WATEREUSE ORANGE COUNTY

THANK YOU FOR JOINING US

WateReuse Orange County Chapter Meeting

WILL BEGIN SHORTLY

Agenda

- **Welcome:** Scott Lynch, Chapter President
- **Presentations**
  - —**Pure Water Soquel**
    - Melanie Mow Schumacher, General Manager, Soquel Creek Water District
    - Rebecca Gold Rubin, Public Outreach Coordinator, Soquel Creek Water District
  - —**WateReuse California Annual Update**
    - Brenley McKenna, Managing Director, WateReuse California
- **Standing Items**
  - —State Section Update
  - —Regulatory Updates: DDW/OCHCA
  - —Legislative and Regulatory Matters
- **Officer Elections**
- **Conferences/Webcasts**
- **Other Announcements/Discussion Items**
- **2025 Chapter Meetings**
- **Roundtable: What's Going On - All**
- **Adjournment**

Have a question?

We will get to your questions after each presenter.

SOQUEL CREEK WATER DISTRICT

PUREWater Soquel
Water Transformed

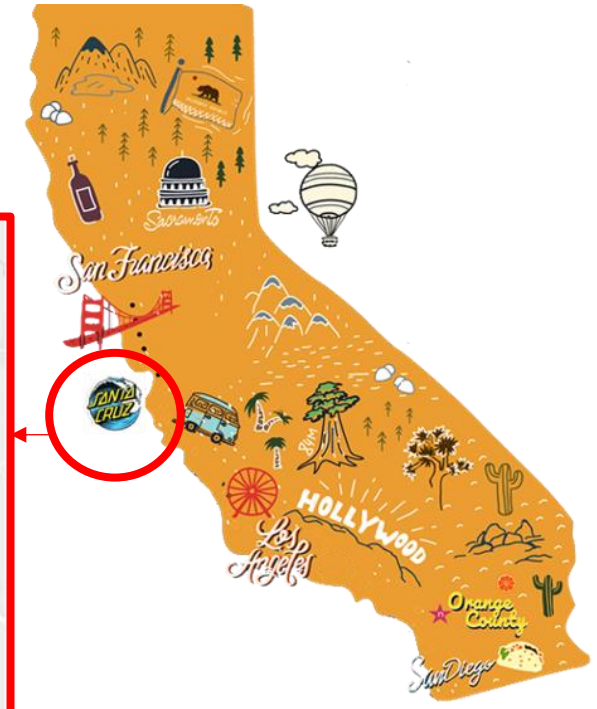
Pure Water Soquel

Melanie Mow Schumacher
General Manager

Rebecca Gold Rubin
Public Outreach Coordinator

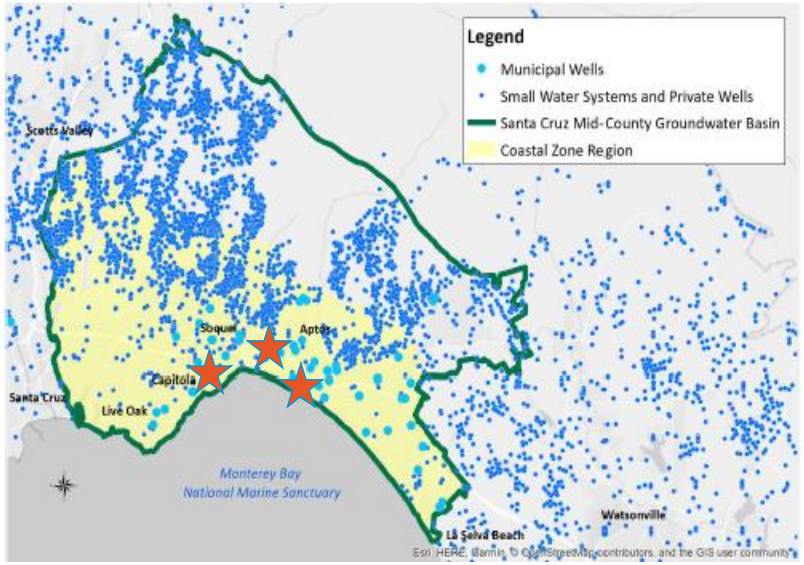
About Soquel Creek Water District

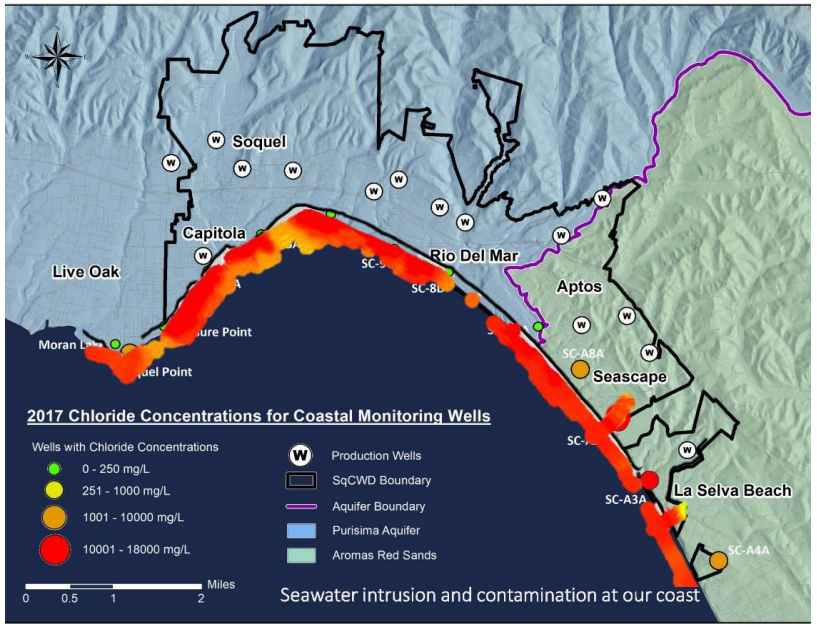
- California Special District, which is a local government agency that provides essential services
- Not a land use authority, that is the responsibility of Santa Cruz County and City of Capitola within our service area boundary
- 100% groundwater conveyed through 165+ miles of pipeline
- 16 active groundwater wells, approximately pump 2,900 acre-feet per year (~2.6 MGD)
- Population of 40,600 through approx. 16,000 service connections
- 48 Employees



Our Water Challenges

1. Groundwater is the only source of water for SqCWD and much of the Santa Cruz Mid-County Region
2. Mid-County Basin is identified by the State of California as 1 of 21 basins that are ‘critically overdrafted’ with a mandate to be sustainable by 2040
3. Contaminated with seawater intrusion along the Monterey Bay coastline





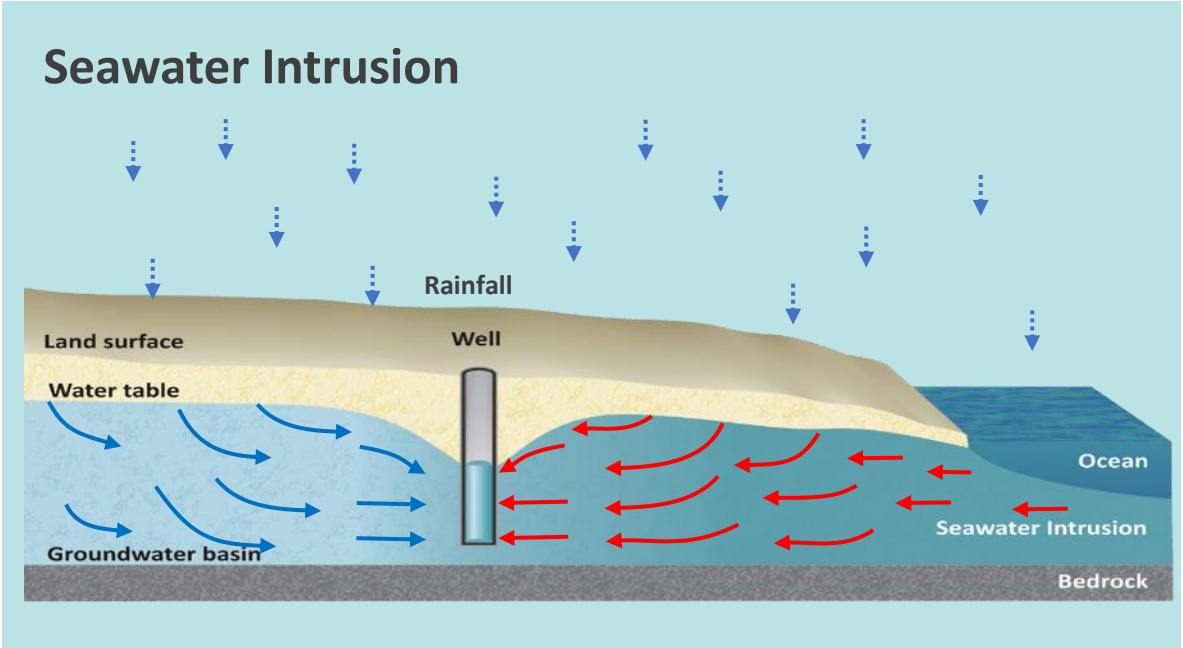
Bulletin 118 Groundwater Basins Subject to Critical Conditions of Overdraft – Update based on 2018 Final Basin Boundary Modifications

