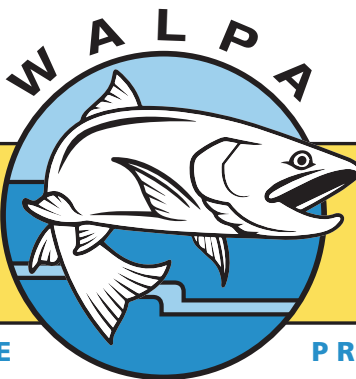


October 4-6, 2023

Tacoma, WA

# 36th Annual Conference



*Fish and Beyond  
in Our Lakes*

WASHINGTON STATE LAKE

PROTECTION ASSOCIATION

## WALPA Conference Events:

### Evening Social and Poster Presentations

Please join us on Thursday night for poster presentation, appetizers, drinks, and good company. It's a great time to unwind and network with fellow WALPA members. Refreshments provided with the first drink ticket on the house.

### Annual Raffle and Silent Auction

During the evening social, WALPA will be holding its annual raffle & auction to raise funds for student scholarships, research, and outreach. The silent auction and raffle will also have a variety of items including an Insitu AQUATROLL 500 multiparameter sonde and a YSI ProSOLO optical dissolved oxygen kit! You must be there for the raffle, but not the silent auction. We hope to see you there.

### 2023 Secchi Award

The Secchi Disk Award is nominated by the WALPA membership and voted on by the Board of Directors to honor a member in recognition of their outstanding contribution to science, management, or the protection of lakes in Washington or Idaho. In 2023, the Board is honored to present the Secchi Disk Award to Rob Zisette! Rob has spent much of his career at Herrera, where he is well-loved as an awesome problem-solver and mentor, scientist, sponsor of Bakeshop Thursday, corporate Health & Safety Officer, vehicle and equipment overseer, coffee quality assurance officer and enthusiastic party planner. It is quite remarkable that he finds time for the technical work at all given how instrumental he is to everything else, including growing the company from 9 staff to 140. He is a passionate scientist bent on learning, teaching, and improving the environment. In addition to his extensive work

with WALPA and other lakes organizations, Rob is a regional expert on the pollutant reduction benefits of street sweeping, one of the first to apply microbial source tracking technology to fecal source identification in the early 90s, a drinking water taste and odor expert, an expert on contaminated sediment dredge and disposal analysis, and one of the first to employ floating wetlands technology in both the US and China. Congratulations Rob on a well-deserved award!

### 2023 Student Scholarship Awards

#### DAVE LAMB MEMORIAL SCHOLARSHIP FOR MS (\$1,000) - Nicole Doran, University of Washington

University of Washington master's student Nicole Doran has won a Dave Lamb Memorial Scholarship for her work studying the preservation effects on stable isotope signatures of sixteen native and invasive freshwater fishes from lakes in the Pacific Northwest.

#### DAVE LAMB MEMORIAL SCHOLARSHIP FOR MS (\$1,000) - Madison Schumacher, University of Idaho

University of Idaho master's student Madison Schumacher has won a Dave Lamb Memorial Scholarship of \$1,000. Madison is studying Idaho lakes to determine whether boater activity and wind patterns lead to the resuspension of nearshore sediments, including nutrients and metals studying Idaho lakes to determine whether boater activity and wind patterns lead to the resuspension of nearshore sediments, including nutrients and metals.

#### UNDERGRADUATE WALPA SCHOLARSHIP (\$500)

##### Garret Homer, University of Idaho

Garret is an undergraduate at the University of Idaho and has been granted the \$500 undergraduate WALPA scholarship to help fund his research into the effects of wake boats on the resuspension of sediment and associated nutrients in central Idaho's Payette Lake.

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# *Fish and Beyond in Our Lakes*

## SESSION SCHEDULE

### **Wednesday, Oct. 4**

**1:00 PM – 5:00PM**

#### **WORKSHOP: AQUATIC INVASIVE SPECIES**

- Ben Peterson, *King County Noxious Weed Program*
  - Brian Turner, *Washington Department of Fish and Wildlife*
- This aquatic invasive species (AIS) workshop is designed to help participants learn about invasive plant and animal species that currently impact or present a threat to lakes in Washington State. The first half of the workshop will focus on plants and the second half of the workshop will focus on animals along with our State AIS management program.

