



sfs2016

RUNNING ON EMPTY

SACRAMENTO CALIFORNIA, USA



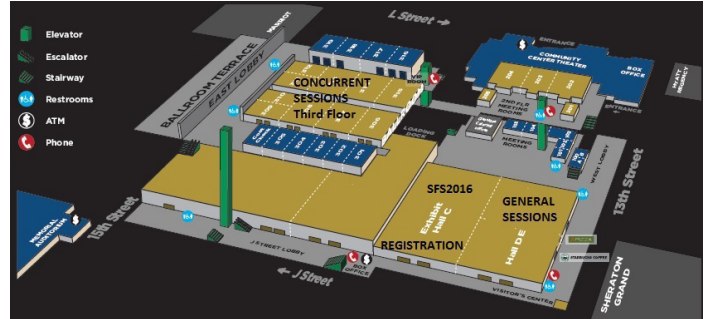
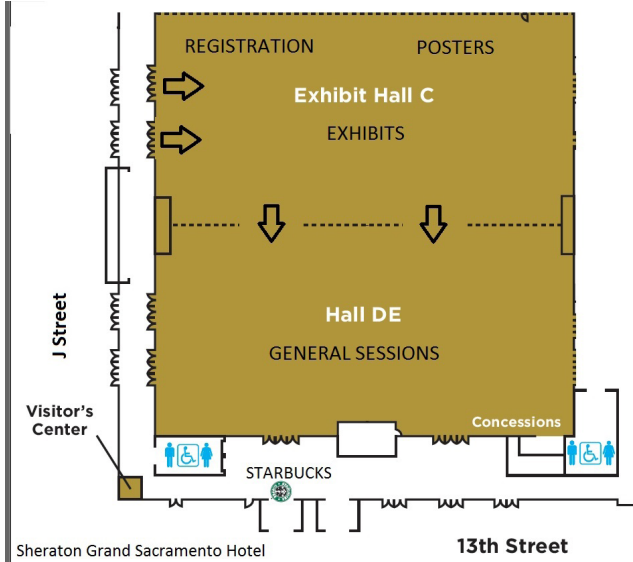
SOCIETY FOR FRESHWATER SCIENCE

Annual Meeting

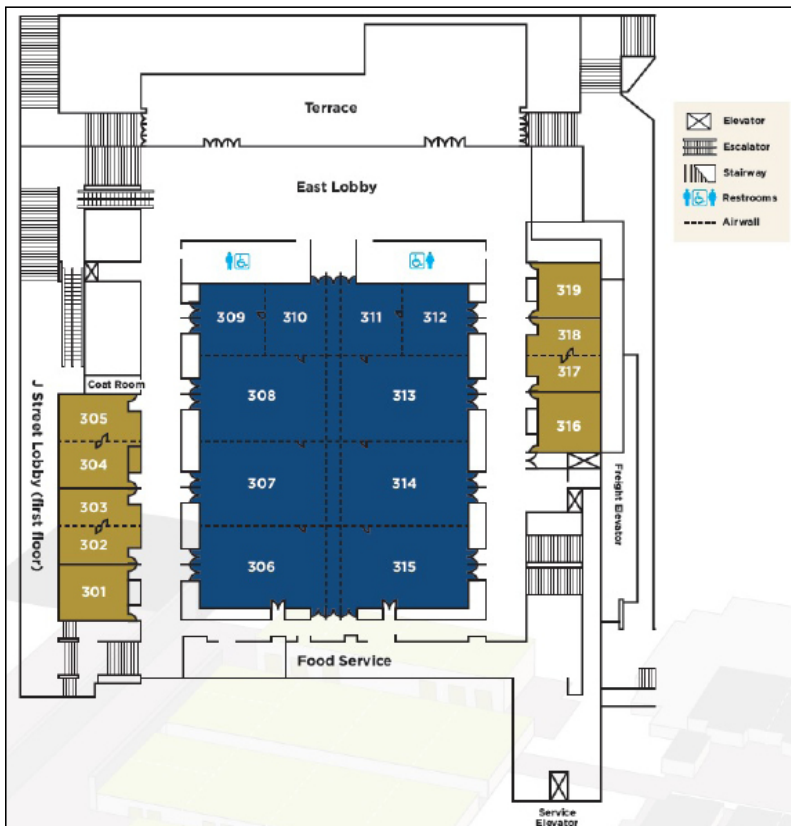
MAY 21-26 2016

SACRAMENTO CONVENTION CENTER

Street Level



Third Floor Meeting Rooms



CONTENTS

General Information

Registration Information6
Plenary Information7-9
Awards10
Future Meeting: SFS2017 Raleigh11
Sponsors12-13
Exhibitors14-16

Activities

Workshops17
Taxonomy Events18
Field Trips19
Meetings20
Events & Activities20
Student/Post Doc Opportunities21
Instars Program22
Presenter Information23

Sessions

Oral Sessions30-57
Poster Sessions58-66

Schedules

Schedule At-A-Glance4-5
Schedule Grid By Day25-29

Indexes

Session Index24
Presenter Index67-82



**SOCIAL MEDIA
HASH TAG:
#2016SFS**

Online Searchable Agenda

Online presentation listings in various formats are located on the Agenda page of the conference website:
<http://sfsannualmeeting.org/agenda.cfm>

Direct Link to downloadable schedule grid by room and day:
http://sfsannualmeeting.org/includes/SFS2016_GridAgenda.pdf



SOCIETY FOR FRESHWATER SCIENCE
2016 ANNUAL MEETING



ANNUAL MEETING
Sacramento California

sfs2016
RUNNING ON EMPTY

SACRAMENTO CALIFORNIA, USA

MAY 21-26, 2016
Sacramento Convention Center

For more information visit freshwater-science.org or

sfsAnnualMeeting.org

Running on Empty:
*Increasing Demands on
Freshwater Resources in the
face of a Changing Climate*

In many regions of the developed and developing world, large human populations live in arid environments that out of necessity depend on scarce or imported water. This is certainly true in California and the Western US where a complex infrastructure of dams, canals, and groundwater extraction provide freshwater for some of the world’s most productive farms and some of the world’s most opulent living conditions. Compounding this insatiable demand for freshwater is the effects that variable environmental conditions of a warming climate, changing precipitation, and increasing frequency and severity of droughts have on over-taxed water supplies.

While water resource managers contemplate these issues, the farms and cities keep consuming, despite dwindling supplies. The 2016 meeting of the Society for Freshwater Science will be held in Sacramento California at a time when the State is experiencing the worst drought in its modern history. Although droughts are not uncommon in the Western US and other semi-arid regions of the world, expanding human populations have accelerated the loss of freshwater resources and the impacts to aquatic organisms. The theme of the 2016 meeting of the Society for Freshwater Science will focus on declining freshwater availability and explore issues of freshwater depletion, the consequences for freshwater ecosystems, and potential solutions.

