WATEREUSE ORANGE COUNTY

THANK YOU FOR JOINING US

WateReuse Orange County Chapter Meeting

WILL BEGIN SHORTLY

Agenda

- **Networking & Social Session** – 11:30 AM
- **Call to order** – 12:00 PM
- **Welcome:** Hannah Ford, Chapter Vice President
- **Presentations**
  - **OCWD R&D Piloting Experience with Three Enhanced-Recovery RO Technologies: CCRO, FO-RO, and FR-RO**
    - Han Gu, Scientist, OCWD R&D Department
  - **DPR Public Outreach**
    - Sara Katz, Founder and CEO, Katz & Associates
- **Standing Items**
  - Regulatory Updates: DDW/OCHCA
  - Legislative and Regulatory Matters:
    - Alicia Harasty, OCWD
    - Claire Johnson, OCWD
  - Potential Funding for Projects
- **Conferences/Webcasts**
- **2024 WateReuse California Conference Update**
- **Other Announcements/Discussion Items**
- **Roundtable: What's Going On - All**
- **Adjournment**

Have a question?

We will get to your questions after each presenter.

OCWD R&D Piloting Experience with Three Enhanced-Recovery RO Technologies: CCRO, FO-RO, and FR-RO

Orange County Chapter of WateReuse California

Han Gu, Ph.D.
Scientist/Process Specialist
Orange County Water District

February 15, 2024

Outline

- Utilization of high-recovery Reverse Osmosis (RO) for potable reuse
- Flow-reversal RO (FR-RO) pilot study
- Summary of Closed-Circuit RO (CCRO) and Forward Osmosis RO (FO-RO) pilot studies
- Pros/Cons of three technologies piloted and cost comparison

Utilization of High-recovery RO for Potable Reuse

- **Conventional RO** removes dissolved solids, macro-molecules, and pathogens, but **recovery is limited**
- RO generates large volumes of **concentrated waste stream**, making concentrate management a challenge
- Economically feasible **high-recovery RO** technologies, such as **CCRO**, **FO-RO** and **FR-RO**, may make potable reuse a more viable option
- Singapore PUB implemented FR-RO at full-scale (2.8 mgd) in NEWater plant from 2017-~22 (Recovery increased from 75% to 90%)
- Santa Monica recently began first municipal FR-RO performance testing at full-scale facility
- CCRO pilot tested at PUB (2012-17), PDMWD (2016-17) and LACSD (2015-18), recovery range from 90-96%

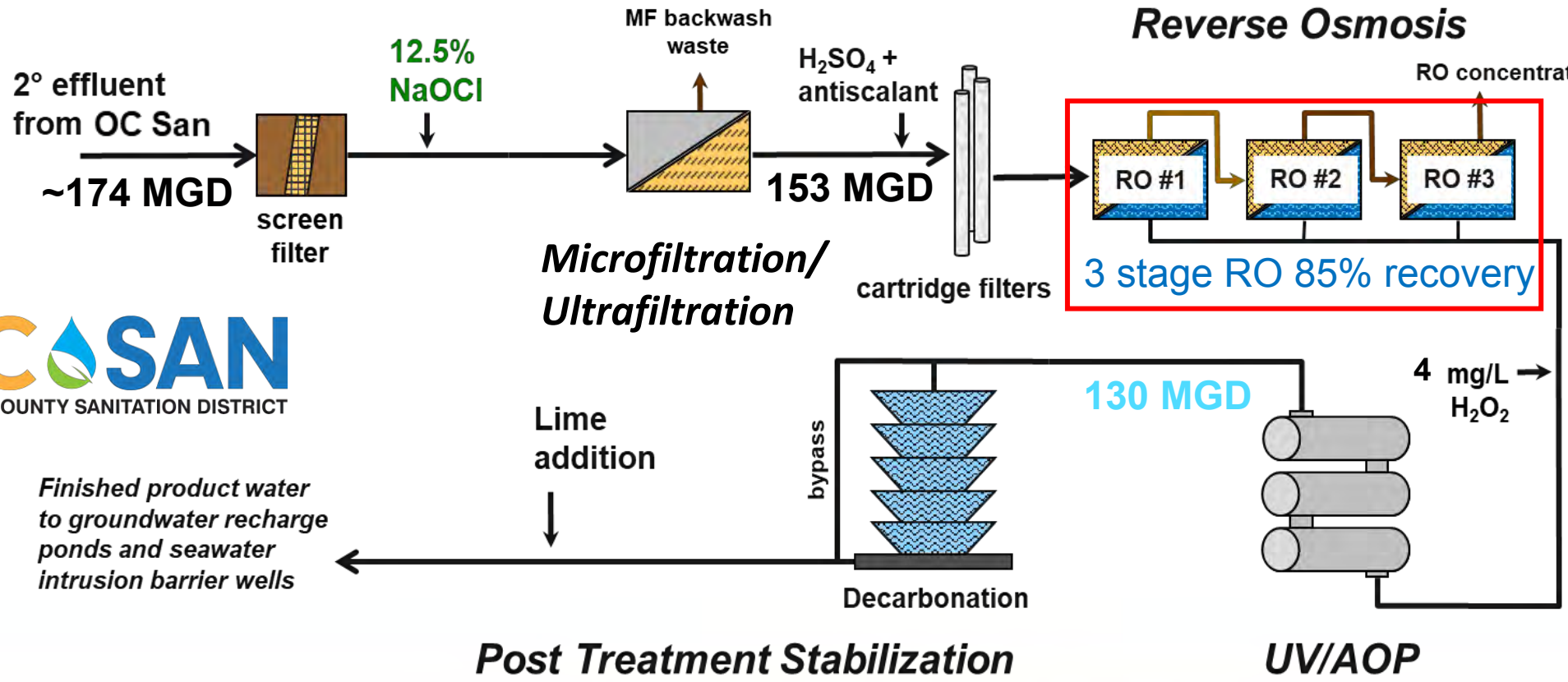
Singapore PUB – FR-RO Retrofit

Full scale CCRO system

Advanced Water Purification Facility (AWPF) at OCWD's Groundwater Replenishment System (GWRS)

GWRS is the largest potable reuse facility in the world, producing up to 130 MGD of high purity water (after final expansion in 2023)

GWRS
GROUNDWATER REPLENISHMENT SYSTEM



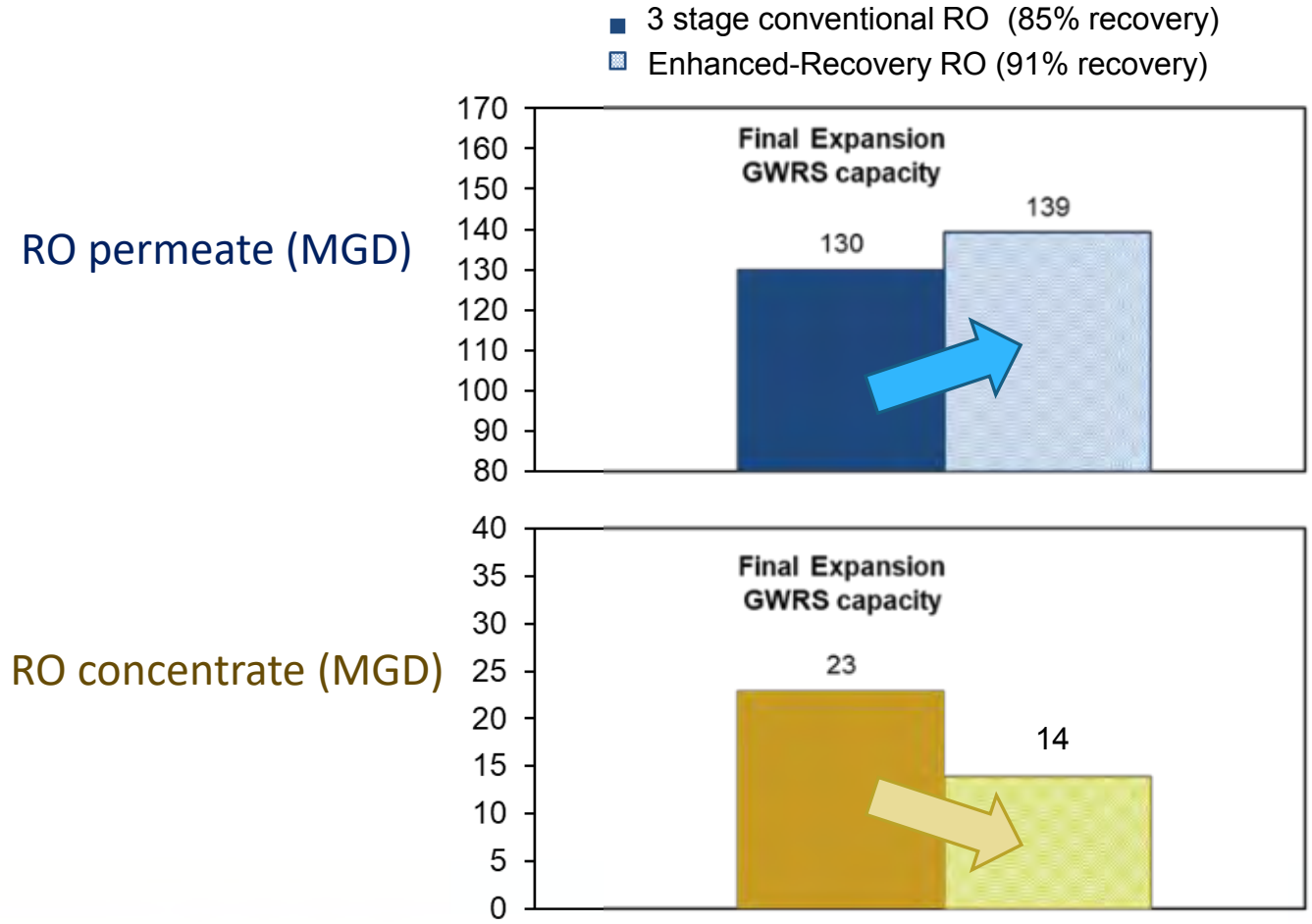
ORANGE COUNTY WATER DISTRICT SINCE 1933

Benefit of Increasing the RO Recovery for GWRS

Increasing RO recovery would increase the overall GWRS production and lower the volume of reject water (currently discharged to ocean outfall)

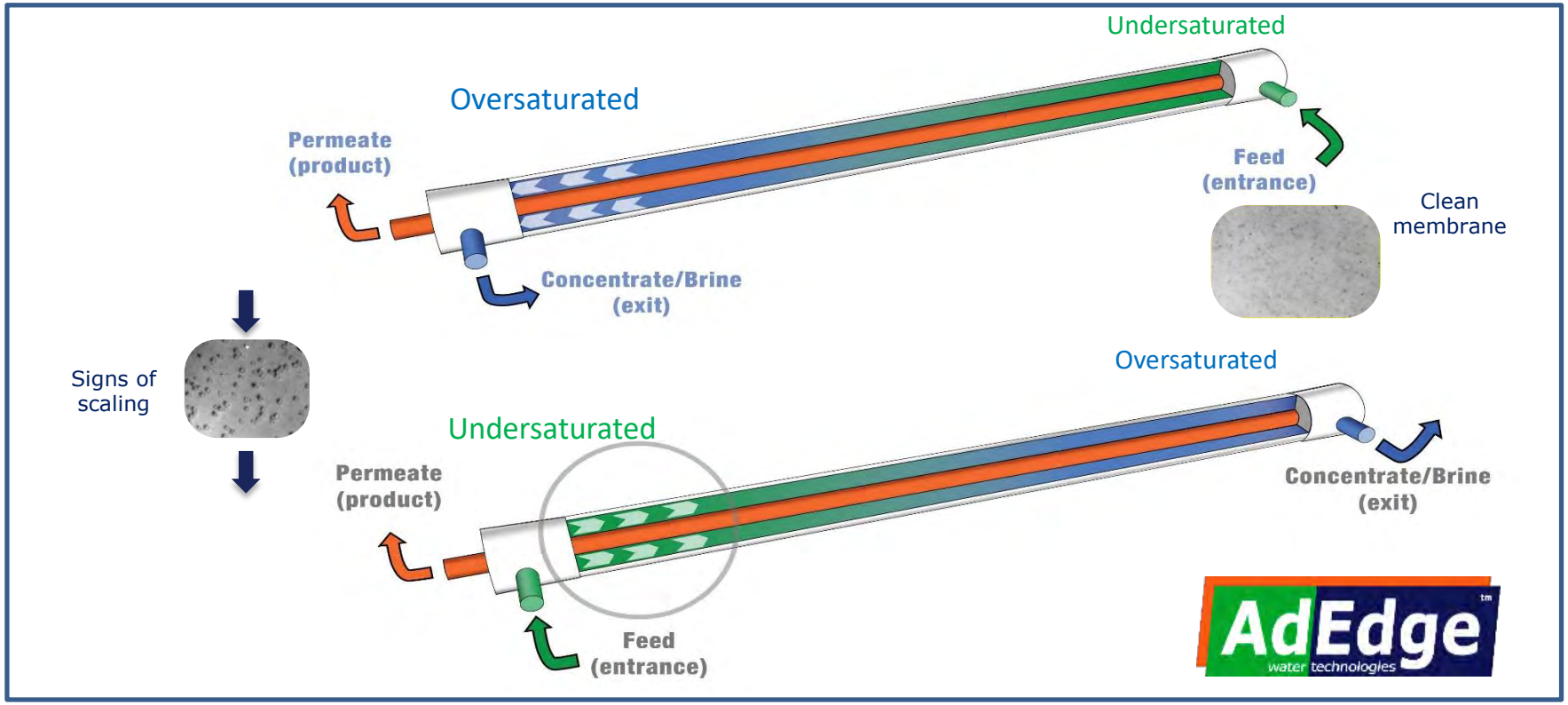
Main drivers for enhancing RO recovery:

