (PFHpA)	n-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)
nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	perfluorohexanesulfonic acid (PFHxS)	perfluorotetradecanoic acid (PFTA)
perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	perfluorohexanoic acid (PFHxA)	perfluorotridecanoic acid (PFTTrDA)
perfluoro-3-methoxypropanoic acid (PFMPA)	perfluorononanoic acid (PFNA)	

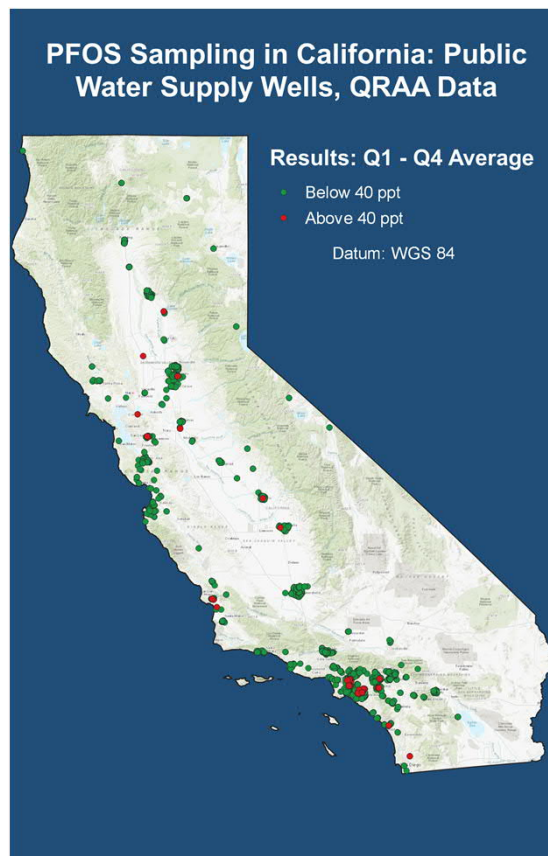
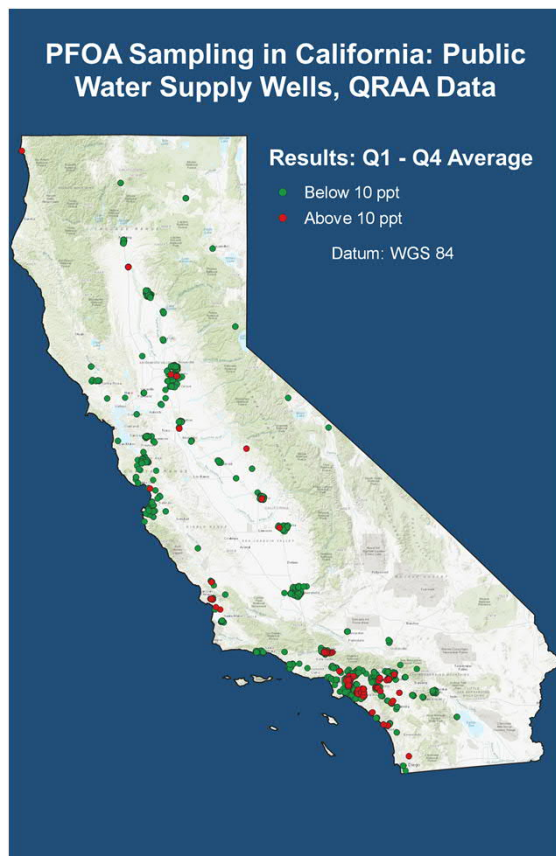
1. Although the abbreviation used is ADONA, indicating the ammonium salt, 4,8-dioxa-3H-perfluorononanoic acid is the parent acid.