MEETING ORGANIZERS

2016 Meeting Co-Chairs

Amy Burgin
University of Kansas

Jim Harrington
California Department of Fish and Wildlife

Jay Jones
University of Alaska Fairbanks

Additional Members

Nick Macias
Cal Poly San Luis Obispo

Raphael Mazor
Southern California Coastal Water Research Project

Dan Pickard
California State University Chico

Eric Stein
Southern California Coastal Water Research Project

President

Matt Whiles
Southern Illinois University

Conference Planner/Meeting Manager

Joy Brisighella, CMP
USU Conference Services

Student Resource Committee (SRC) Officers

Chair
Joanna Blaszcak

Board of Directors Representative
Petra Kranzfelder

Treasurer
Jessica Fulgoni

Silent Book Auction
Andrea Fitzgibbon (chair), Allyson Yarra, Julie Kelso, Martha Dee

SRC Workshop
Matt Fuller, Megan Fork

Student-Mentor Mixer
Matt Trentman (chair), Matthew Cashman, Kara Prior, Logan Shoup

Merchandise
Darrin Hunt (chair), Corey Krabbenhoft, Martha Dee, Natasha Wingerter

Live Auction
Dustin Kincaid (chair), Anna Boegehold, Raissa Mendonca

Undergraduate Travel Awards
Kait Farrell, Sophia Bonjour, Brittany Hanrahan

Public Information & Policy Representatives/Social Media Managers
Alex Yeung, Hal Halvarson

Website and Social Media

We encourage you to use the meeting website and the detailed online schedule for all current information and to navigate the meeting.

Meeting Website
sfsannualmeeting.org

Society Website
freshwater-science.org

Facebook
www.facebook.com/FreshwaterScience

Twitter
<https://twitter.com/benthosnews>



**SOCIAL MEDIA
HASH TAG:**

#2016SFS

PHOTO CREDIT

The photos on our front and back cover contrast pre-drought vs. during-drought conditions in California, and are courtesy of Dave Herbst (shown), Sierra Nevada Aquatic Research Laboratory, University of California.

Conference Planner/Meeting Management

USU Conference Services
Joy Brisighella, CMP
435-797-9270
Joy.brisighella@usu.edu

Recording Policy

Please! No recording of individual talks or sessions (oral or poster).

Audio taping, videotaping, or photographing of presentations is not allowed at the meeting.

Thank you for your cooperation.

Policy Regarding Drink Tickets

Due to state and society policies, a 2016 conference badge and a valid photo ID are required to redeem drink tickets at 2016 SFS events. Drink tickets are valid on the date (and event) listed on the ticket only, and are for the exclusive use of the registered participant who has received the ticket in his/her registration packet – tickets are not transferrable to any other person(s).

MEETING SCHEDULE

All events are at the Sacramento Convention Center unless otherwise indicated

Friday, May 20, 2016

8:00 AM - 5:00 PM **Pre-Meeting Field Trips**

3:00 PM - 5:00 PM **SFS Finance Meeting** Sheraton-Beavis

Saturday, May 21, 2016

9:00 AM - 5:00 PM **PRE-MEETING WORKSHOPS** Convention Center - Third Floor

1:00 PM - 4:30 PM **INSTARS Orientation** 304-305

4:00 PM - 10:00 PM **Registration Open** Exhibit Hall C

6:00 PM - 10:00 PM **Exhibits Open** Exhibit Hall C

06:00 PM **Welcome Mixer** Exhibit Hall C

7:00 PM - 10:00 PM **SFS Meeting Opening and Awards** Hall DE

Sunday, May 22, 2016

8:00 AM - 11:00 PM **Registration Open** Exhibit Hall C

9:00 AM - 12:00 PM **TCP Test Sessions** 317-318

9:00 AM - 10:00 AM **Welcome/Announcements** Hall DE

PLENARY SESSION: Mary Power Hall DE

10:00 AM - 10:30 AM **Coffee Break** Exhibit Hall C

10:30 AM - 12:00 PM **CONCURRENT SESSIONS 1** Convention Center - Third Floor

12:00 PM - 1:30 PM **Lunch On Your Own**
(for those not in a committee lunch)

SFS Committees Lunch Meeting Sheraton-Gardenia

SRC Student Resource Committee Lunch Meeting Sheraton-Camelia

1:00 PM - 4:00 PM **TCP Test Sessions** 317-318

1:30 PM - 3:00 PM **CONCURRENT SESSIONS 2** Convention Center - Third Floor

3:00 PM - 3:30 PM **Coffee Break** Convention Center - Third Floor

3:30 PM - 5:00 PM **CONCURRENT SESSIONS 3** 302-303

4:00 PM - 5:00 PM **TCC Meeting** 317-318

6:30 PM - 8:30 PM **SRC Student/Mentor Mixer** Sheraton-Camelia/Magnolia

07:30 PM **SFS Mixer** Exhibit Hall C

8:00 PM - 10:00 PM **Live Auction** Hall DE

Monday, May 23, 2016

7:00 AM - 9:00 AM **Pub Com Meeting** Sheraton-Beavis

8:00 AM - 7:00 PM **Registration Open** Exhibit Hall C

9:00 AM - 10:00 AM **Welcome/Announcements** Hall DE

PLENARY - Peter Moyle Hall DE

10:00 AM - 10:30 AM **Coffee Break** Exhibit Hall C

ROOM 301 HAS BEEN RESERVED FOR CHAPTER MEETINGS THROUGHOUT THE WEEK.

A SIGN UP FORM IS POSTED ON THE MESSAGE BOARD NEXT TO REGISTRATION.

10:30 AM - 12:00 PM	<i>CONCURRENT SESSIONS 4</i>	Convention Center - Third Floor
12:00 PM - 1:30 PM	SFS Membership Business Lunch	Hall DE
	Lunch On Your Own (if not attending business lunch)	
1:30 PM - 1:45 PM	<i>CONCURRENT SESSIONS 5</i>	Convention Center - Third Floor
3:00 PM - 3:30 PM	Coffee Break	Convention Center - Third Floor
3:30 PM - 3:45 PM	<i>CONCURRENT SESSIONS 6</i>	Convention Center - Third Floor
5:00 PM - 6:00 PM	SFS Endowment Reception	Sheraton-Bataglieri
5:00 PM - 7:00 PM	Conference Mixer with California Chapter Hosts	Exhibit Hall C
Tuesday, May 24, 2016		
8:00 AM - 1:00 PM	Taxonomy Fair Set-up	Exhibit Hall C
8:00 AM - 9:00 AM	South Central Chapter Meeting	301
8:00 AM - 4:00 PM	Registration Open	Exhibit Hall C
9:00 AM - 10:00 AM	Welcome/Announcements	Hall DE
	PLENARY - Peter Gleick	Hall DE
10:00 AM - 10:30 AM	Coffee Break	Exhibit Hall C
10:30 AM - 12:00 PM	<i>CONCURRENT SESSIONS 7</i>	Convention Center - Third Floor
12:00 PM - 1:30 PM	Lunch On Your Own	
1:30 PM - 4:00 PM	Poster Session	Exhibit Hall C
	Taxonomy Fair	Exhibit Hall C
4:00 PM - 5:00 PM	Chapter Information Session	301
4:30 PM - 6:00 PM	Fun Run	Old Town Sacramento
7:30 PM - 10:00 PM	Offsite Social Event and Jam Session	Rail Road History Museum Grounds
Wednesday, May 25, 2016		
7:30 AM - 9:00 AM	New Board of Directors Breakfast	Sheraton-Falor
8:00 AM - 5:00 PM	Registration Open	Exhibit Hall C
	Silent Auction Pickup	Exhibit Hall C
9:00 AM - 10:00 AM	Welcome/Announcements	Hall DE
	PLENARY - J Angus Webb	Hall DE
10:00 AM - 10:30 AM	Coffee Break	Exhibit Hall C
10:30 AM - 12:00 AM	<i>CONCURRENT SESSIONS 8</i>	Convention Center - Third Floor
12:00 PM - 1:30 PM	Lunch On Your Own	Offsite
1:30 PM - 3:00 PM	<i>CONCURRENT SESSIONS 9</i>	Convention Center - Third Floor
3:00 PM - 3:30 PM	Coffee Break	Convention Center - Third Floor
3:30 PM - 5:00 PM	<i>CONCURRENT SESSIONS 10</i>	Convention Center - Third Floor
Thursday, May 26, 2016		
8:00 AM - 7:00 PM	Field Trips	

