

EDUCATION, AWARENESS, & TECHNOLOGY

# NORTHWEST GROUNDWATER CONFERENCE

March 18 & 19 Holiday Inn Express Hotel & Suites 4525 Convention Place, Pasco, WA 99301



## **Groundwater Champions**



## Welcome to the 2024 Northwest Groundwater Conference!

The objective of American Ground Water Trust conferences is to showcase topical and/or controversial groundwater issues and to facilitate information sharing among landowners, groundwater end-users, regulators, management agencies, scientists, engineers, lawyers, and citizens who have economic or environmental interests in water resources.

## **Continuing Education**

Program to be submitted for: ID Drinking Water Professionals, ID Wastewater Professionals, OR Water and Wastewater Operators, WA Waterworks Operators, WA Wastewater Operators

Certificates are available for all attendees upon completion of CE Form

## **Conference Sponsors**

### **Platinum Sponsors**

#### **Gold Sponsors**



**Silver Sponsors** 







#### **Bronze Sponsors**

## Groundwater Supply Around the Tri-Cities -Adaptation to Change

#### Led by Kevin A. Lindsey, Principial Hydrogeolgist, GeoEngineers, Inc.

Date/Time: Sunday, March 17/ 12-5pm Cost: \$65 Limit: 50 people

#### Stop One - Benton Conservation District

Over the past 2 decades, irrigated ag land has been transitioning to low to moderate density residential where the primary water supply is shallow groundwater sourced by irrigation water seepage. As this transition has occurred, the need for greater irrigation efficiency has led to less seepage, with an associated increase in shallow groundwater nitrate levels. Representatives of the Benton Conservation District and the local irrigation district will talk about these changing groundwater conditions as this landscape changes from irrigated ag to rural residential.

#### Stop Two - West Richland

In recent years, West Richland has dealt with a number of water woes. For this stop, we will talk about their recent experiences which include replacing old degraded deep basalt wells, and the effects of nearby faults on water quality, methane occurrence, and well productivity. This on-going work has also been driven by long-term water level declines which has led them to begin investigating ASR. Access to the oh so close, but oh so far away, Columbia River via a water system intertie with the City of Richland figures into this ASR discussion.

#### Stop Three - Terra Blanca Winery and Estate Vineyard

This 1.5 hour tour will give attendees a behind the scene look at how Terra Blanca sustainably grows and crafts their amazing selection of Estate produced wines. Along with a tour that includes a visit to the vineyard, production facilities and wine barrel caves, indulge in an educational wine tasting experience complete with six pours and a charcuterie platter.

#### Monday, March 18

| 7:30-8:20 am   | Registration & Refreshments  |
|----------------|--|
| 8:20-8:30 am   | Welcome and Overview of the Northwest Groundwater Conference<br>Sara Chudnoff, PG, Executive Director, American Ground Water Trust, Pinetop, AZ  |
| Moderator      | TBD  |
| 8:30-9:00 am   | Update on Oregon Groundwater Management and Regional Priorities<br>Chris Kowitz, North Central Region Manager, Oregon Water Resources Department, Pendleton,<br>OR   |
| 9:00-9:30 am   | Ecology Updates, Current Regional Projects, and Groundwater Monitoring Trends<br>in Eastern Washington<br>Patrick Cabbage, LHG, Technical Unit Supervisor and Jaime Short, Water Resources PM,<br>Washington Department of Ecology, Spokane, WA  |
| 9:30-10:00 am  | Groundwater: Challenges and Opportunities in Idaho<br>Paul Arrington, Executive Director & General Counsel, Idaho Water Users Association, Boise, ID   |
| 10:00-10:30 am | Legal Issues for Ground Water Users on Idaho's Eastern Snake Plain Aquifer<br>Maximilian C. Bricker, Associate, Somach Simmons & Dunn, Denver, CO  |
| 10:30-11:00 am | Break and Exhibitor Introductions  |
| 11:00-11:30 am | Keynote<br>Navigating the Current: Tools to Address Water Supply Challenges for Instream<br>and Out-of-Stream Uses<br>Danielle Squeochs, PhD, LHG, PE, Hydrogeologist, Yakama Nation Water Resources Program,<br>Toppenish, WA   |
| 11:30-12:00 pm | <b>The Columbia Basin Sustainable Water Coalition - Mission and Objectives</b><br>Cari Cortez, Special Projects Coordinator, Columbia Basin Conservation District, Moses Lake, WA<br><b>Co-Authors:</b> Elsa Bowen, District Manager, Lincoln County Conservation District, Davenport, WA<br>Claire Miller, Program Manager, Washington Department of Commerce, Spokane, WA and<br>Kristina Ribellia, Executive Director, Columbia Basin Conservation District, Moses Lake, WA |
| 12:00-12:30 pm | <b>Common Ground(water): Collaboration and Challenges for Transboundary</b><br><b>Protection and Management of the Spokane Valley Rathdrum Prairie Aquifer</b><br>Amy Sumner, Water Resources Manager, Spokane County, Spokane, WA, Alyssa Gersdorf,<br>Environmental Specialist, City of Post Falls, Post Falls, ID   |
| 12:30-1:45 pm  | Lunch (provided)   |
| Moderator      | TBD  |
| 1:45-2:15pm    | Geophysical Methods to Map Groundwater for Fish Hatchery Operations in<br>Various Geological Settings<br>Phil Sirles, Principal Geophysicist/Business Development. Collier Geophysics, Lakewood, CO,   |