Expected to be a
Final Rule in Dec.
2021

Sample collection
between 2023-
2025

California PFAS Occurrence

Source: Jeff O'Keefe, DDW



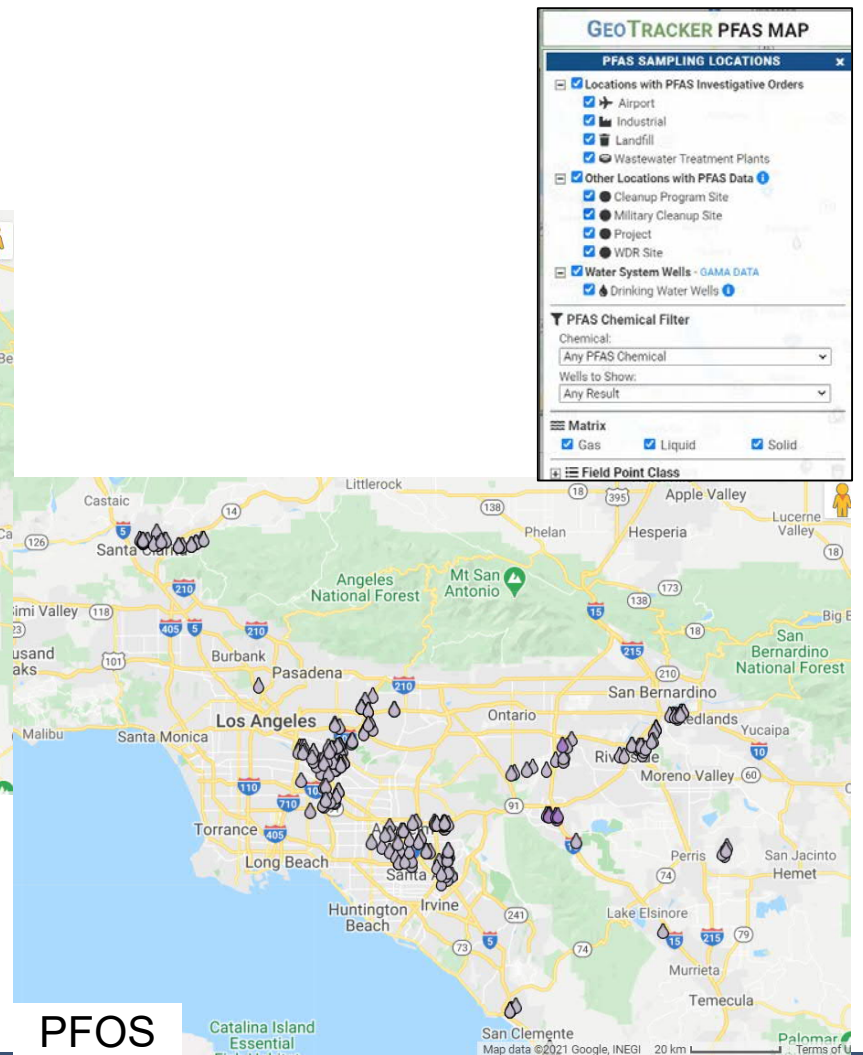
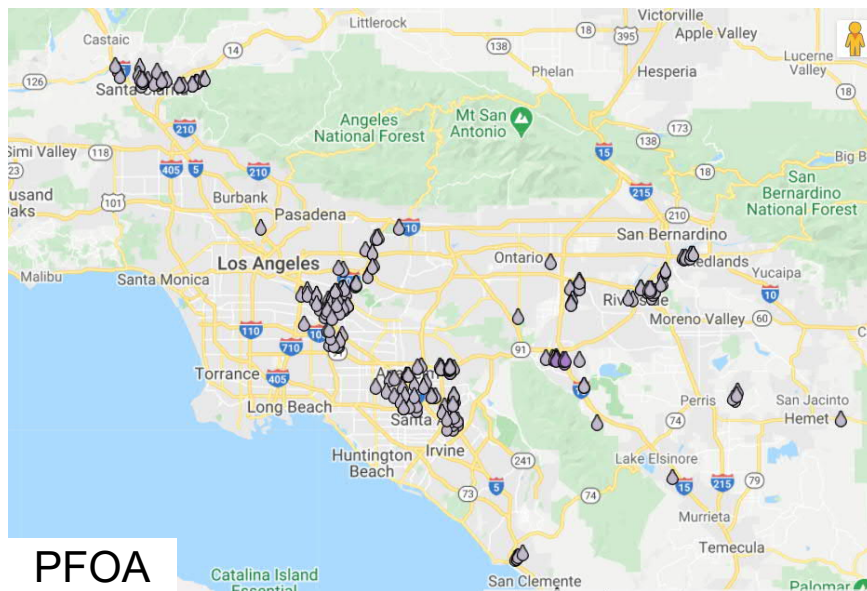
2,900 sampling events in 2019