### **Thursday, October 5**

**7:00 AM – 8:00 AM**

#### **BREAKFAST & REGISTRATION**

**8:00 AM – 9:00 AM**

#### **WELCOME & PLENARY**

- Community-Engaged Research in Lakes with Undergraduates: Bridging Basic Science, Education, and Community Needs
- James Gawel, *University of Washington Tacoma*

**9:00 AM - 9:15 AM BREAK**

**9:15 AM – 10:45 AM**

#### **SESSION 1: SAVING SALMON**

**Moderator: Angela Strecker**

- Testing the Waters: Identifying effective methods for engaging lakefront residents towards behavioral change
- Torren Valdez, *Mid Sound Fisheries Enhancement Group*
  - Coauthors: Piper Hanson, Debbie Meisinger, Amber Mikluscak, and Angela Mele
- Lake Sammamish Kokanee - Local and Emergency Actions on the Road to Recovery
- Alison Agness, *King County*
- Quantifying the effect of Artificial Light at Night on planktivorous fish in Lake Washington, WA
- Tessa Code, *University of Washington*
  - Coauthor: Dr. David Beauchamp
- Floating Treatment Wetland and Biomedia Module for Stormwater Treatment and 6PPD Quinone Removal
- Lizbeth Seebacher, *University of Washington*

**10:45 AM – 11:00 AM BREAK**

**11:00 AM – 12:30 PM**

#### **SESSION 2: INVASIVE PLANTS**

**Moderator: Jeremy Walls**

- Bottoms Up! Reducing salmon predation through aquatic weed management in Lake Sammamish.

- David Kyle, *Trout Unlimited*
- Coauthor: James Bower

**Tahoe Keys Control Methods Test: Using data visualization tools to inform decision making**

- Toni Pennington, *Environmental Science Associates*
- Coauthor: Travis Hinkelman and Kathleen Berridge

**Containment Approach to AIS Prevention: Stopping Starry Stonewort**

- Jake Utrie, *CD3, General Benefit Corporation*
- Coauthor: Edgar Rudberg

**Evaluating Effects of Three Alum Treatments and the Recent Brazilian Elodea Invasion on Toxic Cyanobacteria Blooms in Green Lake, Seattle, Washington**

- Rob Zisette, *Herrera Environmental Consultants*
- Coauthors: Tim Clark and Eliza Spear

**12:30 PM – 2:00 PM**

#### **LUNCH & WALPA UPDATE**

**2:00 PM – 3:30 PM**

#### **SESSION 3: HUMAN IMPACTS**

**Moderator: Katey Queen**

**Lake Washington has been surprisingly stable despite rapid urban/suburban development in the watershed**

- Daniel Nidzgorski, *King County Natural Resources*
- Coauthor: Curtis DeGasperi

**Anthropogenic Wakes as a Contributor to Cultural Eutrophication in the Nearshore of Recreationally Important Lakes in Idaho**

- Garret Homer, *University of Idaho*
- Coauthor: Dr. Frank Wilhelm

**Watershed, Lake, and Food Web Factors Influence Diazotrophic Cyanobacteria in Mountain Lakes**

- Angela Strecker, *Institute for Watershed Studies, Western Washington University*
- Coauthor: Lara Jansen, Yangdong Pan, Daniel Sobota

**An Interagency Approach to Microbial Source Tracking in Poverty Bay**

- Jeremy Walls, *King County Natural Resources*

**3:30 PM – 3:45 PM BREAK**

**3:45 PM – 5:15 PM**

#### **SESSION 4: RESEARCH, REGULATIONS & FUNDING**

**Moderator: Rob Zisette**

**50 Years of Stream Monitoring. Statistical Analysis of Long-Term Trends in Water Quality throughout Streams in King County, WA.**

- Emily French, *University of Washington Dept of Civil and Environmental Engineering*
- Coauthors: Michael Brett, Curtis DeGasperi, Jeremy Walls

# *Fish and Beyond in Our Lakes*

## SESSION SCHEDULE

### **Eutrophication Management in Utah Lake**

- Michael Brett, *University of Washington Dept of Civil and Environmental Engineering*

### **Evaluating HABs for the 303(d) List in Washington State**

- Justin Donahue, *Washington State Department of Ecology*

### **The Money Game - Options for Funding Lake Management**

- Marisa Burghdoff, *Snohomish County Surface Water Management*

**5:15 PM – 7:00 PM**

### **POSTER PRESENTATIONS & SOCIAL HOUR**

Join us for refreshments and hors d'oeuvres while we auction prizes to fund our student scholarships!

**Friday, October 6**

**7:00 AM – 8:00 AM**

### **BREAKFAST & REGISTRATION**

**8:00 AM – 9:30 AM**

### **SESSION 5: HARMFUL ALGAL BLOOM MANAGEMENT**

**Moderator: Jen Oden**

#### **A Lake That Flows Both Ways: Managing a HAB-impacted Floodplain Lake**

- Katie Sweeney, *Herrera Environmental Consultants*
- Coauthors: Rob Zisette

#### **Lake Cyanobacteria Management Plan Development for Lacamas, Round, and Fallen Leaf Lakes**

- Jacob Krall, *Geosyntec Consultants*
- Coauthors: Ariel Mosbrucker and Steve Wall

#### **Cyanotoxin production in Spanaway Lake (Pierce County, Washington) during the summer of 2021**

- William Hobbs, *Washington State Department of Ecology*

#### **Use Patterns & Operational Efficiency of P Sequestration Agents**

- Ryan Van Goethem, *EutroPHIX*
- Coauthors: Byran Fuhrmann, Ph.D.