ONLINE SEARCHABLE AGENDA:
<http://sfsannualmeeting.org/agenda.cfm>

DOWNLOADABLE SCHEDULE GRIDS:
http://sfsannualmeeting.org/includes/SFS2016_GridAgenda.pdf

ABOUT THE SOCIETY FOR FRESHWATER SCIENCE

SFS is an international scientific organization founded in 1953, whose purpose is to promote further understanding of freshwater ecosystems (rivers, streams, lakes, reservoirs, and estuaries) and ecosystems at the interface between aquatic and terrestrial habitats (wetlands, bogs, fens, riparian forests and grasslands). The society fosters exchange of scientific information among the membership, and with other professional societies, resource managers, policy makers, educators, and the public, sponsoring the journal *Freshwater Science*. Members come from 26 nations worldwide. Society members study the genetics to community structure of freshwater organisms, freshwater ecosystem function, physical processes that affect freshwaters, and linkages between freshwater ecosystems and surrounding landscapes. Applied aspects of their science include habitat and water quality assessment, conservation, fisheries and invasive species management, integrated water resource management, and restoration. Further information can be found at <http://www.freshwater-science.org/>.

SOCIETY OFFICERS AND INFORMATION

Executive Committee

- Matt Whiles** — President
- Emma Rosi-Marshall** — Assistant to the President
- Dave Strayer** — Past-President
- Emily Bernhardt** — President-Elect
- Mike Swift** — Treasurer
- Sue Norton** — Secretary

Board of Directors

- Matt Whiles** — Chair
- Chuck Hawkins** — Publications Committee
- Petra Kranzfelder** — Student Resources Committee
- Kim Haag** — Finance Committee
- Emma Rosi-Marshall** — Assistant to the President
- Sue Norton** **Mike Paul** **Chris Robinson**
- Mike Swift** **Michelle Baker** **Walter Dodds**
- Steve Thomas** **Natalie Griffiths**
- Emma Rosi-Marshall**

REGISTRATION AND CHECK-IN INFORMATION

Registration and check in for the meeting will be available all week on the main floor of the Sacramento Convention Center, Exhibit Hall C. Please check in upon your arrival at the meeting in order to receive your name badge and other important materials and information.

REGISTRATION HOURS

- Saturday, 21 May 2016** – 4:00pm to 10:00pm
- Sunday, 22 May 2016** – 8:00am to 10:00pm
- Monday 23 May 2016** – 8:00am to 7:00pm
- Tuesday 24 May 2016** – 8:00am to 4:00pm
- Wednesday 25 May 2016** – 8:00am to 5:00pm

MEETING UPDATES

Keep up to date with changes by checking for updates on the bulletin board next to registration and on the meeting website.

RECEIPTS AND CERTIFICATES OF PARTICIPATION

Your registration confirmation that was emailed to you when you registered for the meeting will serve as your receipt. In keeping with our conservation efforts, we will not provide printed receipts to attendees on site at the meeting. If you have misplaced your original receipt and need another copy emailed to you, visit the Registration Desk for assistance.

Certificates of Participation may be requested at the Registration Desk and will be generated within 24 hours of request.

MESSAGES

Message boards will be located near registration. Feel free to post messages, CV's, and job opportunities, as well as to check these boards if you are expecting a message during the meeting.

IDENTIFICATION

Your conference name badge is required for entry to all sessions, activities and social events and regardless of your age a valid picture ID is required for service of alcoholic beverages.

TICKETS TO PARTICIPANT EVENTS

Your conference badge includes a block of tickets to be used for the SFS mixers and social events. Please keep these tickets in a safe place. They will not be replaced if lost. Unused tickets cannot be redeemed for cash and are non-transferrable to other events or persons. Due to state and society policies, a 2016 conference badge and a valid photo ID are required to redeem drink tickets at 2016 SFS events. Drink tickets are valid on the date (and event) listed on the ticket only, and are for the exclusive use of the registered participant who has received the ticket in his/her registration packet – tickets are not transferrable to any other person(s).

DIETARY RESTRICTIONS

An effort has been made to provide a mix of choices at the SFS meal and mixer events that cover a range of dietary preferences, according to the information submitted in pre-registration. There are no special tickets, and individual special meals have not been ordered, leaving it up to the individual at each event to make the choices that best fit their preferences and needs. If you have questions regarding the ingredients of any of the provided food items at the SFS events, ask the server on duty.

KEYNOTE/PLENARY SESSIONS

Sunday 22 May 2016

DR. MARY E. POWER



*University of California,
Berkeley*

Drought, Floods, and Alternate States of Algal-based River Food Webs in the Thirsty Eel

Winter scour and summer base flow control algal-based food webs that assemble during the biologically active summer in the Eel and similar rivers

under the Mediterranean seasonality along the California North Coast. Large algal blooms of the macroalga *Cladophora* follow winters with one or more bed-mobilizing flood, which scour away over-wintering armored grazers. Inedible armored grazers abound after winters without flood scour, and sequester early summer growths of *Cladophora* and diatoms, reducing supplies for higher trophic levels. If winter floods release spring algae from large grazers, however, *Cladophora* proliferates over the summer low flow season, and becomes overgrown with highly edible epiphytic diatoms. Salmonids and other predators are then supported by prey built of epilithic and epiphytic algal carbon, but only if scouring winter floods are followed by sustained summer base flow. If prolonged drought (or human water extraction) reduce flows enough to disconnect and warm mainstem pools, cyanobacteria, some toxic, can proliferate and cover both rocky substrates and the *Cladophora*-diatom assemblages. Twenty-five years of observation, 5 field experiments, and diatom frustule counts in an 84-year stratigraphic record from the Eel's marine canyon help link year-to-year variation in hydrology to the three contrasting summer food web states: with scouring floods and sufficient summer baseflow leading to 3-4 link chains that support salmon; flood-free winters leading to 2-link food chains with algal energy sequestered by predator resistant grazers if base flows keep mainstem reaches hydraulically connected; and the recently seen, concerning development that under severely reduced summer baseflows, a one-link food chain may develop, capped by cyanobacteria, some of which are toxic to vertebrates. Agency, academic, and citizen scientists are now collaborating to monitor and study conditions that flip river food webs from salmon-supporting to cyanobacterially-dominated states, and to learn more about the fates of algal production in river and coastal food webs. More Eyes on the Eel and other rivers are needed to track critical flow-driven ecological changes, and to steward watersheds through the altered hydrologic regimes that lie ahead.