60% PFAS detections

Approximately 100 systems with sources above the RLs

Southern California PFAS

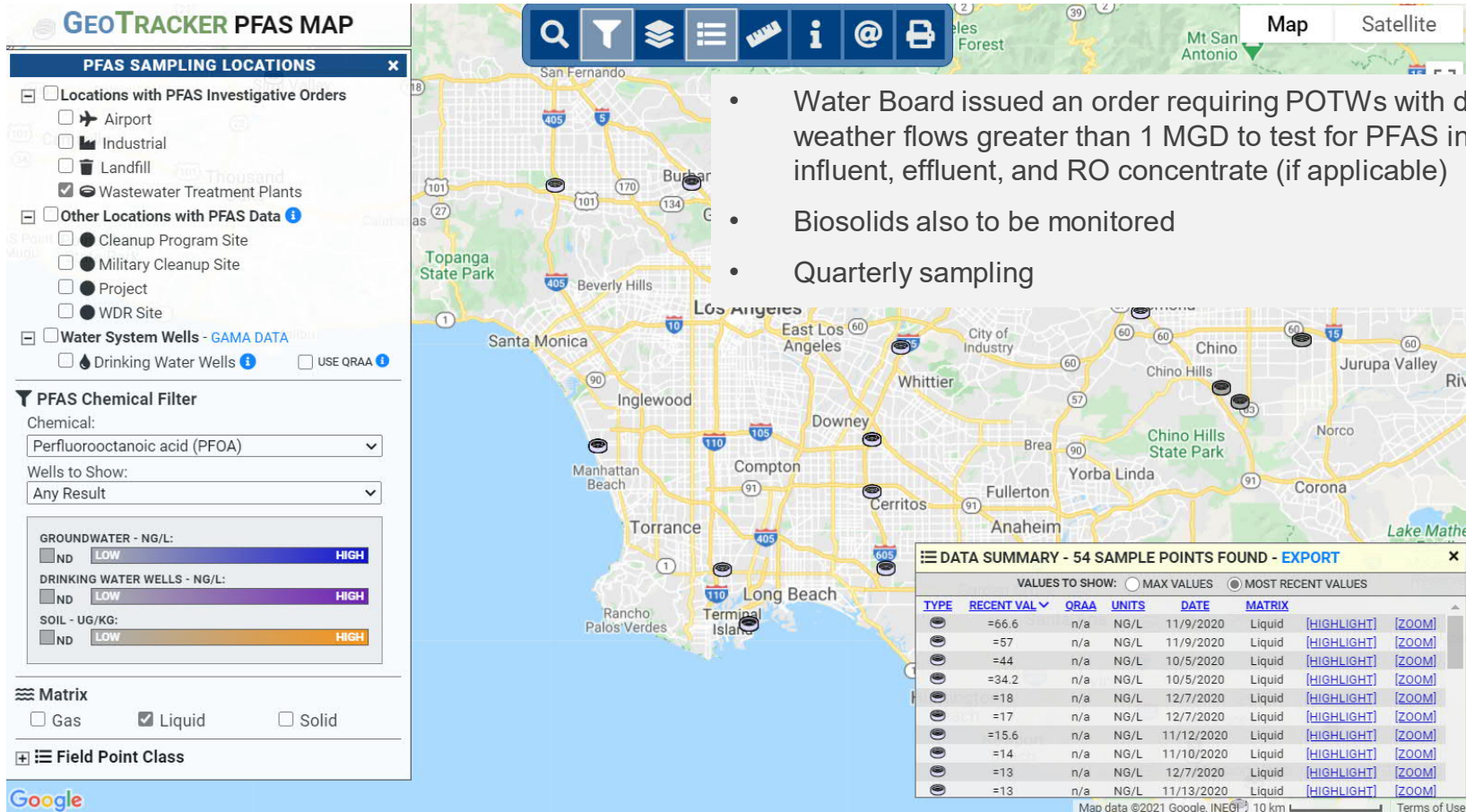
Drinking Water Sources above the NLs



https://geotracker.waterboards.ca.gov/map/pfas_map

Southern California PFAS

Publicly Owned Treatment Works



- Water Board issued an order requiring POTWs with dry weather flows greater than 1 MGD to test for PFAS in influent, effluent, and RO concentrate (if applicable)
- Biosolids also to be monitored
- Quarterly sampling

Treatment Options

Granular Activated Carbon (GAC)



Benefits

- Proven PFOA/PFAS removal
- Removal of other chemicals (e.g., 1,2,3-TCP and VOCs)
- DBP precursor reduction

Drawbacks

- Longer EBCT = larger footprint
- Short-chain PFAS removal
- TOC may affect GAC capacity for PFAS

Treatment Options

Ion Exchange (IX)



Benefits

- Proven PFOA/PFAS removal
- Removal of perchlorate
- Shorter EBCT = smaller footprint



Drawbacks

- More expensive on a \$/cf basis compared to GAC
- Competing anions may affect GAC capacity for PFAS

Treatment Options

Nanofiltration/ Reverse Osmosis (RO)



Benefits

- Removal of most PFAS
- Removal of other chemicals
- DBP precursor reduction
- Softening



Drawbacks

