



33RD ANNUAL

*Idaho Water Quality
Workshop*

February 1 & 2, 2023

WEDNESDAY, FEB 1, 9:00 AM - 12:10 PM

SESSION I

MONITORING TECHNOLOGY AND THE LOWER BOISE RIVER

BRYANT KUECHLE *The Langdon Group Inc.*
Nampa/EPA Partnership to Increase Hispanic Community
Stormwater and Watershed Engagement

CHRIS MURPHY *Idaho Fish and Game*
Estimated Water Quality Improvement Functions of Managed
Wetlands After Enhancement in the Lower Boise River

BRIDGET BITTMANN *Boise State University*
Influence of Urbanization and Climate on Irrigation Drainage
Flows to the Boise River

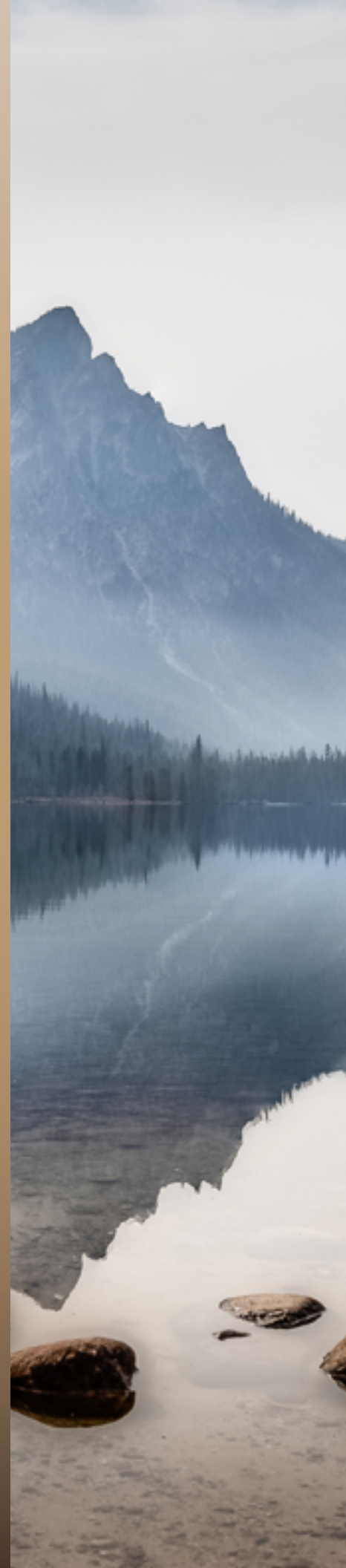
MIKE SCHUBERT *HDR, Inc.*
Lower Boise Watershed - Agricultural Implementation Plan
Updates

ALAN KOLOK *University of Idaho*
Bioindicator Organisms and Their Utility in Evaluating Idaho's
Water Quality

TAO HUANG *Boise State University*
Assessing Performances of Machine Learning Models in
Stream Temperature Prediction

JACK MCLAREN *Henry's Fork Foundation*
Limnology, Morphology, and Weather Predict Fall Sediment
Events in the Henrys Fork River

JAE RYU *University of Idaho*
Applications of Autonomous Vehicles to Advance Real-Time
Water Quality Monitoring and Visualization



WEDNESDAY, FEB 1, 1:20 PM - 4:30 PM

SESSION II

STREAMFLOW AND DATA

CANDICE HOPKINS *U.S. Geological Survey*
An Update on the State of USGS Water Data Delivery

KENDRA KAISER *Boise State University*
Integration of Distributed Streamflow Measurement Metadata
for Improved Water Resource Decision-Making

KONRAD HAFEN *U.S. Geological Survey*
Using Lidar and Spectral Imagery to Identify and Model
Streamflow in Small Streams

SCOTT GAUVAIN *Boise State University*
Acoustic and Morphological Properties of Adjustable Plunging
Jets

DANIELE TONINA *University of Idaho*
Mapping Stream Aquifer Interaction at the Riverine Segment
Scale

PAIGE SARGEANT *Utah State University*
Analyzing Facilitators of Floodplain Connectivity

SAMUEL BOX *Rio Applied Science and Engineering*
Secondary Channel Form and Process in the Upper Salmon
River Basin

JULIA LINDGREN *HDR, Inc.* **AND DORENE MACCOY** *City
of Boise*
Habitat Suitability Assessment of Loggers Creek

POSTER SESSION AND SOCIAL HOUR
Following Session II



THURSDAY, FEB 2, 9:00 AM - 12:10 PM

SESSION III

METALS AND REGULATORY APPROACHES

KIM PRESTBO *U.S. Environmental Protection Agency*
Performance and Effectiveness of Central Treatment Plant
Upgrades and Groundwater Collection System – Bunker Hill
Superfund Site, Kellogg ID.