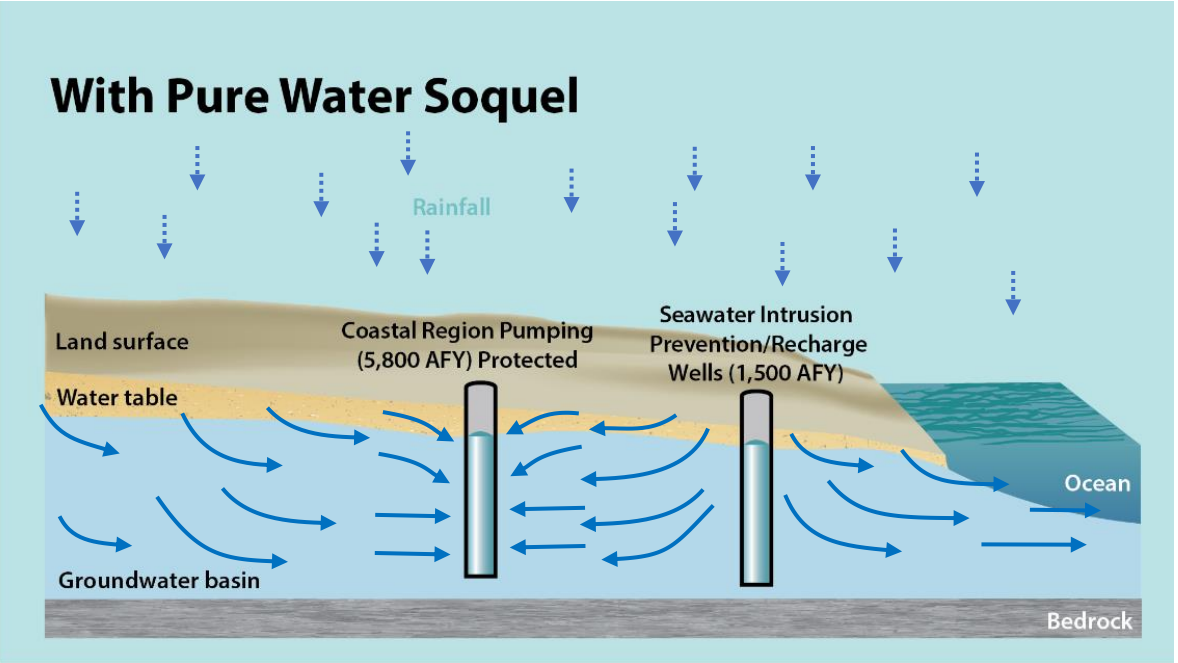
CALIFORNIA DEPARTMENT OF WATER RESOURCES

Our Solution

PUREWater Soquel
Water Transformed

- Will replenish the groundwater basin
- Will create a seawater intrusion barrier
- Will restore the Groundwater Basin to sustainable levels

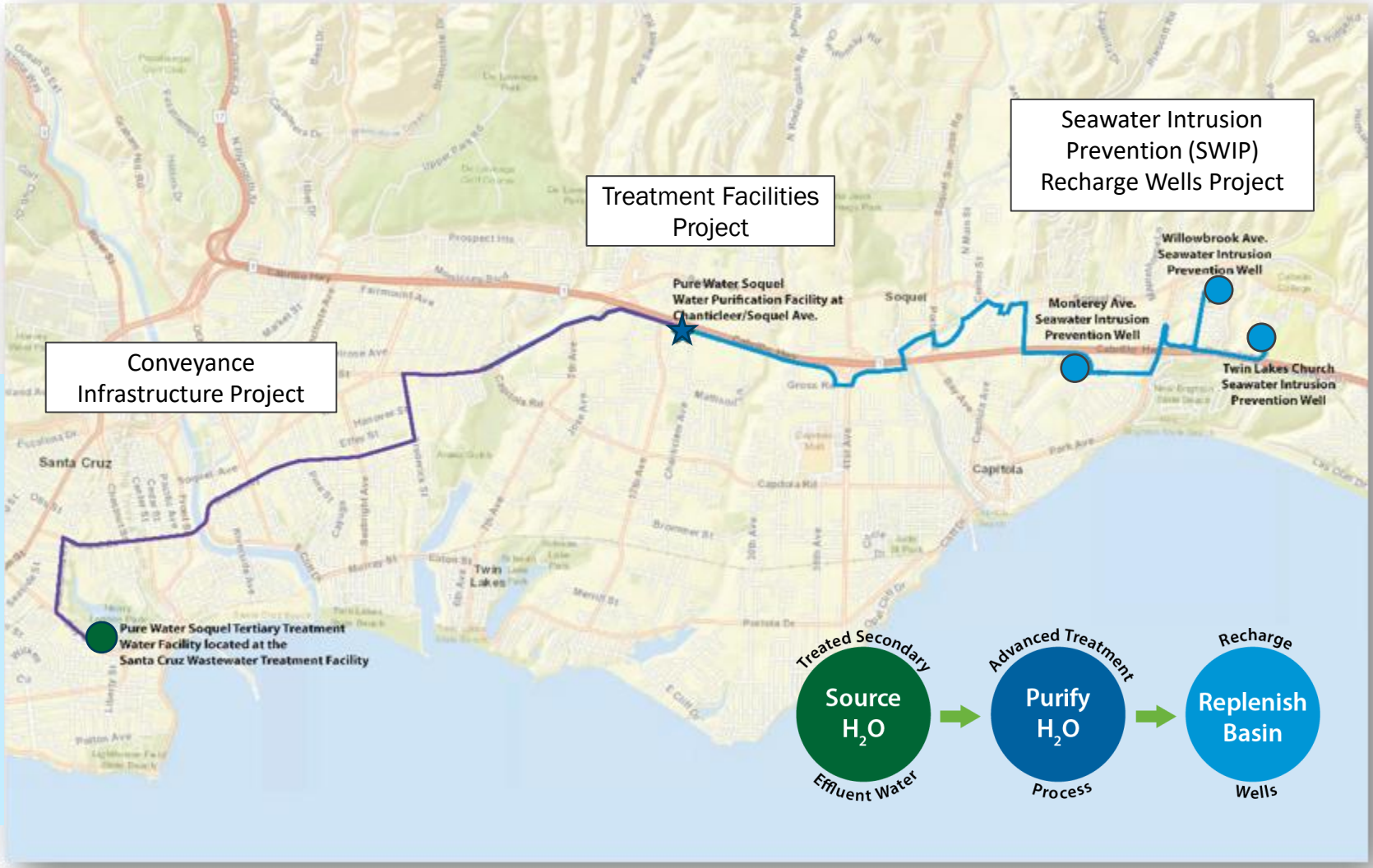




Project Overview
and Locations

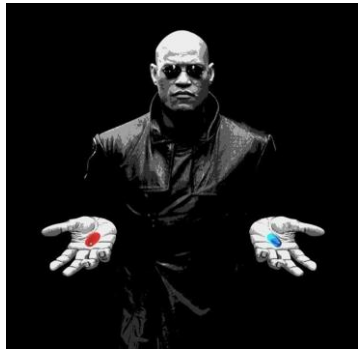
PUREWater Soquel
Water Transformed

- **0.3 MGD Tertiary non-Potable Recycled Water**
- **1.3 MGD Advanced Purified Water**
- **Designed for Potential Future Expansion to meet Basin, Drought, and Climate Change Needs/Goals**



3 Primary Projects

Project	Major Components	Design-Construction Method	Notice to Proceeds (NTPs)
Treatment Project	2- Treatment Facilities	Progressive Design-Build	Phase 1 (Design/GMP): March 2020 Phase 2 (Construction): November 2021
Conveyance Project	2- 16” Pipelines (~4 miles) 1- 14” Purified Pipeline (~4 miles)	Progressive Design-Build	Phase 1 (Design/GMP): February 2020 Phase 2 (Construction):March 2021
Seawater Intrusion Prevention Wells (SWIP)	3- SWIP Wells (injection wells)	Traditional Design-Bid-Build	SWIP Wells: July 2020 SWIP Equipping: July 2022
	8- Monitoring Wells	Traditional Design-Bid-Build	Mon Wells: August 2021



Design Build vs Design-Bid-Build

Water Treatment Process
at-a-glance

PUREWater Soquel
Water Transformed

SC WWTF Location

Sourcewater: UV-Disinfected Secondary Effluent

Sodium Hypochlorite

Source Water Pump Station

Strainer

Tertiary Treatment Facility for Non-Potable Recycled Water

Discharge to Monterey Bay

City SC WWTF Outfall

Chanticleer AWPF Location

Ozone (O_3)

Microfiltration

MF Backwash Waste

Sulfuric Acid + Antiscalant

Reverse Osmosis

RO Concentrate

Hydrogen Peroxide

Ultraviolet Light with Advanced Oxidation

Post Treatment*

Purified Water Pump Station

Purified Water: Goes to our three Seawater Intrusion Prevention Wells

Sodium Bisulfite

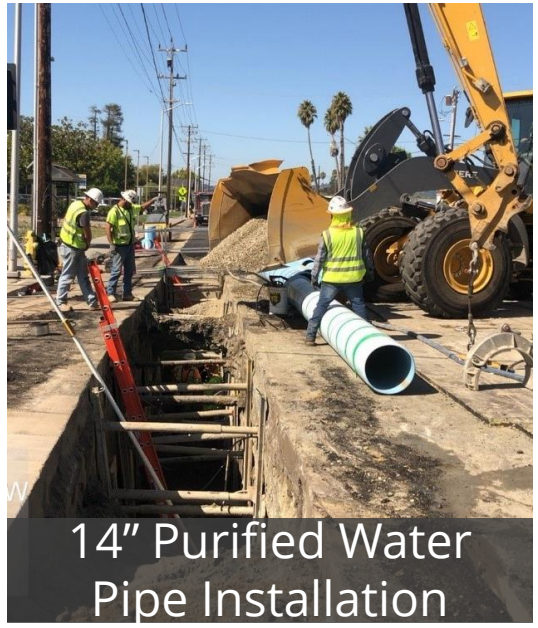
ROC Wet Well

BLACK & VEATCH

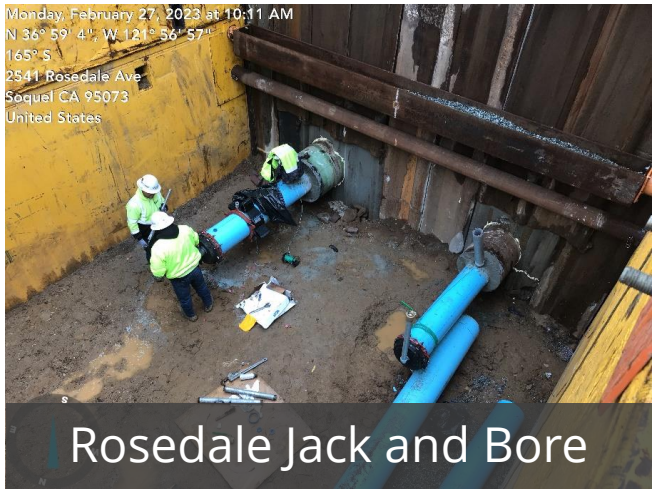
Trussell TECHNOLOGIES INC

Construction Activities Update - Conveyance

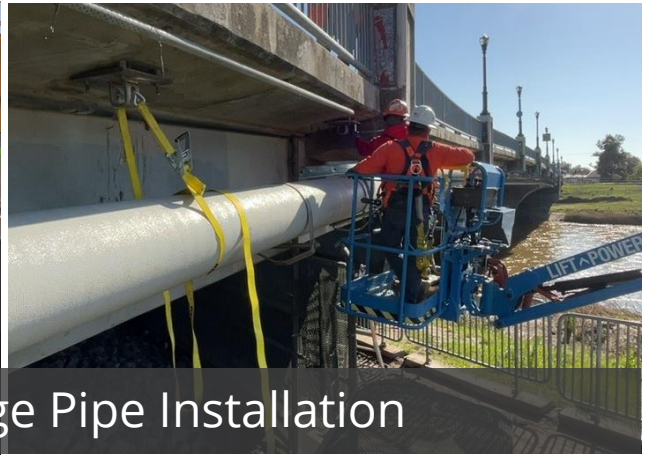
Dual 16” Pipe Installation



14” Purified Water Pipe Installation



Rosedale Jack and Bore



Laurel Street Bridge Pipe Installation

Paving (Broadway)