- Water loss
- Brine management / PFAS destruction in brine
- Costly compared to other options

Treatment Options

Novel/ Alternative Media



Benefits

- Similar EBCT as IX but potentially lower cost

Drawbacks

- Testing necessary

Comparison of GAC, IX, and Novel Adsorbents

OCWD Testing with Jacobs and Battelle – commissioned in December 2019

Pilot Adsorbents	No. Products Tested	Empty Bed Contact Time (EBCT)	Supplier(s)/ Manufacturers
GAC	8	10 min	Cabot Norit, Calgon, Evoqua, Jacobi
IX	4	2 min	Calgon, ECT ₂ , Evoqua, Purolite
Alternative (Cyclodextrin-based media)	1	5 min	Cyclopure (DEXSORB+)
Alternative (Surface-mod. bentonite)	1	2 min	CETCO (FluoroSorb 200)

PFAS Detected in Pilot Influent (groundwater)	Mean (ng/L)
PFOA (<i>long-chain</i>)	16
PFOS (<i>long-chain</i>)	23
PFHxS (<i>long-chain</i>)	11
PFBS (<i>short-chain</i>)	15
PFHxA (<i>short-chain</i>)	3



Pilot (OCWD)
- Jacobs

Additional Site-Specific Studies to Compare GAC, IX, and Novel Adsorbents

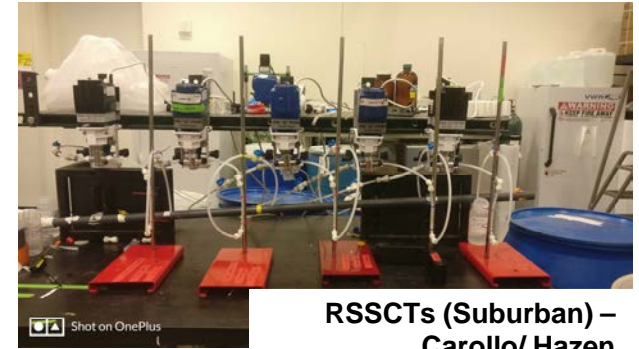
RSSCTs

Isotherms

Pilot Testing



RSSCTs (San Jose Water)
– WQTS/ Hazen



RSSCTs (Suburban) –
Carollo/ Hazen



Isotherms (San Jose Water) –
WQTS/ Hazen



Pilot (WRD) –
GSI Environmental/ Hazen



Thank you!