Dr. Mary E. Power is Professor in the Department of Integrative Biology at the University of California, Berkeley. She was awarded an honorary doctorate by Umea University, the Kempe Medal for distinguished ecologists, and the Hutchinson Award from the American Society of Limnologists and Oceanographers. She is

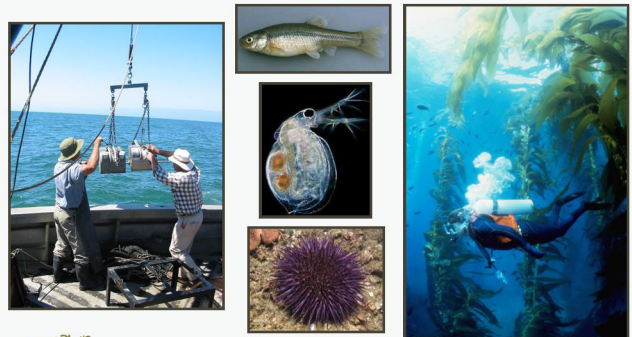
a member of the California Academy of Science, the American Academy of Arts and Sciences, and National Academy of Sciences, USA. She has served on the Editorial Board of PNAS (2014 to present) and Science (2006-2009). Mary also served as President of the American Society of Naturalists, and of the Ecological Society of America. Since 1988, she has been the Faculty Director of the Angelo Coast Range Reserve, (one of the UC Natural Reserve System sites, a 3500 ha reserve protected for university teaching and research). She has studied food webs in temperate and tropical rivers, as well as linkages of rivers, watersheds and near-shore environments. Focal organisms include cyanobacteria, algae, invertebrates, fish, estuarine crustaceans and terrestrial grasshoppers, spiders, lizards, birds and bats. By studying how key ecological interactions depend on landscape and temporal contexts, her group hopes to learn how river-structured ecosystems will respond to changes over space and time in climate, land use, and biota. Her group also collaborates closely with Earth and atmospheric scientists in site-based research to investigate linkages among riverine, upland, and near-shore ocean ecosystems.

aquatic
bioassay &
consulting
laboratories, inc



'quality marine & freshwater biological services since 1988'

- ◆ **Aquatic & Sediment Toxicology**
- ◆ **Watershed Assessments**
- ◆ **Coastal & Harbor Marine Sciences**
- ◆ **Taxonomic Services**



aquatic bioassay & consulting laboratories, inc
29 north olive ventura, ca 93001 (805) 643 5621

KEYNOTE/PLENARY SESSIONS

Monday 23 May 2016



PETER B MOYLE
University of California, Davis

Aquatic California: Endemic Biota, Endemic Problems, Endemic Solutions

California is distinctive aquatic bioregion, with a high degree of endemism in its biota. The best-studied group, the fishes, is 79%

endemic to the state or adjacent regions. Endemic species are widely distributed around the state but most are concentrated in 'hot spots'. Aquatic invertebrates follow the same pattern. California is the hydraulic society, so there is intense competition between humans and aquatic ecosystems for water. The ecosystems are losing. Most are highly altered and/or highly invaded by alien species, creating novel ecosystems. As a result 93 of 124 extant native fishes have some official designation as endangered, threatened, or special concern. Such severe stress requires new approaches and large-scale solutions. 'Reconciliation ecology' is an approach that seems to resonate with managers and can provide a basis for state-wide conservation strategies that are broad in scope but local in impact.

Peter Moyle has been working on the ecology California's freshwater and estuarine fishes since 1969, culminating in *Inland Fishes of California* (2002, UC Press). He has co-authored numerous papers on the ecology, status and trends of California's native and alien fishes, including documenting declines of salmon, steelhead, and other anadromous fishes in California. Present research focuses on climate change, effects of drought on fishes, floodplain management, and reconciliation ecology. He is Distinguished Professor Emeritus in the Department of Wildlife Fish and Conservation Biology and associate director of the Center for Watershed Sciences, UC Davis.

KEYNOTE/PLENARY SESSIONS

Tuesday 24 May 2016



DR. PETER GLEICK
*Pacific Institute,
Oakland California*

The Future of Freshwater in a World of Climate Change

Global and local freshwater challenges continue to mount around the world as populations expand, economies grow, and climate changes accelerate.

Dr. Peter Gleick will address the nature of freshwater problems, the history and science around society's efforts to solve water challenges, and a vision for a sustainable future for water. Science and technology remain central to efforts to understand and improve water management, but it is equally important to understand the economic, cultural, and political factors that also influence how freshwater is used and how the adverse impacts of that use can be mitigated.

Dr. Peter Gleick is a leading expert, innovator, and communicator on water and climate issues. He co-founded and leads the Pacific Institute in Oakland created in 1987 and now one of the most innovative, independent non-governmental organizations addressing global water challenges. Dr. Gleick's work has redefined water from the realm of engineers to the world of social justice, sustainability, human rights, and integrated thinking. His influence on the field of water has been long and deep: he developed one of the earliest analyses of climate change impacts on water resources, the earliest comprehensive work on water and conflict, and defined basic human needs for water and the human right to water – work that has been used by the UN and in human rights court cases. He pioneered the concept of the "soft path for water," developed the idea of "peak water," and has written about the remarkable history and background of the growing bottled water phenomenon. Dr. Gleick is a MacArthur "genius" Fellow, was named "a visionary on the environment" by the BBC, and is an elected member of the U.S. National Academy of Sciences. *Wired Magazine* featured Dr. Gleick as "one of 15 people the next President should listen to." He received his B.S. from Yale University and an M.S. and Ph.D. from the University of California, Berkeley. Dr. Gleick serves on the boards of numerous journals and organizations, and is the author or editor of many scientific papers and eleven books, including the influential series *The World's Water and Bottled and Sold: The Story Behind Our Obsession with Bottled Water*, as well as the 2012 release *A Twenty-First Century U.S. Water Policy*.

KEYNOTE/PLENARY SESSIONS

Wednesday 25 May 2016



DR. ANGUS WEBB
*University of Melbourne,
Australia*

Of Droughts and Flooding Rains: Innovative Responses to Water Scarcity in Temperate Australia

The Millennium Drought (1997-2009)
across much of temperate

Australia caused major hardships in rural communities and long-lasting (perhaps permanent) damage to river systems of the Murray-Darling Basin and beyond. However, with every crisis comes opportunity, and the latter years of the Millennium drought were characterized by rapid advances in water resource and environmental management research, policy and practice in Australia.