Construction Activities Update – Treatment

Santa Cruz WWTF



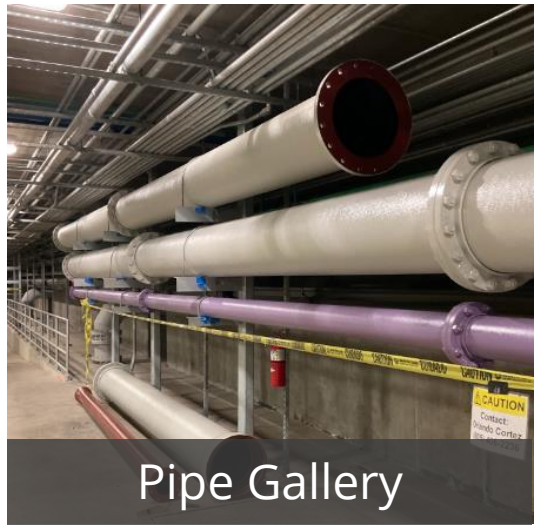
Source Water Pump Station


Source Water Pipe


PG&E Metering Pad


Tertiary Treatment Facility


South Boundary Road

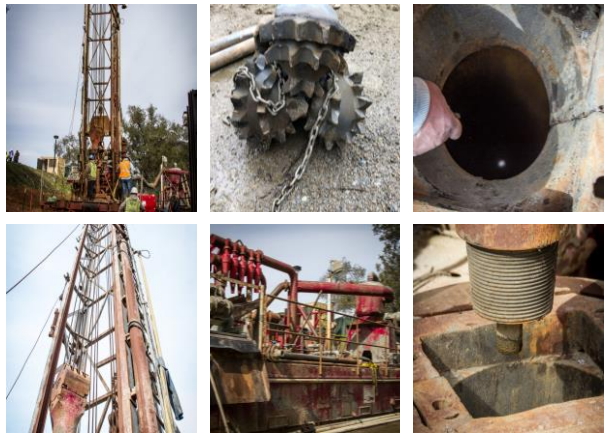


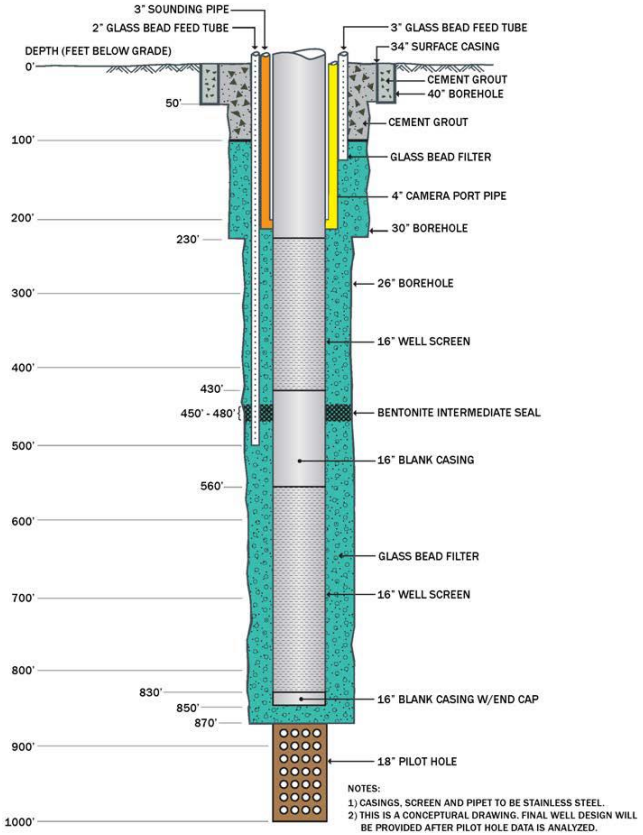
Pipe Gallery

Construction Activities @ Chanticleer AWPF

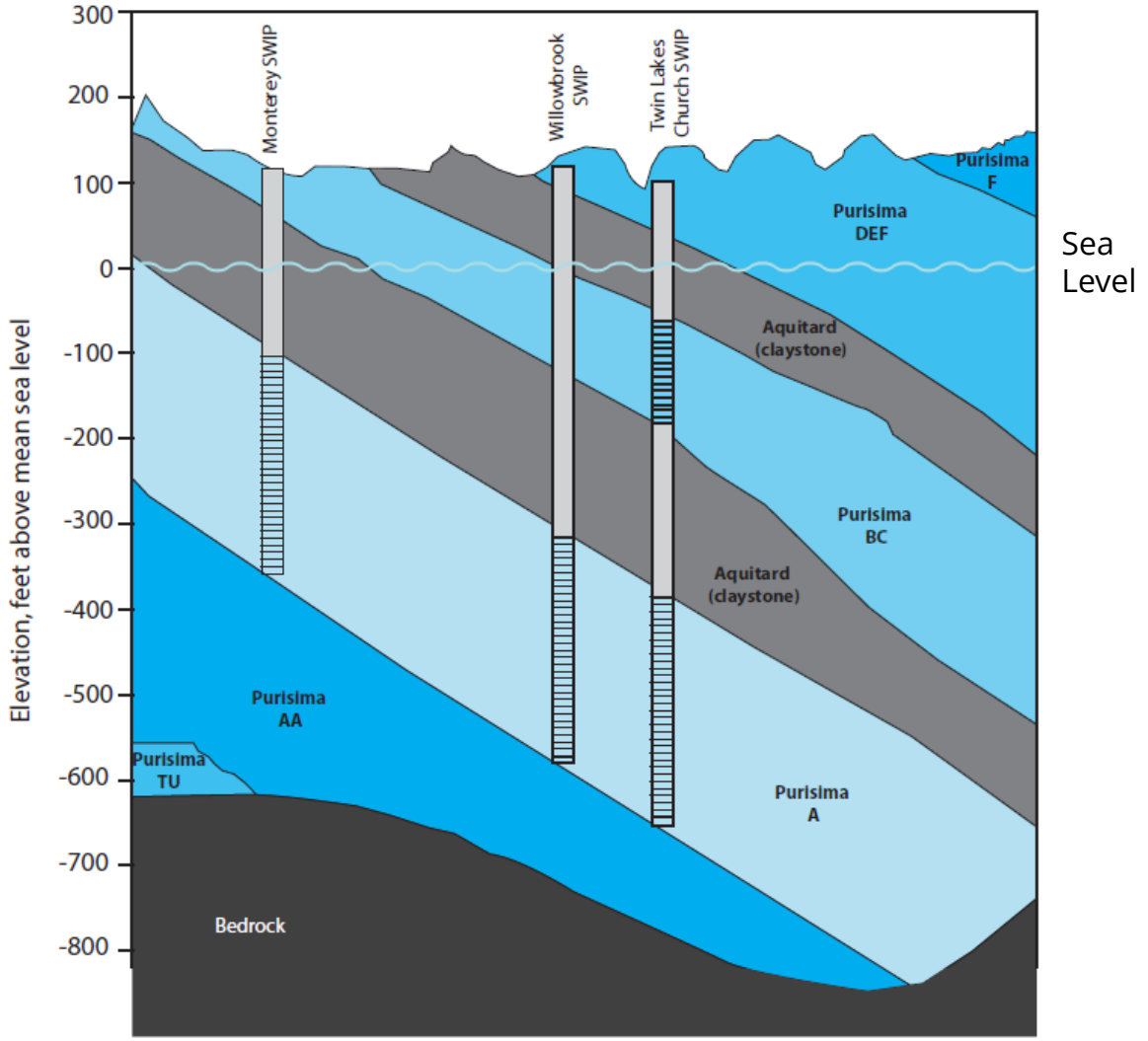
Chanticleer AWPF

SWIP Wells and Aquifer Units





Twin Lakes Church SWIP Well, 850 feet deep



This cross section of the Purisima Formation shows the geologic layers where the Sea Water Intrusion Prevention (SWIP) wells will be screened. The screens are depicted as Purisima Formation is a 2,000-foot-thick body of sandstone alternating with layers of silstone and claystone. Think of it as a layer cake. Aquitards or claystone are layers that water cannot get through.