Nicole Blute
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WateReuse California Los Angeles Chapter Meeting



February 9, 2021

Legislation & Regulation Update

Raymond Jay
Metropolitan Water District of Southern California
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2021 California Legislative Calendar

- Jan. 1 Statutes take effect
- Jan. 4 Legislature reconvenes
- Jan. 10 Governor submits budget to Legislature
- **Feb. 19 Last day for bills to be introduced**
- Apr. 30 Last day policy comm. to report fiscal bills
- May 7 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
- Oct. 10 Last day for Governor to sign or veto bills
- See: <http://assembly.ca.gov/legislativedeadlines>

2021 Relevant Water Legislation

- SB 45 (Portantino): Climate Resiliency Bond
- SB 222 (Dodd): Water Affordability Assistance Program
- SB 222 (Dodd): Discontinuation of residential water service.
- SB 230 (Portantino): SWRCB: Constituents of Emerging Concern Program

SB 230 (Portantino): SWRCB: Constituents of Emerging Concern

- Require SWRCB to develop & maintain CEC program for drinking water
- Establish Science Advisory Panel & science-based approach to consistently assess public health and DW concerns from CECs
- Identify CECs that warrant further action(s)
- Establish CEC Action Fund in State Treasury
- Authorize SWRCB, upon appropriation, to provide financial assistance to water systems from cost of testing
- Similar to SB 996 from 2020 but replaces Stakeholder Advisory Group with a public participation process
- Co-sponsored by CUMA and MWD

Water Use Efficiency Implementation

- Water Conservation and Drought Planning
 - AB 1668 (Friedman, 2018)
 - SB 606 (Hertzberg, 2018)
- Establish water use efficiency objectives & reporting
- Initial indoor water use of 55 gallons per person per day decreases to 50 GPPD by 2030
- Potable reuse credit of 10-15% for new or existing facilities
- Follow Model Water Efficiency Landscape Ordinance for outdoor uses
- No penalties before Nov. 2027

Recycled Water Volumetric Reporting

- Required by updated Recycled Water Policy
- Data due April 30th every year
- 2019 Data is 1st year of reporting
- 2019 submittal delayed to 6/30/2020 due to COVID-19
- Intended to help track RW uses and meet RW goals
- Approximately 820 wastewater and recycled water facilities required to report
- Report influent, effluent, RW use, treatment, & discharge type
- Use SWRCB's GeoTracker GIS reporting system
- https://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/volumetric_annual_reporting.html

Federal Update

- Negotiating \$1.9T COVID relief bill
 - Funds to local governments?
 - Low-income rate payer assistance & water shut offs?
- 117th Congress sworn in January 4th
- Biden Administration review recent regulations
- WRA Outreach letter to new administration
- National Water Reuse Action Plan

Questions?

If you have any questions, please contact:

Raymond Jay, Past President



c/o Metropolitan Water District of Southern California
700 N Alameda Street
Los Angeles, CA 90054
(213) 217-5777
rjay@mwd.h2o.com



Regulatory Agency Updates

- Los Angeles Regional Water Quality Control Board
 - Steven Webb
- Los Angeles County Department of Public Health
 - Glenn Van Eekhout
- State Water Board Division of Drinking Water
 - Mir Ali

LA WATERUSE MEMBERS MEETING

RECYCLED WATER UNIT Update – February 9, 2021

Mir L. Ali

Water Resources Control Engineer

Overview

- Direct Potable Reuse (DPR)
- Cross Connection Control Handbook & Non Potable Reuse (NPR) Regs.
- Onsite Reuse Regs.
- Title 22 Engineering Report Update

Direct Potable Reuse (DPR)