**Co-Author:** Kristen Marberry, Hydrogeophysicist, Collier Geophysics, Golden, CO

| 2:15-2:45 pm   | Kecharge to Basalt Aquiters of the Upper Umatilia Basin<br>Kate Ely, Umatilla Basin Hydrologist, Confederated Tribes of the Umatilla Indian Reservation, Dept.<br>of Natural Resources-Water Resources, Pendleton, OR   |
|----------------|---|
| 2:45-3:15 pm   | Characterizing Groundwater in the Grande Ronde Formation of the Columbia<br>River Basalt Group of Central and Eastern Washington<br>Ellen Svadlenak, Hydrologic Scientist, Washington Geological Survey, Olympia, WA, Co-Author:<br>Lee J. Florea, PhD, PG, Earth Resource Program Manager, Washington Geological Survey,<br>Olympia, WA  |
| 3:15-3:45 pm   | Break   |
| 3:45-4:15 pm   | Well Design and Glass Bead Application<br>Edd T. Schofield, Technical Sales Manager - Well Chemicals, Johnson Screens, Laguan Hills, CA   |
| 4:15-4:45 pm   | Water Supply Well Condition Evaluations: Rebuild or Replace; Examples from the Columbia Basin<br>Kevin Lindsey, Principal Hydrogeologist, GeoEngineers, Inc., Kennewick, WA, Co-Authors: Jon<br>Travis, RG, Geologist, GeoEngineers, Kennewick, WA and Phil Brown, WA LHG, OR RG Northwest<br>Groundwater Services, LLC, Beaver Creek, OR |
| 4:45-6:00 pm   | Reception & Networking Sponsored by GeoEngineers  |
| Tuesday, Marc  | ch 19   |
| 7:30-8:25 am   | Registration  |
| 8:25-8:30 am   | <b>Summary of March 18th Presentations</b><br>Jeremy Kuhn, AGWT Executive Board-Secretary, Director-North America, Roscoe Moss, Phoenix, AZ   |
| Moderator      | Nicki Feiten, Water Resources Project Manager, Spokane County, Spokane, WA  |
| 8:30-9:15am    | <b>Groundwater Supply Development Challenges in 2024: Overview and Solutions</b><br>Robyn Cook, RG, LG, CWRE, Supervising Hydrogeologist and Matt Kohlbecker, RG, Principal<br>Hydrogeologist, GSI Water Solutions, Portland, OR  |
| 9:15-9:45 am   | Going Green at the Well Head, Ways to Reduce Injection Cost<br>Jared Owen, Lead Programmer, 3RValve LLC, Echo, OR   |
| 9:45-10:15 am  | ASR Well Screen Considerations in Alluvial Wells<br>Kevin McGillicuddy, PG, Chief Hydrogeologist, Roscoe Moss Company, Los Angeles, CA  |
| 10:15-10:45 am | Break   |
| Moderator      | Rhiannon Whitehead, Staff Hydrogeologist 1, GeoEngineers, Inc., Kennewick, WA   |
| 10:45-11:15 am | ASR Well Design and Rehabilitation<br>Jay Pietraszek, LHG, Principal Hydrogeologist, Aspect Consulting, Yakima, WA, Co-Authors:<br>Andrew Austrena, PG, LHG, Aspect Consulting, Yakima, WA  |

