



27TH ANNUAL CALIFORNIA AQUATIC BIOASSESSMENT WORKGROUP (CABW) MEETING

AND

8th ANNUAL CALIFORNIA CHAPTER SOCIETY FOR FRESHWATER SCIENCE MEETING

OCTOBER 13 & 14, 2020

DRAFT AGENDA

Day 1 - Tuesday, October 13, 2020:

9:00 – 9:10 Day 1 Welcome and Logistics | Ali Dunn and Nick Macias

9:10 – 9:35 Keynote Speaker | Obi Kaufmann

SESSION 1:

9:35 – 11:05 Panel: Incorporating Temporary Streams into Monitoring and Management: The UK Experience

- **Opening** | Rachel Stubbington
- **English Temporary Streams and Why We are Interested in Them** | Judy England
- **UK T-streams, with Focus on Chalk Winterbournes** | Tim Sykes
- **Terrestrial Invertebrates as Biomonitoring in 'Winterbourne' Streams** | Rachel Stubbington
- **Dry-phase Plant Community Responses to Human Impacts in Cool, Wet Temporary Streams** | Chloe Hayes
- **Identifying Sites of High Terrestrial Invertebrate Richness and Rarity from Simple Habitat Surveys** | Kieran Gething
- **Public Perceptions of Dry Temporary Streams** | Tim Sykes
- Q&A

11:05 - 11:15 BREAK (10 minutes)

SESSION 2:

- 11:15 – 11:35 **Perennial Stream Assessment Report Summary** | Ali Dunn |
State Water Resources Control Board
- 11:35 – 11:55 **A Regional Assessment of Trends in Stream Condition in Southern California** |
Raphael Mazor | *Southern California Coastal Water Research Project*
- 11:55 – 12:15 **Restoration and Protection Prioritization Tool for southern California streams** |
Jerry Diamond | *Tetra Tech, Inc.*
- 12:15 – 1:15 LUNCH BREAK
- Cal-SFS Business Meeting – to be held concurrently during lunch break

Virtual Poster Session:

- 1:15 – 2:15 This years' poster session will come of two forms: virtual posters and lightning talks. You will find all posters and lightning talks available for you to view and enjoy all day throughout the meeting on both days [HERE](#).

We will be using the Slack platform to gather questions for the virtual poster presenters and lightning talk presenters. Questions can be submitted all day and long after the meeting is over. This time on the agenda is reserved for a live Q&A session with virtual poster presenters and lightning talk presenters, where you can converse and get live feedback and responses immediately from the presenters.

If you are interested in participating in the Q&A, please view this [Slack Guide](#) for instructions on how to sign up and join (it is free!)

This first day will be the competitive student poster competition, where students can be judged on their virtual posters/lightning talk for a chance to win cash prizes (UG, MS, and PhD categories). These student poster/lightning talk opportunities are aimed to help attract students to attend this meeting and to showcase their current research or projects while learning from other freshwater scientist professionals and about other freshwater activities being conducted by universities, tribes, agencies, and other organizations.

The goal of hosting this session is to encourage student attendance and participation in CABW & Cal-SFS, as students are the future members of SFS and the next generation of freshwater scientists!

Workshop #1

2:15 – 4:15

Beginning R: Workshop

The Beginning R Workshop is aimed at folks with little/no experience in R, or who are just beginning to use R. All are welcome, but we will be covering content assuming folks have not used R before.

If you are interested in signing up for the R workshop, please fill out the [Registration Form](#) [Registration Form](#) and make sure you select “Yes” for “Day 1”. We will email the Zoom information out to the **first 50 participants**. Recordings will be made public after the workshop and will be posted on the [State Water Board Program Page](#).

The session will be approx. 2 hours, with breaks.

Day 2 – Wednesday, October 14, 2020:

9:00 – 9:05 Day 2 Welcome and Logistics | Ali Dunn and Nick Macias

SESSION 3:

9:05 – 10:15 Panel: Environmental DNA approaches for biodiversity and species monitoring

- **Opening** | Suzie Theroux
- **Advancing eDNA tools for Bioassessment Applications** | Suzie Theroux
- **Using Enclosure Experiments to Inform eDNA Interpretation in the San Francisco Estuary** | Ann Holmes
- **CDFW's First in-house eDNA Projects: Recent Success in Aiding Reintroduction of a Listed Trout and Future Directions with Native Fishes** | Kristen Ahrens
- **A Biodiversity Composition Map of California Derived from Environmental DNA Metabarcoding and Earth Observation** | Meixi Lin
- **TBD** | Nicole Witzel/Peter Houpt
- Q&A

10:15 – 10:25 BREAK (20 minutes)

Session 4:

10:25 – 10:45 **A Conceptual Framework and Sampling Methodology for Bioassessment in Eelgrass (*Zostera marina*) Beds in California's Estuaries** | David Gillett and Kenneth McCune | *Gillett, McCune, and Stein - Southern California Coastal Water Research Project; McCune and Whitcraft - California State University Long Beach*

10:45 – 11:05 **Predicting Geographic Distributions of Fishes in Remote Stream Networks Using Maximum Entropy Modeling and Landscape Characterizations** | Anna Holder | *State Water Resources Control Board*

11:05 – 11:25 **Climate Change Impacts on a Sierra Nevada Foothill Watershed Two Decades of Citizen-Science Data Demonstrate Climate-Driven Shifts in Perennial Stream Water Quality** | Jeff Lauder | *University of California Merced and Sierra Streams Institute, Sierra Streams Institute*

11:25 – 12:10 LUNCH BREAK

Session 5:

12:10 – 12:30 **Hypolimnetic Oxygenation to Control Mercury Bioaccumulation in Lakes: Two Case Studies** | Mark Beutel and Marc Seelos | *UC Merced Environmental Systems Graduate Group and Valley Water*

- 12:30 – 12:50 **Statistically Modeling 28 Years of Periphyton Blooms in an Oligotrophic Lake |**
Karen Atkins | *Tahoe Environmental Research Center, University of California, Davis*
- 12:50 – 1:10 **Managing the Nitrogen to Phosphorus (N:P) Ratio for Improved Aquatic Ecosystem Function |** Byran Fuhrmann | *SePRO Corporation. and University of California, Merced*
- 1:10 – 1:20 Break
- Virtual posters**
- 1:20 - 1:50 This years' poster session will come of two forms: virtual posters and lightning talks. You will find all posters and lightning talks available for you to view and enjoy all day throughout the meeting on both days [HERE](#).
- We will be using the Slack platform to gather questions for the virtual poster presenters and lightning talk presenters. Questions can be submitted all day and long after the meeting is over. This time on the agenda is reserved for a [live](#) Q&A session with virtual poster presenters and lightning talk presenters, where you can converse and get live feedback and responses immediately from the presenters.
- If you are interested in participating in the Q&A, please view this [Slack Guide](#) for instructions on how to sign up and join (it is free!)
- We will announce the winner of the competitive student poster competition during this session!
- 1:50 – 2:15 Break
- Workshop Day 2**
- 2:15 – 4:15 Intermediate R: Workshop
- The Intermediate R Workshop is aimed at folks with some experience in R. All are welcome, but we will be covering content assuming folks have at minimum covered content from Day 1 and/or used R before.
- If you are interested in signing up for the R workshop, please fill out the [Registration Form](#) and make sure you select “Yes” for “Day 2”. We will email the Zoom information out to the **first 50 participants**. Recordings will be made public after the workshop and will be posted on the [State Water Board Program Page](#).
- The session will be approx. 2 hours, with breaks.