**9:30 AM – 9:45 AM BREAK**

**9:45 AM – 11:15 AM**

### **SESSION 6: LAKE RESEARCH**

**Moderator: Will Hobbs**

#### **Surveying Fish Consumption in Smaller Lakes for Human Health Risk Assessment and Communication**

- James Gawel, *University of Washington Tacoma*
- Coauthors: Jenna Berglund, Nardoes Desta, Daniel Holycross, Jennifer Lai, Michelle Matous, Kathryn Noakes, Kenzie Sacco, Deanna Steen, Denise Drevdahl

#### **Characterizing the Impacts of Arsenic Contamination on Freshwater Lake Microbiomes**

- Sarah Alaei, *University of Washington Tacoma*

- Coauthors: Nyah Laureta, Sahra Jama, Alison Gardell, James Gawel

### **Terrestrial-Aquatic Linkages in Debris-Avalanche Ponds Following the 1980 Mount St. Helens Eruption**

- Katey Queen, *Western Washington University & Institute for Watershed Studies*
- Coauthors: Angela Strecker

### **Accuracy, Convenience, and Cost of using the Hanna checker for ultra-low phosphate readings in lakes for exploratory analysis by volunteers**

- Sandy Williamson, *Friends of Spanaway Lake*

**11:15 AM – 11:30 AM BREAK**

**11:30 AM – 12:30 PM**

### **STUDENT EARLY CAREER PANEL**

**Sponsored by Herrera Environmental Consultants**

**Moderators: Tim Clark, Herrera Environmental Consultants and Corinne Klohmann, Four Peaks Environmental Data Solutions**

Join not-so-seasoned professionals as they share their perspectives and experiences as young professionals in limnology and related fields.

- Panelists: Lyddie Austin, *Project Engineer*; Corinne Klohmann, *Water Quality Scientist*; Drew Stang, *Environmental Scientist*; Katie Sweeney, *Environmental Scientist*; Wafa Tafesh, *Water Quality Planner*; and Diane Yeh, *Environmental Aide*.

### **POSTERS – ON DISPLAY THROUGHOUT THE CONFERENCE**

#### **Using Microcosms to Estimate Internal Loading of Phosphorus in Spanaway Lake**

- Mateo Schuler, *University of Washington Tacoma*
- Coauthor: James Gawel

#### **Assessment of Cyanotoxin Driven Water Quality Impairments in Freshwater Lakes of WA State**

- Emese Hadnagy, *University of Washington Tacoma*
- Coauthors: Laci Bostwick, Rachel Cohn, Vinial Kumar, Isabelle Lake, Noah Melnick, Tyler Roberts, Joseph Joo

#### **Looking Between Clouds: Examining the Efficacy of Remote Sensing as a Tool to Monitor for Harmful Algal Blooms in King and Pierce County Lakes**

- Emese Hadnagy, *University of Washington Tacoma*
- Coauthors: Gopal Mulukutla, James Gawel, Joan Hardy

#### **The Impact of Nearshore Recreational Activities on Arsenic Exposure in Contaminated Lakes: A Study of Sediment Disturbance and Water Quality**

- Kirsti Lipphardt, *University of Washington Tacoma*
- Coauthor: James Gawel

# WALPA 36th CONFERENCE SCHEDULE 2023

<b>1-5 pm Workshop:</b> Aquatic Invasive Species	<b>WED</b>
<b>7 – 8 am Registration/Breakfast</b>	<b>THURS</b>
<b>8 – 9 am Welcome &amp; Plenary</b>	
<b>9 – 9:15 am Break</b>	
<b>9:15 – 10:45 am Session 1:</b> Saving Salmon	
<b>10:45 – 11 am Break</b>	
<b>11 – 12:30 pm Session 2:</b> Invasive Plants	
<b>12:30 – 2 pm Lunch &amp; WALPA Update</b>	
<b>2 – 3:30 pm Session 3:</b> Human Impacts	
<b>3:30 – 3:45 pm Break</b>	
<b>3:45 – 5:15 pm Session 4:</b> Research, Regulations & Funding	
<b>5:15 – 7 pm Social Hour &amp; Posters</b> Refreshments, Hors d'Oeuvres & Auction	
<b>7 – 8 am Breakfast &amp; Registration</b>	<b>FRI</b>
<b>8 – 9 am Session 5:</b> Harmful Algal Bloom Management	
<b>9:30 – 9:45 am Break</b>	
<b>9:45 – 11:15 am Session 6:</b> Lake Research	
<b>11:15 – 11:30 am Break</b>	
<b>11:30 – 12:30 pm Early Career Panel</b> Sponsored by Herrera Environmental Consultants	



[www.walpa.org](http://www.walpa.org)

## WALPA business Meeting Agenda

- Introduction and WALPA 2023 review
- Scholarship Awards
- Secchi Award
- New & Retiring Board Members

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