



Research Update 2023

OC SAN – Board of Directors
Wednesday, September 27, 2023

Topics

Institutional Overview

Academic Research Fellowships

30th Athalie Richardson Irvine Clarke Prize

Independent Advisory Panels

Uniform Criteria for Direct Potable Reuse

Questions

Institutional Overview

Founded 1991

Joint Powers Agency, 6 Member Agencies:

Orange County Water District

Orange County Sanitation

Inland Empire Utilities Agency

Irvine Ranch Water District

Los Angeles Department of Water & Power

Metropolitan Water District of Southern California

501(c)(3) NonProfit



Research Fellowships

Masters, Doctoral, and Post-Doctoral Students

Research of substantial interest to NWRI, Members & Partners

Academic Year 2023/24 Fellows:

Alma Bartholow, NWRI Fellow, UC Berkeley

Emma Payne, NWRI Fellow, CU Boulder

Kieran Fung, NWRI/AMTA Fellow, CU Boulder

Aron Griffin, NWRI/AMTA Fellow, Colorado Mines

Jishan Wu, NWRI/SCSC Fellow, UCLA



30th Annual Clarke Prize

Demonstrated Excellence in Water Science and Technology

Charles Driscoll, Ph.D— Syracuse University

University Professor of Environmental Systems and Distinguished
Professor of Civil and Environmental Engineering

October 20, 2023— Future of the Clarke Prize

October 21, 2023— Award Ceremony, Beckman Center



NWRI Projects Nationwide

The nation's collaborative
resource for the advancement of
water resources science, policy,
and innovation.



Active Advisory Engagement	
1. Orange County Water District, Orange County, CA	GWRS Mid Basin Injection Project
2. Los Angeles Department of Water and Power, Los Angeles County, CA	Groundwater Replenishment Project
3. Metropolitan Water District of Southern California, Los Angeles County, CA	Pure Water SoCal
4. City of San Diego, San Diego County, CA	Pure Water San Diego
5. Valley Water, Santa Clara County, CA	Regional Recycled Water Program
6. Trussell Technologies, San Diego County, CA	East County Advanced Water Purification
7. Palmdale Water District, Los Angeles County, CA	Pure Water Antelope Valley
8. Palmdale Water District, Los Angeles County, CA	Brine Management Tech Evaluation
9. Truckee Meadows Water Authority, NV	One Water Nevada
10. Las Virgenes - Triunfo JPA, Los Angeles County, CA	Surface / Raw Water Augmentation
11. Division of Drinking Water, Sacramento County, CA	Regulatory Expert Panel on DPR
12. Anne Arundel County, MD	Our wAater Program
13. Carollo – City of Los Angeles Bureau of Sanitation & Environment – LADWP – West Basin, Los Angeles County, CA	Hyperion MBR Demonstration
14. City of South Jordan, UT	Pure Solo
15. US Bureau of Reclamation, CO	AI Fault Identification
16. National Alliance for Water Innovation, Alameda County, CA	AI Utility Advisory
17. JEA, Jacksonville, FL	Subsurface Injection Demonstration
18. CASA SCCWRP, Orange County, CA	Coupled OAH Model Peer Review
19. The Water Reuse Association, VA	California IPR Validation Standards
20. Southern California Salinity Coalition, Orange County, CA	Salinity Research Administration
21. City of Boise, Idaho	Regional Water Recycling Program
22. Garver— US Bureau of Reclamation and City of Norman, OK	Dynamic Reservoir Management

California DPR Regs

SB 918 (2010) and SB 322 (2013)

NWRI Expert Panel Finds Regulation of DPR Feasible (2016)

AB 574 (2017) Sets December 2023 Goal, Establishes Expert Panel

Research to Support Development of DPR Regulations (2019-21)

NWRI DPR Expert Panel (2020-23)

Administrative Process Underway

Public Hearing on September 7th

45-day Public Comment Period Ended September 8th

Final Panel Finding: Regulation is Protective of Public Health



Questions

Kevin M. Hardy
Executive Director
18700 Ward Street
Fountain Valley, CA 92708

khardy@nwri-usa.org

760.801.9111