

2022 IDAHO WATER QUALITY WORKSHOP

MAR 16 & 17
at Boise State
University

All sessions will be held in the Simplot Ballroom and online.

There is **no fee** to attend the conference. Snacks and beverages are provided by our sponsors.

WEDNESDAY March 16

8:00 am - 9:00 am

SIGN-IN/REGISTRATION

9:00 am - 12:00 pm

SESSION 1: AGRICULTURE AND NUTRIENTS

1:30 pm - 4:20 pm

SESSION 2: DATA AND RESTORATION

SOCIAL HOUR AND POSTER SESSION

Following Session 2

THURSDAY March 17

9:00 am - 12:00 pm

SESSION 3: SELENIUM AND MERCURY

1:30 pm - 3:50 pm

SESSION 4: RESERVOIRS, HABS AND BACTERIA

*The Water Quality Workshop is produced by Idaho DEQ and funded by the US EPA.
BSU Department of Geosciences provides venue and operational support. Venue sponsor: Idaho Power.*

2022 IDAHO WATER QUALITY WORKSHOP

WEDNESDAY, MARCH 16, 8:00 AM - 12:00 PM

Simplot Ballroom, Boise State University

SESSION 1: Agriculture and Nutrients

Registration opens at 8:00 am. Morning Coffee sponsored by CWT Training Academy

- 9:00 am** | **AMY YODER** *U.S. Geological Survey*
High Frequency Total Phosphorus Observations from the Lower Boise River
- 9:20 am** | **HAL ANDERSON** *Idaho Water Engineering*
Bioengineered Solutions for Reducing Pollutants in Agricultural Return Drains
- 9:40 am** | **HOWARD NEIBLING** *University of Idaho*
Magnetically Influenced Water Improves Poor Water Quality
- 10:00 am** | **KOSSI NOUWAKPO** *USDA-ARS Irrigation and Soils Research Laboratory*
Patterns and Associations Between Major Crops and Water Quality in the Twin Falls Canal Company Irrigation Project
- 10:20 am** | **SNACK BREAK** *Sponsored by Alta Science and Engineering, Inc*
- 10:40 am** | **KENNETH SKINNER** *U.S. Geological Survey*
Trends in Nitrate and Orthophosphate Concentrations and Groundwater Levels in the Middle Snake River Region
- 11:00 am** | **BRYCE OLDEMEYER** *Henry's Fork Foundation*
Understanding the Relationship Between Palisades Reservoir Storage and Sediment Mobilization in the South Fork Snake River
- 11:20 am** | **TAYLOR DUDUNAKE** *U.S. Geological Survey*
Modeling the Hydraulic and Water Quality Habitat Suitability for Macrophytes in the Middle Snake River
- 11:40 am** | **DYLAN HARP** *The Freshwater Trust*
Graph-Theoretic Approach to Account for the Role of Agricultural Drains in Water Quality Management

2022 IDAHO WATER QUALITY WORKSHOP

WEDNESDAY, MARCH 16, 1:30 PM - 4:20 PM

Simplot Ballroom, Boise State University

SESSION 2: Data and Restoration

Afternoon Coffee sponsored by Overland Distributing Company

- 1:30 pm** | **ERIC BERNTSEN** *Kalispel Tribe of Indians*
Integrating Regional and Local Monitoring Data and Assessment Tools
- 1:50 pm** | **LYNN VAN EVERY** *Idaho Department of Environmental Quality*
Water Quality Trends in the Portneuf River Watershed
- 2:10 pm** | **MATT GREEN** *Trout Unlimited*
Indian Springs/Little Sawmill Creek Restoration Project
- 2:30 pm** | **DARCY HELMICK and JOSHUA WHITE** *Simplot Land and Livestock and U.S. Fish and Wildlife Service*
Working Across a Watershed to Enhance Riparian Habitat
- 2:50 pm** | ——— | **BREAK** *Sponsored by Frontier Precision*
- 3:20 pm** | **ROBERT TIEDEMANN** *Boise River Enhancement Network*
Conservation Stewards Building the Ark (aka: Taking the Idaho Riparian Forest Through a Time of Changing Climate)
- 3:40 pm** | **JASON WILLIAMS** *Idaho Department of Environmental Quality*
Lochsa River Subbasin Stream Temperature Natural Conditions Assessment
- 4:00 pm** | **KYLE DUCKETT** *Alta Science and Engineering*
A First Look at Groundwater Quality at the Bunker Hill Superfund Site with Completion/Operation of the Groundwater Collection System
- 4:20 pm** | ——— | **SOCIAL HOUR AND POSTER SESSION**
Refreshments sponsored by Xylem YSI (until 5:30 p.m.)

2022 IDAHO WATER QUALITY WORKSHOP

THURSDAY, MARCH 17, 9:00 AM - 12:00 PM

Simplot Ballroom, Boise State University

SESSION 3: Selenium and Mercury

Morning Coffee sponsored by Clean Water Partners, LLC & Idaho Water Engineering
(from 8:30am)

- 9:00 am | **SCOTT DUCAR** *U.S. Geological Survey*
Sediment Transport in the Yankee Fork of the Salmon River: 2012-2019
- 9:20 am | **JOHANNA KRAUS** *U.S. Geological Survey*
Increased Mercury and Reduced Insect Diversity in Linked Stream-Riparian Food Webs Downstream of an Historical Mercury Mine
- 9:40 am | **JOANN HOLLOWAY** *U.S. Geological Survey*
Assessment of Mercury Mobilization in Monumental Creek
- 10:00 am | **LADONNA CHOATE** *U.S. Geological Survey*
What Information Can Be Gained from Analysis of Colloids
- 10:20 am | ——— **SNACK BREAK** *Sponsored by The Freshwater Trust*
- 10:40 am | **AUSTIN BALDWIN** *U.S. Geological Survey*
Relations Between In-Reservoir Processes and Aqueous and Biological Mercury Export from the Hells Canyon Complex
- 11:00 am | **TATE LIBUNAO** *Idaho Water Resources Research Institute*
Signal Crayfish in the Columbia River Basin: Are They Effective Environmental Sentinels for Mercury Concentration?
- 11:20 am | **GENNY HOYLE** *and SHAWN YOUNG* *Kootenai Tribe of Idaho*
Elk River Mining: The Effects of Selenium on the Kootenai River Biota and Implications for Management

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Simplot Ballroom, Boise State University

SESSION 4: Reservoirs, HABs and Bacteria

Afternoon snacks sponsored by HDR. Beverages sponsored by T-O Engineers

- 1:30 pm** | **COLIN CUSTER** *City of Boise*
The Continued Search for Freshwater Mussels in the Lower Boise River
- 1:50 pm** | **TERRY MCNABB** *Aquatechnex*
Monitoring and Managing Harmful Algae Blooms
- 2:10 pm** | **CRAIG COOPER** *Idaho Department of Environmental Quality*
Phosphorus and Nitrogen Inventory for Coeur d'Alene Lake Tributaries
- 2:30 pm** | **DORENE MACCOY** *City of Boise*
Esther Simplot Pond Complex Water Quality Monitoring 2016-2022
- 2:50 pm** | **FLINT HALL** *Idaho Department of Environmental Quality*
Island Park Bacteria Investigation 2020-2021
- 3:10 pm** | **WESLEY ULLOA** *Nephros*
Improving Waterborne Pathogen Detection Using Onsite Molecular Diagnostics
- 3:30 pm** | **KERRI TREINEN** *U.S. Geological Survey*
Evaluating Hydrologic Processes in the Eastern Snake River Plain Aquifer with Uranium and Strontium Isotopes