

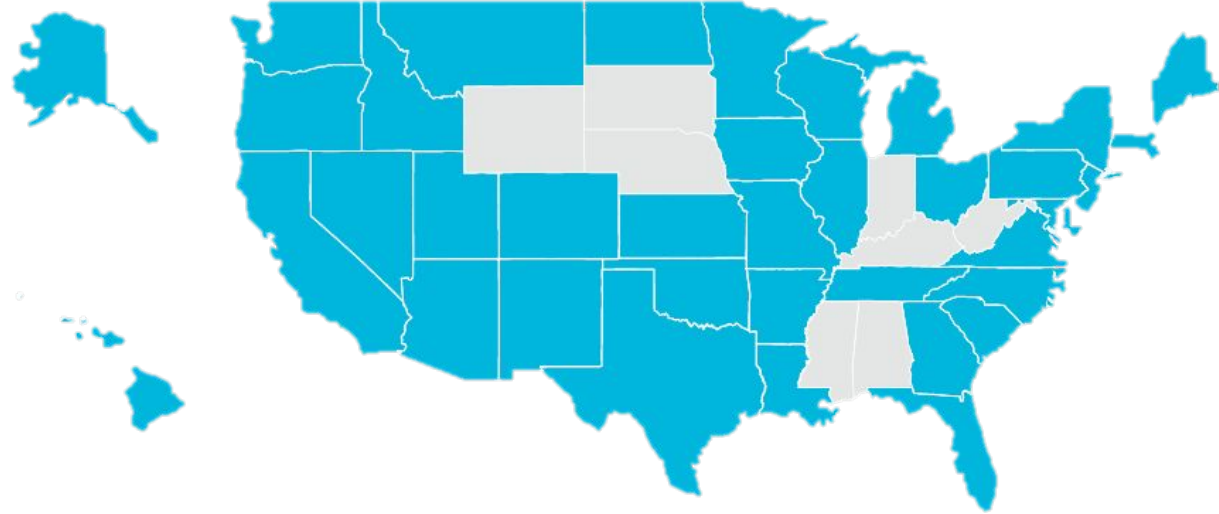


*Pivotal Point
for Water
Reuse: Trends
and
Opportunities*

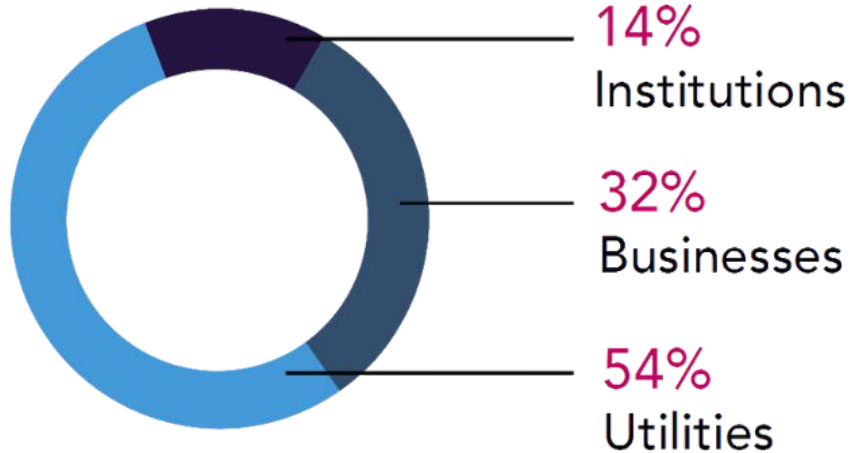
Brenley McKenna
Managing Director,
WaterReuse California

WaterReuse Association

- WaterReuse members in 38 states, operating across all 50 states



WaterReuse MEMBERS



WaterReuse Association has California Roots:



In 1990, the WaterReuse Association (WRA) was established in California:

