



NWMOA
Northwest Membrane Operator Association

Risks and Rewards of Membrane Plants in the Northwest

**Vancouver, WA
August 30-31,
2023**



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AvistaTM



'TORAY'



TUESDAY, AUGUST 29, 2023

3:00 - 5:00 pm Exhibitor Set-Up and Registration Open

WEDNESDAY, AUGUST 30, 2023

8:15 am **Introduction and Opening Remarks**
John Tonner, American Membrane Technology Association

SESSION 1 - INTRODUCTION AND RISK

Moderator: *Timothy English, Carollo Engineers*

Time: 8:30 am - 12:00 pm

8:30 am **External Funding Opportunities: The Ins and Outs of Considerations**
Seema Chavan, Brown and Caldwell

9:00 am **'When' Does it Make Economic Sense to Slect Ceramic Membranes?**
Dave Holland, Aqua-Aerobic Systems, Inc.

9:30 am **Actions to Increase Critical Infrastructure Availability During Cybersecurity Attacks**
Peter Barry, HDR, Inc.

10:00 am **NETWORKING BREAK**

10:30 am **Not If, But When: How to be Prepared to Face Supply Chain Risks**
Simon Bouchard, H₂O Innovation

11:00 am **PVDF Supply Chain Obstacles and Coundermeasures**
Sean Carter, Toray Membrane USA, Inc.

11:30 am **Risks Facing WTP?WWTPs and How to Mitigate Them Panel Discussion**
Dave Holland, Aqua Aerobic Systems, Inc.
Peter Barry, HDR, Inc.
Simon Bouchard, H₂O Innovation
Sean Carter, Toray Membrane USA, Inc.

SESSION 2 - FACILITY TOUR

Moderator: *Greg Madden, H₂O Innovation*

Time: 1:00 - 5:00 pm

1:00 pm **Facility Overview - North Clackamas County Water Commission Water Treatment Plant**
Joe Rogers, North Clackamas County Water Commission

1:30 pm **Load Bus**

1:45 pm **Travel to NCCWC WTP**

2:30 pm **Tour NCCWC WTP**

3:30 pm **Travel to Hotel**

4:15 pm **Arrive back at Hotel**

4:45 pm **Travel to Networking Event**

5:00 - 7:00 pm **Networking Event (Location TBD)**

THURSDAY, AUGUST 31, 2023

SESSION 3 - MEMBRANE CASE STUDIES

Moderator: *Tina St. Pierre*, Veolia Water Technologies & Solutions

Time: 8:30 am - 12:00 pm

- 8:30 am** **Understanding Rejection: The Path to a Healthy Membrane Life**
Nick Poplizio, Avista Technologies, Inc.
- 9:00 am** **Sustainably Protecting Local Water Supplies by Recharging Aquifers with MBR Effluent**
Hiro Kuge, Kubota Membrane
- 9:30 am** **Thoughtful Planning Leads to Successful Pilot Testing for Springfield Utility Board's McKenzie WTP**
Lee Odell, Consor Engineering
- 10:00 am** **NETWORKING BREAK**
- 10:30 am** **Extending Membrane Life**
Darrell Byrer, American Water Chemicals, Inc.
- 11:00 am** **Presentation Title TBD**
Dustin Whyman, Carollo Engineers
- 11:30 am** **Study of Wastewater Autopsy and Full Element Cleaning of Aluminum Silicates and Iron**
Gregory Sato, PWT

SESSION 4 - MEMBRANE APPLICATIONS AND DISCUSSION ITEMS

Moderator: *Jill Miller*, City of Bozeman

Time: 1:00 - 2:45 pm

- 1:00 pm** **Impact of Harmful Algal Blooms Public Health and MF/UF Drinking Water Treatment Systems**
Evan Hofeld, Oregon Department of Health
- 1:30 pm** **PFAS Regulatory Issues in Washington**
Mike Means, Washington DOH Office of Drinking Water
- 2:00 pm** **So, What's New in Water Treatment Since WWII? Updating Water Treatment Technology at the Hanford Site**
Thomas Helgeson, Hanford Mission Integration Solutions, LLC
- 2:30 pm** **Workshop Wrap-Up**
Jill Miller, City of Bozeman
Timothy English, Carollo Engineers

3:00 - 6:00 AMTA Board Meeting