Rare bipartisanship in the nation's capital saw a new Federal Water Act established, greatly increasing the standing of 'the environment' as a legitimate user of water. The Murray-Darling Basin Plan, which became law in November 2012, will see around 2,750 GL/year of water recovered from consumptive water uses (mainly irrigation) for the environment. This equates to a recovery of around 21% of average annual discharge across the Basin. This make it one of the largest (in terms of relative volumes) environmental flows program ever implemented, and positive ecological responses of this major investment in the environment are already being observed. However, water reform has been far from painless, with affected rural communities understandably concerned about effects upon their livelihoods, and indeed the long-term viability of the fabric of rural Australia.

During the drought, technological and behavioural innovations greatly reduced water consumption in urban and rural Australia; and local river managers developed ecological triage approaches to maintain critical ecological functions of rivers on very small volumes of water. Water markets have also created the opportunity for efficient use of water for both consumptive and environmental purposes; and collaborations between researchers and river managers are developing methods to achieve best ecological outcome from the environmental water available.

The drought broke with a bang, with record flooding in south-eastern Australian in spring 2010, and rainfall patterns have been approximately average since then. Encouragingly, the majority of water reform policies and practices have endured, suggesting that Australia is better placed to face the next major drought. An opportunity to test this hypothesis may come sooner than expected, with 2015 inflows to the Murray River through to the end of September among the lowest on record, and climatic conditions in the Pacific and Indian oceans pointing to the high likelihood of a dry 2016.

Dr. Angus Webb is a Senior Lecturer in Environmental Hydrology and Water Resources at the University of Melbourne, Australia. He originally trained as a marine ecologist before moving into the study and restoration of large-scale environmental problems in freshwater systems. Much of his research centers on improving the use of the existing knowledge and data for such problems. To this end he has developed innovative approaches to synthesizing information from the literature, eliciting knowledge from experts, and analyzing large-scale data sets. He is heavily involved in the monitoring and evaluation of ecological outcomes from the Murray-Darling Basin Plan environmental watering, leading the program for the Goulburn River, Victoria, and advising on data analysis at the basin scale. Angus is currently a co-editing a major new text book on environmental flows science and management. He was awarded the 2013 prize for Building Knowledge in Waterway Management by the River Basin Management Society, and the 2012 Australian Society for Limnology Early Career Achievement Award.

2016 AWARD RECIPIENTS

SFS 2016 Award of Excellence



CLIFFORD N. DAHM

Dr. Clifford N. Dahm, the 2016 recipient of the SFS Award of Excellence, has a distinguished career in ecosystem studies and aquatic ecology that has produced a large and influential body of inter-disciplinary research. Cliff has made substantial research contributions in areas including stream geomicrobiology, stream biogeochemistry and the influence of hyporheic,

ecohydrology, nutrient dynamics, tower-based evapotranspiration dynamics of riparian zones, stream water-groundwater interactions, the influence of climate dynamics on river and riparian ecosystems, and the ecology of intermittent rivers. In addition he has also worked on more applied research in stream, river, and wetland restoration, and on the bridge from science to policy and management. Cliff started with his masters and PhD work at the Oregon State University researching nutrient cycling and the distribution and fate of dissolved organic carbon, but with a dual focus in oceanographic and freshwater systems. After 4 years as a post-doctoral research associate and assistant professor in aquatic ecology at Oregon State, Cliff moved inland to the University of New Mexico (UNM), where, over three decades,

he established a rich and productive research program. At UNM Cliff mentored many (30+) graduate students as well as numerous undergraduates and post-docs, and helped establish programs such as the NSF-sponsored Integrative Graduate Education and Research Traineeship (IGERT) on freshwater ecology and the Sevilleta LTER, which have enriched the University and been highly beneficial to innumerable students. Cliff has participated in and/or helped direct several notable interdisciplinary, collaborative, and/or international research projects, such as the Nutrient Partitioning and Retention [NPARS], the Lotic Intersite Nitrogen eXperiment [LINX] I and II, the National River Restoration and Science Synthesis [NRRSS] project, and more recently, the Intermittent River Biodiversity Analysis and Synthesis [IRBAS] project. Exemplifying Cliff's commitment to translating science to policy in a meaningful way, from 2008-2011, while maintaining his activities at UNM, Cliff became the Lead Scientist for the CALFED Bay-Delta Science Program (later Delta Science Program/Delta Stewardship Council). Here he made enormous contributions to the incorporation of science in the management of the Bay-Delta ecosystem, balancing ecosystem recovery with water supply reliability. As a testament to both Cliff's commitment to the marriage of science and policy and to the high regard he earned in this position, Cliff was recently re-appointed as the Delta Program Lead Scientist, where he currently serves despite his recent 'retirement' from UNM.

SFS 2016 Environmental Stewardship Award



JIM HARRINGTON

Jim Harrington is a Senior Environmental Scientist for the California Department of Fish and Wildlife's and has worked in the field of fisheries and water quality biology for more than 35 years. Jim received a BS in Fisheries Management and MS in Watershed Management from Humboldt State University in Arcata, California.

Jim is presently assigned to the CDFW Water Pollution Control Laboratory where he investigates and provides biological interpretation of toxicological and chemical data associated with enforcement of pollution events throughout California. He also provides technical support and training on water quality issues to all CDFW functions and many branches of State and Federal government which deal in environmental monitoring and regulation.

In 1993, Jim established the CDFW Aquatic Bioassessment Laboratory (ABL) where staff specializes in developing biological techniques to assess status, determine stressors and monitor recovery of aquatic systems. ABL staff conducts biological monitoring for the State Water Resource Control Board's Surface Water Ambient Monitoring Program (SWAMP) and leads the technical development of the tools needed to protect biological integrity for waters of the State. In 1996, Jim developed field and laboratory curriculum for professionals, environmental educators and watershed groups, teaching them the principles of bioassessment and how biological indicators can be used in California water quality monitoring and protection.

FUTURE MEETING



sfs 2017

JUNE 4-8, 2017

DESIGNING OUR FRESHWATER FUTURES
RALEIGH, NORTH CAROLINA, USA

DESIGNING OUR FRESHWATER FUTURES

Human civilization relies on a sustainable supply of fresh water to satisfy our thirst, water our crops, support fisheries, provide energy, and enrich our experience of nature. We are equally reliant on freshwater ecosystems to dispose of our wastes and to transport our commodities. These needs are often in conflict with one another, and unless carefully managed may both conflict with our desire to maintain the beauty and biodiversity of rivers. Much freshwater science has focused on documenting the identity and distribution of freshwater species and their loss; how our farms, cities, dams and mines degrade the physical, chemical and biological integrity of receiving streams. As a result, we are adept at documenting the decline – research designed to identify solutions has proved more elusive.