With the goal of advancing laws, policy, and funding to increase water reuse



WaterReuse California is part of WRA as a state section



WRCA works with over 220 water related organizations within California

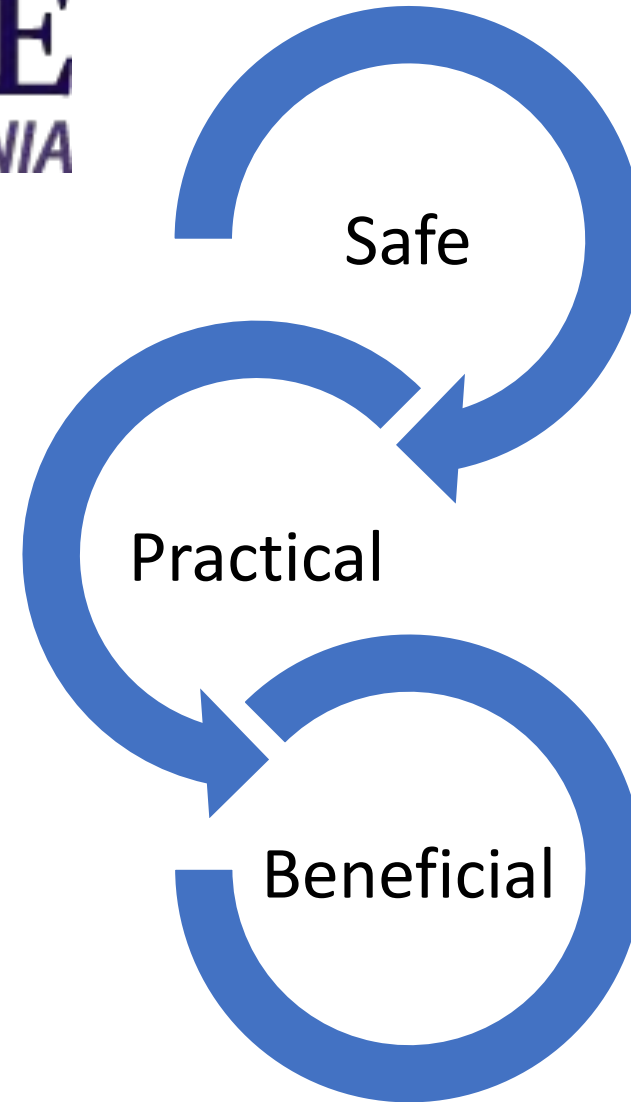


WATER REUSE

CALIFORNIA

A Vision for the Future:

To advance water recycling as the cornerstone of a climate-resilient, new water supply for California.



Water Reuse in the News:

LOCAL NEWS

Could recycled water be the answer to California's future droughts?

