



Consortium Updates and Highlights

- Consortium Mid-year Review May 11th and 12th Overview
- I-West Forum June 14, 2022 on Energy Water, including hydrogen and produced water
- Ground Water Protection Council Annual Forum - June 21-23, 2022
- Produced Water Society Permian Basin Forum - August 2022 in Midland
- Treated produced water collection coordination with EPA in July 2022
- New effort with OCD on produced water reuse inside oil and gas
- Treatment Technology Testing Update
- Recent Consortium Presentations and Outreach Efforts

Consortium Mid-year Review - May 11-12

We held a hybrid mid-year review on May 11-12 at NMSU. We had 50 participants in person and 70 participants by video for the day and a-half meeting. The format included:

- Detailed working group reviews and overviews;
- A multi-state panel on produced water reuse permitting;
- Two treatment technology testing presentations; and on day two
- A half-day major discussion on current risk and toxicology efforts; and
- Individual discussions with new treatment project teams.

The meeting allowed interactive discussion and questions from both the in-person and remote participants. All the presentations and the recording of the proceedings are available on the NMPWRC web-site. Website access remains <https://nmpwrc.nmsu.edu>. Or you can google NMPWRC and get a link that will take you directly to the web site.

I-West Workshop June 14, 2022 on Energy Water

A new group essentially addressing water and energy issues in the Inter Mountain West has scheduled a half-day workshop on energy transition and water needs in western states. Many of the discussions will be around produced water and non-traditional water use to support energy transitions, including hydrogen. The Consortium gave a presentations to this group on energy and water issues in the west in May, and especially New Mexico efforts on produced water and applications to energy applications like hydrogen. We will be presenting a condensed version of that presentation at the workshop.

Consortium members might be interested in discussions of efforts in these areas by other western states. More can be found on the workshop, as well as registering for the workshop at: <https://iwest.org/water-and-energy-how-do-they-mix/>.

Ground Water Protection Council Annual Forum - June 21-23 Salt Lake City

There will be a forum track on produced water at the GWPC annual forum that might be of interest to Consortium members. Deborah Dixon of the Consortium will be one of the presenters. Our Consortium is working closely with the GWPC, who with EPA and industry

created the first produced water research roadmap in 2018. You can register for the conference through the following link: <https://www.gwpc.org/events/upcoming/annual-conference/>.

Produced Water Society Permian Basin Forum - August 15-17, Midland

This annual PWS Permian Basin event brings together speakers to discuss the produced water issues faced by operators, water midstream companies, and water services providers in the Permian. Produced water experts will discuss solutions and technology innovations to support better produced water management best practices to assure sustainable business operations and safeguard the environment and freshwater resources.

If you are interested in submitting an abstract, the deadline is Friday June 10, and you can submit and register by using the following link: <https://mailchi.mp/c34c3b3da824/register-sponsor-present-produced-water-society-permianbasin-2022?e=70ab87bcd7>

Treated Produced Water Collection and Coordination with EPA in July 2022

The Consortium has been contacted by the US EPA to again support their research program on produced water treatment and risk and toxicology impacts. Like last year, the Consortium has agreed to help provide several sets of raw and treated produced water samples to evaluate the changes in relative human and environmental health and safety. The waters collected will be used by both EPA and the Consortium to support risk and toxicology analysis efforts. We will begin this effort in June, with the delivery of the water samples in the mid-July timeframe. We will be contacting all producers to see about supporting this effort with us.

Information on the results of the efforts last year and this year will be provided to Consortium members as we get them. Preliminary results from EPA have been very encouraging.

New Efforts with OCD on Produced Water Treatment and Reuse Within Oil and Gas

Based on a number of suggestions from industry and with concurrence from NMED, the Consortium management has contacted OCD to discuss efforts to facilitate increased utilization of treated produced water in operations inside the oil and gas sector. The goal is the reduction of fresh water use in oil and gas by substituting the use of treated produced water. We have agreed to collaborate with OCD as we move forward in 2022. Some of the areas of interest include 'green fracing', additional use of treated produced water for fracing, drilling, well pad restoration, well pad construction, and cementing and plugging operations. As we formalize this collaboration, we will keep the membership updated. But I expect we will initiate a few additional working groups to drive the discussions and technical efforts that will become part of our overall Consortium research and testing portfolio.

Treatment Technology Testing Update

Currently we have three technologies planning treatment studies in the summer of 2022, and a few scheduled for testing in the fall of 2022. We are currently working with NMED to place 2-page summaries of each project on the website for all to review. We have a draft format that we are working with technology providers to get their thoughts.

Additionally, based on the level of potential matching funds of \$1M from the state of New Mexico, we are planning an additional RFP for treatment testing and analysis efforts in fall 2022. We have already started discussions on this with the Treatment and other Working Groups to identify priority efforts, including testing of treatment trains to support specific applications. If you have ideas on areas of new or additional research and testing needs, please contact the Consortium management or suggest ideas at our monthly working group meetings. I envision a similar technology evaluation working group team of 15-20 technical experts to evaluate proposals as we used in 2021.

Consortium Presentations and Outreach

Consortium management gave presentations on our efforts and progress at the following forums:

- San Juan College Water Symposium - April
- Northern New Mexico College, Espanola - April
- I-West Energy Water and Produced Water presentation- May
- Santa Fe Petroleum Club presentation- May
- New Mexico Junior College, Hobbs (3 meetings) - May
- New Mexico Society of Professional Engineers Annual Meeting presentation - June

All these presentations and summaries of the outreach participants, comments, and discussions will be available on the NMPWRC web site.