Groundbreaking: December 10, 2021

Ceremonial Ribbon Cutting: October 3, 2024

Pure Water Soquel Butterfly Mural for Group pics and selfies

Releasing of Butterflies at Ribbon Cutting Event

Pure Water Kombucha with OCWD Purified Water

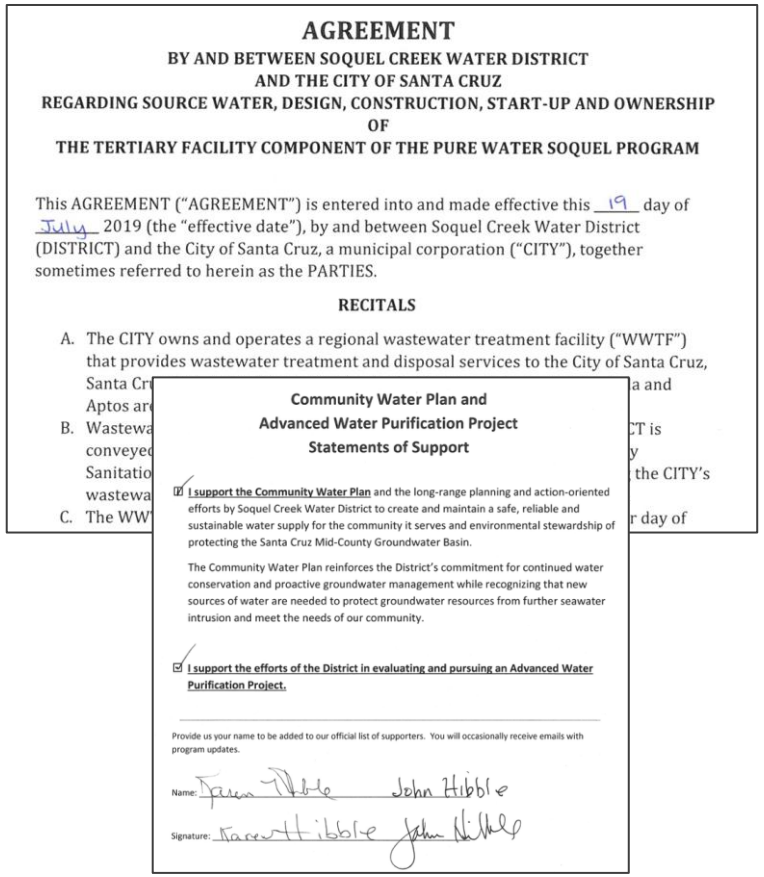
UV-AOP Challenge Test – December 2-6 , 2024 (7pm testing)

PUREWater Soquel

Current and Upcoming Project Completion Activities

- UV-AOP Challenge Test
- Acceptance Test
- DDW Site Inspection
- Acceptance Letter to Replenish Groundwater Basin with Purified Water
- Operations Optimization Plan
- Tracer Study

Agency Collaboration & Community Support



AGREEMENT

BY AND BETWEEN SOQUEL CREEK WATER DISTRICT AND THE CITY OF SANTA CRUZ REGARDING SOURCE WATER, DESIGN, CONSTRUCTION, START-UP AND OWNERSHIP OF THE TERTIARY FACILITY COMPONENT OF THE PURE WATER SOQUEL PROGRAM

This AGREEMENT ("AGREEMENT") is entered into and made effective this 19 day of July 2019 (the "effective date"), by and between Soquel Creek Water District (DISTRICT) and the City of Santa Cruz, a municipal corporation ("CITY"), together sometimes referred to herein as the PARTIES.

RECITALS

A. The CITY owns and operates a regional wastewater treatment facility ("WWTF") that provides wastewater treatment and disposal services to the City of Santa Cruz, Santa Cr… a and Aptos ar…

B. Wastewa… CT is conveyed… y Sanitatio… the CITY's wastewa…

C. The WW… r day of

Community Water Plan and Advanced Water Purification Project Statements of Support

☑ **I support the Community Water Plan** and the long-range planning and action-oriented efforts by Soquel Creek Water District to create and maintain a safe, reliable and sustainable water supply for the community it serves and environmental stewardship of protecting the Santa Cruz Mid-County Groundwater Basin.

The Community Water Plan reinforces the District's commitment for continued water conservation and proactive groundwater management while recognizing that new sources of water are needed to protect groundwater resources from further seawater intrusion and meet the needs of our community.

☑ **I support the efforts of the District in evaluating and pursuing an Advanced Water Purification Project.**

Provide us your name to be added to our official list of supporters. You will occasionally receive emails with program updates.

Name: Karen Hibble John Hibble

Signature: Karen Hibble John Hibble

CITY OF SANTA CRUZ

THE GREAT SEAL OF THE COUNTY OF SANTA CRUZ 1850 SINE PRAEJUDICIO

Santa Cruz County Chamber of Commerce — Creating a vibrant community for 130 years

capitola soquel CHAMBER of COMMERCE

SANTA CRUZ COUNTY BUSINESS COUNCIL

CITY OF CAPITOLA INCORPORATED 1949 FOUNDED 1874

SANTA CRUZ MID-COUNTY GROUNDWATER AGENCY

SAVE OUR SHORES

RESOURCE CONSERVATION DISTRICT OF SANTA CRUZ COUNTY

SCCRTC

CALIFORNIA DEPARTMENT OF WATER RESOURCES

CALIFORNIA COASTAL COMMISSION

Caltrans

State and Federal Investment and Support

CALIFORNIA Water Boards — STATE WATER RESOURCES CONTROL BOARD — REGIONAL WATER QUALITY CONTROL BOARDS

PROP 1 — GOVERNOR EDMUND G. BROWN, JR. WATER BOND 2014 — RELIABILITY | RESTORATION | RESILIENCE

BUREAU OF RECLAMATION

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WIFIA PROGRAM

CoBANK — COOPERATIVE. CONNECTED. COMMITTED.

Evolution of Funding Portfolio

	2018 Planning Costs Class 4/5 Estimate No Grants or Low Interest Loans	2023 Actual Costs with Grants and Low-Interest Loans
Project Cost	$90,000,000	$195,000,000*
Interest Payments	+$47,500,000	+$22,176,084
Average Interest Rate	@ 3.0%	@ 1.34%
Grants		- $ 95,250,000
Total Adjusted Cost	**$137,500,000**	**$121,950,000**

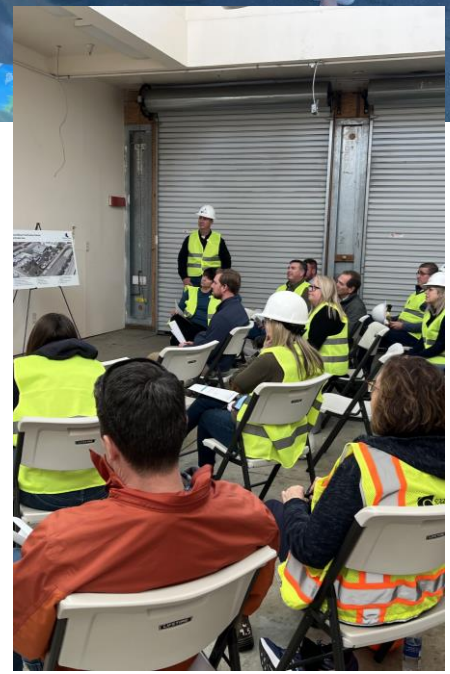
Grants from:

Low Interest loans from:

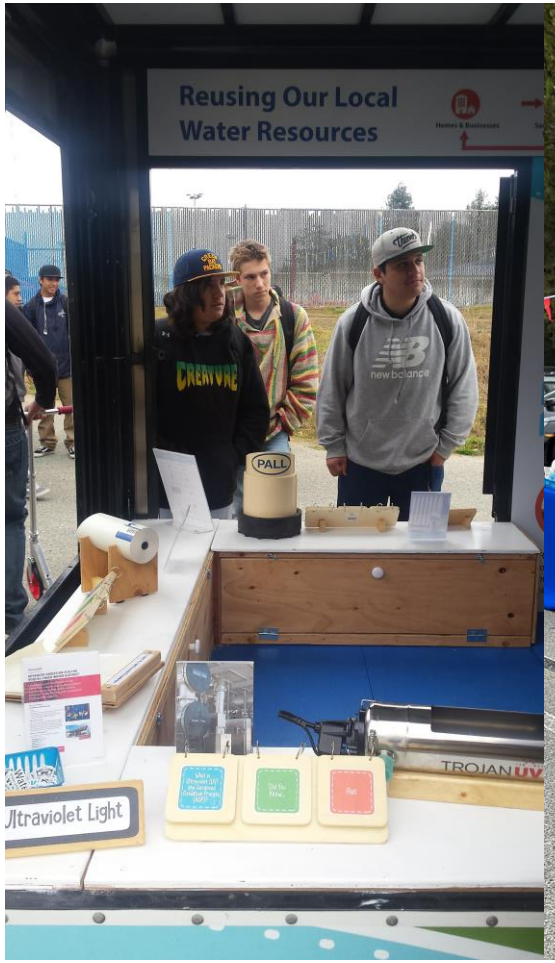
*includes construction contingency costs

Outreach

- One on One Meeting with leaders in your community
  - Elected Officials
  - Environmental
  - Religious
  - Health
  - Education
  - Community Groups (Chambers, HOAs)
- Support Letters
- Public Meetings
- Tours – Of other facilities and Construction
- Fun Community Events
- Demo Sites & Mobile Education Units to taste the water