When conserving water isn't enough, water engineers are looking to reuse water we already have.



Author: Carley Gomez (ABC10)
Published: 7:18 PM PDT April 4, 2024
Updated: 7:18 PM PDT April 4, 2024



'Average is awesome': California pleased with result of critical snowpack survey

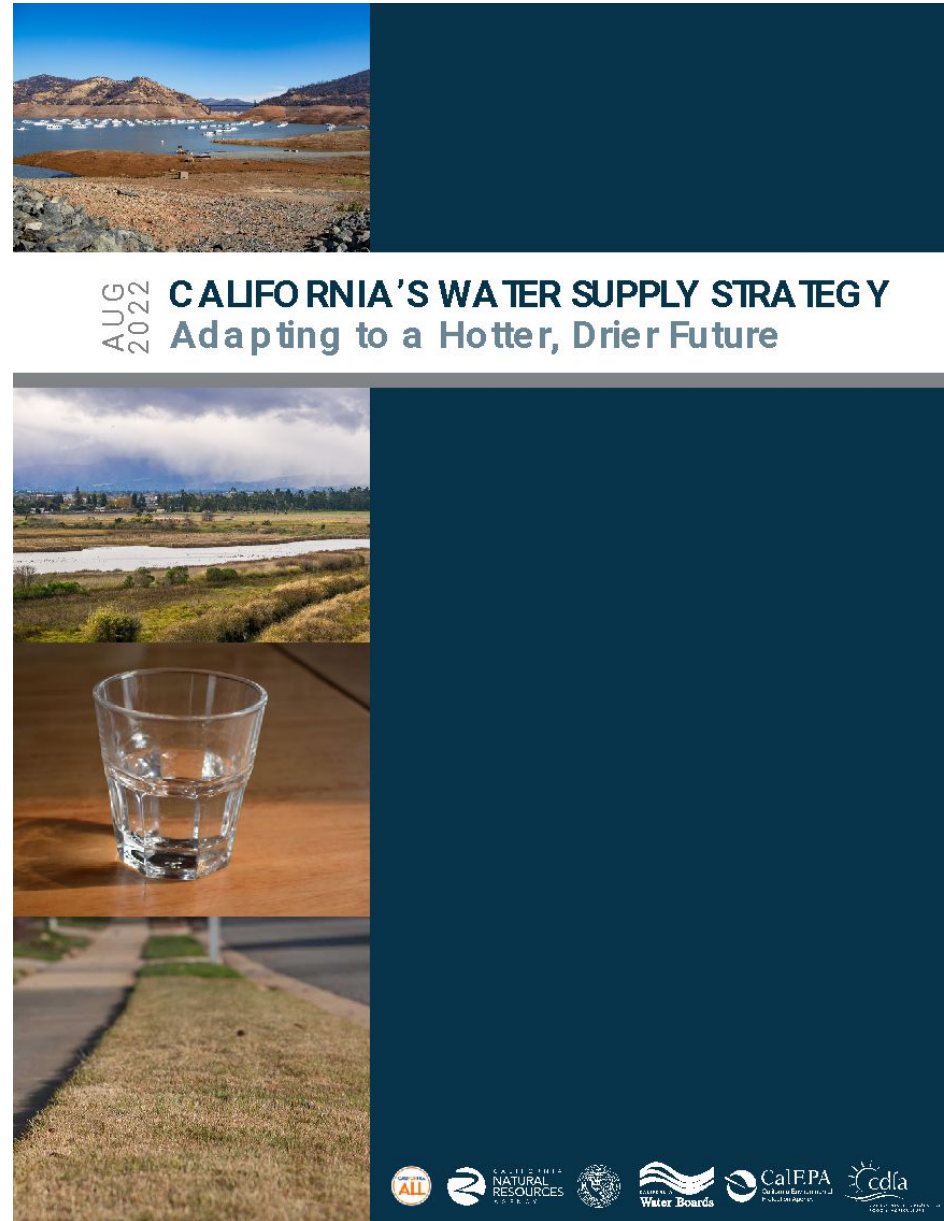
After years of swinging extremes, state snowpack is at rare average of 110%, setting up good water savings account for year ahead