In our Raleigh 2017 meeting, we want to challenge the SFS community to shift their focus to how freshwater science can help imagine and implement solutions to the complex set of problems that plague freshwaters. Advancing our understanding of ecological processes will continue to be important, but is insufficient to meet future challenges. At SFS 2017 we will discuss and debate compelling ideas about how freshwater scientists can individually and collectively contribute to solution pathways that improve the trajectory of freshwater ecosystems. Our goal is to encourage all members of SFS to use their science to Inspire the public by sharing stories about the wonders of freshwater ecosystems; Inform stakeholders about the threats to and possibilities for future freshwater management and Insert our knowledge into real-time policy decisions, management actions, and technological innovations that will ultimately determine our freshwater future.

Please visit the Greater Raleigh Convention and Visitor's Bureau booth for further details concerning the meeting; or visit the SFS website, www.sfsannualmeeting.org.

SFS 2017 Meeting Organizers

Program Chair: Mike Paul

Local Arrangements Chair:
Jim Heffernan

(with help and oversight from Emily Bernhardt and Steve Thomas, President and Vice President)

LOCAL ARRANGEMENTS COMMITTEE MEMBERS

Marcelo Ardón, Anne Hershey, Julie DeMeester, Dave Penrose, Bob Hall, Brad Taylor, Bob Hall, Joanna Blaszcak (as head of SRC), and Natalie Griffiths (head of Early Career group).

Program Committee Members

CONTRIBUTED SESSION ORGANIZERS

Geoff Poole and Wyatt Cross (go MSU!!)

SPECIAL SESSION ORGANIZERS

Amy Rosemond and Krista Capps

2017 ANNUAL MEETING SCHEDULE

Sunday June 4: Workshops and board/committee meetings

Monday June 5–Thursday June 8:
SFS Annual Meeting

Friday June 9: Optional field trips

CONFERENCE VENUE:

Raleigh Convention Center

500 S. Salisbury Street

Raleigh NC 27601

CONFERENCE HOTELS:

Sheraton Raleigh Hotel

421 S. Salisbury Street

Raleigh NC 27601

Raleigh Marriott City Center

500 Fayetteville Street

Raleigh NC 27601

Holiday Inn Raleigh Downtown

320 Hillsborough Street

Raleigh NC 27603

GREAT LAKES SPONSOR



UNITED STATES GEOLOGICAL SURVEY

United State Department of the Interior

Reston, VA 20192

usgs.gov/ecosystems/fisheries

WATER FUTURES SPONSOR



AQUATIC BIOASSAY & CONSULTING LABORATORIES, INC.

29 N. Olive

Ventura, CA 93001

(805) 643-5621

scott@aquabio.orgwww.aquabio.org

Ecosystem Science for Now and the Future

Healthy watersheds and thriving aquatic populations are vital to the wellbeing of American society, providing clean water, food, and recreation-- yet almost 40 percent of the Nation's freshwater fish species are considered at risk or vulnerable to extinction.



The United States Geological Survey's Ecosystems Mission Area conducts cutting-edge research to protect, restore, and enhance our Nation's fisheries and their habitats. Our world-class scientists provide expertise and science to address local, regional, and national questions on aquatic species, communities, and habitats which supports Department of Interior bureaus, state and federal partners, non-governmental organizations, and native tribes in their decision-making.

U.S. Department of the Interior
U.S. Geological Survey

<http://www.usgs.gov/science/mission-areas/ecosystems>

OTHER SPONSORSHIP



R.B. ANNIS WATER RESOURCES INSTITUTE

Grand Valley State University

740 West Shoreline Drive

Muskegon, MI 49441

Contact: Al Steinman

steinmaa@gvsu.edu | gvsu.edu/wri



JH TECHNOLOGIES™

JH TECHNOLOGIES

John Hubacz

tel 408.436.6336 x302

fax 408.436.6343

jh@jhtechnologies.com

www.JHTechnologies.com



TWO RIVERS CIDER CO., SACRAMENTO, CA.

TWO RIVERS CIDER COMPANY

4311 Attawa Ave Suite 103,

Sacramento, CA 95822

www.tworiverscider.com



HERETIC BREWING COMPANY

1052 Horizon Dr, Ste B

Fairfield, CA

www.hereticbrewing.com



BARRELHOUSE BREWING CO.