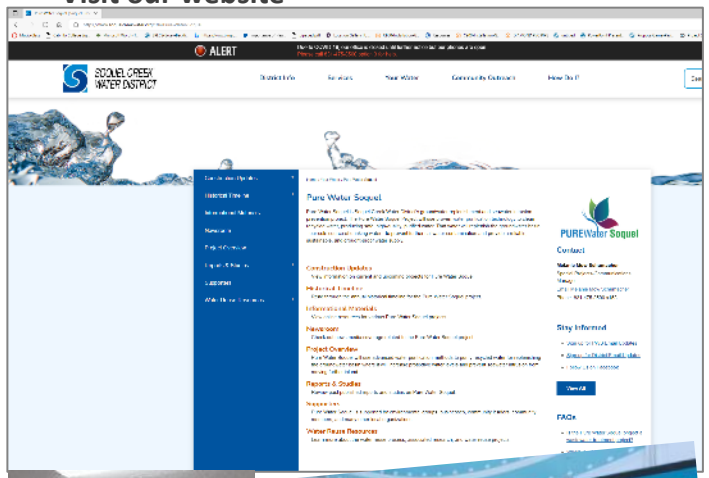


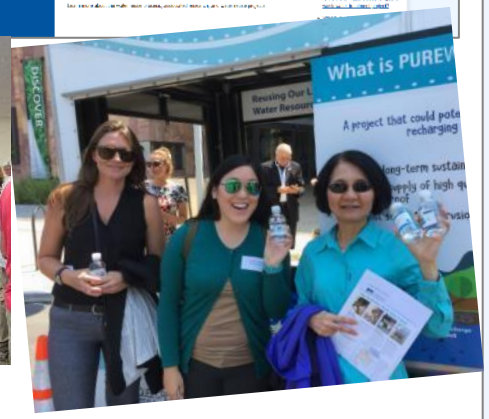
Mobile Education



More Outreach

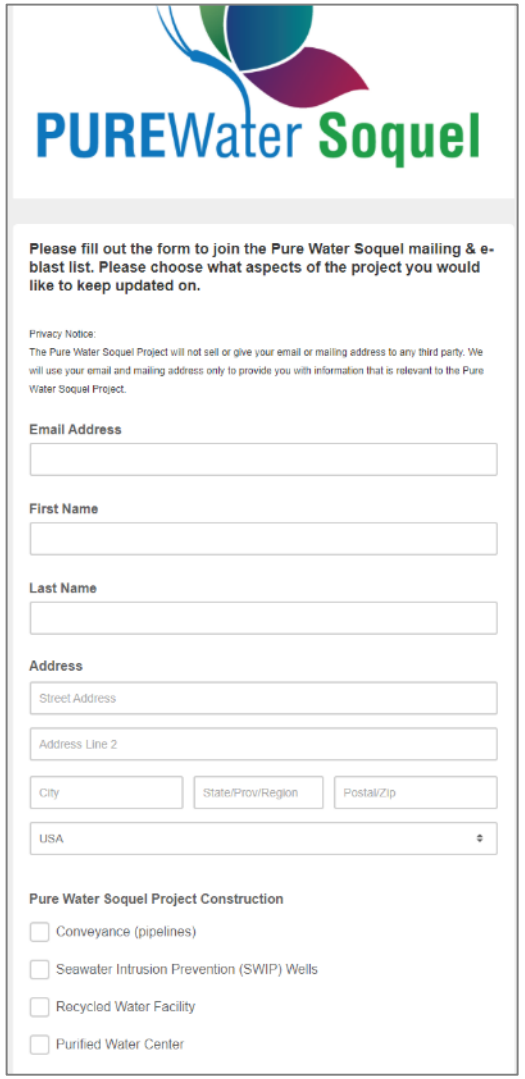
Visit our website



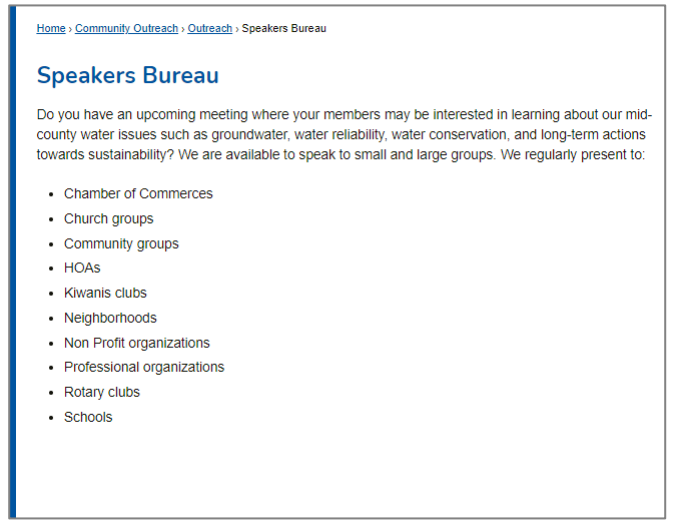


Visit Our On-Line Library

Sign-up for Email Updates

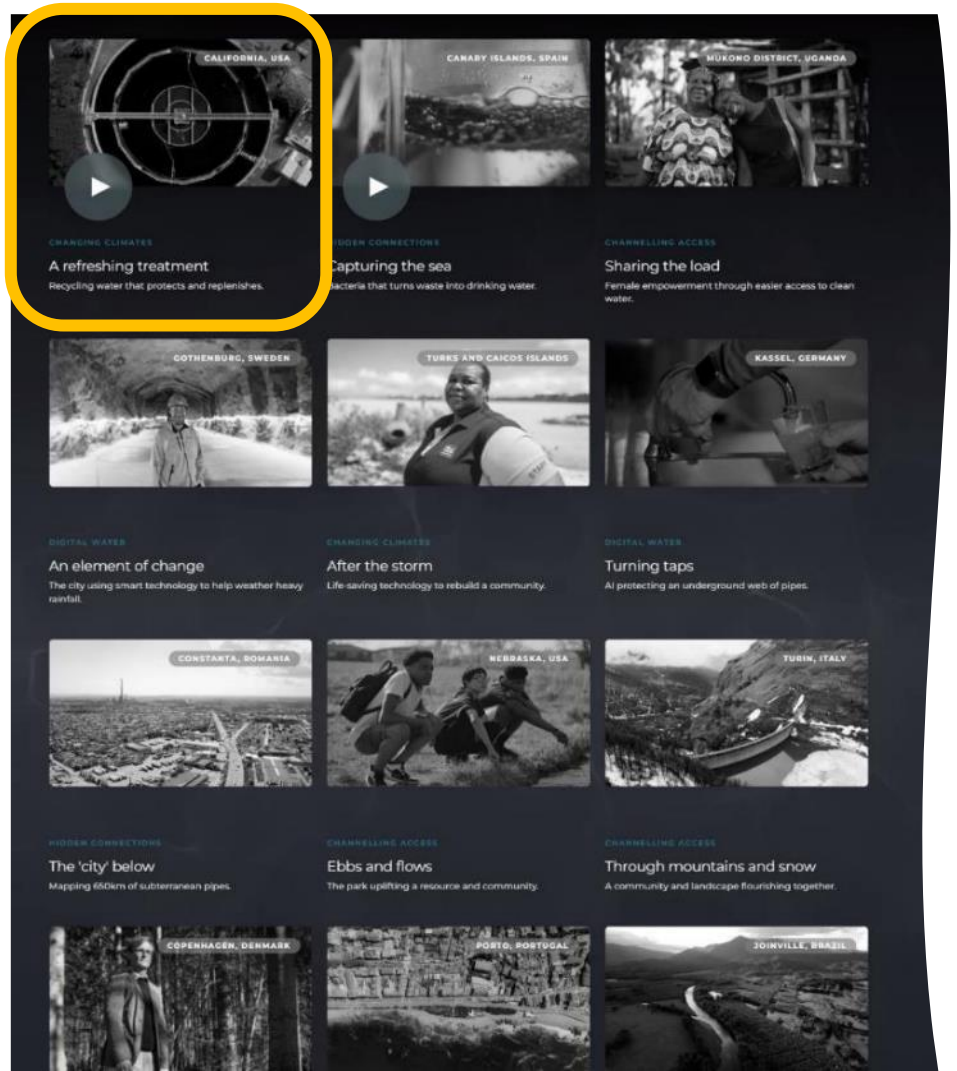


Schedule a Presentation



One of 16 Projects Featured in the International Water Association ‘Beneath the Surface’ Film Series

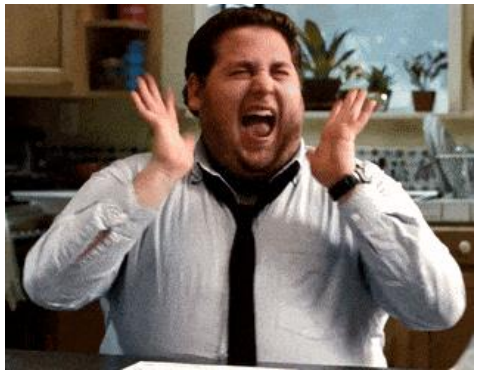
Santa Cruz County, California, USA
Tenerife and Madrid, Spain
Mukono District, Uganda
Gothenburg, Sweden
Turks & Caicos
Kassel, Germany
Constanta City, Romania
Omaha, Nebraska, USA
Turin, Italy
Copenhagen, Denmark
Porto, Portugal
Joinville, Brazil
Switzerland and The Netherlands
Kingston, Jamaica
Polokwane, South Africa
Glasgow, Scotland



https://www.bbc.com/storyworks/specials/beneath-the-surface/

Lessons Learned

1) Know your Why. Continue to inform key decision makers.
2) Develop a Strong and Resilient Team. You'll need it.
3) Be Nimble and Agile! Plan for Contingencies. Things do not always go as planned. No matter how good you think you are.
4) Plan Way Ahead and Incorporate DDW/RWQCB Review Times and your responses to comment times. Multiply it by 2.
5) Understand your procurement methods. Risk Transfer, Performance Criteria, GMP. Funding Requirements.
6) Outreach and Communication is essential. Hire dedicated staff.
7) Celebrate Project Milestones (even the babies!)
8) Reach out to others and network within WateReuse. So helpful!
9) Always have the mindset to learn.
10) Work-life balance, have fun, and surround yourself with smarter and more passionate people than you. It's infectious. ☺