1. Water increasingly valuable as cost of other sources increases
2. Water conservation reducing source volume
3. Environmental stewardship



Flow-reversal RO (FR-RO) Process Description

- Key features:
  - Feed side flow reversal (FR)
  - Block rotation (BR)
  - Proprietary FR/BR triggering system (based on crystallization induction time estimate)



ROTEC

Induction time: the time for a supersaturated solution to reach the onset of nucleation

OCWD FR-RO Pilot Study – Overview

- Pilot study was conducted between 2021 to 2023 in collaboration with Chart/AdEdge and ROTEC
- Phase 1 (treating AWPF RO feedwater)
  - **Simulate full scale retrofit of a conventional primary RO with FR**
- Phase 2 (treating AWPF RO concentrate)
  - **Simulate RO brine concentrator**
- Phase 3 (treating AWPF final expansion RO feedwater)
  - **A repeat of Phase 1 to confirm performance on FE feedwater**

FR-RO pilot deployed in the OCWD AWPF RO building

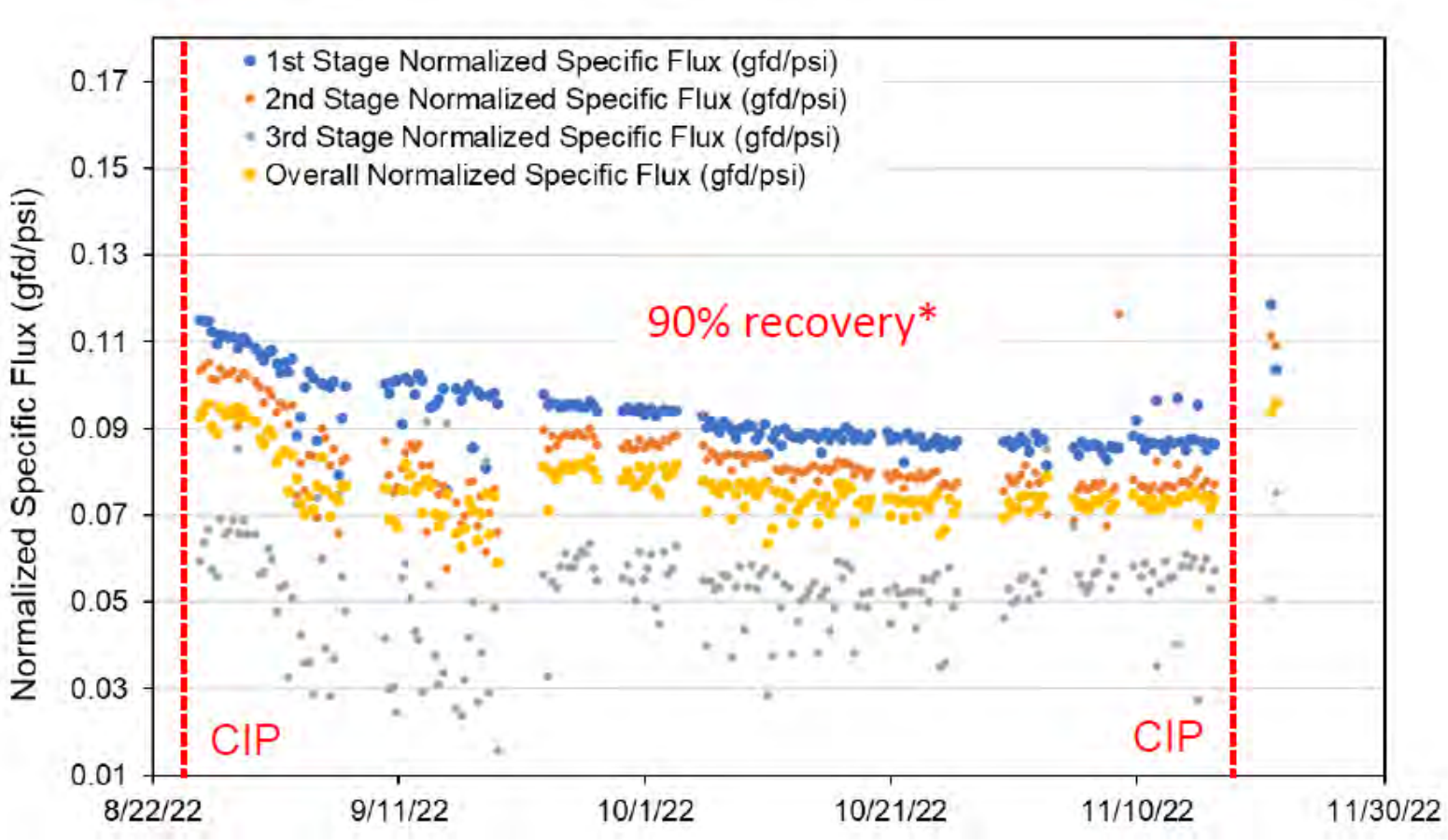
Single pass three stage RO system

30 gpm feed flow in 3 stage RO mode
15 gpm feed flow in 1 stage RO concentrator mode

ChartWater™ AdEdge BlueInGreen ROTEC

FR-RO Pilot Study: Summary of Findings

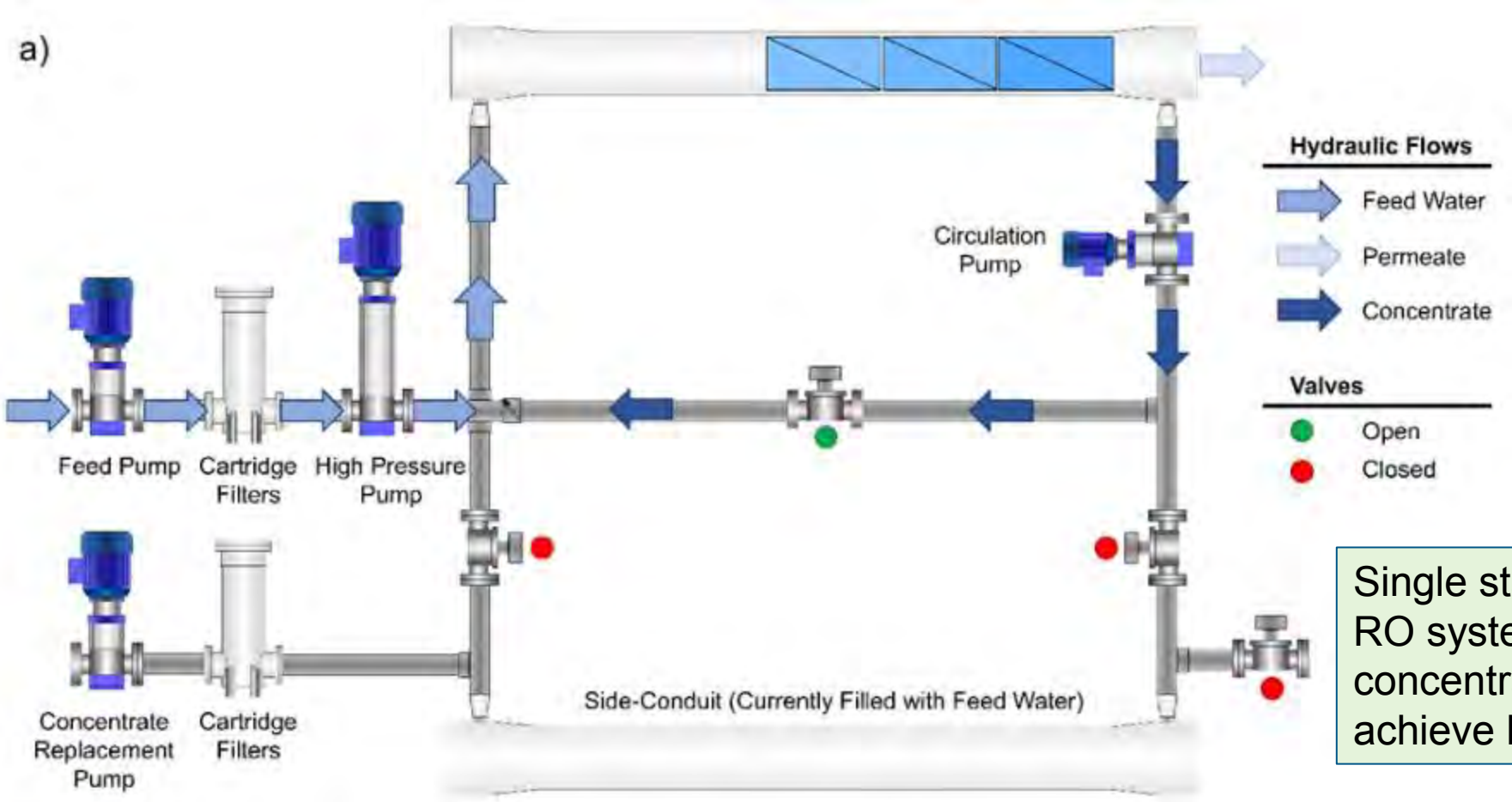
- Achieved ~89-90% stable recovery treating GWRS ROF
  - *No additional chemical needed*
  - *Re-confirmed after GWRS FE startup*
- Membrane cleaning approach was optimized: 3-mo between chemical cleanings (CIPs)
  - *GWRS RO CIP interval is 6-12 months*
- Treating RO concentrate directly with FR-RO was ***not*** sustainable



3-month steady-state trial showing stable specific flux at 90% recovery. Block rotation and flow reversal every 40 min (1st and 3rd stage); 2nd stage flow reversal every 10 hr.

CCRO System Process Description

Step 1: Closed-Circuit Mode



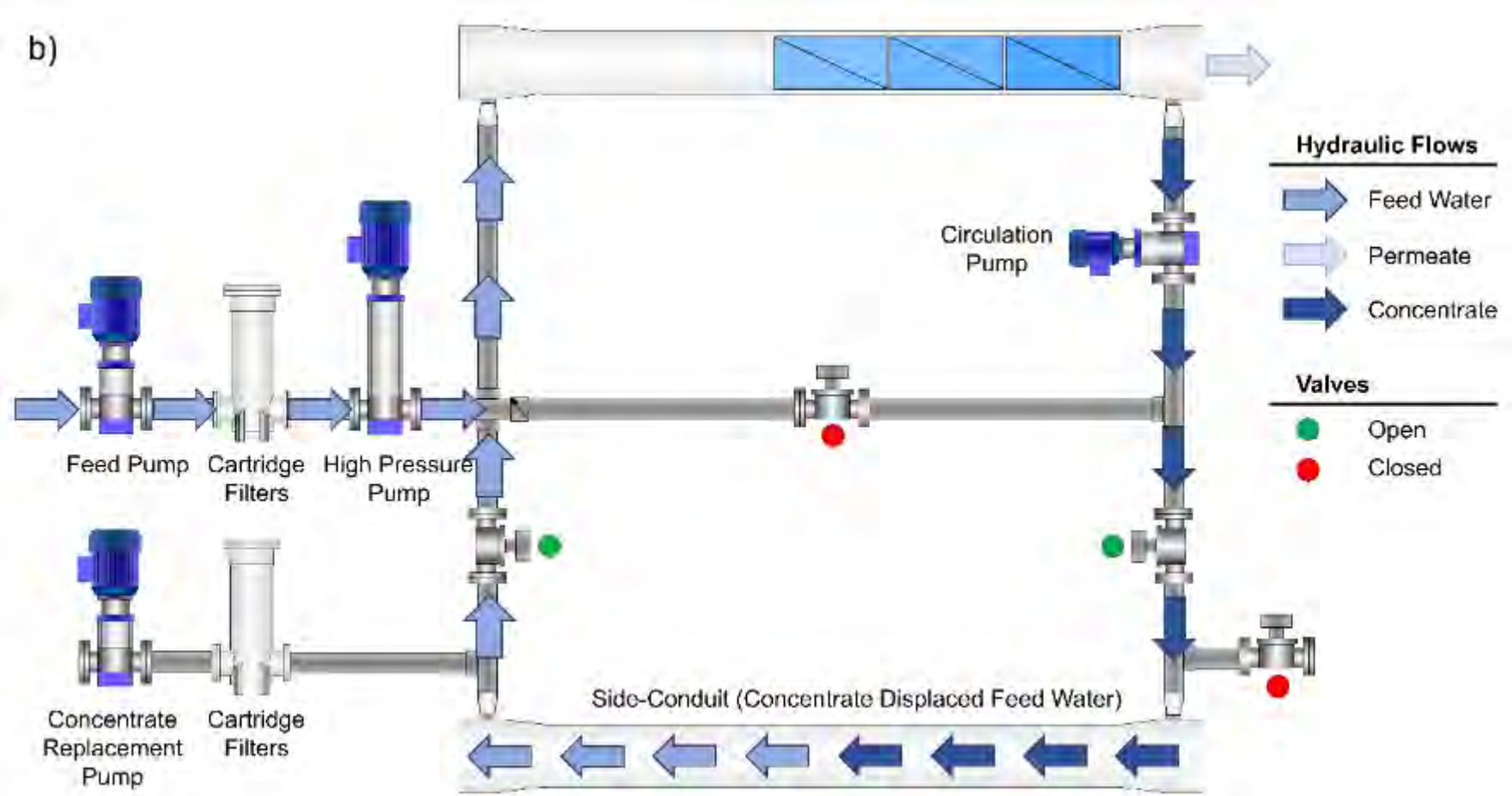
Single stage, semi-batch RO system, use complete concentrate recycling to achieve high recovery

Cross flow velocity can be adjusted independent of the overall recovery and permeate flux. All three are independently controlled set-points