3055 Limestone Way,

Paso Robles, CA

www.barrelhousebrewing.com



SUDWERK BREWING COMPANY

2001 2nd Street

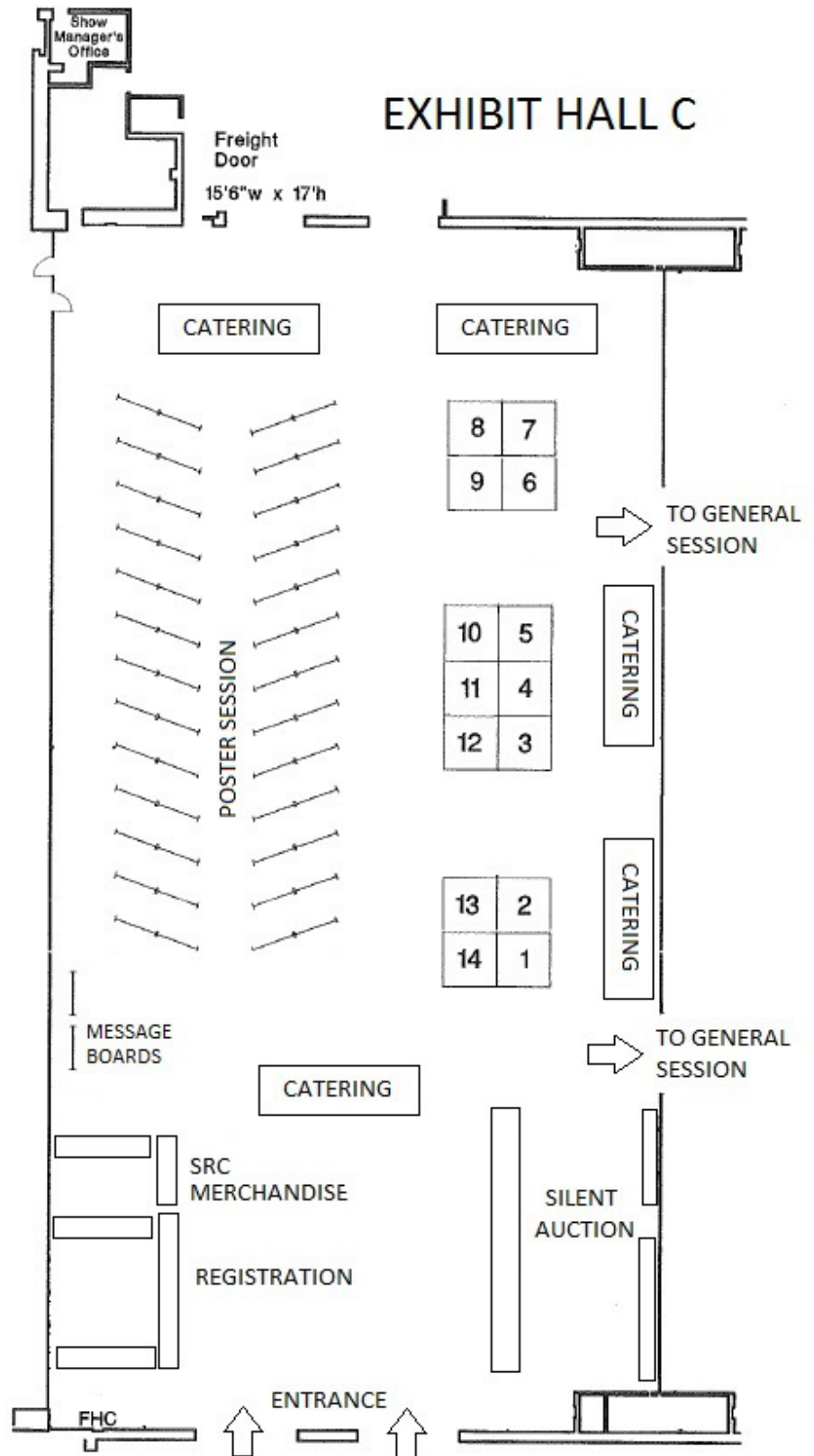
Davis, CA 95618

http://sudwerkbrew.com/

2016 SFS EXHIBITORS

BOOTH	ORGANIZATION
1	U.S. Forest Service
2	SFS 2017 - Raleigh
3	Turner Designs
4	EcoAnalysts, Inc.
5	USGS
6	The University of Chicago Press
7	Freshwater Science Journal
8	Eureka Water Probes
9	JH Technologies
10	University of California Press
11	Frigid Units, Inc.
12	Wildscape Inc.
13-14	SFS California Chapter

EXHIBITORS



2016 SFS EXHIBITORS



US FOREST SERVICE

800 Buchanan Street
Albany, CA 94710
510-883-9962
sleng@fs.fed.us
www.fs.fed.us/psw



GREATER RALEIGH CONVENTION & VISITORS BUREAU

Site of SFS 2017
421 Fayetteville St., Ste 1505
Raleigh, NC 27601-2995
visitRaleigh.com
919-645-2661



TURNER DESIGNS

1995 N 1st Street, San Jose, CA 95112
Tom Brumett
408-749-0994 | 877-316-8049
sales@turnerdesigns.com
www.turnerdesigns.com



L I F E I N W A T E R

ECOANALYSTS, INC.

1420 S. Blaine, Suite 14 Moscow, ID 83843
Gary Lester
(208)882-2588 x21
sales@ecoanalysts.com
www.ecoanalysts.com

FRESHWATER SCIENCE

Irwin Polls
847-564-9905
ipolls@comcast.net

THE UNIVERSITY OF CHICAGO PRESS

1427 E. 60th St., Chicago, IL, 60637
Chaz Oreshkov, Marketing Manager
(773) 834-1793
oreshkov@uchicago.edu
<http://www.journals.uchicago.edu>



EUREKA WATER PROBES

2113 Wells Branch Pkwy, Ste 4400, Austin, Texas 78728
Joanna Howerton
512-302-4333
Sales@waterprobes.com
www.waterprobes.com

2016 SFS EXHIBITORS



JH TECHNOLOGIES™

JH TECHNOLOGIES

John Hubacz

tel 408.436.6336 x302

fax 408.436.6343

jh@jhtechnologies.com

www.JHTechnologies.com



FRIGID UNITS, INC.

5072 Lewis Ave., Toledo, OH 43612

Dawn M. Heilman

P - 419/478-4000 F - 419/478-4019

Dawn@frigidunits.com

WILDSCAPE, INC.

Jewelry Created by the Caddisfly

Kathy Kyle Stout

304-280-5428

Kathy@wildscape.com

www.wildscape.com



**UNIVERSITY of
CALIFORNIA PRESS**

Advancing Knowledge, Driving Change

UNIVERSITY OF CALIFORNIA PRESS

Merrick Bush-Pirkle

155 Grand Ave., #400

Oakland, CA 94612

mbushpirkle@ucpress.edu



UNITED STATES GEOLOGICAL SURVEY

United State Department of the Interior

Reston, VA 20192

usgs.gov/ecosystems/fisheries

WORKSHOPS

Introduction To R

Saturday, May 21, 9:00 am-5:00 pm

CONVENTION CENTER – ROOM 309-310

The R computing environment has become a leading computational freeware for data analysis and display. This workshop is intended to introduce participants to the "R" computing environment, participants will learn to import, export and transform data to run statistical tests and data summaries. Instructors will demonstrate several functions of R and associated packages increasing the understanding and use of the R environment. Students will be expected to bring their own computer, and will be provided with many additional resources for exploring and learning in the R environment. A basic understanding of statistics and statistical tests is required.

Introduction to Gastropods and Mollusks: Sampling and Identification 101

Saturday, May 21, 9:00 am-5:00 pm

CONVENTION CENTER – ROOM 306

The focus of this workshop is to provide participants with a background on biology and ecology of freshwater mollusks (gastropods and bivalves), sampling techniques widely accepted in the industry, and taxonomic skills for commonly encountered species. Jeremy Tiemann and Kevin Cummings of the Illinois Natural History Survey will bring knowledge and charisma to an often under recognized taxa group. Whether you're a novice aquatic ecologist, looking to gain more experience with another faunal group, or a seasoned field biologist, this workshop will be informative and a thorough overview of mollusk taxonomy and sampling. Completing this workshop will prepare participants for the much anticipated SFS- Taxonomic Certification Exam for Genus level IDs of Freshwater Mollusks.

Bioassessment Analytical Methods for Freshwater Soft-Bodied Algae

Saturday, May 21, 9:00 am-5:00 pm

CONVENTION CENTER – ROOM 311-312

Soft-bodied algae are increasingly used in freshwater bioassessment as bioindicators of ecological conditions. The methods for their analysis are variable and influence the quality of obtained ecological information. This workshop is intended to demonstrate and discuss several analytical methods for benthic soft-bodied algae currently used in US federal and state stream bioassessment programs (such as National Aquatic Resource Surveys, National Water-Quality Assessment Program, and Surface Water Ambient Monitoring Program). In addition, methods for phytoplankton and periphyton from lentic ecosystems (lakes,

wetlands) will be briefly presented. Workshop leaders, Drs. Rosalina Stancheva and Julianne Heinlein, will lead discussions regarding time and cost efforts, and the advantages of each method. During this workshop the participants will receive an overview of the methods, the data generated, and their applications to bioassessment. Participants will compare the methods by hands-on experience processing freshwater samples, using various microscope counting devices for soft-bodied algae, and identifying and quantifying the soft-bodied algae under light microscope. This workshop is intended for both new and experienced algal taxonomists as well as those managing/ designing projects which include algal counts.

Stream Hydrology for Ecologists

Saturday, May 21, 9:00 am-5:00 pm

CONVENTION CENTER – ROOM 315

This 6-hour workshop is intended to be an introductory level course on stream hydrology for aquatic ecologists. This workshop will provide a conceptual overview of how hydrology and aquatic ecology intersect. Through interactive and hands-on exercises, Ken Eng (USGS) and Ted Grantham (USGS) will focus instruction on methods for obtaining and calculating flow and watershed data, prediction of natural and altered flows at ungauged locations, and modeling floodplain hydrology. All participants are required to have R (version 2.11.1 or higher) and R Studio (<https://www.rstudio.com/products/rstudio/>) installed on their own laptops.