Thank You

PUREWater Soquel
Water Transformed

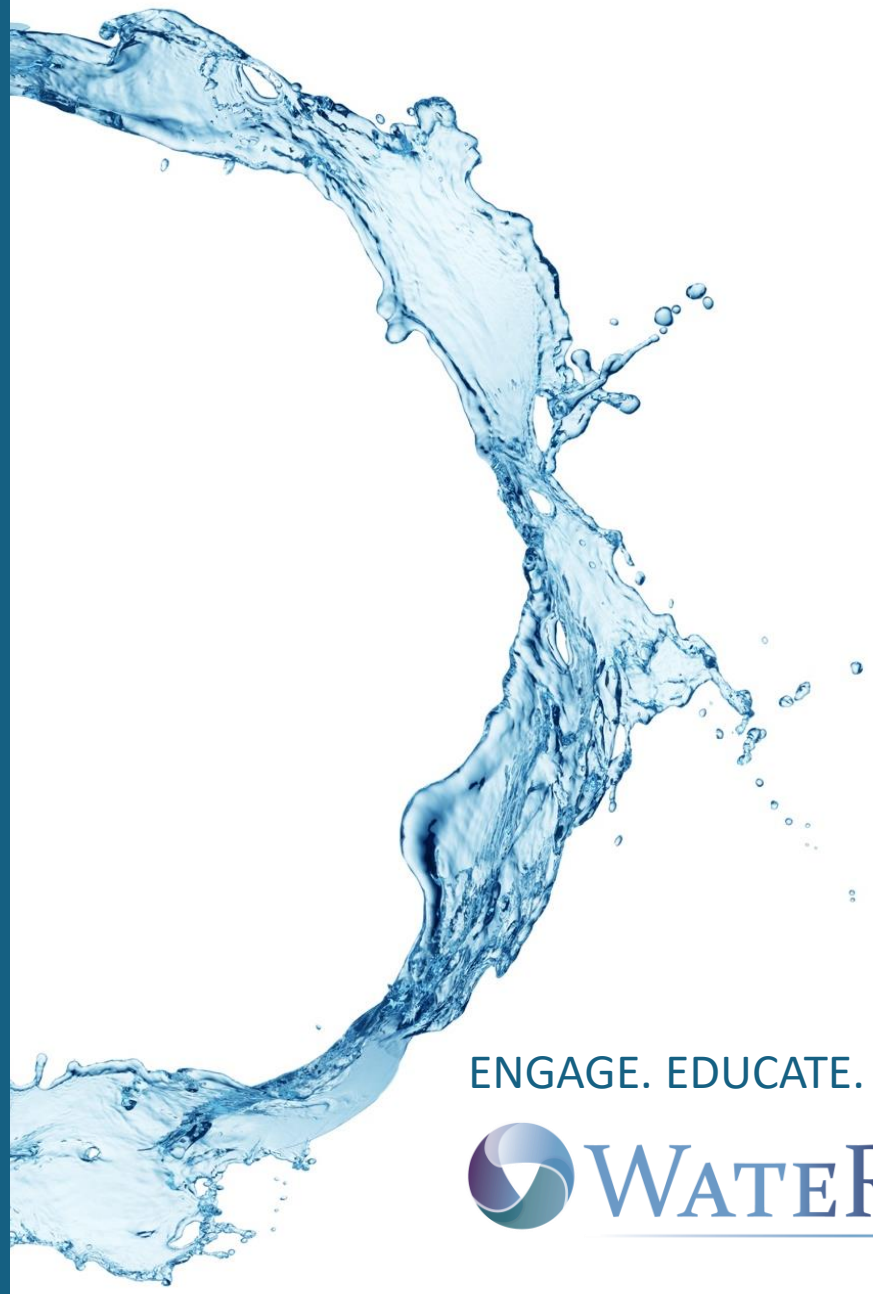
Contact Information:
Melanie Mow Schumacher
melanies@soquelcreekwater.org

Contact Information:
Becca Gold Rubin
beccar@soquelcreekwater.org

WRCA UPDATE

Brenley McKenna
Managing Director

November 21, 2024



ENGAGE. EDUCATE. ADVOCATE.

WATEREUSE CALIFORNIA

2024 WRCA ANNUAL CONFERENCE

87 Sessions

9 Panels

803 Registered

164 Speakers

Sponsors
63

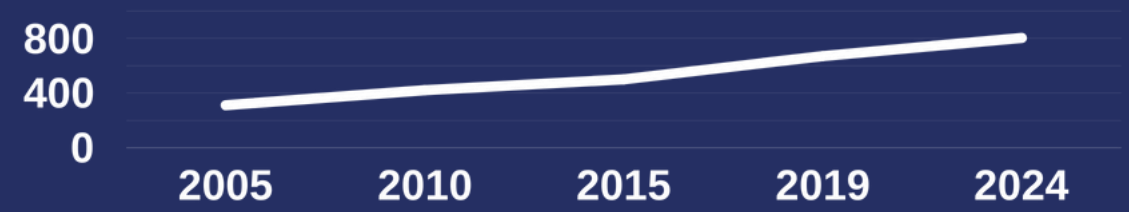
Exhibitors
30

Planning Committee
37

Volunteers On Site
26

Where our attendees are from:

Conference Attendees Over Time:



2025 WateReuse California Conference
Town and Country Resort
San Diego, CA
September 7-9, 2025

Year to Date: Organizational Summary

Membership

Members: 221

New Members: 9

Non-renewals: 22

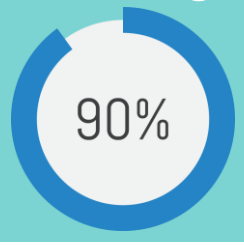
Renewal Rate: 94%

Organizational

WRCA Staff: 3

Contractors: 6

Strategic Planning



Advocacy Efforts: Funding

General Fund: $73.5M

Proposition 4: $386.25 M

~$460M*

Regulatory

OAL

Direct Potable Reuse Regulations: 10/1/24

Making Conservation A California Way of Life

Member Engagement

Chapters: 7

1,462

Individuals

Committees: 4

164

Individuals

Research Investment: $10K

CalVal: Leveraged to $300,000

Outreach

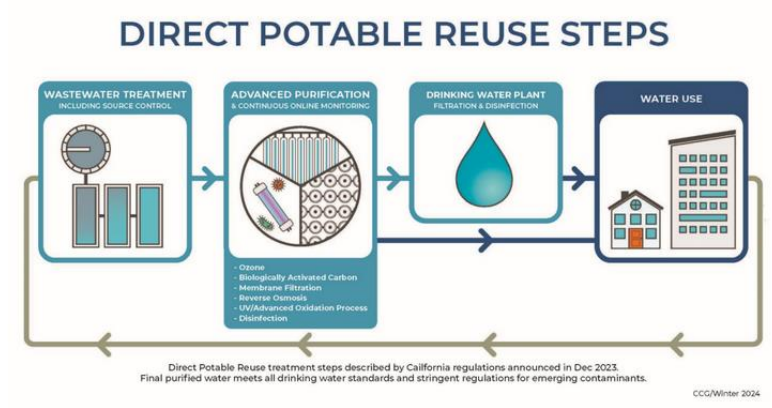
Newsletters: 10

Subscribers: 2,309

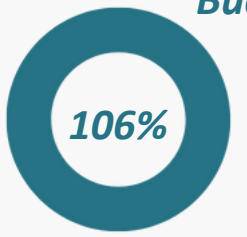
Average Open Rate: 21%

NEWSLETTER

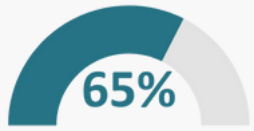
Most Popular Topic:



Budget: as of 9/30



% Revenue



% Expenditures

Fourth Quarter Focus

Long-term Planning, Logistics, Organizational

1. **FY 2025 Budget**
   Planning for 2025

2. **Strategic Planning**
   Working group meetings, draft, and revisions

3. **Building Community**
   Active role with Ag Reuse, chapter meetings

4. **Workshop Execution**
   Reuse Implementation Workshop

5. **Identify Legislative Priorities**
   In-person planning session with Leg Reg Committee

6. **Conference Planning**
   San Diego, CA

WaterReuse California

Legislative & Regulatory Updates

WaterReuse California

Legislative & Regulatory Update: 2024 Summary

- Direct Potable Reuse Regulations
- Making Conservation a California Way of Life
- Volumetric Annual Report
- Recycled Water Permitting Fees
- Proposition 4
- Clean Water State Revolving Funds

Volumetric Annual Report (VAR) of Wastewater and Recycled Water

WateReuse CALIFORNIA

Volumetric Annual Report

- The State Water Resource Control Board's Recycled Water Policy requires wastewater treatment plants and recycled water producers to report monthly volumes of influent and effluent each year from the previous calendar year every April

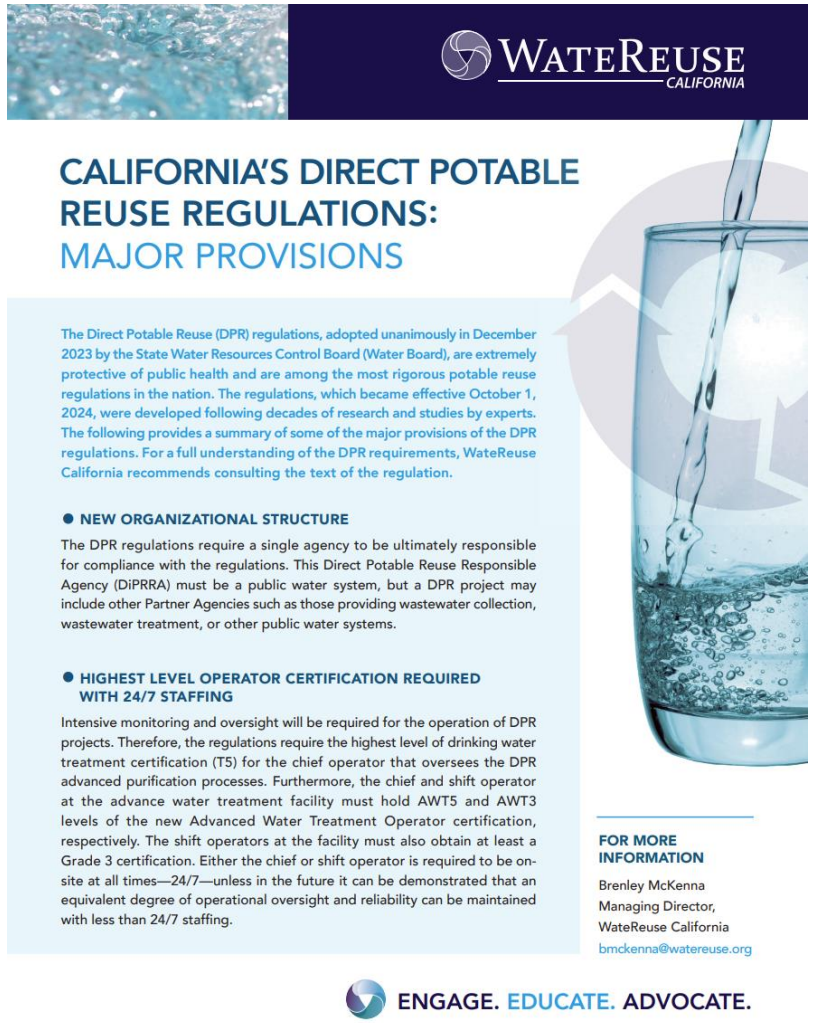
Regulations for Direct Potable Reuse

WateReuse CALIFORNIA

DPR Regulations went into effect on October 1, 2024

DPR Member Tool Kit

- WRCA press release: California's Direct Potable Reuse Regulations Flow into Action
- Two pager
- Quotes document: WateReuse California Members react



WATEREUSE CALIFORNIA

CALIFORNIA'S DIRECT POTABLE REUSE REGULATIONS: MAJOR PROVISIONS

The Direct Potable Reuse (DPR) regulations, adopted unanimously in December 2023 by the State Water Resources Control Board (Water Board), are extremely protective of public health and are among the most rigorous potable reuse regulations in the nation. The regulations, which became effective October 1, 2024, were developed following decades of research and studies by experts. The following provides a summary of some of the major provisions of the DPR regulations. For a full understanding of the DPR requirements, WateReuse California recommends consulting the text of the regulation.