| 11:15-11:45 am | Integrated Modeling to Optimize Ecological and Agricultural Water Supply<br>Enhancement  |
|----------------|--|
|                | Jason Keller, GeoSystems Analysis, Inc., Hood River, OR, Troy Baker, Executive Director, Walla Walla<br>Basin Watershed Council <b>Co-Authors:</b> Tara Patten, Project Manager, Walla Walla Basin Watershed<br>Council, Scott Waibel, Hydrogeologist, GeoSystems Analysis, Inc., Hood River, OR, Michael<br>Milczarek, President, GeoSystems Analysis, Inc., Tucson, AZ   |
| 11:45-1:00 pm  | Lunch (provided)   |
| Moderator      | Curtis Cude, Principal, Water Insecurity Solutions LLC., Portland, OR  |
| 1:00-1:45 pm   | Keynote<br>Emerging Contaminants in Groundwater: Where Are We, How Did We Get Here,<br>and Where Are We Going?<br>Alan Kolok, Professor of Ecotoxicology, College of Natural Resources, Fish and Wildlife Sciences,<br>University of Idaho, Moscow, ID   |
| 1:45-2:15 pm   | Addressing Nitrate in Domestic Wells: Implementation Strategies in the Lower<br>Yakima Valley Groundwater Management Area<br>David Haws, PE, CFM, Yakima County Public Services, Environmental Services Director, Yakima, WA   |
| 2:15-2:45 pm   | Groundwater Nitrate Occurrence and Rural Water Supply in Badger Coulee,<br>Benton County, Washington: An Example of Groundwater Responding to Land Use<br>Changes at the Urban/Rural Interface and to Increased Water Use Efficiency<br>Alicia Candelaria, Staff Environmental Scientist, GeoEngineers, Kennewick, WA, Co-Authors: Mark<br>Nielsen, District Manager and Marcella Appel, Water Resources Program Manager, Benton<br>Conservation District, Kennewick, WA and Kevin Lindsey, Principal Hydrogeologist, GeoEngineers,<br>Inc., Kennewick, WA |
| 2:45-3:15 pm   | <b>The Complex Hydrogeology of the West Plains, Spokane County</b><br>Ben Lee, PE, Senior Associate Engineer, Landau Associates, Seattle, WA, <b>Co-Author:</b> Tom Briggs, PE, LHG, Senior Associate, Landau Associates, Spokane, WA  |
| 3:15-3:45 pm   | Iodine-129 in the Eastern Snake River Plain Aquifer at and Near the Idaho National<br>Laboratory, Idaho, 2021-2022<br>Kerri Treinen, Hydrologist and Allison Trcka, Hydrologist, Idaho Water Science Center, USGS, Idaho<br>Falls, ID  |
| 3:45-4:15 pm   | <b>Emerging COC's; An Innovative Approach to Predictive Well Development and</b><br><b>Comprehensive Treatment Strategies</b><br>Adam Midkiff, VP Payment Sales Director, Layne (a Granite Company) Roanoke, VA, <b>Co-Author:</b><br>Tim Oman, Business Development Manager, Layne (a Granite Company), The Woodlands, TX   |
| 4:15 pm        | Door Prize Awards  |
|                | Conference Exhibitors<br>3R Valve<br>Johnson Screens   |

Layne (a Granite Company)

OTT HydroMet

Roscoe Moss Company

Schneider Water Services

## **Registration Information**

2024 Northwest Groundwater Conference - Pasco, WA March 18 & 19, 2024

#### Register online at agwt.org/events

#### **Registration Overview**

| General Registration                             |                 |  |
|--|-----------------|--|
| 2 Day Registration                               | \$450.00        |  |
| 2 Day Full-Time Student                          | \$120.00        |  |
|  |                 |  |
| 1 Day Registration (March 18 or 19)              | \$245.00        |  |
| 1Day Full-Time Student (March 18 or 19)          | \$ 80.00        |  |
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| Speaker Registration                             | <b></b>         |  |
| Speaker (March 18)                               | \$ 0.00         |  |
| Speaker (March 19)                               | \$ 0.00         |  |
| Attend - Not Speaker (March 18)                  | \$100.00        |  |
| Attend - Not Speaker (March 19)                  | \$100.00        |  |
| Moderator Registration                           |                 |  |
| -  | \$425.00        |  |
| 2 Day Registration                               | •               |  |
| 1 Day Registration                               | \$220.00        |  |
| Download of Presentations in PDF - attendees     | \$ 30.00        |  |
| Download of Presentations in PDF - non-attendees |                 |  |
|  |                 |  |
|  | <b># / E 00</b> |  |

Field Trip - Groundwater Around the Tri-Cities (March 17)\$65.00

(Field Trip open for conference attendee's only)

**Sponsor and Exhibit Opportunities** - See our event webpage for more information or choose options(s) during on-line registration

Checks should be made payable to AGWT Mail to: American Ground Water Trust 50 Pleasant St., Suite 2 Concord, NH 03301

For questions please call: (603) 228-5444