Desalitech
a DuPont brand

CCRO System Process Description

Step 2: Plug Flow (Purge) Mode

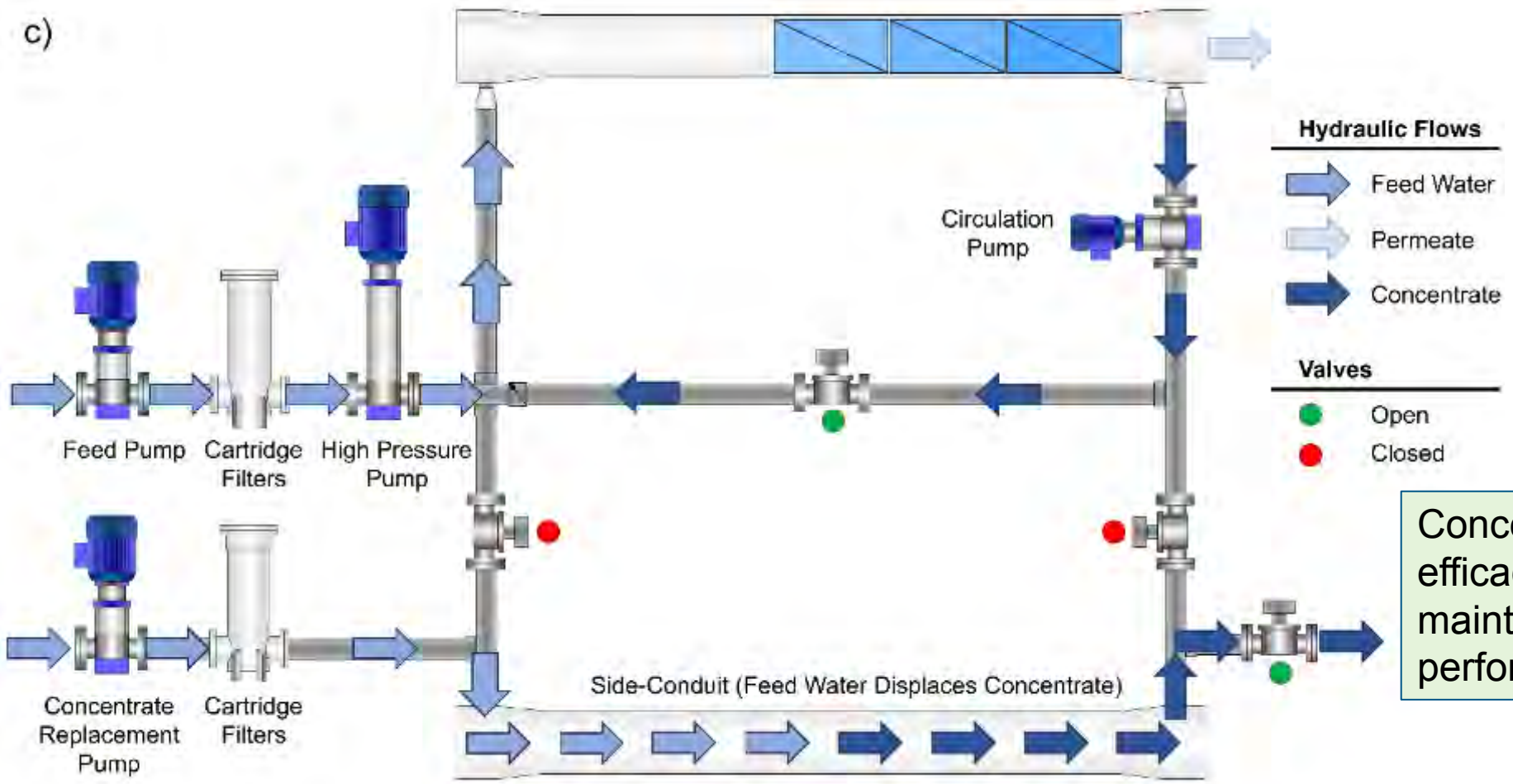


The pressurized CCRO concentrate is purged from the membrane array into the side conduit, which displaces the fresh feed to the front of the membrane array

Desalitech
a DuPont brand

CCRO System Process Description

Step 3: Side-Conduit Refill Mode



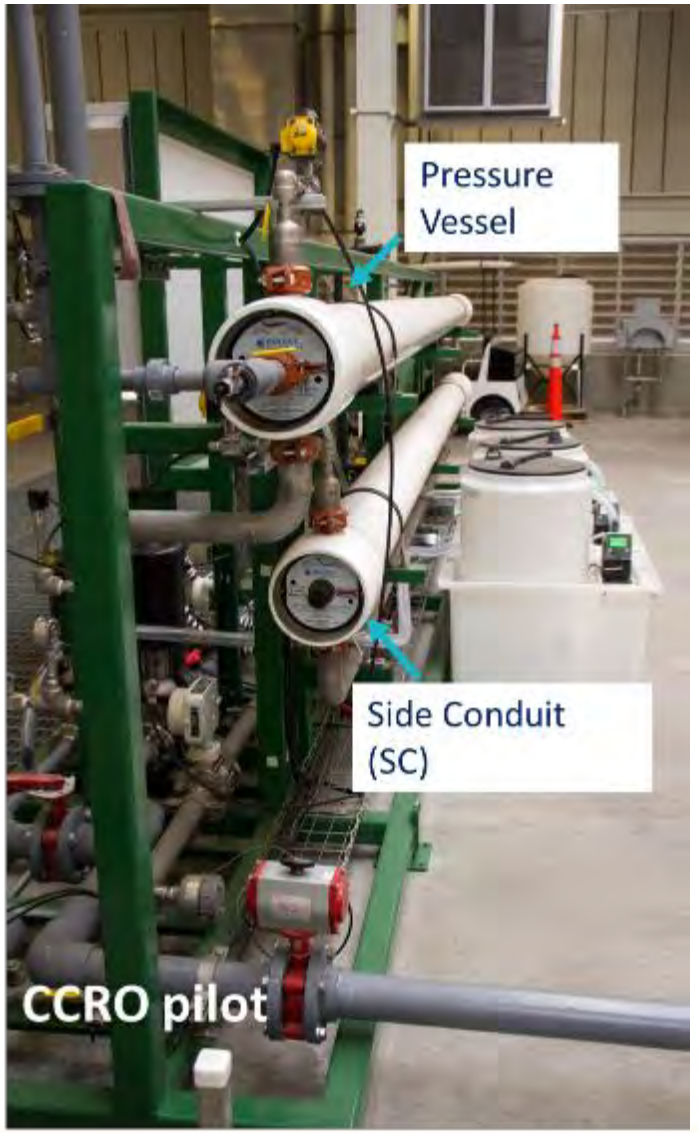
Concentrate flushing efficacy is key to maintain membrane performance

The side conduit is isolated, depressurized and flushed with fresh feed under low-pressure for the next sequence

Desalitech
a DuPont brand

CCRO Pilot Testing at OCWD GWRS

Dupont ReFlex Max CCRO Pilot at AWPF RO Building (2017-2019)



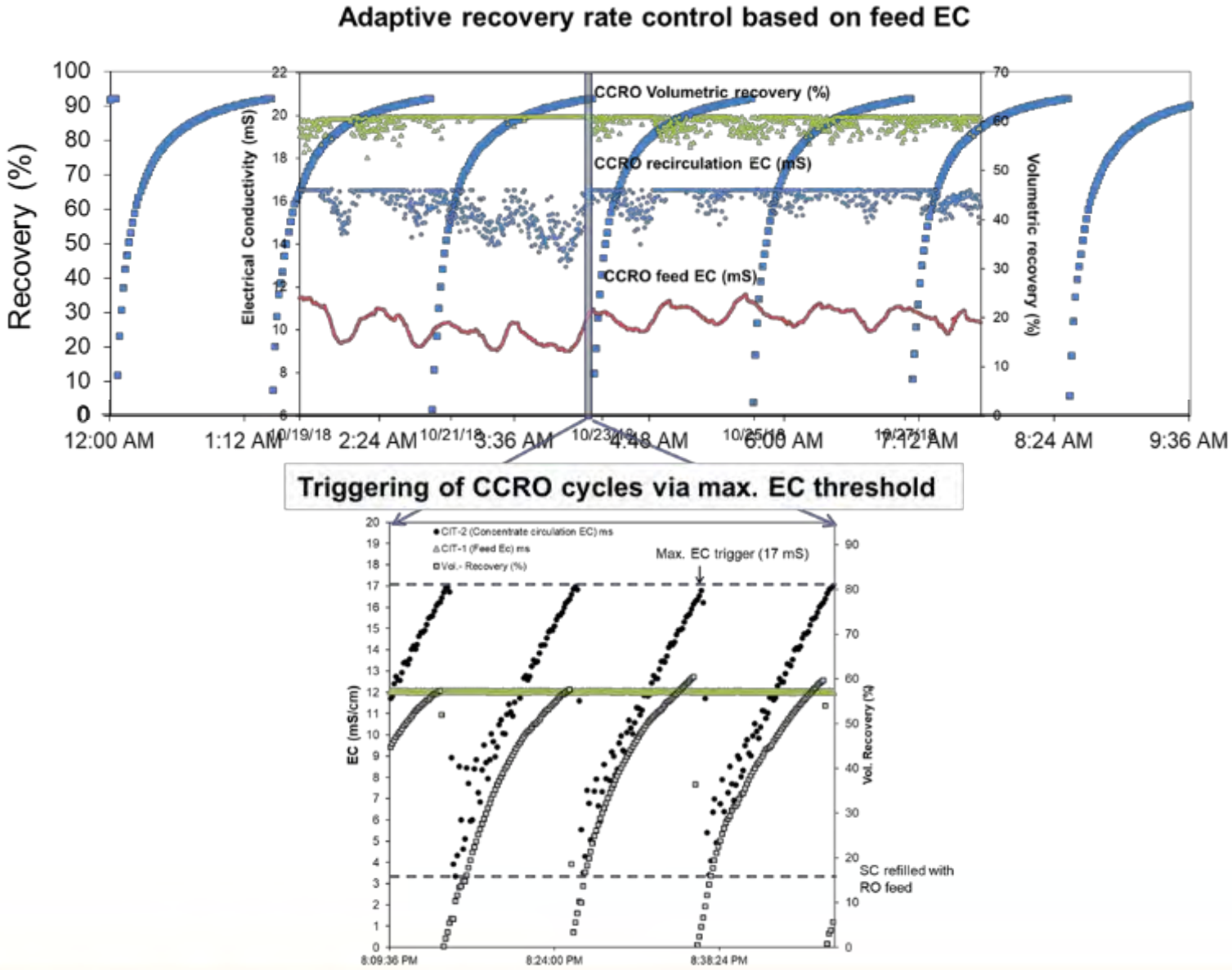
OCWD CCRO Pilot Study – Overview

Pilot study was conducted between 2017 to 2019 in collaboration with Dupont/Desalitech and Jacobs

- Phase 1 (CCRO treating AWPF MF effluent)
  - **Simulate full scale CCRO (as primary RO)**
    - **Filling side conduit with MF effluent (ROF)**
- Phase 2 (CCRO treating AWPF RO concentrate)
  - **Simulate RO brine concentrator (4th stage RO)**
    - **Filling side conduit with AWPF ROC or ROF**

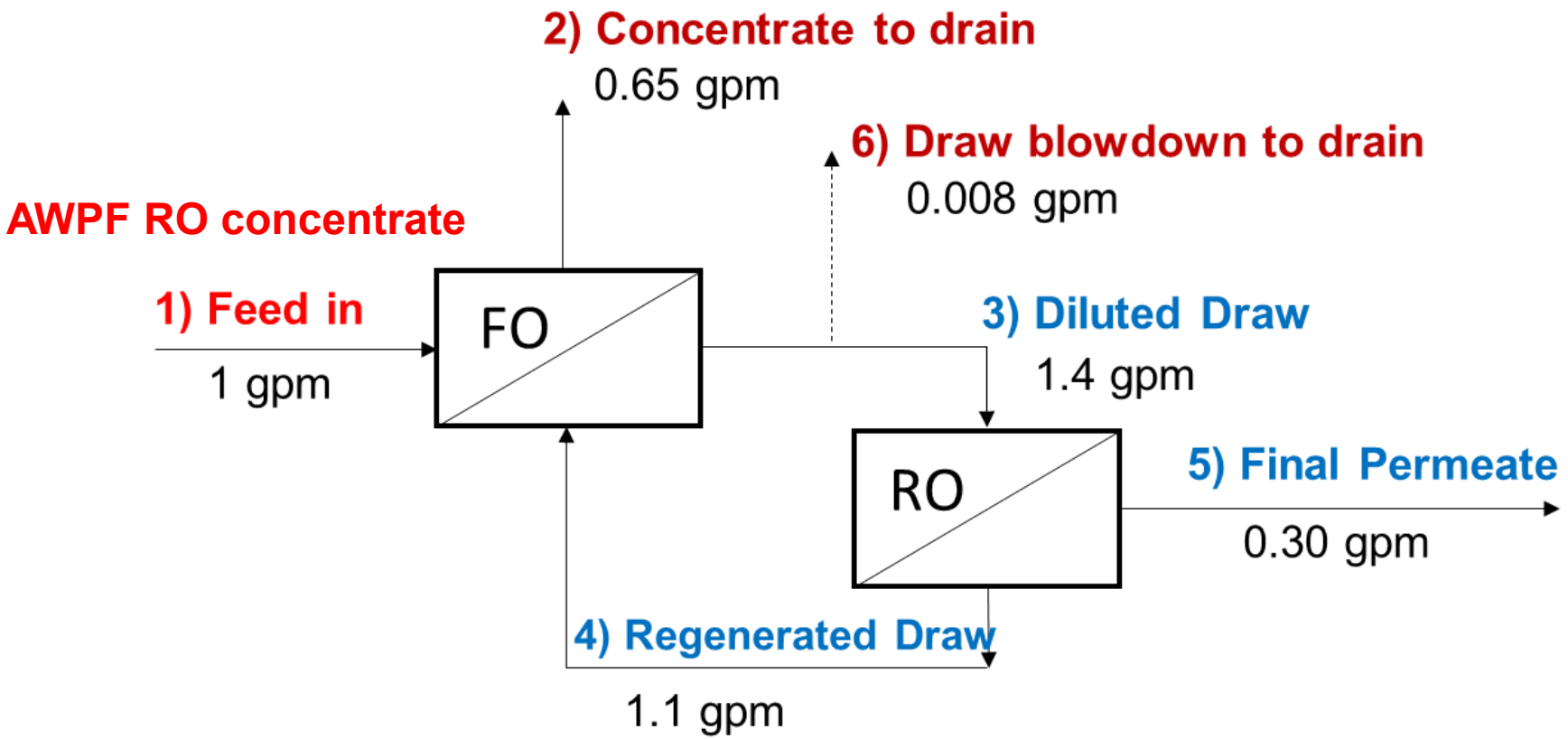
CCRO pilot study: Summary of Findings

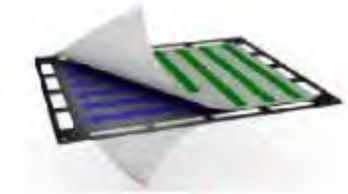
- Achieved ~92% stable recovery treating GWRS AWPF MFE
- Achieved ~91% overall recovery treating RO concentrate (pilot was operated as a “fourth stage” RO)
  - Flush side conduit with ROF extended the interval between CIPs by more than two-fold
  - The pilot operated in adaptive variable recovery mode to cope with fluctuating feed water quality
- Membrane chemical cleaning was optimized: ~2-mo between CIPs