- DPR regulations are on schedule, expected to complete by end of 2023.
- Contract processed to initiate the DPR Expert Panel.
- Purpose of Expert Panel is to ensure draft DPR regs are protective of public health.
- Selection of Expert Panel members ongoing to cover following areas of expertise:
 - Engineers: Experienced with drinking water standards and chemical control treatment.
 - Public health microbiologist or scientist: Specializing in microbiological risk assessment & treatment processes for microorganism control.
 - Toxicologist: Experienced in human health risk assessments for exposures to chemical contaminants in drinking water & familiar with DW Regs.
- Expert panel is expected to be formed by mid of this year (2021).
- Latest DPR Framework document and additional information is available on our website.
- https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/direct_potable_reuse/dprframewksec.pdf

Cross Connection Handbook & Non Potable Reuse (NPR) Regs. Update

- DDW developing cross connection control book, meant to replace the Title 17 regulations.
- Final draft of the handbook is expected to be posted on DDW website for public comments shortly (2 weeks).
- After 45 days the public comments will be incorporated in the handbook and reposted, there will be at least two public hearing once the handbook is made public.
- Additional information is available on DDW website under Upcoming Regulations.
- We are starting on updating the existing NPR regulations which is expected to complete in 2 years.

Onsite Reuse Regs.

- Regulations for onsite treatment and reuse for non-potable end uses is being drafted and on schedule, to be finalized by end of next year (2022).
- Posting and public hearings expected to begin early next year (2022).
- Additional information is on our website. (Water Quality Criteria for Onsite Treated Non-potable Water Systems, Section 13558).
- https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/onsite_nonpotable_reuse_regulations.html

Title 22 Engineering Report Update

- All Title 22 engineering reports which were permitted prior to January 1, 2001 need to be updated per the Recycled Water Policy.
- RWU working on sending out letters within this month to the Regional Boards and DDW field offices (District Engineer) regarding it.
- https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2018/121118_7_final_amendment_oal.pdf

State Water Resources Control Board
Division of Drinking Water

Thank You

Mir.Ali@Waterboards.ca.gov

Chapter Trustee Updates WaterReuse LA Chapter – February 9, 2021



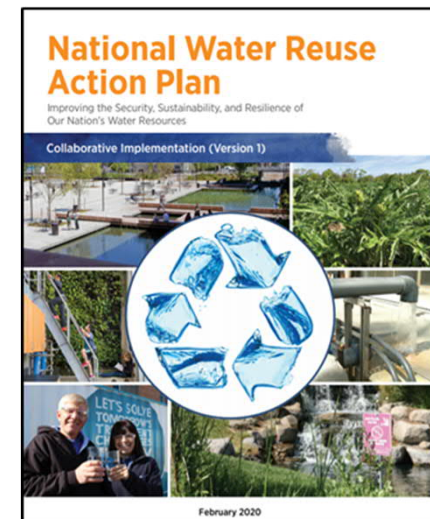
Last WaterReuse CA Board of Trustees Meeting: February 5, 2021

Draft WRCA Charter

- New Charter will replace current bi-laws for each State section
- Reviewed and revised by WRCA executive board
- New state charter expected be sent to national board in March

Water Reuse Action Plan Implementation (WRAP)

- Developed list of action items from EPA's National Water Reuse Action Plan
- WRCA advocating for federal interagency workshop(s)



Chapter Trustee Updates WaterReuse LA Chapter – February 9, 2021



50L Home Coalition

- Initiative to develop homes that can be sustained on 50 liters (13 gallons) per person/per day
- WRCA members have raised concerns on impact to wastewater facilities/RW
<https://50lhome.org/>

Indian Wells Event in 2024

- National to commit to Indian Wells events to avoid fees cancellation fees.
- Currently negotiating with hotel for 2024 event

Chapter Trustee Updates

WaterReuse LA Chapter – February 9, 2021



WRCA Membership Renewals for 2021

- 40 Agencies (2 not renewing), 19 companies/consulting firms, 7 affiliated organizations.