ERIN MURRAY *U.S. Geological Survey*
Groundwater Seepage to the South Fork Coeur d'Alene River:
A look at Trace Metal and Nutrient Loading in 2022 Following
Remediation to the Bunker Hill Superfund Site

LAUREN ZINSSER *U.S. Geological Survey*
Effects of Remediation at the Central Impoundment Area on
Water-Quality in the Coeur d'Alene River

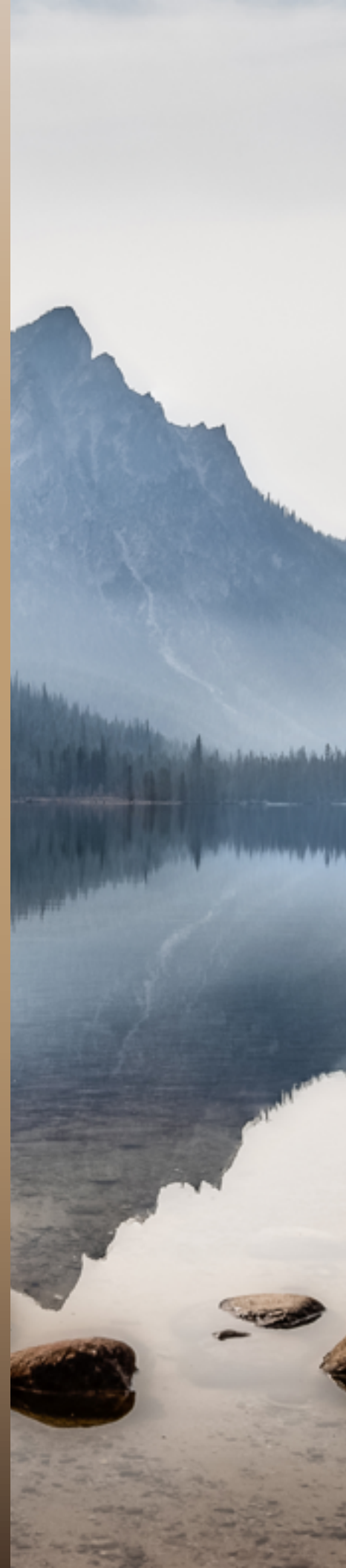
TRAVIS SCHMIDT *U.S. Geological Survey*
Observed Long-Term Trends for Total Selenium in the Kootenay,
Elk, and Columbia Rivers, British Columbia, Canada 2005 –
2014: Implications to Montana, Idaho, and Washington States.

BRIAN MUEGGE *Salmon-Safe*
Trout-Safe Idaho: Introducing a new Market-based Water
Quality Protection Initiative for Agricultural Lands

JASON WILLIAMS
Idaho Department of Environmental Quality
Evaluating Clean Water Act Progress Drivers in Idaho 2002-
2022

JOHN LOFFREDO *Idaho Department of Water Resources*
Water Rights 101: Water Transactions for Instream Flow &
Salmon Recovery in the Upper Salmon River Basin

THEA WICKERSHAM
Idaho Department of Environmental Quality
Restoring Idaho's Surface Waters: What Is a TMDL and How
Can It Be Utilized?



THURSDAY, FEB 2, 1:30 PM - 3:50 PM

SESSION IV

NUTRIENTS AND HABS

MARK COLEMAN *University of Idaho*
Tree, Soil, Hydrologic and Nutrient Leaching Responses
Along a Four-Decade Time Series of North Idaho Forest Water
Reclamation Facilities

COURTNEY COSDON *University of Idaho Extension*
Soil Health and Water Quality Relationships in a Changing
Idaho Climate

ELEANOR BASH *The Freshwater Trust*
A Network Approach to Optimizing the Impact of Management
Practices in Agricultural Drains

JESSE NAYMIK *Idaho Power Company*
Long-Term Trends in Inflowing Chlorophyll *a* and Nutrients
and Their Relation to Dissolved Oxygen in a Large Western
Reservoir.

TYLER KING *U.S. Geological Survey*
Introducing the REMote Aquatic Chlorophyll Tracker (REACT)

SHEA DAVIES AND MADISON ALLEN
University of Idaho - McCall Outdoor Science School
Management Strategies for Mitigating the Effects of Harmful
Algal Blooms at Lake Cascade

RYAN VAN GOETHEM *EutroPHIX*
Adaptive Management to Improve Water Quality and Address
HABs

MAUREEN PEPPER
USDA - Natural Resources Conservation Service
NRCS Water Quality Programs and Initiatives - Activity and
Collaborative Opportunities