Gu et al. Desalination, Vol 518, 2021, 115300

(Forward Osmosis) FO-RO Pilot Process Description





Flat-sheet FO membrane

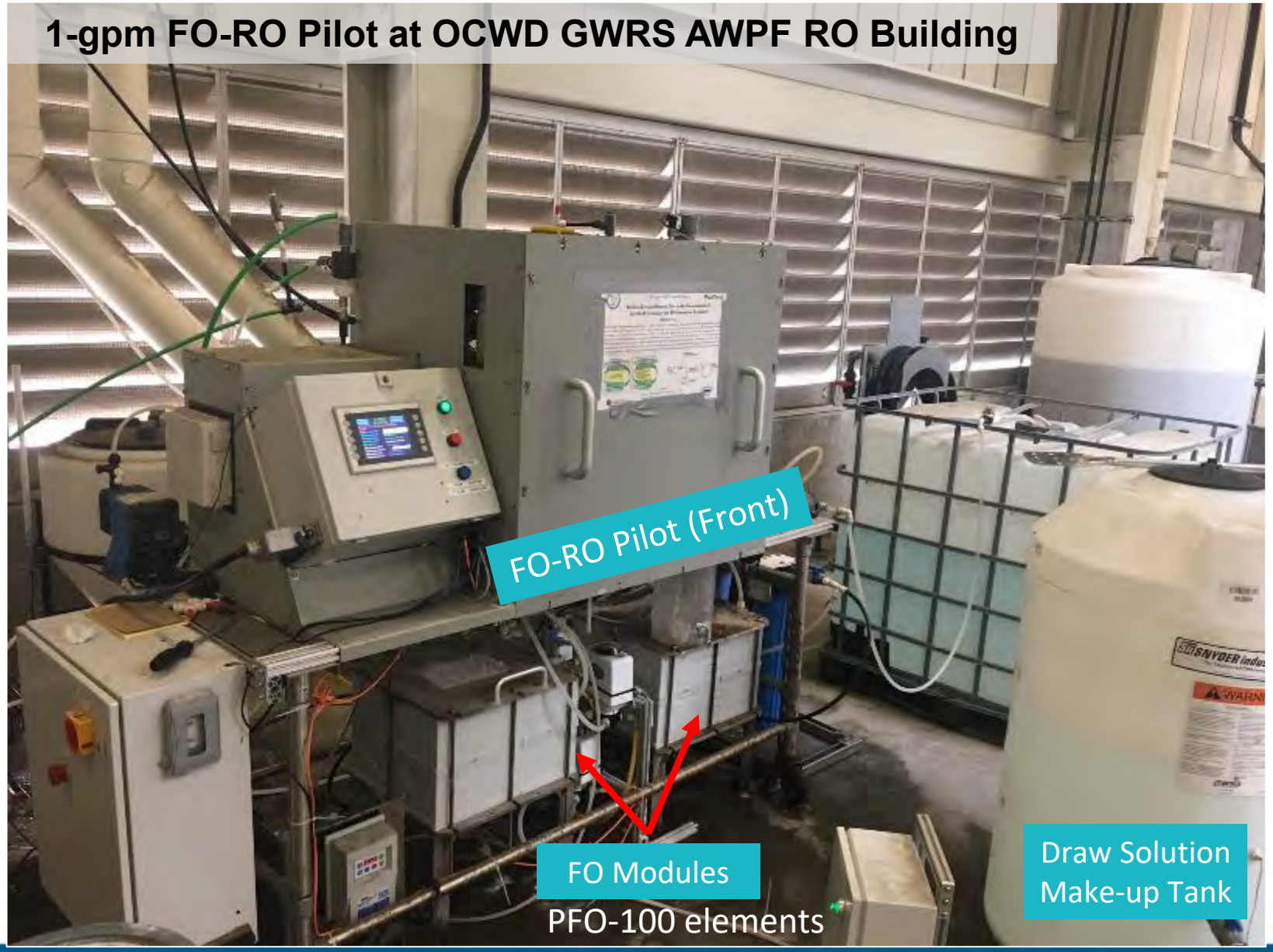
PFO-100 membrane module (14 m^2)

Hybrid membrane system, one pass, double barriers, draw solution (**NaCl**) required to separate permeate

The salt concentration in the draw solution is retained within the closed-loop

Porifera

(Forward Osmosis) FO-RO Pilot Testing (2018-2019)



RO Elements

Dupont SW30-2540

Porifera

FO-RO pilot study: Summary of Findings

- Pilot treated AWPF RO concentrate directly
- The system piloted at OCWD for about 18 months
- FO-RO system operated between 30-35% recovery (89.5-90.3% overall recovery)
- FO CIP frequency: every 3-4 weeks
- RO CIP frequency: every ~6 mo.

Operational Challenges

- ➢ Organic fouling and silica (silts/clay) scaling of the FO membrane
- ➢ FO membrane delamination due to rapid spikes in draw overpressure
- ➢ High draw solution usage

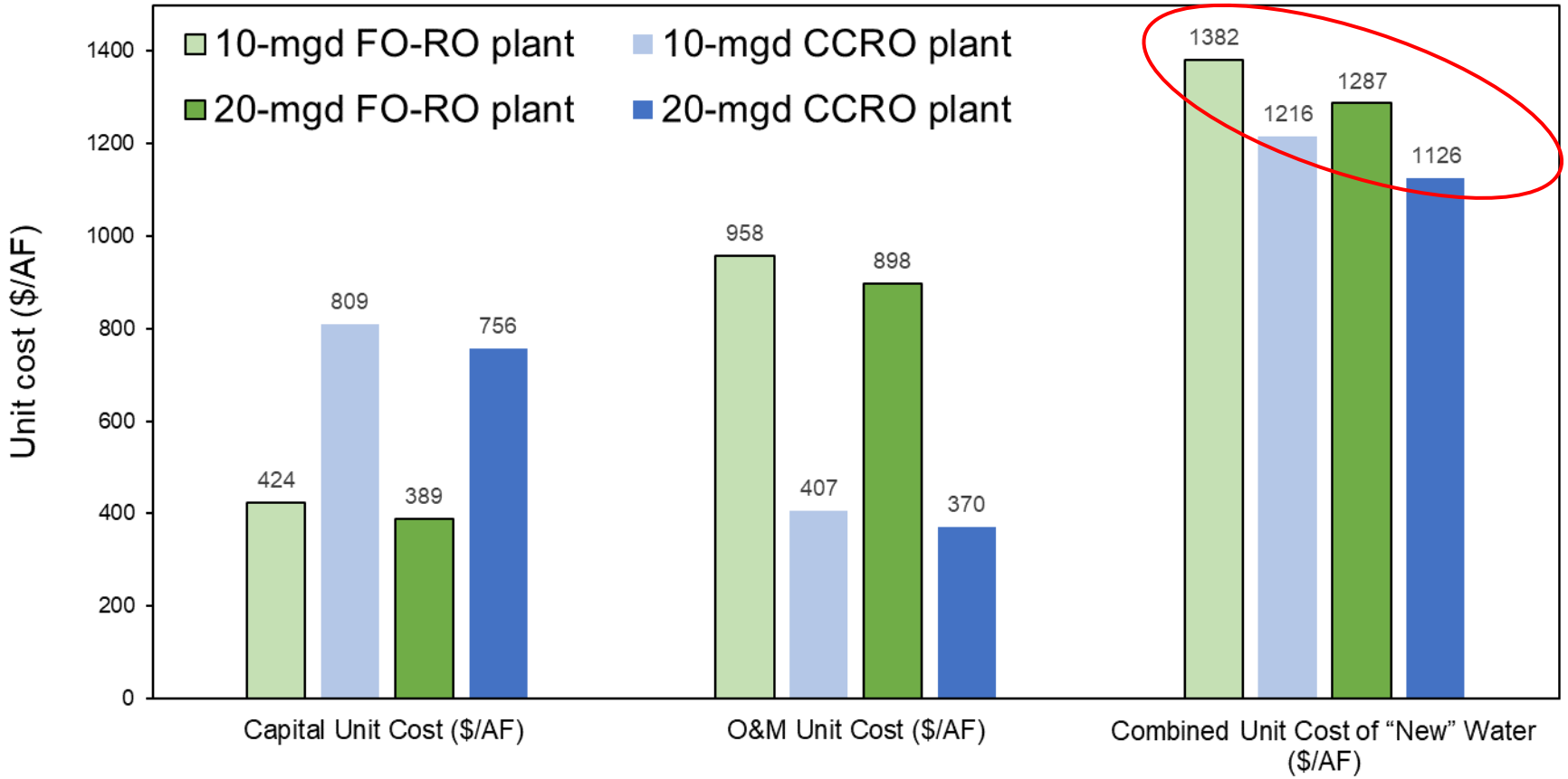
Porifera

Relative Pros/Cons of Three High Recovery RO Technology

Technology	Pros	Cons	Test Duration	Pilot configuration and max recovery
FR-RO	Able to retrofit an existing RO *CIP interval: ~3-mo* *Salt and organic rejection similar to conventional RO*	Concentrator mode was unsuccessful Recovery reduced during FR/BR transition	2021-2023	Primary RO mode at 89-90% overall recovery
CCRO	Work well in both primary RO and concentrator mode *Variable cycle recovery mode, adaptive to feed EC*	Concentrator mode requires ROF for SC flushing Permeate quality vary with time (cyclic behavior)	2017-2019	Primary RO mode at ~92% overall recovery, or RO concentrator (fourth stage) at ~91% overall recovery
FO-RO	Internal salt retention min. concentrate reject salinity *Better organic and virus rejection than CCRO*	CIP interval: 3-4 weeks. FO membrane integrity issues. High draw solution usage. High permeate TDS	2018-2019	RO concentrator at 89.5-90% overall recovery

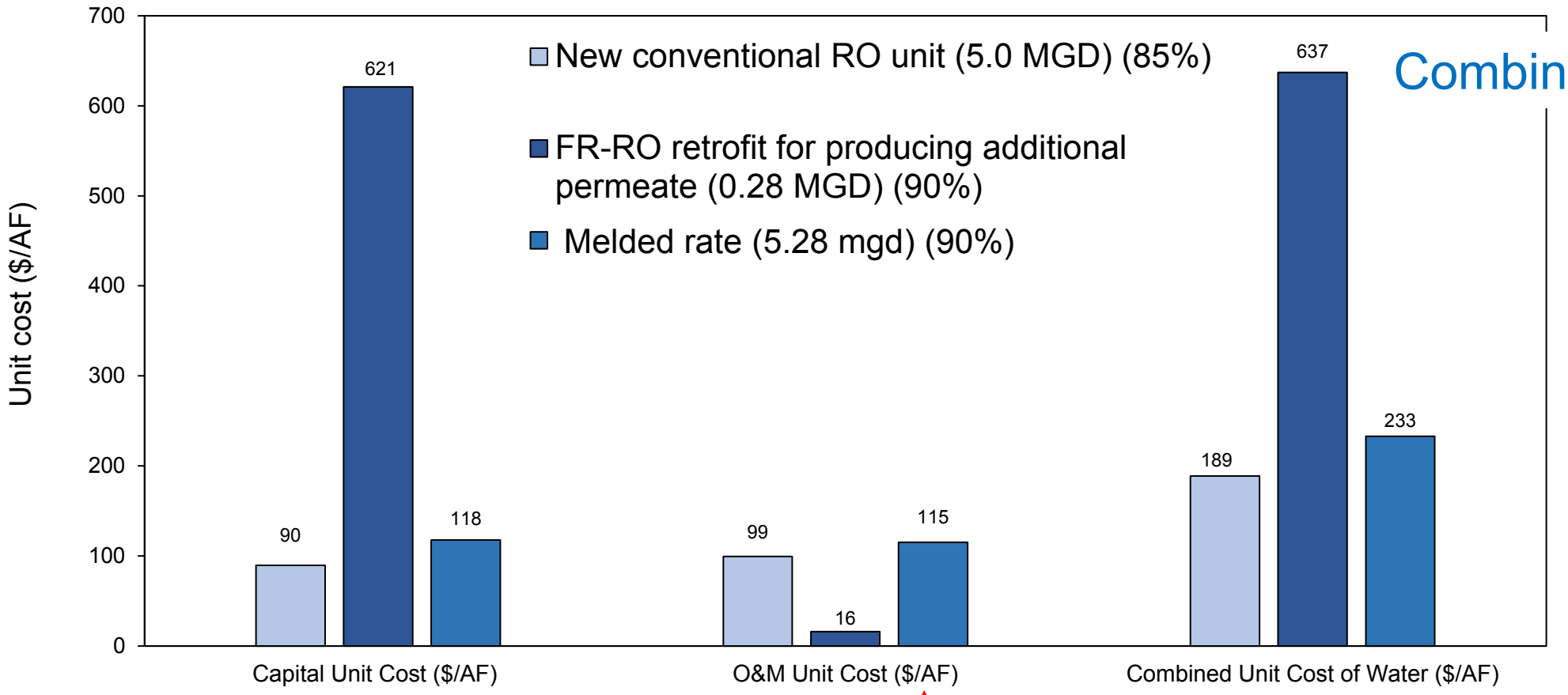
Preliminary Cost Evaluation for Full-Scale CCRO and FO-RO

Gu et al. Water Reuse (2023) 13 (3): 305–318.