📷 The snowpack supplies roughly 30% of California's water as it melts. Photograph: Tayfun Coskun/Anadolu via Getty Images

Recycled Water Key Strategy

- Sets new recycled water goals
- Recognizes need for more state and federal funding
- Created of recycled water “Strike team” to resolve permitting issues
- Essential DPR Regulations by 2023



California Goals for Reuse Water

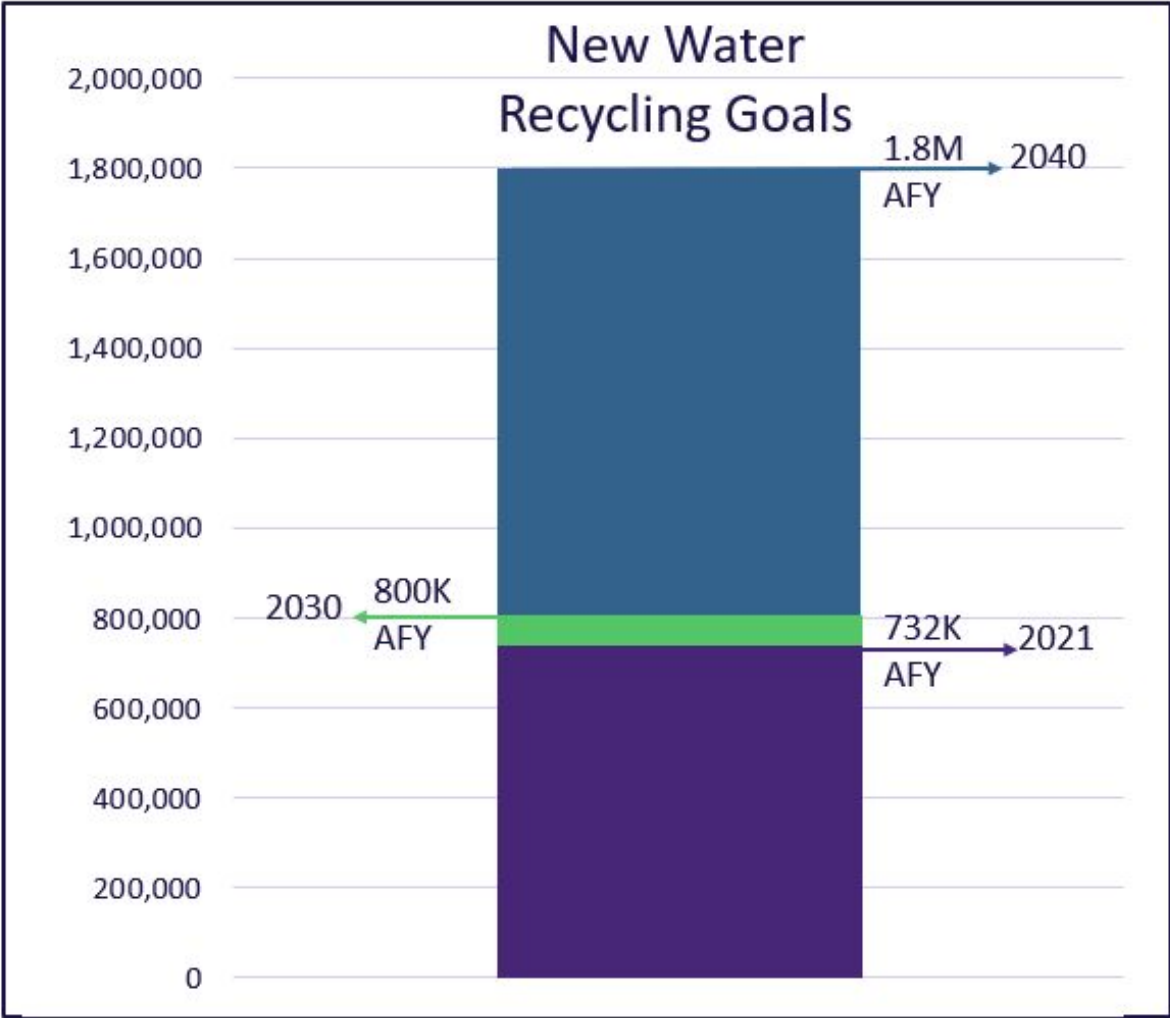


