

# FEBRUARY 2025

### CONSORTIUM UPDATES AND HIGHLIGHTS

- 2025 Membership Agreement
- Working Group Meetings for 2025
- New Consortium Documents
- NM Economic Development Produced Water Projects
- TORO National Produced Water Podcasts Next Podcast Thursday, February 20th
- Recent Consortium White Papers
- Treatment Testing Update
- Upcoming Meetings, Presentations, and Conferences

# 2025 MEMBERSHIP AGREEMENTS - ENROLL BY MARCH I

Membership Agreements are due by March 1. If you want to participate in a working group this year, you must be a Consortium member. You can easily sign up through the Consortium web site (<a href="https://nmpwrc.nmsu.edu/membership/membership.html">https://nmpwrc.nmsu.edu/membership/membership.html</a>), or email <a href="mapsu.edu">nmpwrc@nmsu.edu</a>. All industry partners and non-government participants will require a paid membership to be included on a working group.

Sponsors of the Consortium's research can include paid memberships for up to 7 individuals, depending on the level of sponsorship. For more details on research sponsorships please contact Cortney Chavez at <a href="mailto:nmpwrc@nmsu.edu">nmpwrc@nmsu.edu</a>, or visit: <a href="https://nmpwrc.nmsu.edu/sponsorship.html">https://nmpwrc.nmsu.edu/sponsorship.html</a>

# 2025 WORKING GROUP MEETINGS

In 2025, the Consortium will continue with monthly Working Group and Task Committee meetings for "Active" Consortium members. Active members are defined as those who are current with their membership agreement and membership dues. Additionally, for 2025, the Consortium has revised the Working Groups as follows:

- <u>Risk and Toxicology First Monday of the month 9-10:00 am MT</u>
  Coordinate technology treated water sampling, target and non-target analysis, toxicology testing and analysis, and fate and transport modeling and analysis efforts, and publication of both analysis and risk assessment results.
- <u>Technology Testing and Evaluation First Tues of the month 9-10:00 am MT</u>
  Coordinate treatment technology testing and demonstrations, schedules, site visits, and performance assessment and water quality sampling coordination. There was interest at the 2024 End of Year Meeting to include other technology evaluations such as real-time monitoring, etc.

- <u>Infrastructure Implementation and Engineering 1st Wed of the month 9:00 10:00 am MT</u> Coordinate with NMOGA, OCD, NMED, communities, and industry on assessing and developing strategies, engineering tools, training modules, and funding to support technology implementation and local economic development opportunities. This will be a combined group made up of the 2024 Infrastructure and PW Data Portal Working groups.
- <u>Public Education and Outreach First Thurs of the month 9:00 10:00 am MT</u>

  Expand public education and outreach efforts by improving web access to the public, adding more educational materials such as podcasts and video workshops, webinars, update workshop data, and expand in-person workshops.
- <u>State Coordinating Council Second Monday of the month 1:00 2:00 pm MT</u>
  Coordinate state produced water Consortium leads, and federal EPA and state regulatory agency representatives on coordination of NMPWRC efforts with other states, and development of coordinated research and implementation efforts on produced water treatment and reuse to support states and national trade and water reuse associations.

# **NEW CONSORTIUM DOCUMENTS**

The Consortium has developed several recent documents of interest, which can also be found at <a href="https://nmpwrc.nmsu.edu/index.html">https://nmpwrc.nmsu.edu/index.html</a>. They Include:

- Minutes and Summary of the 2024 Annual Meeting;
- 2025 Research Program Plan;
- 2024 Research Program Summary;
- White Paper on Training Needs and Operation Requirement Development for Produced Water Treatment Technology with the Pubic Ed and Implementation Work Groups;
- White Paper on industry directions on raw produced water quality data collection with the Data Portal and Public Ed Work Groups;
- Draft Techno-economic Analysis model for estimating treatment plant design and operation tradeoff costs with the Implementation and Engineering work group;
- White Paper on consideration of treated produced water requirements for irrigation in support of USEPA on regulatory framework west of the 98th meridian with the Risk and Tox, Technology Evaluation, and State Coordinating Council work groups;
- White Paper on the use of treated produced water by the BLM in western states to meet new priorities with the State Coordinating Council work group; and
- Publication of the peer-reviewed survey paper on public perception and acceptance of the use of treated produced water - with the Public Ed work group.

# NEW MEXICO ECONOMIC DEVELOPMENT DEPARTMENT PRODUCED WATER PROJECTS

In September 2024, the New Mexico Economic Development Department issued an RFP for water and energy projects capable of being implemented and operational by July 1, 2025. The Consortium provided Letters of Support for two funded projects focused on treating produced water. The first project, led by Sunvapor, utilizes a solar-based membrane distillation system, which will be installed and operated at an NGL site south of Loving. The second project, Undesert, will test a solar still at BGNDRF.

The Consortium is actively collaborating with both groups. A key focus with Sunvapor is developing standard operating procedures (SOPs), coordinating operator training, and engaging local colleges to support testing and operations. This initiative marks a significant step toward integrating workforce training into produced water treatment and reuse efforts.

# TORO PRODUCED WATER PODCAST SERIES

The Consortium's ongoing partnership with ConocoPhillips led to an invitation from TORO (the irrigation company) to collaborate on a podcast series focused on produced water treatment and reuse as part of their water stewardship initiative. TORO's Water Zone podcast is the world's #1-rated water podcast, attracting 70,000 live attendees and 200,000 downloads per episode.

These podcasts have been coordinated through the Public Education and Outreach Working Group, featuring Consortium members as key participants. So far, the Consortium has conducted four episodes with TORO, covering:

- An introduction to produced water
- A discussion with BoR and EPA WRAP on the emerging national interest in produced water reuse
- A conversation with local community leaders about their perspectives on produced water treatment and reuse
- An industry-focused episode on corporate interest and strategy for produced water reuse

The next TORO Water Zone podcast is scheduled for Thursday, February 20th, at 5 PM MT. Dr. Pei Xu, Consortium Director of Research, will present key findings on the relative risk and toxicology of treated produced water.

#### TREATMENT TECHNOLOGY TESTING UPDATE

Several new treatment technologies are scheduled for testing in the first quarter of 2025. StrongBox will begin testing at BGNDRF in mid to late February. Their system utilizes evaporation technology with a condenser system to recover steam for reuse.

In another innovative project, Kanalis has constructed a commercial greenhouse to evaluate the use of treated produced water for growing pine tree seedlings for reforestation. Operating under a non-discharge permit, the project will assess tree performance and constituent uptake compared to a control group. Lab studies at NM Highlands University have shown promising results, and this marks the first commercial application of treated produced water in New Mexico.

# **UPCOMING CONFERENCES AND PRESENTATIONS**

- Produced Water Society Feb 11-13, Houston
- Water Zone podcast Feb 20, 5 pm MT
- Multi-State Salinity Conference Feb 26-28, Las Vegas
- Permian Basin Energy Water Conference March 5-6, Midland
- Oil and Gas Industry Innovation and Emerging Technology Group March 20, Houston
- American Water Works Association Rocky Mountain Conf April 10-11, Albuquerque