- CCRO system is expected to have lower annual operation and maintenance (O&M) cost but higher capital cost than the FO-RO system (FO-RO system exhibit the reverse trend)
- Assuming a 30-year loan period at a fixed annual interest rate of 5%, the unit cost of new water produced by the CCRO system is slightly lower than FO-RO system

Preliminary Full-Scale FR-RO Retrofit Cost Estimate



Combined Cost

OCWD site specific cost number

The melded rate new RO unit + retrofit capital cost

The O&M cost is higher due to more frequent cleanings and higher electrical power consumption (due to membrane fouling)

Conclusions

- CCRO pilot achieved slightly higher recovery than the FR-RO pilot in primary mode and higher recovery than the FO-RO pilot treatment in concentrator mode
- Based on a 10 and 20 mgd cost estimate, the unit cost of additional water produced by the CCRO system is similar to the FO-RO system
- The unit cost of additional permeate from full-scale FR retrofit is lower than that of CCRO and FO-RO system
- All pilots produced high quality permeate that could be blended with the existing primary RO permeate to increase overall production

Acknowledgements

- OCWD R&D team (on-site monitoring of pilots, sampling)
- OCWD oversight – Mehul Patel and Jason Dadakis
- AdEdge/ChartWater – Ronit Erlitzki, Auryan Mohseni and Zach Edwards
- ROTEC – Yair Shnurmacher, Dan Peled
- Desalitech (DuPont Water Solutions) – Mike Boyd and Ran Nadav
- Porifera – Erik Desormeaux and Olgica Bakajin
- Brown and Caldwell - Adam Zacheis, Jishnu Mehta and Jocelyn Lu
- City of Santa Monica - Alex Waite and Sunny Wang

OCWD R&D Team:

Don Supernaw

Andrew Huang

Tae Lee and Natalie Shamma (interns)

Funding Agencies:

BUREAU OF RECLAMATION

CCRO pilot study
FR-RO pilot study

SCSC Southern California Salinity Coalition

FR-RO pilot study

STATE OF CALIFORNIA ENERGY COMMISSION — CALIFORNIA ENERGY COMMISSION

FO-RO pilot study

Thank you!
Questions?

hgu@ocwd.com

K&A

KATZ & ASSOCIATES

A SOUTHWEST STRATEGIES COMPANY

POTABLE REUSE

Strategic Communications | Public Involvement | Community Relations

ABOUT US

"K&A's expertise in community relations and strategic planning, as well as their unique knowledge and qualifications in the water industry, has helped us develop a long-term approach for a complex multibillion-dollar potable reuse program that will provide a sustainable water supply for San Diego's future."

-Halla Razak, Former Director of Public Utilities, City of San Diego

38
Years in business

90+
Practitioners

- Potable Reuse and Recycled Water
- Infrastructure Construction
- Rates and Cost of Service
- Water Resources and Quality
- Water and Wastewater System Planning
- Water Supply Diversification
- Facility Siting
- Conservation

Helping people communicate effectively about things that matter.

K&A

OUR TEAM OF EXPERTS

Our team brings decades of **unmatched experience** moving water reuse projects forward through the various life-cycle stages of a project, and into the challenging phases of construction.

SARA M. KATZ
Founder/CEO

SARAH ROSSETTO
Vice President

ANN NEWTON
Senior Director

BRENT EIDSON
Director

EMILY P. OTIS
Director

KAREN SNYDER
Strategic Counsel

PATSY TENNYSON
Strategic Counsel

DECADES OF COMBINED WATER REUSE COMMUNICATION EXPERIENCE

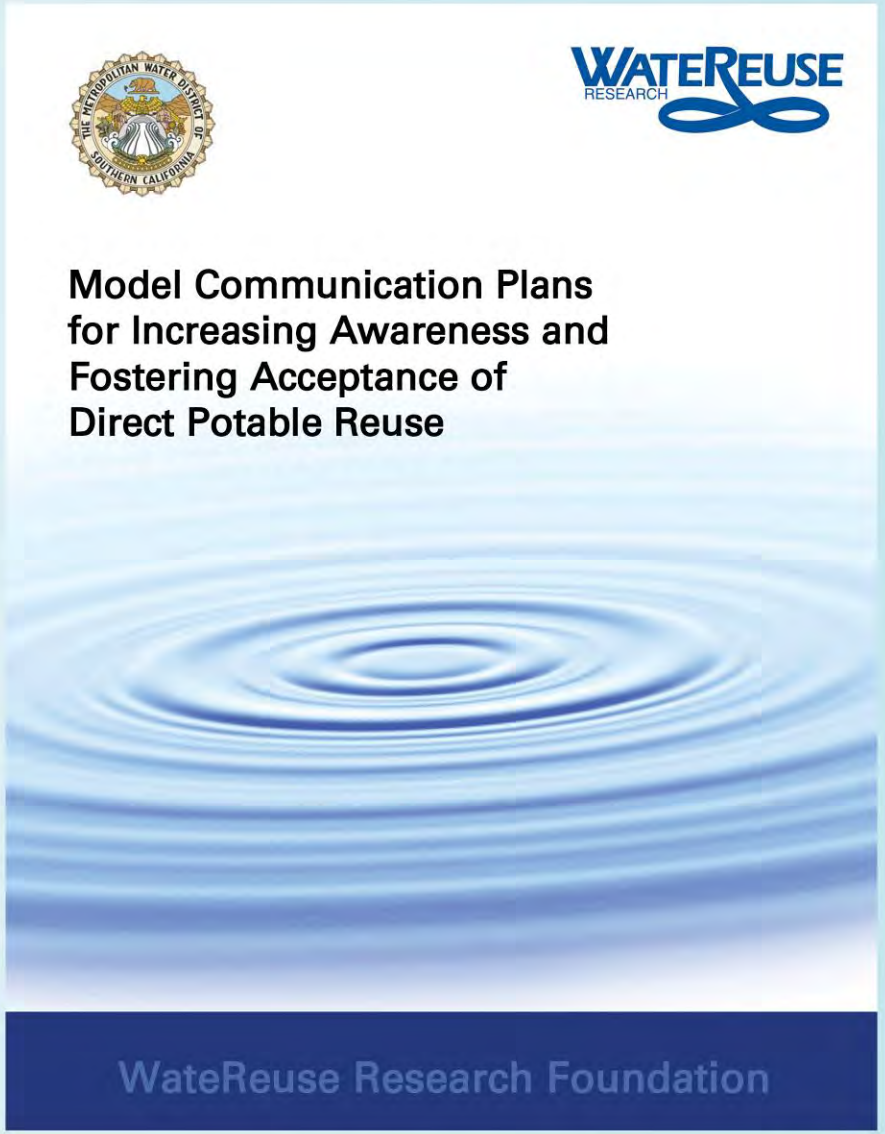
EXPANDED TEAM OF **90+ PROFESSIONALS**

K&A

RESOURCES

Water Research Foundation Report #1302

Model Communications Plans for Increasing Awareness and Fostering Acceptance of Direct Potable Reuse



HELPING PEOPLE UNDERSTAND POTABLE REUSE (WRF #1302)

Define the Purpose and Need

1. What is potable reuse?
2. Where does it fit into your water supply/climate strategy/portfolio?
3. Why is it needed?
4. What purpose does it serve?
5. How safe is the water?
6. How will it be monitored?
7. How much will it cost?
8. When will it be implemented?

K&A

RESEARCH

Quantitative and qualitative research has been conducted for indirect potable reuse, but far less research has been undertaken for direct potable reuse.

Consider employing research tactics to gauge your community's understanding and support for direct potable reuse.

Quantitative

1. Use structured tools such surveys, polls, or questionnaires to gather data.
2. Use a sample size large enough to accurately reflect the target audience.
3. Findings derived from a sample can be extrapolated to make informed decisions to aid in developing communications strategies.

EXAMPLES:

- Customer opinion survey conducted by research firm.
- Surveys with closed ended questions.

RESEARCH

Qualitative/Opinion Leaders

1. Used to understand how people feel about the topic.
2. Many approaches to qualitative research.
3. More flexible and focus on retaining meaning when interpreting results.

Both types of research can help inform communications strategies, messaging and tactics.

EXAMPLES:

- Observations: recording what you have seen, heard, or encountered in interactions.
- Interviews: Conducting one-on-one conversations.
- Focus groups: Asking questions and generating discussion among a group of people.
- Surveys: Questionnaires with open-ended questions.

INCREASING AWARENESS & GAINING ACCEPTANCE OF POTABLE REUSE

- **Start Outreach Early**
  Communicating about potable reuse is a marathon, not a sprint.

- **Focus on Water Quality**
  Highlight the product water, not its origin.

- **Understanding the Advanced Water Treatment Process**
  Leads to increased public acceptance.

- **Terminology is Important**
  Words matter.

KNOW YOUR AUDIENCE

- **Community Mapping:**
  - » Academic & education leaders/ influencers
  - » Business organizations (Tech, Recreation, Tourism, Hospitality, Corp HQ's, Industrial, Good Gov/Taxpayers)
  - » Medical /Public Health/WQ experts
  - » Civic and community groups
  - » Environmental & climate change NGO's
  - » Multicultural & faith-based groups
  - » Local/State elects & staff

- **Identify Key Voices/Influencers and Consider:**
  - » Values and traits
  - » Competence or expertise
  - » Social, civic, political positions

DRAFT YOUR COMMUNICATIONS/MESSAGING PLAN

DEVELOP COMMUNICATIONS PLAN/KEY MESSAGES in terms for non-technical audience.

CREATE A COMMUNITY PRESENTATION to tell your project's story.

TRAIN SPOKESPEOPLE to present and respond to questions.

CREATE EASY-TO-UNDERSTAND INFOGRAPHICS to support your story.

DEVELOP COMMUNICATIONS TOOLS AND PROCESS

- Develop Brand
- Materials Platform
- Speaker's Bureau/Training
- Media Training
- Website/Graphics
- Social Media Engagement
- Community Working Groups
- Databases w/ Audience Segmentation
- Develop Partnerships
- Third-Party Advocates

DEVELOP COMMUNICATIONS TOOLS AND PROCESS

Crisis Management Plan Scenarios

- RAPID RESPONSE TEAM
- MESSAGES FOR SITUATION
- EMPLOYEE COMMUNICATION
- BOARD/COUNCIL COMMITTEES
- WEBSITE UPDATES AND PUBLIC NOTICES
- PHONE LISTS
- OP EDS / LETTERS TO THE EDITOR
- MEDIA ENGAGEMENT
- SOCIAL MEDIA
- REPUTATION MANAGEMENT

WHAT HAS WORKED BEST FOR SUCCESSFULLY ADVANCED POTABLE REUSE PROJECTS?

- **"Go to Them"**
  - » Established community group meetings.
  - » Community events, festivals, farmer's markets.
- **Community based and Independent Advisory Committees (NWRI)**
- **Close engagement with regulators**
- **Establishing close exchange of information with key media**
  - » In some cases a third-party coalition.
- **Highlighting potable reuse in the context of climate change and drought**
- **Visibility**
  - » Speakers bureau, stakeholder interviews, video engagement of academia, scientists, experts in the field.
- **Clear, concise and transparent project information in all formats**
- **Demonstration Plant Tours**
  - » Seeing/tasting is believing.

K&A

IPR & DPR: BOTH APPROACHES CAN WORK, IT JUST DEPENDS

- **Lots of questions: Is one better, safer, more environmental, less expensive?**
- **Don't pit one against the other – Let's change the narrative now!**
- **Think about using Advance Recycled Water to set the stage.**
- **Every project must evaluate many factors.**
- **Success relies upon building trust with your community!**

PURE WATER SAN DIEGO PROGRAM

Pure Water San Diego

K&A

CARPINTERIA ADVANCED PURIFICATION PROJECT

Carpinteria Advanced Purification Project

MARCH 2021

CAPP | Replenishing Our Groundwater for the Future

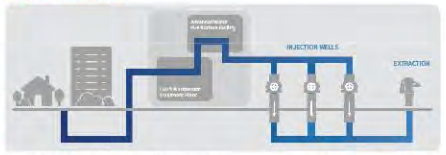
Carpinteria Valley Water District (CVWD) is investing in a project to purify recycled water and replenish the groundwater basin, creating a locally-controlled drinking water supply that will augment existing supplies and serve as a dependable, drought-resistant source of water for our future.