CALIFORNIA'S WATER SUPPLY STRATEGY

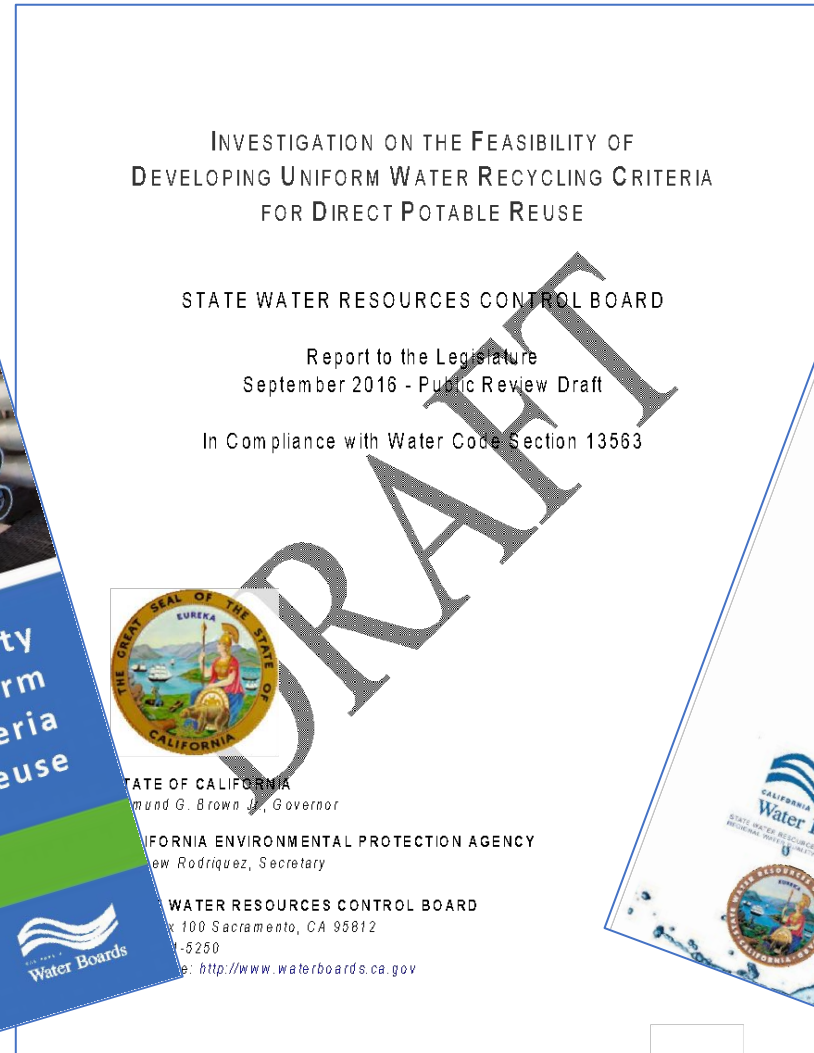
Adapting to a Hotter, Drier Future

New Goals for Recycled Water

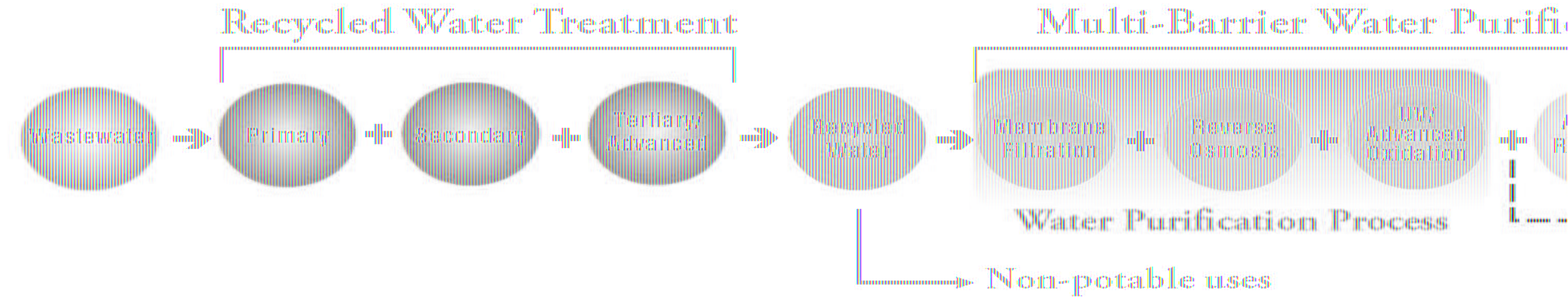
- 800,000 AFY by 2030
- 1.8 MAF by 2040

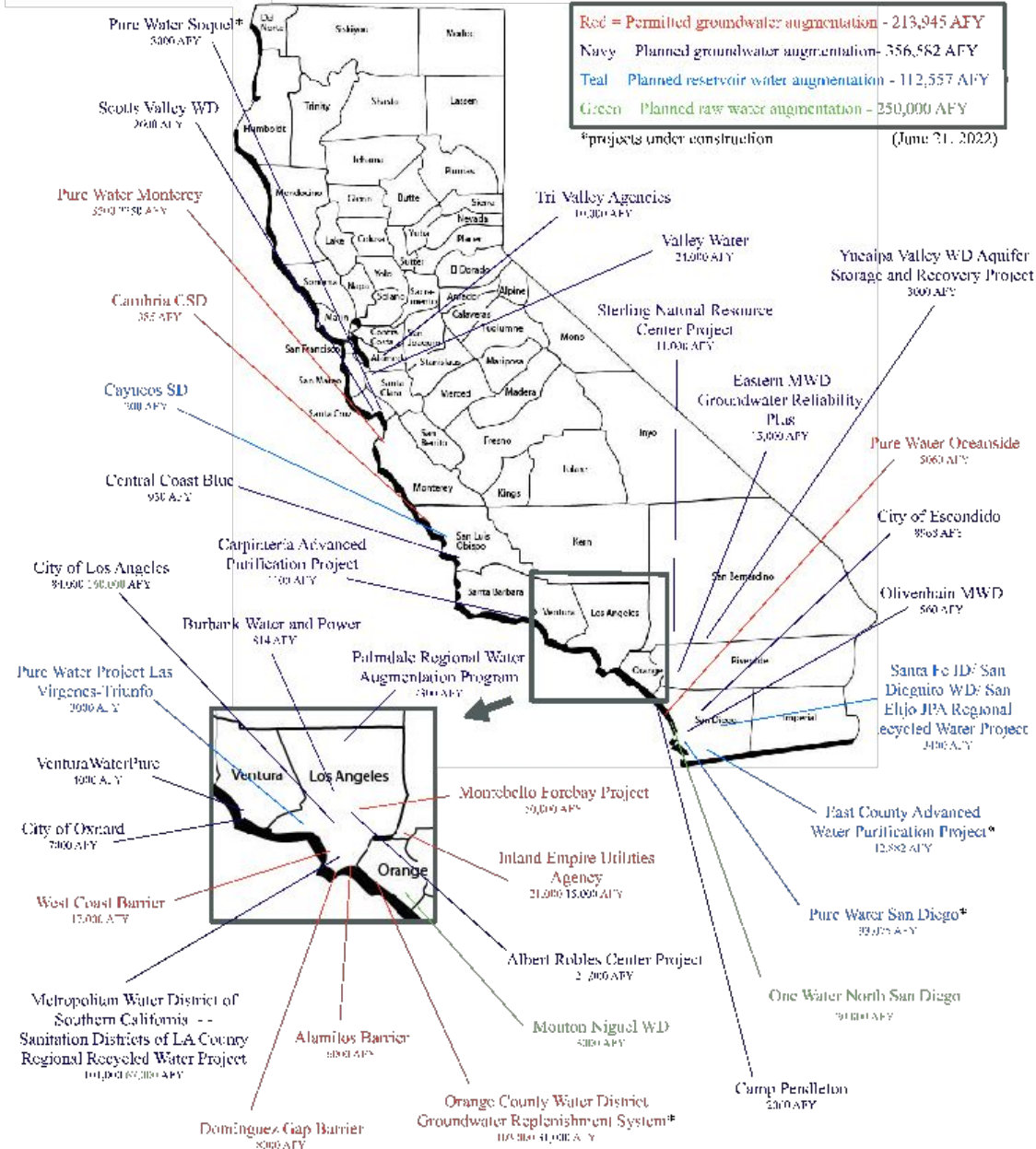


Regulations Based on Frameworks

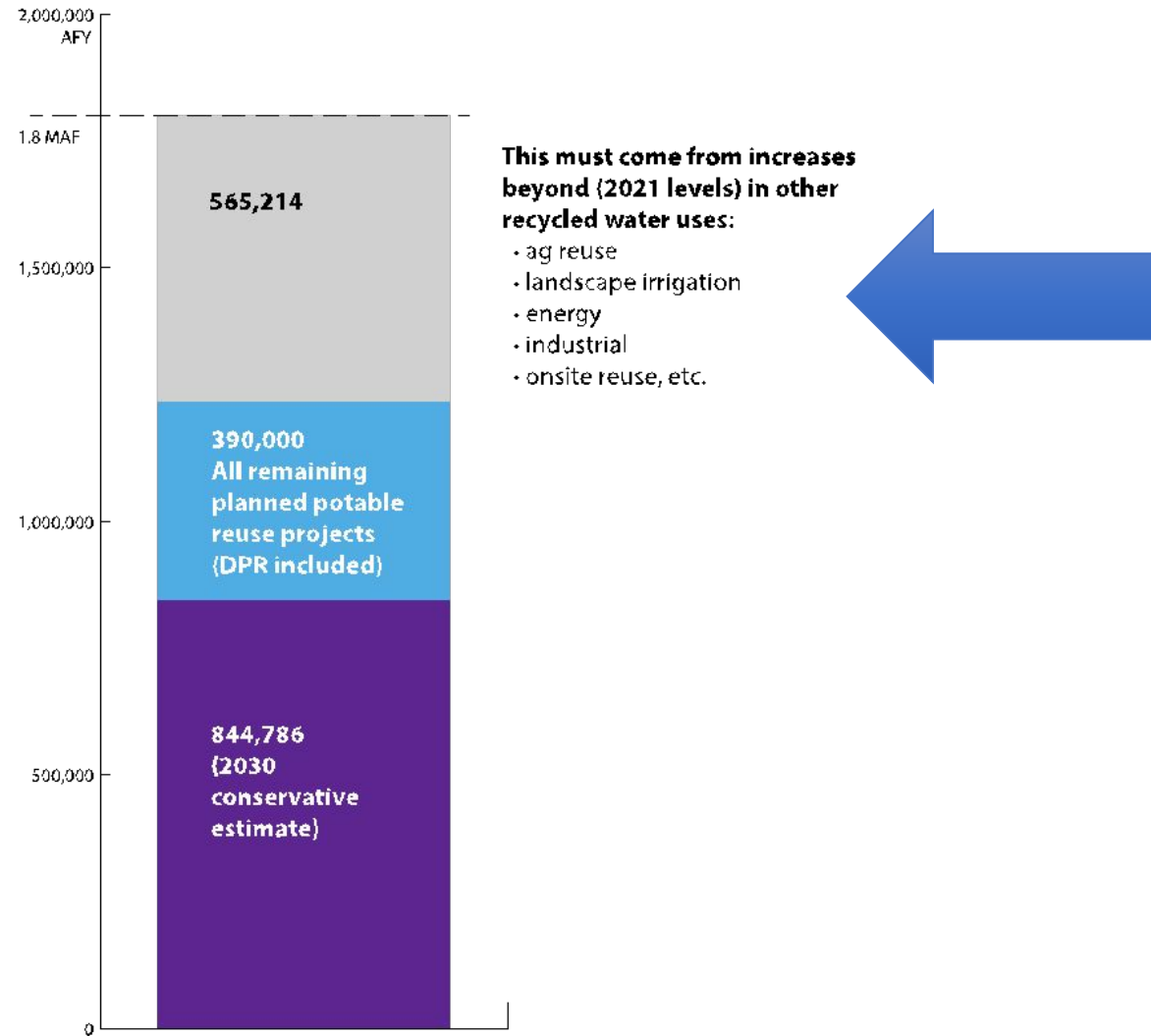


The Technology Works – We know it's possible to purify wastewater





Meeting the 2040 1.8 MAF Goal



Growing Environmental Uses of Recycled Water Not Included in Statewide Totals

- **256,000 AF in 2021** for in-stream flows, natural systems, wetlands
- Need to be included in statewide RW totals or at least co-reported



Trends in Water Reuse

Collaboration, Community, & Communication



PureWater SF

Innovative Research Exploring the Possibilities for Purified Water



PUREWater Soquel

Water Transformed



Pure Water Monterey

A Groundwater Replenishment Project

PURE WATER

SOUTHERN
CALIFORNIA

Pure Water PENINSULA

Our Water | Our Future



Pure Water San Diego



pure water ceanside



NBWA 2024

Pure Water San Diego

- Provide 40% of the City of San Diego's water supply by the end of 2035. Phased multi-year project.
- Drivers: Reduce reliance of imported water supply – water security, local control.
- Reservoir Augmentation with purified recycled water