● NEW ORGANIZATIONAL STRUCTURE

The DPR regulations require a single agency to be ultimately responsible for compliance with the regulations. This Direct Potable Reuse Responsible Agency (DiPRRA) must be a public water system, but a DPR project may include other Partner Agencies such as those providing wastewater collection, wastewater treatment, or other public water systems.

● HIGHEST LEVEL OPERATOR CERTIFICATION REQUIRED WITH 24/7 STAFFING

Intensive monitoring and oversight will be required for the operation of DPR projects. Therefore, the regulations require the highest level of drinking water treatment certification (T5) for the chief operator that oversees the DPR advanced purification processes. Furthermore, the chief and shift operator at the advance water treatment facility must hold AWT5 and AWT3 levels of the new Advanced Water Treatment Operator certification, respectively. The shift operators at the facility must also obtain at least a Grade 3 certification. Either the chief or shift operator is required to be on-site at all times—24/7—unless in the future it can be demonstrated that an equivalent degree of operational oversight and reliability can be maintained with less than 24/7 staffing.

FOR MORE INFORMATION

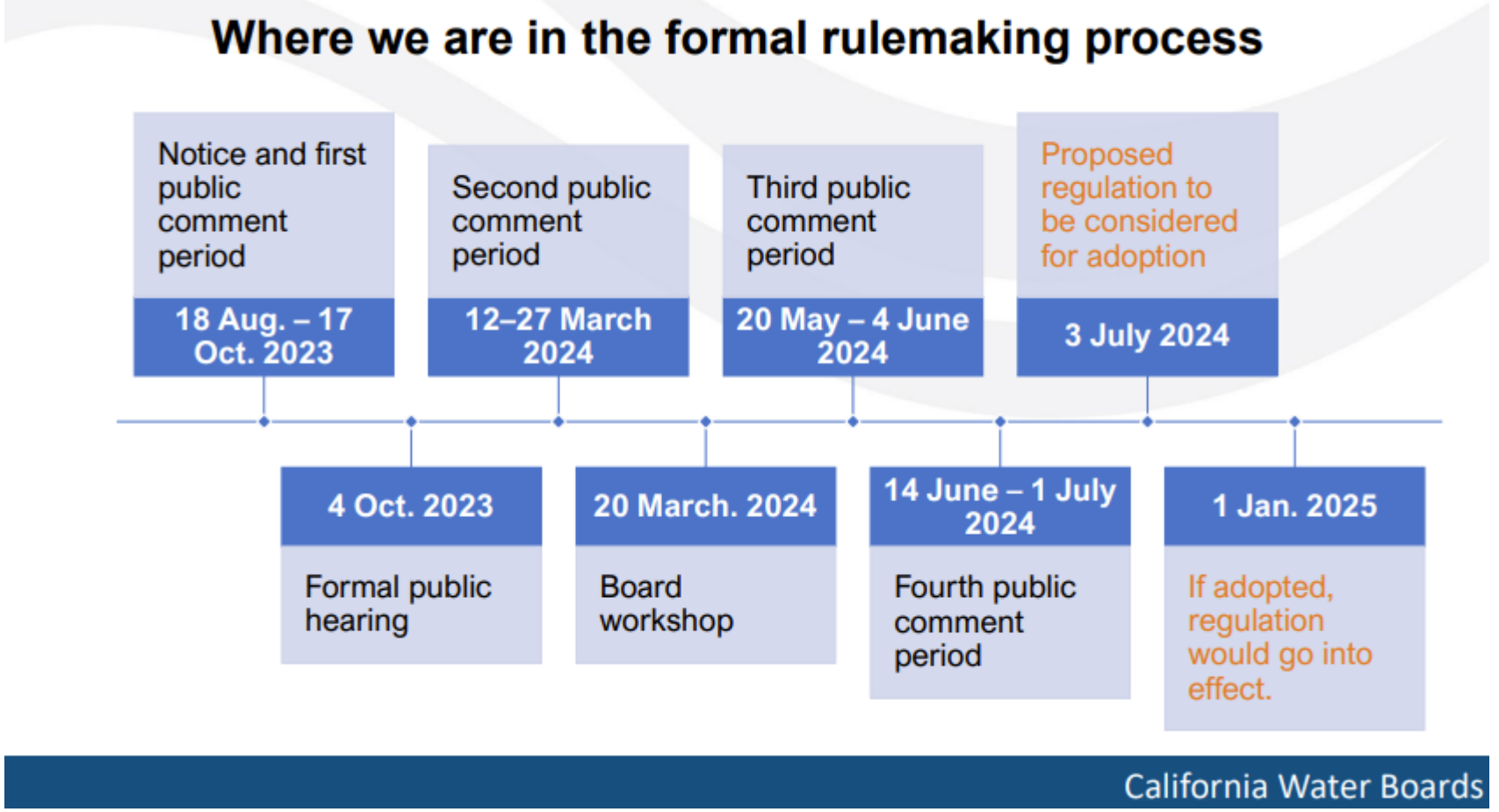
Brenley McKenna
Managing Director,
WateReuse California
bmckenna@watereuse.org

ENGAGE. EDUCATE. ADVOCATE.

Rulemaking to Make Conservation a California Way of Life

WaterReuse California

State Water Resources Control Board Slide:
Timeline



Regulations approved by OAL on October 22, 2024

- State Water Resources Control Board (SWRCB) received approval from the Office of Administrative Law (OAL) for the Making Conservation a California Way of Life regulation
- Regulation effective date: 1/1/2025
- Final text of the Regulation to Make Conservation a California Way of Life
- Urban Retail Water Suppliers are required to submit their Urban Water Use Objective Reporting Form [and guidance documents] to the SWRCB by January 1, 2025

WRCA Laser Focused on Reuse Issues

- Recycled Water Landscape Irrigation: Maintain 1.0 ET
  - Develop a High TDS Variance for Landscape Irrigation

- Ensure potable reuse bonus incentive for all types of Potable Reuse

- For impacts from lowered indoor water use -- include process for addressing negative impacts to wastewater collection, treatment and reuse systems

Recycled Water Permit Fees

WaterReuse California

Recycled Water Permit Fees: Background

- As a result of:
  - State Fiscal Year 2023-24 budget change proposal “BCP” and
  - Public resources budget trailer bill (SB 122, statutes of 2023)
- The State Water Resources Control Board now has authority to assess fees for recycled water permits

Recycled Water Permit Fees: Purpose and Initial Implementation

- Per BCP, fees intended to cover 15 Regional Board staff for permitting recycled water projects
  - Page 1: “allowing the Water Boards to effectively carry out recycled water permitting responsibilities”

- 13 of 15 Regional Board positions, as well as 2 positions for desalination and 4 positions for Water Supply Strategy, already funded in Fiscal Year 2023-24
  - 2.7% increase in all existing Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit fees
  - These fee increases were already invoiced to projects last year

Path to path forward

State Board Fee Unit's Guiding Principles	WateReuse California Guiding Principles
• Remain Revenue Neutral • Be implementable statewide • Minimize yearly swings • Spread the fees broadly • Based on relative size - actual flow from Volumetric Annual Report (VAR) • No "fee for service"	• Not be one-size-fits-all • Increase proposals be transparent and capped • Avoid duplicative charges • Fee should be fair • State Board provide meaningful stakeholder engagement

Approved Option [formerly known as “Option F”]: Fee by Type of Recycled Water Produced and Distribution/Use

- Continuing to fund the new Personnel Years (PYs) via the existing WDR Fees and NPDES Fees, with an additional surcharge added on recycled water projects
- Fee would distinguish between potable and non-potable recycled water produced
- Would be assessed as a surcharge for:
  - National Pollutant Discharge Elimination System (NPDES) Wastewater (WW) permits and
  - Waste Discharge Requirements (WDRs) that contain recycling requirements
- For projects that produce *both* potable and non-potable water under a single permit, the higher potable surcharge would be assessed
- Fee will likely increase annually by 4-6% to keep up with inflationary increases
- Small fee also assessed on Water Recycling Requirements (WRRs) for recycled water distribution/use only

State Board slide on “Option F”: Fee by Type of Recycled Water Produced and Distribution/Use

