

## CONSORTIUM UPDATES AND HIGHLIGHTS

- Upcoming Meetings and Events
- **Save the Date - Consortium Annual Meeting Dec 13-14 in Albuquerque**
- Summary of Summer 2023 Meetings and Presentations
- Update on NMED Produced Water regulation draft and comment periods
- Working Group Highlights to Date and through the Fall, including upcoming testing and evaluation field efforts

---

## UPCOMING MEETINGS AND PRESENTATIONS

- Texas Desal Annual Meeting - Sept. 27-28 El Paso (NMPWRC presentation)
- DOE Tribal Energy Conference - Oct. 2-3 Buffalo Thunder, Santa Fe
- NM Oil and Gas Assoc. Annual Meeting - Oct. 9-10 Santa Fe (NMPWRC presentation)
- Bureau of Reclamation WIN Workshop - Oct 24-25 Alamogordo NM at the Brackish Groundwater National Desalination Research Facility (NMPWRC presentation)
- NM Desal Annual Meeting - Oct 26 Albuquerque (NMPWRC panel)
- San Juan Energy Conference - Nov 1-2 Farmington
- **NM Produced Water Consortium Annual Meeting - Dec 13-14 Albuquerque**

---

## SUMMARY OF SUMMER 2023 MEETINGS AND PRESENTATIONS

- June 20-21 NM Produced Water Research Consortium - Mid-year Review

We averaged of about 120 participants in our remote mid-year meeting over two days with total participation of about 160 people. The format included presentations on mid-year accomplishments of each working group and invited presentations by speakers to discuss special elements of working group projects. Some highlights include:

- a large number of treatment projects scheduled for the late summer and fall,
- presentation of recent data on non-target analysis of treated produced water,
- updated survey results of widespread support of treated produced water reuse,
- water stewardship driving future industry oil and gas operations,
- NMED discussion of regulation proposal and timeline for public comment,
- Community interest in establishing local produced water authorities to manage and coordinate treated produced water reuse for local economic development.

Both days were recorded and can be viewed on the Consortium web site.

- American Ground Water Trust - July 11-12 in Albuquerque

NMPWRC presented as part of a session on non-traditional ground water resources in NM and opportunities to utilize in the future. Additional presentations by both NMED and EDF on thoughts, issues, and directions associated with non-traditional water treatment and reuse. NMPWRC presentation is on the Consortium website.

- Produced Water Society - Permian Basin - August 15-16 in Midland  
NMPWRC presented on the need for better water stewardship in the oil and gas sector to reduced fresh water use and create new water supplies. Included information on current climate impacts on water supply availability and rainfall in SE NM and West Texas. Also provided summary information on a NMPWRC effort with other states to identify current water discharge standards. The presentation is on the Consortium website.
- Texas Produced Water Consortium Annual Meeting- August 28-29 in Austin  
NMPWRC participated in discussions on the DOE PARETO produced water management optimization model to include produced water treatment as a disposal option. Also met with TPWC management to identify opportunities for collaboration in efforts in the Permian Basin. Several opportunities for cooperation we identified and will be pursued in several upcoming pilot testing projects.
- Meeting with TCEQ - August 30 in Austin  
At the request of TX University Lands, met with TCEQ staff on recent NMPWRC evaluation of current TX and NM surface water discharge standards and current produced water treatment quality data from Permian Basin produced water pre-treatment, treatment, and post-treatment testing conducted by the Consortium. In a March produced water meeting in March, TCEQ announced they would be taking requests for surface discharge permits for treated produced water. The published a draft set of regulations in June 2023 and have received some interest in projects. The presentation provide data on technology performance evaluations and differences in current NM and TX discharge requirements. (Surprising to me, the current surface discharge standards in both NM and TX for human and aquatic impact are essentially the same).
- Permian Energy Dialogue - September 19-20 in Santa Fe  
This is a panel-based dialogue format conference for group discussion of emerging issues and challenges. NMPWRC organized a panel of regulatory, NGO, industry, and industry research representatives to discuss emerging directions in produced water treatment and use inside oil and gas (recycling) and treatment and use outside oil and gas (reuse), focused on water stewardship. Water stewardship being the minimization of fresh water use and the treatment to create new water supplies to extend local fresh water supplies. Produced water, air emissions, electric power needs and renewable energy integration, and infrastructure financing for implementation, were other major conference areas. Alternatives to produced water disposal and associated economic and ecologic benefits of treatment and reuse were big topics.

### **UPDATE ON NMED PRODUCED WATER REGULATION DRAFT AND POTENTIAL TIMELINE**

NMED announced in July that they would be developing draft regulations for permitting of produced water treatment and reuse in early fall 2023, with public comment in late fall 2023, and a proposed hearing with the Water Quality Control Commission (WQCC) in possibly April 2024. NMED has established a Produced Water Advisory Committee (PWAC) composed of a broad range of constituents, including industry and Consortium members. This groups will help review drafts before going out for public comment. The PWAC will meet the week of September 18th. The current schedule is for draft review and modifications, then public review and comment, updates by January for the state legislature, and a meeting with WQCC in the Spring of 2024.

The Consortium will keep all informed of the progress and make sure everyone is aware when the draft regulations come out and are available for public comment.

## **WORKING GROUP HIGHLIGHTS THIS QUARTER AND UPCOMING EFFORTS**

### Treatment Technology Testing and Evaluation Working Group

- identified a second location for treatment of produced water for OCD use, continuing to coordinate with OCD
- Circle Verde is a new company using mechanical vapor compression for produced water treatment near Big Spring TX. Coordinating with the Texas Consortium to collect and test treated water in mid-October. Open house will be week of October 16-19 to see operations.
- Bechtel produced water treatment project has been mobilized and erected in Midland. Initial operational shakedown to start in October. Treated water collection and testing in late November.
- JIP technology testing was recently initiated on one of the three technologies.
- We agreed to coordinate all Texas projects with the TX PW Consortium and their new technical lead, Dr. Shane Walker. That way the data can be used by both Consortia.

### Risk and Toxicology Working Group

- Continued work on non-target analysis.
- Gearing up sampling team for additional treated produced water testing and associated risk and toxicology analysis.

### Produced Water Quality and Data Portal Working Group

- While Consortium has 43 detailed raw produced water data sets, interest is in expanding to over 100-300 data sets of summary raw water data.
- Working group has established a list of data and will ask for that data from SWD industry at NMOGA in October. Raw summary data will be needed to better support treatment train selection and address regulatory concerns of identifying variability.

### Infrastructure and Scenario Planning Working Group

- Supported PW Authority interest by Lea County by connecting them with NM Chamber of Commerce to get onto the legislation call for 2024.
- New issues emerging about electrification of the oil patch and additional electric power needs/options for produced water treatment.
- Analysis by NMSU and contractor of likely Seismic Response Area designation changes to include in PARETO optimization model for application to the Permian Basin treatment and reuse infrastructure optimization analysis.

### Socio-economic Ecologic Modeling Working Group

- Consideration of integration of socio economic model with DOE PARETO model.

### Public Education and Outreach Working Group

- Have completed the 6-part pod cast series on produced water treatment and reuse - the whys and hows. First two podcasts on the web and others being added monthly.
- Have accelerated conducting more public surveys - Eddy County Fair July 26, NM State Fair September 15, Dona Ana County Fair end of Sept, and SE NM State Fair in Roswell in October. Closing in on 500 respondents from all over NM.

**Newsletter followers:** There are now over 600 people on our contact list, following the NM Produced Water Research Consortium from public outreach and/or presentations or seminar contacts.