Like communities throughout California, Carpinteria faces continuing and historic drought conditions. During a drought, surface water and imported water supplies are limited, and groundwater pumping increases. The region also faces increasing pressures on existing surface water supplies from Lake Cachuma and the State Water Project. Although minimal growth is projected for our region and we have made great strides through conservation, we continue to face a critical water supply need.

Replenishing the groundwater basin with water that can be used for drinking purposes, also known as "indirect potable reuse," will not only assist in supplementing the local water supply but is also safe, sustainable and environmentally friendly.

Carpinteria's Current Water Sources

Project Schematic



Wastewater from homes and businesses travels to the Carpinteria Sanitary District's wastewater treatment plant. Currently, this valuable water is treated and then discharged to the ocean.

With the proposed Advanced Water Purification Facility, this water will be purified for beneficial reuse.

It then travels along a new pipeline to several injection wells, where it is injected into the groundwater basin.

After several months, the water is then extracted using existing CVWD wells for drinking water purposes.

What is "Groundwater Replenishment?"

Once the recycled water has been purified to meet or exceed drinking water standards, it will be injected into the ground through wells to replenish or "refill" the groundwater basin. Groundwater is water from precipitation that naturally percolates and is stored underground in the soil or in cracks and crevices between rocks. The groundwater in the Carpinteria Valley has been depleted in the recent and recurring droughts, straining one of Carpinteria's major water supplies. By replenishing the groundwater basin with water that can be used for drinking, residents and businesses in Carpinteria will have a reliable, renewable supply of water for generations to come.

Why is this project needed?

The Carpinteria Valley has been in moderate to exceptional drought since 2013 and has limited water supply options. While the Carpinteria Groundwater Basin is relatively healthy compared to many others throughout the state, our imported supplies are becoming more expensive, with both State Water Project water and Lake Cachuma supplies becoming less reliable. Added to this is the recently-enacted Sustainable Groundwater Management Act which likely will bring changes to the way in which groundwater is managed and used in the Carpinteria Valley. It is crucial to invest in a local water supply that is reliable, and not subject to the same vulnerabilities as our existing surface water supplies.

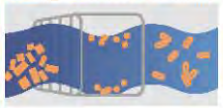
The 2016 Carpinteria Valley Recycled Water Facilities Plan (sponsored by CVWD, CSD, and the City of Carpinteria) analyzed a range of options for a cost-effective recycled water program. It was determined that groundwater recharge using advanced treated wastewater would be the most cost-effective long-term solution to Carpinteria's water supply challenges.

What is "Advanced Water Purification?"

Advanced Water Purification describes proven, multi-step processes that purify water which has already been cleaned at a wastewater treatment plant. The advanced purification process uses a **multi-step treatment process** including **membrane filtration, reverse osmosis,** and **ultraviolet/advanced oxidation** resulting in water that is pure to replenish the groundwater basin. This system of scientifically proven technology is being used throughout California and the United States.

Scientists and public health professionals have been working for decades to ensure safe processes that are routinely monitored. The California State Water Resources Control Board has also established a rigorous regulatory framework for potable reuse projects that is protective of public health and the environment.

Existing Wastewater Treatment

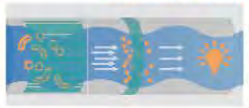


PRELIMINARY — Trash, grit, and other inorganic materials are removed.

PRIMARY — Solids settle to the bottom or float to the top, and are removed.

SECONDARY — Beneficial microbes feed on solids and organic matter for removal of harmful bacteria and other pollutants.

Advanced Purification Process



MEMBRANE FILTRATION — Removes microscopic particles including suspended solids, bacteria, and protozoa.

REVERSE OSMOSIS — Membranes remove most toxic organics and organisms, in addition to salts and lead.

UV/ADVANCED OXIDATION — Ultraviolet light combined with chlorine creates chemical reactions that destroy all trace chemicals, organisms, or contaminants that remain at this stage.

GROUNDWATER INJECTION — The highly purified water is injected through wells into the groundwater basin to be used for future drinking water purposes.

Project Timeline

2016	2018	2019	2020	FEB 2021	June 2022	2025
Carpinteria Valley Recycled Water Facilities Plan	Sustainable Groundwater Management Act Basin Re-Prioritization to High Priority	CA Environmental Quality Act - Environment Review Complete	Sustainable Groundwater Management Agency established	Eligible for Low Interest Loan	Expected completion of final design	Expected completion of construction

Project Timeline

CAPP

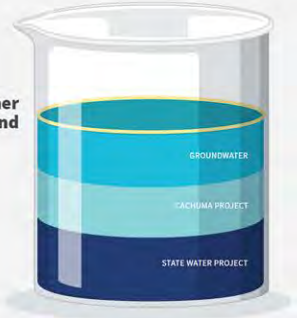
Carpinteria Advanced Purification Project

Replenishing Our Groundwater for the Future

Why CAPP is needed

NORMAL YEAR

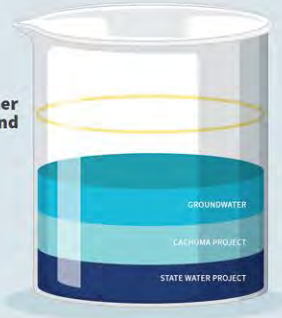
Carpinteria Valley Water District (CVWD) receives enough water from three water sources in "normal" conditions to meet its customer demands.



DROUGHT CONDITIONS

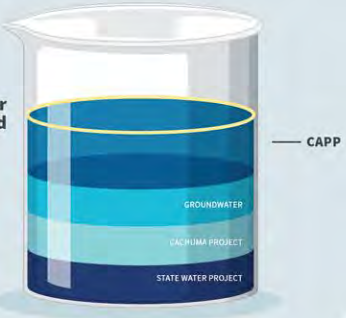
Before CAPP

During extended drought conditions, the three water sources are not always available.



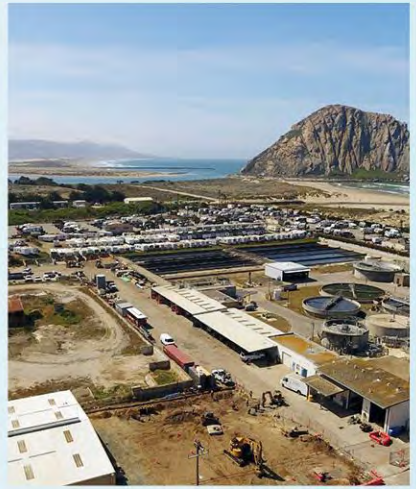
After CAPP

CAPP provides a locally-controlled, drought-proof additional source that helps meet our CVWD water needs and stabilizes against the ups and downs with the various water supply sources that we routinely experience.



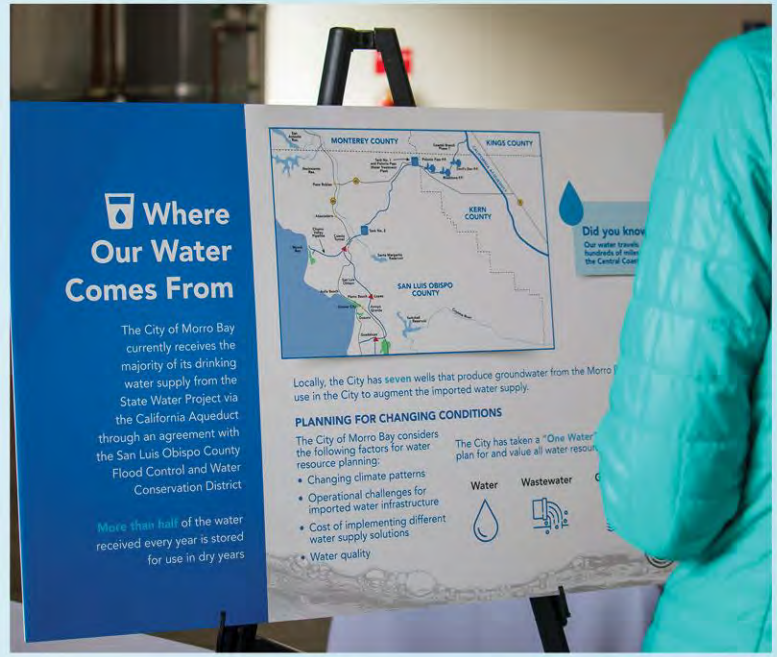
K&A

MORRO BAY WATER RESOURCES CENTER



LOCAL. RELIABLE. CLEAN.

OUR WATER
MORRO BAY



Thank you

K&A

KATZ & ASSOCIATES

A SOUTHWEST STRATEGIES COMPANY

katzandassociates.com

Strategic Communications | Public Involvement | Community Relations

Standing Items

- **Legislative and Regulatory Updates**
  - —DDW
  - —OCHCA
  - —Claire Johnson, OCWD
  - —Alicia Harasty, OCWD

- **Potential Funding for Projects**

WateReuse California Announces New Managing Director Brenley McKenna

Regulatory Updates

- Making Conservation a California Way of Life Regulation
  - —Draft regulation released August 2023
  - —A Recycled Water stakeholder working group is seeking consensus on:
    - "Temporary provision" for negative impacts to wastewater collection, treatment, and reuse systems due to indoor water use standards should not be temporary
    - Special Landscape Areas should not be treated as a variance
    - Method for calculating bonus incentive for Direct Potable Reuse
  - —Revised draft anticipated late February, followed by Board Workshop in March

Regulatory Updates Continued

- Direct Potable Reuse Regulations adopted at Dec. 19 State Board meeting
  - —**California DPR Regulations Make International News** The adoption of Direct Potable Reuse regulations made the news in a big way! Hundreds of print, digital, and TV outlets covered the story, starting conversations about potable reuse around the world. A few highlights included coverage by New York Times, Washington Post, CNN, Reuters, Associated Press, Univision, and CalMatters.
  - —Jennifer West told CalMatters and other publications that the regulations "really herald a new era for water reuse in California. Communities across California will be able to benefit from this new, safe, resilient supply."
- Mid-summer likely earliest date regulations will be enforceable

2024 WateReuse California Conference

- September 15-17, 2024
  —Hyatt Regency, Garden Grove

- Call for abstracts anticipated to open **early April**

- Early Bird registration will open **mid-April**

State Budget

- The Gov's budget reduces funding for water recycling and groundwater cleanup ($174.4 M reduction & delay of $100 M)
- WateReuse is advocating to get water recycling funding back into the budget and in any potential Climate Bond
- The State Board responded to the Gov's budget by announcing the need to adjust the $15 M max grant amount for CW-SRF down to accommodate pending projects (WateReuse is advocating for a $5 M max)

Standing Item

- **Potential Funding for Projects** (see handout)

WATEREUSE CALIFORNIA

Local, State and Federal Funding Opportunities [1] FEBRUARY 2024

PROGRAM	Total allocation	Funding available this Round	Purpose	Eligible Projects	Status	Anticipated Timeline	Notes
MWD On-Site Retrofit Program (OSRP) * *only MWD members are eligible for this funding	$2M per year	$195/acre-foot over 10 years.	Provides financial incentives directly to customers	Public and private owners to convert potable water irrigation or industrial water systems to utilize recycled water.	SOLICITATION OPEN	First come first serve basis starting 7/1 through 6/30 or until funds are exhausted.	Contact: Jessica Arm, Associate Resource Specialist jarm@mwdh2o.com http://www.bewaterwise.com/on-site-retrofit-program.html
MWD Local Resource Program (LRP)* *only MWD members are eligible for this funding			Provides financial incentives for the development of water recycling, groundwater recovery, and seawater desalination projects.	Projects can include: • Water recycling • Groundwater recovery • Seawater desalination Three incentive payment options: • Sliding scale incentives up to $340/AF over 25 years, • Sliding scale incentives up to $475/AF over 15 years, or • Fixed incentive up to $305/AF over 25 years.	SOLICITATION OPEN	First come first serve basis starting 7/1 through 6/30 or until funds are exhausted.	Contact: Nadia Hardjadinata Resource Specialist nhardjadinata@mwdh2o.com http://www.mwdh2o.com/AboutYourWater/Planning/Funding-Programs/Local-Resource-Program-Funding
Water Savings Incentive Program			Open to all commercial, industrial, agricultural, institutional and large Landscape customers	Project examples: • Replacement of older, less water-efficient equipment, • Comprehensive changes to industrial processes that reduce water consumption, • Improvements to existing irrigation systems and landscaping to improve water use efficiency.	SOLICITATION OPEN	Payment amount is up to $0.60 per 1,000 gallons saved per year over the project live, up to a maximum of 10%. Incentives are limited to 50% of eligible project costs	

Local, State and Federal Funding Opportunities [1] FEBRUARY 2024

PROGRAM	Total allocation	Funding available this Round	Purpose	Eligible Projects	Status	Anticipated Timeline	Notes
SoCal Water$mart		Dependent on type of project	Business and residential rebates to help encourage water efficiency and conservation	**Commercial Projects:** Plumbing Fixtures Landscaping Equipment Food and HVAC Equipment Medical and Dental Equipment **Residential Projects**: Turf Removal Residential Devices	SOLICITATION OPEN		https://socalwatersmart.com/en/commercial https://socalwatersmart.com/en/residential
SWRCB Division of Financial Assistance: Drinking Water State Revolving Funding	$650 Million		Planning/design and construction of drinking water infrastructure projects including: • treatment systems • distribution systems • interconnections • consolidations • pipeline extensions • water sources • water meters	• Publicly-owned community water systems (e.g., counties, cities, districts) • Privately-owned community water systems (e.g., for-profit water utilities, non-profit mutual water companies) • Non-profit or publicly-owned non-community water systems (e.g., public school districts) • Community water systems created by the project	SOLICITATION OPEN	Complete and submit an application online through the Financial Assistance Application Submittal Tool (FAAST) at https://faast.waterboards.ca.gov	The application is also available on the DWSRF website at: https://www.waterboards.ca.gov/drinking_water/services/funding/SRF.html