Recycled Water Permits
Fee Option

Option F: Fee by Type of Recycled Water Produced and Distribution/Use

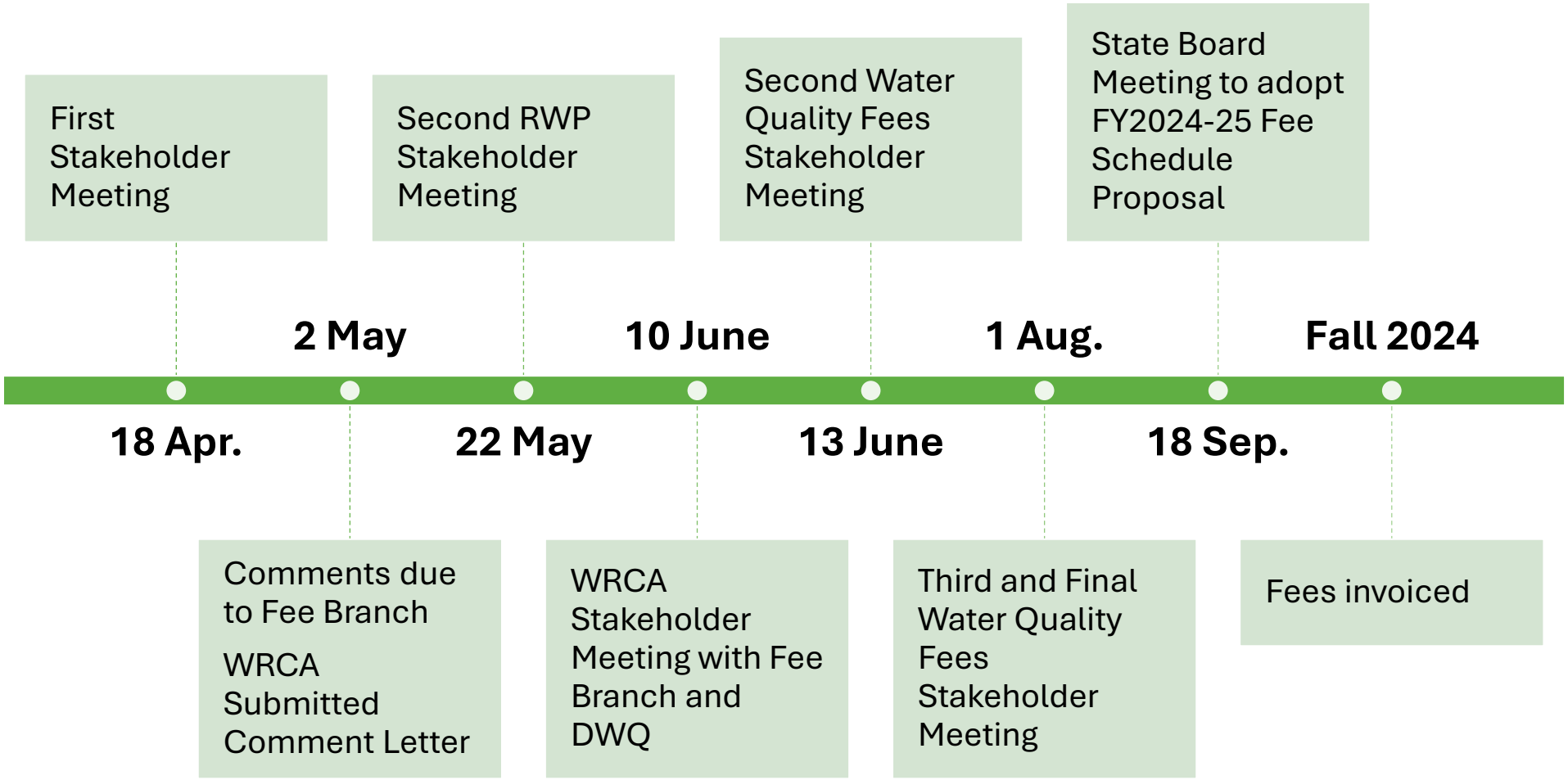
For facilities producing recycled water consistent with California Code of Regulations, Title 22, a fee would be assessed based on the type of recycled water produced. The fee would distinguish between potable and non-potable recycled water produced and would be assessed as a surcharge for National Pollutant Discharge Elimination System (NPDES) Wastewater (WW) permits and Waste Discharge Requirements (WDRs) that contain recycling requirements and as a flat fee for Water Recycling Requirements (WRRs).

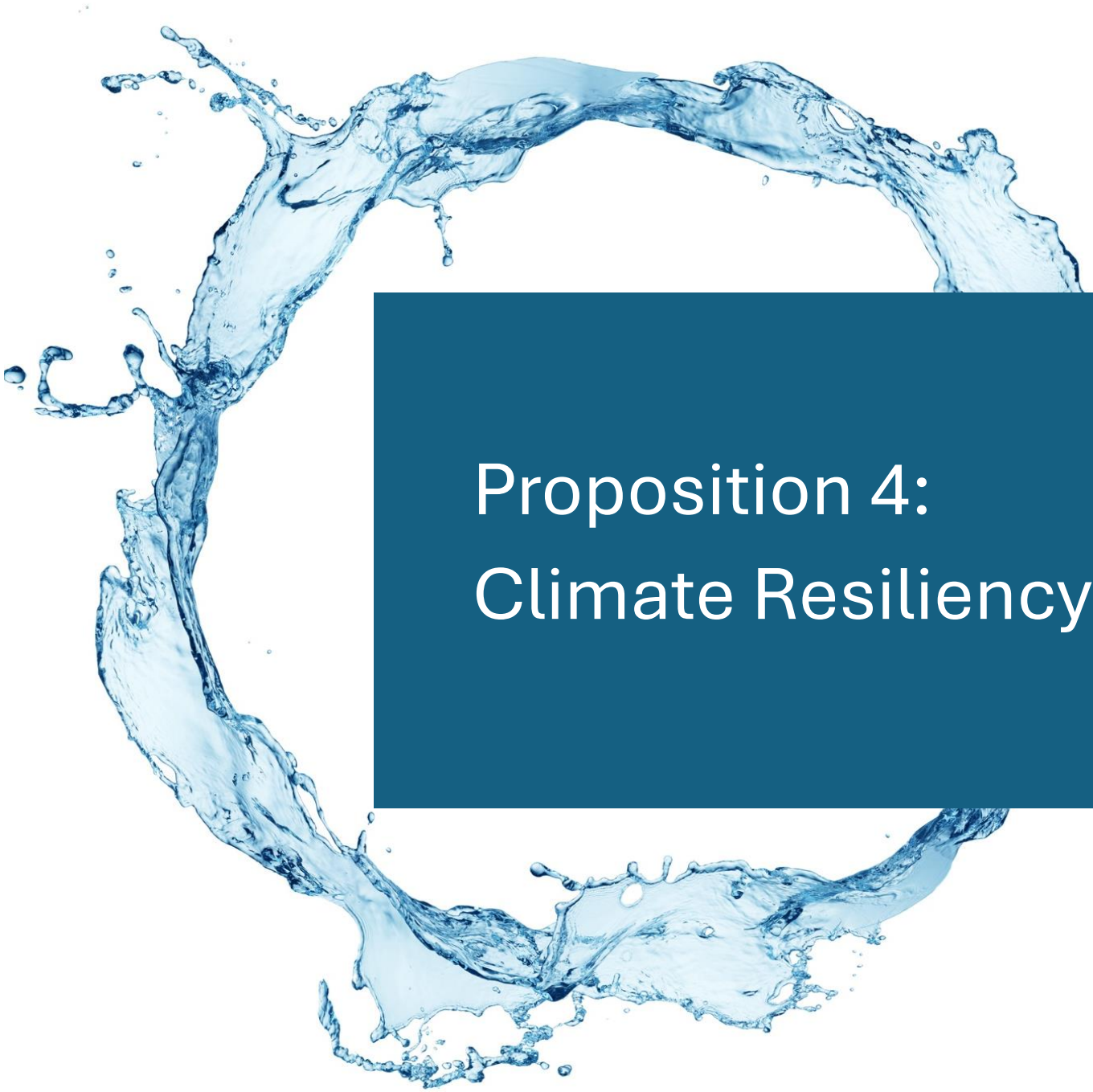
For permits for the distribution or use of recycled water (exclusive of production), the fee would be a flat fee.

Recycled Water Production	Potable Fee	Non-Potable Fee
Permits issued for recycled water production	$16,000	$2,800

Recycled Water Distribution and/or Use	Fee
Permits issued for recycled water distribution and/or use only	$1,500

Recycled Water Permit Fees – Timeline





Proposition 4:
Climate Resiliency Bond

WaterReuse California

Proposition 4

- WRCA Position: Support
  - August 9: WRCA Legislative-Regulatory Committee makes recommendation to support
  - September 15: This recommendation went to our full WRCA Board of Trustees, and they approved the position to support
- November Ballot
  - Authorizes $10 billion in general obligation bonds for water, wildfire prevention, and protection of communities and lands. Requires annual audits.
  - Official Voter Information Guide

Clean Water State Revolving Fund

WateReuse CALIFORNIA

Clean Water State Revolving Fund

- State Water Resources Control Board (SWRCB) Division of Financial Assistance (DFA) recently released proposed revisions to the Clean Water State Revolving Fund Policy, or “Policy Amendments.”
- CWSRF Policy Notice
- CWSRF Webpage

Summary of the proposed changes

- Change One: Primary Score
- Change Two: Replace Secondary Score with Affordability Score
- Change Three: Readiness Score
- Other significant proposed changes:
  - Deputy Director Authority to remove a project when applicant fails to meet deadlines established in Intended Use Plan.
  - Eligible Projects:
    - Cost of purchasing a wastewater system
    - Septic decommissioning and private laterals

Standing Items

- **State Section Update:** Joone Lopez, MNWD
- **Legislative and Regulatory Updates**
  - DDW
  - OCHCA
- **Funding Opportunities**
  - https://watereuse.org/wp-content/uploads/2024/09/Summary-of-Funding-Opportunities-as-of-10-01-24.pdf

Nominations and Elections for Chapter Officers

- Chapter Officers:
  - —President
  - —Vice-President
  - —Secretary/Treasurer
  - —Chapter Trustee
  - —Immediate Past President
- Eligibility
  - —Member of the Association
  - —Live or Work in Orange County
- 1-Year Term

Proposed Slate for 2025

- President – Hannah Ford/El Toro Water District
- Vice-President – Ben Smith/Orange County Water District
- Secretary/Treasurer – Annaliese Torres/Rincon Consultants
- Chapter Trustee – Joone Lopez/Moulton Niguel Water District
- Immediate Past President – Scott Lynch/Jurupa Community Services District

Thank you to our outgoing officers!

- **Kraig Erickson, Woodard & Curran**
  Secretary/Treasurer

- **Scott Lynch, JSCD**
  President, former VP and Secretary/Treasurer

Upcoming Conferences, Webcasts & Meetings

- **2025 WateReuse Nevada Conference** | Jan. 27| Reno, NV
- **2025 WaterReuse Symposium** | March 16 - 19| Tampa, FL
  - **Early Bird Registration ends *December 17, 2024***
- **2025 WateReuse Colorado Conference**| May 5| Denver, CO
- **2025 WateReuse California Conference**| Sep. 7-9| San Diego, CA

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

WATEREUSE ORANGE COUNTY

➢ Other Announcements/Discussion Items

- Meeting Hosts for 2025
  - Feb – TBD
  - Apr – TBD
  - Jun – TBD

➢ Roundtable: What's going on?

THANK YOU

Meeting Adjourned