Pure Water Southern California



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA



LOS ANGELES COUNTY
SANITATION DISTRICTS
Converting Waste Into Resources



Our Water, Our Future

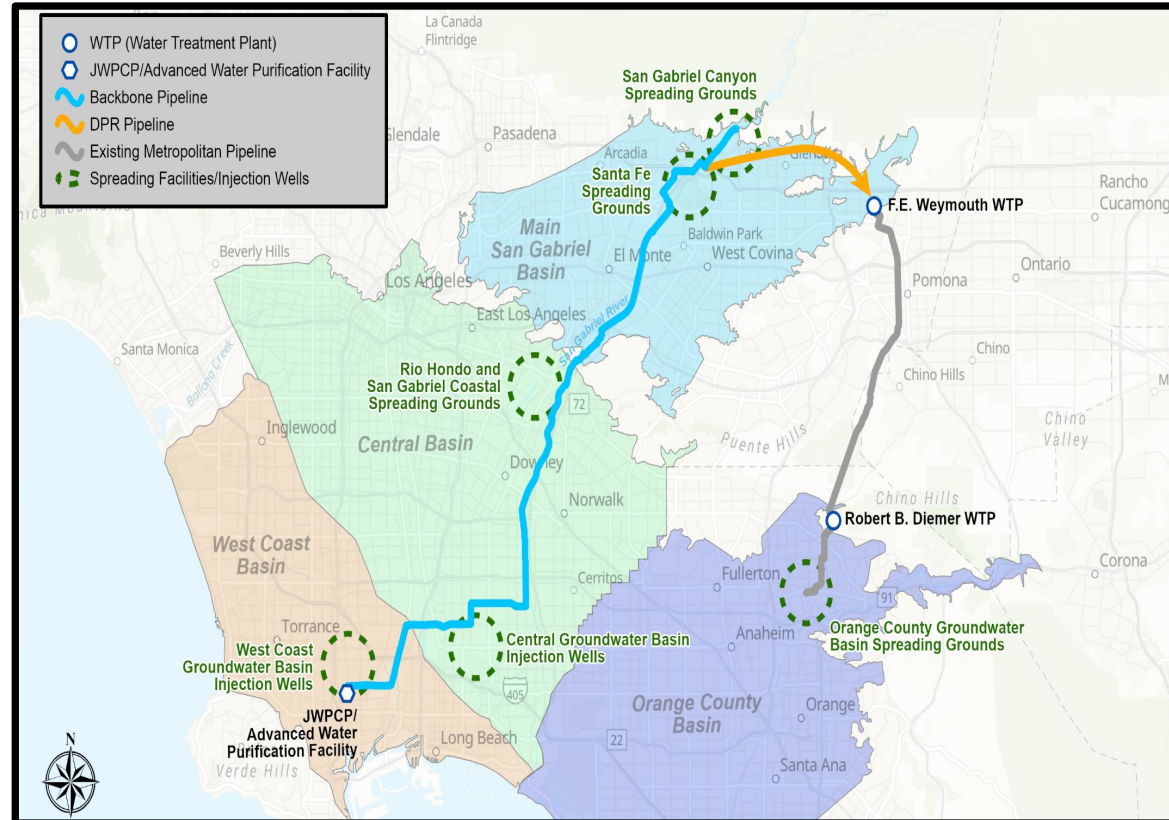


Up to 150 million gallons per day



Enough water for over 1.5 million people

- Regional Water Reuse Program
- Climate Resistant Supply
- Program Partnerships
- Advanced Water Purification facility
 - Demonstration Plant, DPR testing
- Hybrid & Phased Reuse
 - IPR/DPR (RWA)
 - Explore TWA -future approach



AUGUST 2023

Pure Water Southern California
Demonstration Facility

Nitrifying-Only Tertiary MBR Testing
Final Draft Report

S. Cal Regional Recycled Water Program

- Partnership Metropolitan Water District of S. Cal. and LA County Sanitation Districts.
- The Advanced Purification Center is demonstration facility that will generate information needed for the potential future construction of a full-scale recycled water plant.
- A full-scale regional recycled water program would produce up to 150 million gallons daily, enough to serve more than 500,000 homes.



Albert Robles Center (ARC): The latest & most advanced

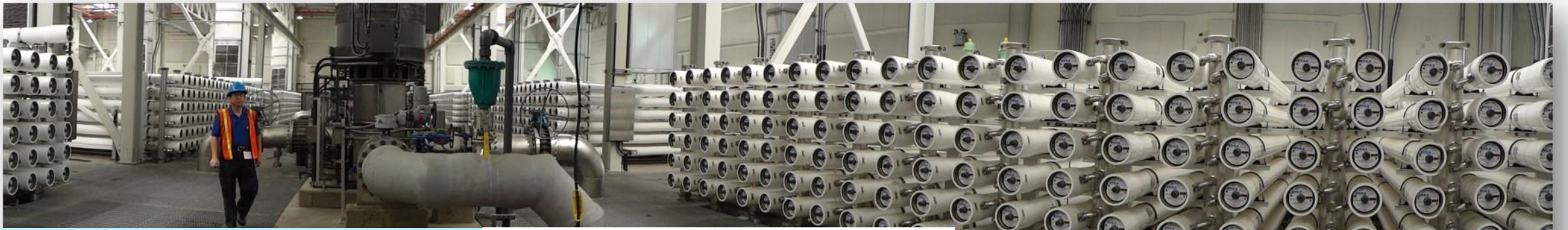


The ARC Facility includes three components



Media visits and showing the future: A kitchen faucet brings new water





THE FUTURE OF WATER IS HERE

Pure Water Monterey
A Groundwater Replenishment Project

NBWA 2024

PUREWater Soquel
Water Transformed



Cheers to the **Future!**
safe, reliable, sustainable

Pure Water San Diego

Safe
What is the Advanced Water Purification Process?

- Microfiltration (MF)** Water moves through a porous filter that traps particles as small as 100 microns. This filter is 100% effective at removing all of human fecal. These filters allow water to pass through while maintaining quality, taste and appearance, and the kidney disease.
- Reverse Osmosis (RO)** Contaminants like metals, nitrates and chemicals are rejected by this barrier. Concentrated light and medium weight ions are rejected, leaving only water and adding health, in responsible for destroying these level chemicals and pharmaceuticals should they remain after reverse osmosis.
- Ultraviolet Light (UV) & Advanced Oxidation Process (AOP)** Concentrated light and oxidation species further sanitizes and adding health, in responsible for destroying these level chemicals and pharmaceuticals should they remain after reverse osmosis.

the WATER that will never be, is **LIGHT NOW**

SOQUEL CREEK WATER DISTRICT



SAVE THE DATE

September 15-17

Abstracts Due June 10

Questions?



Connect with WaterReuse California

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