Local, State and Federal Funding Opportunities [1] FEBRUARY 2024

PROGRAM	Total allocation	Funding available this Round	Purpose	Eligible Projects	Status	Anticipated Timeline	Notes
SWRCB Division of Financial Assistance: Clean Water State Revolving Funding	$650 Million		Construction of POTWs: • Wastewater treatment • Local sewers • Sewer interceptors • Water reclamation distribution • Stormwater treatment • Combined sewers • Landfill leachate treatment Implementation of NPS projects to address pollution associated with: • Agriculture • Forestry • Urban Areas • Marinas • Hydromodification • Wetlands Development and implementation of estuary comprehensive.	• Any city, town, district, or other public body created under state law, including state agencies • A Native American tribal government or an authorized Native American tribal organization having jurisdiction over disposal of sewage, industrial wastes or other waste • Any designated and approved management agency under Section 208 of the Clean Water Act • 501(c)(3)'s and National Estuary Programs	SOLICITATION OPEN	Complete and submit an application online through the Financial Assistance Application Submittal Tool (FAAST) at https://faast.waterboards.ca.gov	The application is also available on the CWSRF website at: https://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/

WATEREUSE CALIFORNIA

Local, State and Federal Funding Opportunities (1) FEBRUARY 2024

PROGRAM	Total allocation	Funding available this Round	Purpose	Eligible Projects	Status	Anticipated Timeline	Notes
SWRCB Division of Financial Assistance: Proposition 1 Groundwater Grant Program	Proposition 1 provided $900 million for a Groundwater Sustainability Program	Round 3 – Implementation Project only		Proposition 1 Groundwater Grant Program (Prop 1 GWGP) eligible projects must contribute to cleanup or prevention of contamination in the aquifer. However, Sections 4.5 and 4.6 of the Guidelines also allow for Prop 1 GWGP funds to be utilized for certain drinking water and wastewater projects serving disadvantaged communities (DAC)	SOLICITATION CLOSED	Applications are submitted using the Financial Assistance Application Submittal Tool (FAAST).	https://www.waterboards.ca.gov/water_issues/programs/grants_loans/proposition1/groundwater_sustainability.html
DWR Water Use Efficiency: CalConserve Revolving Fund (Proposition 1)	$10M	$10M	Sustainable funding source for urban water use efficiency projects.	Projects including but not limited to: • Dish/clothes washer upgrades • Water-saving plumbing fixtures • Hot-water recirculating pumps • Leak detection & repair • Landscape irrigation upgrades • Commercial, institutional, and industrial water efficiency	Solicitation Open. Proposals accepted through GRanTS application	Continuously	• $1.75 million is to be loaned out for water use efficiency upgrades • $5 million is to be loaned out for fixing expensive and difficult to repair customer leaks
DWR IRWM Grant Program Implementation Grant (Proposition 1, Round 2)	The Round 2 solicitation will make approx. $192 million (the remaining funds for Implementation grants) for awards	TBD	Projects and programs that support IRWM.	• Water reuse & recycling • Water conservation • Surface storage/GW recharge • Conjunctive use • Water conveyance • Watershed restoration and protection • SW resource management • Desalination • WQ improvements	SOLICITATION CLOSED		See link below for website: https://www.water.ca.gov/Work-With-Us/Grants-And-Loans/IRWM-Grant-Programs/Proposition-1

WATEREUSE CALIFORNIA

Local, State and Federal Funding Opportunities [1] FEBRUARY 2024

PROGRAM	Total allocation	Funding available this Round	Purpose	Eligible Projects	Status	Anticipated Timeline	Notes
DWR IRWM Grant Program Planning Grant (Proposition 1, Round 2)	$5M	TBD	Projects and programs that support IRWM.	Planning projects that accomplish: • Development of an IRWM plan that meets the IRWM Plan Standards • Compliance with recent legislation • Improvement of an existing IRWM plan.	SOLICITATION CLOSED		See link below for website: https://www.water.ca.gov/Work-With-Us/Grants-And-Loans/IRWM-Grant-Programs/Proposition-1
DWR IRWM Grant Program DAC Involvement (Proposition 1)	$51M statewide $9.8 M for LA Region	$9.8M for LA Region	Projects and programs that support IRWM.	Projects ensuring DAC involvement in IRWM planning efforts, including but not limited to eligible projects described in the Implementation Grant list.	Solicitations Continuously Open	SOLICITATION OPEN	
DWR 2022 Urban Community Drought Relief Funding	$200M for Urban Communities, $75M for Conservation for Urban Suppliers, and $75M for Turf Replacement. The same Budget Act also authorized $100 million for the Small Community Drought	$300M	These grants are intended to provide water to communities that face the loss or contamination of their water supplies, to address immediate impacts on human health and safety, to secure the future of California's water supply, and to protect fish and wildlife resources	Eligible project types include: • Projects that support immediate drought response • Projects that enhance local supply and climate resilience through source watershed improvements, consistent with Water Code section 108.5, that defines source watershed as infrastructure • Drought resilience planning • Water conservation activities, • Turf replacement with drought tolerant landscaping • Hauled water • Installation of temporary or permanent community water tanks • Bottled water	SOLICITATION CLOSED	Applications were due on 1/31/2023 electronically via GRanTS.	Final 2022 Urban Community Drought Relief GL/PSP (ca.gov)

PROGRAM	Total allocation	Funding available this Round	Purpose	Eligible Projects	Status	Anticipated Timeline	Notes
	Relief Program			• Water vending machines • Emergency water interties • New wells or rehabilitation of existing wells • Construction of permanent connection to adjacent water systems, RW projects that provide immediate relief to potable water supplies projects that support immediate drought response • Fish and wildlife rescue, protection, and relocation			
Integrated Climate Adaptation and Resiliency Program **Regional Resilience Grant Round 1** **Governor's Office of Planning and Research**	The Budget of Act of 2021 made $25 million available for this program.	Total available is $9.4M The funding range for planning projects is $150,000 - $650,000. The funding range for implement ation projects is $650,000 - $3M	RRGP funds two project types: planning and implementation. All projects must have a regional focus and support communities most vulnerable to climate change. needs	**Planning Grants** are for applicants who want to involve their community in studying and determining how to address climate risks in their region. Funds can be used to assess regional climate risks, create regional plans for resilience, prepare for implementation. **Implementation Grants** are for applicants who already know some of the steps they need to take to address the climate risks in their region. Funds can be used for physical projects or non-physical projects like programs or processes that reduce climate risk.	SOLICITATIONS - CLOSED	Phase 1 – Request for Full Application – RRGP Intent Survey were due on 8/29/2023 and Phase 2 – Full Application were due on 8/29/2023	RRGP contact (916) 720-4439 icarp.grants@opr.ca.gov Or Dolores Barajas Dolores.barajas@opr.ca.gov https://www.opr.ca.gov/climate/icarp/grants/regional-resilience-grant.html

Local, State and Federal Funding Opportunities [1] FEBRUARY 2024

PROGRAM TITLE	Description	Eligible Applicants	Federal/Non-Federal Cost Share	Current Status
WaterSMART Grants Drought Response Program **Drought Resiliency Projects**	Purpose: Funding for on-the-ground projects and modeling tools that will increase water reliability and improve water management.	**Category A Applicants:** States, Indian tribes, irrigation districts, water districts, or other organizations with water or power delivery authority. **Category B Applicants:** Nonprofit conservation organizations that are acting in partnership and with the agreement of an entity described above. Applicants must be located in the Western United States or United States Territories specifically: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming (the "Western United States").	Funding Group I: Up to $500,000 per agreement for smaller, on-the-ground projects that should be completed within 2 years. Funding Group II: Up to $2 million for projects to be completed within 3years; and beginning this year, up to $5 million for large projects to be completed within three years. Non-Federal Cost Share: 50% or greater.	A Funding Opportunity to allocate FY23 appropriations and Bipartisan Infrastructure Law funding has been posted on grants.gov. For more information: https://www.grants.gov/web/grants/view-opportunity.html?oppId=335035 **Closed on November 7, 2023**
WaterSMART Grants **Water and Energy Efficiency Grants**	Purpose: On-the-ground water management improvement projects, including projects that conserve water and address water supply reliability.	**Category A Applicants:** States, Indian tribes, irrigation districts, water districts, or other organizations with water or power delivery authority. **Category B Applicants:** Nonprofit conservation organizations that are acting in partnership and with the agreement of an entity described above. Applicants must be located in the Western United States or United States Territories specifically: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming (the "Western United States"), and American Samoa, Guam, the Northern Mariana Islands, the Virgin Islands, and Puerto Rico ("Territories") (collectively "Western United States or Territories").	Funding Group I: Up to $500,000 per agreement for smaller, on-the-ground projects that should be completed within 2 years. Funding Group II: Up to $2 million for projects to be completed within 3years; and beginning this year, up to $5 million for large projects to be completed within three years. Non-Federal Cost Share: 50% or greater.	FY23 selections were announced on April 21, 2023. 84 projects were selected to receive $140 million in federal funding, including Bipartisan Infrastructure Law funding. The FY24 Funding Opportunity is anticipated in mid-November 2023. For more information: https://www.grants.gov/web/grants/view-opportunity.html?oppId=335103 **Closed on July 27, 2022.**

Local, State and Federal Funding Opportunities [1] FEBRUARY 2024

PROGRAM TITLE	Description	Eligible Applicants	Federal/Non-Federal Cost Share	Current Status
WaterSMART Grants **Small-Scale Water Efficiency Projects**	Purpose: To support small water efficiency improvements that have been identified through previous planning efforts.	**Category A Applicants:** States, Indian tribes, irrigation districts, water districts, or other organizations with water or power delivery authority. **Category B Applicants:** Nonprofit conservation organizations that are acting in partnership and with the agreement of an entity described above. Applicants must be located in the Western United States or United States Territories specifically: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming (the "Western United States"),	Up to $100,000 for projects to be completed within two years. Total project costs should generally be less than $225,000. Non-Federal Cost Share: 50% or greater.	FY22 selections were announced on January 5, 2023. 82 projects were selected to receive $7 million in Bipartisan Infrastructure Law funding. The FY24/25 Funding Opportunity was posted November 2, 2023. **The first round for FY24 funding closed on January 16, 2024.**
WaterSMART Grants – FY 2023 **Water Strategy Grants**	Purpose: Planning activities to develop water marketing strategies that establish or expand water markets or water marketing activities between willing participants.	**Category A Applicants:** States, Indian tribes, irrigation districts, water districts, or other organizations with water or power delivery authority. **Category B Applicants:** Nonprofit conservation organizations that are acting in partnership and with the agreement of an entity described above. Applicants must be located in the Western United States or United States Territories specifically: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming (the "Western United States"), and American Samoa, Guam, the Northern Mariana Islands, the Virgin Islands, and Puerto Rico ("Territories") (collectively "Western United States or Territories").	Up to $200,000 for projects to be completed within two years; or up to $400,000 for projects to be completed within three years. Non-Federal Cost Share: 50% or greater.	The FY23 Planning and Design Grants funding opportunity was announced August 7, 2023 **Closed on October 17, 2023.**

Local, State and Federal Funding Opportunities [1] FEBRUARY 2024

PROGRAM TITLE	Description	Eligible Applicants	Federal/Non-Federal Cost Share	Current Status
WaterSMART Grants – FY 2023 **Environmental Water Resources Projects**	Purpose: Eligible projects under this funding opportunity include Environmental Water Resources Projects, including water conservation and efficiency projects that result in quantifiable and sustained water savings and benefit ecological values or watershed health, water management or infrastructure improvements to benefit ecological values or watershed health, and restoration projects benefitting ecological values or watershed health that have a nexus to water resources or water resources management.	**Category A Applicants:** States, Indian tribes, irrigation districts, water districts, or other organizations with water or power delivery authority. **Category B Applicants:** Nonprofit conservation organizations that are acting in partnership and with the agreement of an entity described above. Applicants must be located in the Western United States or United States Territories specifically: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming (the "Western United States"), and American Samoa, Guam, the Northern Mariana Islands, the Virgin Islands, and Puerto Rico ("Territories") (collectively "Western United States or Territories").	Reclamation will provide Federal financial assistance of up to $3 million in Federal funding for projects with a total project cost of $6 million or less that can be completed in three years. Applicants can receive 75% Federal cost-share if the application demonstrates that the project increases water supply reliability for ecological values, was developed as part of a collaborative process, and the project benefits will advance an established strategy or plan to increase the reliability of water supply for consumptive and non-consumptive ecological values.	The FY23 funding opportunity closed April 5, 2023, and applications are currently under review. Selections are expected November 2023. **The FY24 Funding Opportunity is anticipated late February or early March 2024.** For more information: https://www.usbr.gov/watersmart/ewrp/index.html
WaterSMART Grants – FY 2023 **Applied Science Grants**	**Phase I** Projects to develop hydrologic information and water management tools and to improve modeling and forecasting capabilities.	States, Indian tribes, local and special districts (e.g., irrigation and water districts), local governmental entities, and non-profit organizations that are located in the Western United States or Territories.	Up to #1.5 million was available in FY 2022. Up to $200,000 per agreement for a project that can be completed within 2 years. Non-Federal Cost Share: 50% or greater	The FY23 Funding Opportunity was posted June 28, 2023. Applications received by October 17, 2023 are currently under review. Selections are expected mid-March 2024.