Ocean Discharge Legislation

- There will likely NOT be reintroduction of Zero Discharge legislation this year

SB-230 (Portantino) – Establish Drinking Water CEC Program

- Board voted and unanimously approved recommendation to support bill

SB 45 (Portantino) – Climate Bond Update

- Currently \$5.5B with \$100M slated for RW
- Leg-Reg Committee to determine appropriate amount and request increase

Chapter Trustee Updates

WaterReuse LA Chapter – February 9, 2021



Statewide RW/Wastewater Survey

- Agricultural reuse in CA decreased by 35% since 2015
- WRCA sent letter to Water Board to make changes to definitions for 2021 survey
- Board voted and unanimously approved formation of WRCA Ag Reuse Standing Committee

Communications Collaborative Group Update

- Developing draft signage guidelines – to produce uniform message



Chapter Trustee Updates WaterReuse LA Chapter – February 9, 2021

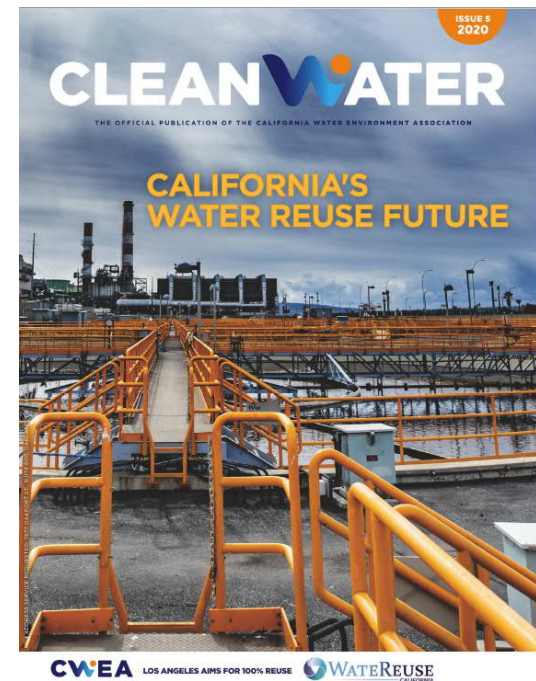


CUWA Recycled Water White Paper Outreach Effort

- Published white paper on Facing Challenges with Maximizing Water Reuse
<https://www.cuwa.org/pubs/2021-maximizing-reuse>

CWEA-WRCA DPR Issue

- December 2020 issue has been published
- Collaborative issue between CWEA and WRCA
<https://www.kelmanonline.com/httpdocs/files/CWEA/cleanwater-issue5-2020/index.html>



Chapter Trustee Updates
WaterReuse LA Chapter – February 9, 2021



Hope to see you all at the 2021 WaterReuse Symposium!

A horizontal banner for the WaterReuse 2021 Symposium. On the left, the text "WaterReuse SYMPOSIUM 2021" is displayed, with "2021" in a large, bold, red font. Below this, it says "In Collaboration with The Water Research Foundation". A red play button icon is next to the word "VIRTUAL", which is above the dates "March 15-25". Below the dates, it says "A Series of Live Roundtable Discussions with Your Colleagues". In the center is a circular graphic made of many overlapping circles in various shades of blue, green, and red. On the right, it says "36th Annual Symposium" above the words "RESILIENCE REDEFINED" in large, bold, red and blue letters. Below that, it says "health. economy. environment." in a smaller, red, sans-serif font.

WaterReuse SYMPOSIUM 2021
In Collaboration with The Water Research Foundation

VIRTUAL
March 15-25

A Series of Live Roundtable Discussions with Your Colleagues

36th Annual Symposium
RESILIENCE REDEFINED
health. economy. environment.

<https://watereuse.org/news-events/conferences/36th-annual-watereuse-symposium/registration/>

Chapter Trustee Updates
WateReuse LA Chapter – February 9, 2021



Thank you to our former chapter trustee, Evelyn Cortez-Davis!



thank you!

Chapter Updates (Judi Miller)

- December Meeting Summary
- Volunteer Opportunities
 - ❖ Technical Committee Chair
 - ❖ Meeting Summary preparation
- Young Member Committee Update
 - Alex Waite

Membership Roundtable (Jared Lee)

In Memoriam: Viet Ha



In Memoriam: Robert Bueras



Next Meetings

- Tuesday, April 13, 2021 – Virtual
- Tuesday, June 8, 2021 – Virtual