Local, State and Federal Funding Opportunities (1) FEBRUARY 2024

PROGRAM TITLE	Description	Eligible Applicants	Federal/Non-Federal Cost Share	Current Status
WaterSMART Grants FY 2023/24 **Cooperative Watershed Management Program – Phase I**	**Phase I** Watershed group development, watershed restoration planning, and watershed management project design.	States, Indian tribes, local and special districts (e.g., irrigation and water districts), local governmental entities, and non-profit organizations that are located in the Western United States or Territories.	Up to $200,000 may be awarded to an applicant per year, for a period of up to two years. Non-Federal Cost Share: No non-Federal cost-share required.	The FY23/24 Cooperative Watershed Management Program Phase I funding opportunity posted August 7, 2023. First round closed on December 5, 2023. **Second round of applications are due by September 4, 2024.**
WaterSMART Grants – FY 2023 **Desalination and Water Purification Research Program**	Laboratory-scale and pilot-scale research projects to increase water supplies by reducing the cost, energy consumption, and environmental impacts of treating impaired or otherwise unusable waters.	States, Indian tribes, local and special districts (e.g., irrigation and water districts), local governmental entities, and non-profit organizations that are located in the Western United States or Territories. Universities, private industry, water utilities, and other research sponsors may submit proposals.	Up to $2 million is available. Laboratory-scale projects are eligible for up to $250,000 in funding over two years. Pilot-scale projects are eligible for up to $800,000 in funding over three years.	To view this funding opportunity, please visit www.grants.gov and search for funding opportunity number R23AS00390. **Closed on November 15, 2023.**
WaterSMART Grants – FY 2024 **Small Storage Program**	The upcoming funding opportunity supports the implementation of small surface storage, groundwater storage, and conveyance projects that will enhance water storage opportunities.	Through this funding opportunity, Reclamation will provide financial assistance for projects that, when implemented, will increase water supply reliability, improve operational flexibility, and enhance climate resiliency of water and related infrastructure throughout the 17 western states, Alaska, and Hawaii.	The Federal cost share for small surface water and groundwater storage projects are limited by law to not more than 25 percent of the total. cost of planning, design, and construction and to not exceed $20 million.	The Fiscal Year 2024 Small Storage Program funding opportunity opened on September 18, 2023. **Reclamation continues to accept feasibility study submissions at any time from eligible non-Federal entities.**

Local, State and Federal Funding Opportunities [1] FEBRUARY 2024

PROGRAM TITLE	Description	Eligible Applicants	Federal/Non-Federal Cost Share	Current Status
WaterSMART Grants – FY 2023 and FY 2024 **Water Conservation Field Services Program**	The Water Conservation Field Services Program (WCFSP) was established by Reclamation in 1996 to proactively encourage water conservation in the operations of recipients of water from Federal water projects and to assist agricultural and urban water districts in preparing and implementing water conservation plans in accordance with the Reclamation Reform Act of 1982.	The WCFSP is managed by each of Reclamation's regional offices and implemented at the local level through Reclamation's area offices to address Reclamation-wide water conservation priorities and to meet local goals. Funding is used to make cost-shared financial assistance available on a competitive basis at the area and regional office levels, as well as for technical assistance from Reclamation staff. Funding may be used to develop water conservation plans, identify water management improvements through System Optimization Reviews, design water management improvements, and to improve application of water conservation technologies through demonstration activities.	The Federal cost share is 50 percent of the total cost and up to $100,000 per entity.	For more information regarding the Water Conservation Field Services Program, please contact Sheri Looper at 303-445-2232 or slooper@usbr.gov. Or you may contact your regional contact: Columbia-Pacific Northwest: Leah Meeks, (208) 378-5025, lmeeks@usbr.gov Lower Colorado Basin: Ken Isakson, (702) 293-8537, kisakson@usbr.gov Missouri Basin: Denis Kelsch, (406)247-7664, dkelsch@usbr.gov Upper Colorado Basin: Gary McRae, (801) 524-3656, gmcrae@usbr.gov **2nd Closing Date was June 1, 2023 for FY 2023 proposal** **Closed on October 13, 2023 for FY 2023 proposals**

Local, State and Federal Funding Opportunities [1] FEBRUARY 2024

PROGRAM TITLE	Description	Eligible Applicants	Federal/Non-Federal Cost Share	Current Status
Planning and Project Design Grants Approximately $35 million in available program funds, including BIL funding (including funding for Section 40904 Multi-Benefit Projects To Improve Watershed Health) will be provided through this Funding Opportunity.	Collaborative planning and design projects to support water management improvements, include the following activities: Water Strategy Grants (WSG):Planning projects to support water management solutions, such as water marketing, water conservation, drought resilience, and ecological resilience Project Design Grants (PDG):Projects to develop the final design of on-the-ground water management construction and restoration projects. Drought Contingency Planning (DCP):Projects to develop a new or update an existing Drought Contingency Plan.	Category A Applicants: States, Indian tribes, irrigation districts, water districts, or other organizations with water or power delivery authority. Category B Applicants: Nonprofit conservation organizations that are acting in partnership and an entity described above. Applicants must be located in the 17 Western States, Alaska, Hawaii, American Samoa, Guam, the Northern Mariana Islands, the Virgin Islands, or Puerto Rico. Note: Drought Contingency Planning funding is limited to Category A and applicants located in the 17 Western States, Hawaii, American Samoa, Guam, the Northern Mariana Islands, or the Virgin Islands.	Up to $400,000 for projects that can be completed within 3 years. Non-Federal Cost Share: 25 - 50%	The FY23 Funding Opportunity was posted August 7, 2023. The first round of applications were due October 17, 2023 and are currently under review. Selections are expected March 2024. **The second round of applications are due April 4, 2024.**

Local, State and Federal Funding Opportunities [1] FEBRUARY 2024

PROGRAM TITLE	Description	Eligible Applicants	Federal/Non-Federal Cost Share	Current Status
Title XVI Water Recycling and Desalination Planning	The objective of this NOFO is to invite eligible applicants to leverage their funds and resources by cost sharing with Reclamation on the following activities: • The development of new water recycling and desalination feasibility studies. • Planning and preliminary design activities for water recycling or desalination construction projects. • Environmental compliance activities for water recycling or desalination construction projects	**Funding Group I:** States, Indian Tribes, irrigation districts, and water districts; and any state, regional, or local authority. All applicants must be located in the Western United States or United States Territories as identified in the Reclamation Act of June 17, 1902, as amended or Hawaii. **Funding Group II:** States, Indian Tribes, municipalities, irrigation districts, water districts, wastewater districts; and any state, regional, or local organization with water or power delivery authority. All applicants must be located in the Western United States or United States Territories as identified in the Reclamation Act of June 17, 1902, as amended.	Funding Group I applicants may request up to $1 million in federal funding for projects with an anticipated total project cost of less than $500 million. Funding Group II applicants may request up to $5 million in federal funding for projects with an anticipated total project cost of greater than $500 million. Applicants may request reimbursement for work that can be completed within two years. Federal cost-share is limited to 50% of total costs for projects under Funding Group I and 25% of total costs for projects under Funding Group II.	FY23 Funding Opportunity selections were announced on September 27, 2023. 31 projects were selected to receive $29 million in appropriated funds To view this funding opportunity, please visit www.grants.gov and search for funding opportunity number R23AS00076.
Title XVI Congressionally Authorized Projects – FY 2023 and 2024	Funding for planning, design, and construction of specific congressionally authorized water recycling and reuse projects	Sponsors of water reclamation and reuse projects specifically authorized for funding under Title XVI of P.L. 102-575.	Typically, between $1 million and $6 million per applicant. Non-Federal Cost Share: 75% or greater.	The FY 23 and FY 24 Funding Opportunity was posted September 28, 2023. First round closed on December 7, 2023. **Second round of applications are due by September 30, 2024.**

Local, State and Federal Funding Opportunities [1] FEBRUARY 2024

PROGRAM TITLE	Description	Eligible Applicants	Federal/Non-Federal Cost Share	Current Status
Title XVI WIIN Act Water Reclamation and Reuse Projects – FY 2023 and 2024	Funding for planning, design, and construction of WIIN Act water recycling and reuse projects	Sponsors of water reclamation and reuse projects with completed feasibility studies that have been submitted to Reclamation for review.	Typically, between $1 million and $6 million per applicant. Non-Federal Cost Share: 75% or greater.	The FY 23 and FY 24 Funding Opportunity was posted September 28, 2023. First round closed on December 7, 2023. **Second round of applications are due by September 30, 2024.**
USBR Large-Scale Water Recycling Projects - FY 2023 and 2024	As part of the implementation of the new Large-Scale Water Recycling Program, Reclamation has identified four stages of project development: planning; 30% design; 100% design; and construction. As each project proposed for funding progresses through those stages, Reclamation will work with the project sponsor to gather and review updated information to ensure that the project meets all statutory and programmatic requirements.	Applicants eligible to receive financial assistance to fund activities under this NOFO include: • States, Indian Tribes, municipalities, irrigation districts, water districts, wastewater districts; and any state, regional, or other organization with water or power delivery authority, • State, regional, or local authorities, the members of which include one or more organizations with water or power delivery authority; and • An agency established under State law for the joint exercise of powers, or a combination of entities described above. All applicants must be located in the Western United States; specifically: Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming.	Up to $180 Million. Federal Funding Amount is based on max 25 percent of the total cost of planning, design, and construction completed after the date of Reclamation's feasibility study review findings within three years of the application's submittal period deadline. Non-Federal Cost Share: 75% or greater.	R23AS00433 Rolling NOFO will have three submission periods: First round closed on November 21, 2023; **Second round of applications are due March 29, 2024;** **Final round of applications are due September 30, 2024.**

Local, State and Federal Funding Opportunities (1) FEBRUARY 2024

PROGRAM TITLE	Description	Eligible Applicants	Federal/Non-Federal Cost Share	Current Status
WaterSMART Desalination Construction Projects Under the WIIN Act - FY 2023 and 2024	The objective of this Notice of Funding Opportunity (NOFO) is to invite sponsors of eligible seawater and brackish water desalination projects to request cost-shared funding for planning, design, and/or construction of those projects. The NOFO is issued under the authority of the Water Desalination Act of 1996, Public Law (P.L.) 104-298, as amended by section 4009(a) of Title II, Subtitle J of the Water Infrastructure Improvements for the Nation (WIIN) Act, P.L. 114-322.The DOI WaterSMART (Sustain and Manage America's Resources for Tomorrow) Program provides a framework for Federal leadership and assistance to stretch and secure water supplies for future generations in support of the Department's priorities.	Sponsors of seawater or brackish water desalination projects eligible to receive financial assistance to fund activities under this NOFO include state or local sponsors, which may include but is not limited to: • States, Indian Tribes, municipalities, irrigation districts, water districts, wastewater districts; and any state, regional, or other organization with water or power delivery authority, • State, regional, or local authorities, the members of which include one or more organizations with water or power delivery authority; and • An agency established under State law for the joint exercise of powers, or a combination of entities described above. All applicants must be located in the Western United States; specifically: Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming.	Up to $30 Million. Federal Funding Amount is based on max 25 percent of the total cost of planning, design, and construction completed after the date of Reclamation's feasibility study review findings within three years of the application's submittal period deadline. Non-Federal Cost Share: 75% or greater.	This is a Rolling NOFO and will remain open until September 30, 2024, with two application submittal periods. Due date for applications: First Application Submittal Period due date was December 7, 2023. **First round of applications closed on December 7, 2023.** **Second and Final Application Submittal Period due date is September 30, 2024, 4:00 p.m. MDT.**

WATEREUSE CALIFORNIA

Local, State and Federal Funding Opportunities (1) FEBRUARY 2024

PROGRAM TITLE	Description	Eligible Applicants	Federal/Non-Federal Cost Share	Current Status
USEPA Water and Infrastructure Finance and Innovation Act (WIFIA) Program	Wastewater conveyance and treatment projects Drinking water treatment and distribution projects Enhanced energy efficiency projects at drinking water and wastewater facilities Desalination, aquifer recharge and water recycling projects	Local, state, tribal and federal government entities Partnerships and joint ventures Corporations and trusts CWSRF and DWSRF programs	$20M minimum project size for large communities $5M minimum project size for small communities (<25,000)	Funding available now 49%maximum portion of eligible project costs that WIFIA can fund EPA announces WIFIA funding availability and application process details in the Federal Register and on its website (www.epa.gov/wifia) NEPA, Davis-Bacon, American Iron and Steel and all federal crosscutter provisions apply. Includes acquisition of property if it is integral to the project or will mitigate the environ. impact of a project.

(1) The Summary of Funding Opportunities for local, State and Federal is not an exhaustive recycled water opportunities and welcome any input from the WateReuse membership to add additional opportunities from other organizations.

Upcoming Conferences, Webcasts & Meetings

- **2024 WateReuse Symposium** | March 10 - 13| Denver
- **2024 WateReuse Arizona Symposium** | July 28 - 30| Flagstaff
- **2024 WateReuse California Conference** | September 15 - 17| Garden Grove
- **2024 Industrial & Commercial Water Reuse Conference** | November 19 - 21| Indian Wells

Upcoming OC Chapter Meetings:

- April – TBD
- June – TBD
- August – TBD

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

WATEREUSE ORANGE COUNTY

2024 WateReuse California Conference Update

- September 15-17
- Garden Grove: Hyatt Regency Orange County
- Initial Planning is confirmed for Wednesday, 2/21
- Site visit to Hyatt to be scheduled

Interested in helping?

Contact

Scott Lynch: SLynch@JCSD.US

Kraig Erickson: kerickson@woodardcurran.com

Hannah Ford: hford@etwd.com

- Other Announcements
  - Meeting hosts for 2024
  - Email Kraig Erickson: kerickson@woodardcurran.com
- Discussion Items
- Roundtable: What's going on?

THANK YOU

Meeting Adjourned