Engage Science Communication Workshop: Communicate Your Research to the Public

Saturday, May 21, 9:00 am-12:00 pm or 1:30 pm-4:30 pm

CONVENTION CENTER – ROOM 302-303

Engage is an organization dedicated to teaching public speaking and science communication skills. At Engage, we train scientists to distill their knowledge without distortion or dilution. Scientists are often the leaders of their field with commanding depths of knowledge. However, these scientists struggle to clearly communicate their research to those outside their area of knowledge and the layperson. The problem isn't too little knowledge, but too much knowledge.

The primary aim of this workshop is to provide an opportunity for early career scientists to strengthen their public speaking and science communication abilities by developing a short, compelling, and jargon-free message about their research. The workshop will train participants to deliver an elevator pitch clearly and concisely with poise and confidence. This message will be accessible to many different audiences, including the public and scientists outside of the student's discipline. After developing this message, participants in this workshop will be able to adapt their communication skills and the message to multiple audiences, thereby improving their communication with the public, the media, and other scientists.

Taxonomic Certification Genus Level Testing - 2016

Announcement:

The TCP will be offering beta tests for Chironomidae and Mollusk images at this event. Sign up early if you wish to take part. Numbers are limited.

Image Tests are on USB sticks for this event and you will require your own laptop computer:

EPT- East or West
Chironomidae- North America
Mollusk- North America

Specimen & Slide Tests require microscope, light etc. (maybe provided if requested):

General Arthropods- East or West
Oligochaeta- North America

Test Sessions:

All testing will take place on Sunday, May 22nd., 2016 in room # 317-318 of the Sacramento Convention Center. The tests are three hours long with a half hour setup time:

Morning Session: 8:30am-12pm
Afternoon Session: 12:30pm-4pm

The tests are three hours long with a half hour setup time. Please contact gail.corkum@acadiau.ca directly if you wish to sign up for any tests in Sacramento. Space is limited. Registration will close on April 15th, 2016.

Taxonomic Certification Committee Meeting- 2016

The TCC meeting will follow the test sessions from 4-5pm in the above room. All are welcome.

Please RSVP: gail.corkum@acadiau.ca to let me know if you will be attending the TCC or not.

Taxonomy Fair

Tuesday 24 May 1:30-4:00 pm

EXHIBIT HALL C

The Taxonomy Fair at the Annual Society for Freshwater Sciences meeting is an opportunity for students and professionals alike to interact with leading experts in the fields of invertebrate and algal taxonomy. The Technical Issues Committee has gathered over 10 experts in taxonomy and systematics to assist participants in difficult and unique taxa. Taxonomic experts will gather at the Taxonomy Fair during the Wednesday evening poster session. Please bring your difficult, unknown or interesting specimens to the taxonomy fair and have them verified by experts in the field. This is an opportunity to discuss your findings with other taxonomists, collaborate on new research and learn about new advances in systematics. The Taxonomy Fair is an open session allowing for intimate one on one interaction with taxonomic experts.

This year we are proud to include a station dedicated to Adult EPT taxa that will also focus on how non-professional taxonomists can contribute phenology and ecology of aquatic insects in citizen science monitoring programs.

Please bring any specimens you wish to discuss, and remember to abide by any restrictive guidelines for traveling with specimens and EtOH.

Technical Issues Committee

Participating Taxonomic Experts:

Participant	Taxonomic Group	Affiliation
Jeff Webb	Ephemeroptera	Rhithron Associates
Mark Wetzel	Oligochaeta	Illinois Natural History Survey
Ed DeWalt	Plecoptera	Illinois Natural History Survey
Julianne Heinlein	Soft Algae	GLEC
Jason Robinson	Trichoptera	Illinois Natural History Survey
Kevin Cummings	Mollusks	Illinois Natural History Survey
D. Christopher Rogers	Crustacea	Kansas Biological Survey
Bohdan Bilyj	Chironomidae	BioTax Consultants
Brady Richards	Coleoptera/ Hemiptera	California Dept. Fish and Game
Rick Hafele	Citizen Science EPT Adults	Independent
Gina LaLiberte	Diatoms	Wisconsin DNR
Doug Post	Dytiscidae	California Dept. Fish and Game
Fredric Govedich	Hirudinea	Southern Utah University
Jeremy Tiemann	Gastropoda	Illinois Natural History Survey
Dan Pickard	Acari	CSU- Chico
Andy Rhen	Odonata	SBC Global

SFS 2016 FIELD TRIPS

White Water Rafting on the South Fork American River

FRIDAY, MAY 20

The South Fork American River lies in the golden hillsides of the Sierra Nevada foothills, just forty miles east of Sacramento. The rafting trip with professional guides starts at the tiny hamlet of Coloma--the town where gold was first discovered in California in 1848. We chose the South Fork for your trip because it offers all the qualities that make river rafting incredibly fun: lively, approachable rapids, splashing waves, and classic California scenery. Though the rapids have overwhelming names like "Troublemaker" and "Satan's Cesspool," they are not too intimidating themselves. Exciting enough to get your heart pumping, they are still reasonable enough for kids as young as eight years old to enjoy.

The bus will pick you up at 9 am and you will be on the water from 11:00 to 4:30. For lunch, you'll enjoy a tantalizing deli spread where you assemble your sandwich from a multitude of fresh vegetables, meats and condiments. You'll snack on chips, salsa, sweet summer fruit, and finish with a tasty dessert. The rafting trip will end at Folsom Lake where the bus will pick you up for the short ride back to the convention center.

Drought, Fire, Flood and Restoration in Mountain Streams of the Sierra Nevada

THURSDAY, MAY 26

The climatic extremes of the golden State are becoming even more pronounced as high temperatures, drought, forest wildfires, and floods have altered the hydrologic environment, especially of mountain streams in the Sierra Nevada. Take a trip with us to some of the stream sites where we've been studying these effects, and whether restoration practices can serve to protect or build resilience of these iconic environments. We'll leave from Sacramento Thursday morning at 7:30 am, head east into the mountains on interstate 80, first going to Sagehen Creek to visit a site where studies of climate change and drought have gone on for the past 6 years, then down along the Truckee River to visit a large river system and impacts from sedimentation, then onto Lake Tahoe and along the beautiful west shore of this great mountain lake (lunch). At the south shore of the lake we'll visit Angora Creek where a fire decimated habitat in 2007 and is now recovering. We will also visit Trout Creek and the Upper Truckee River where meadow restoration projects are hoped to stem effects of climate change and recover hydrologic function. Returning back to Sacramento along highway 50 and the corridor of the south fork of the American River (some stops there). If this winter brings El Nino atmospheric river storms we may see some flooding effects as well. Herbst and Medhurst have studied and published on Sierra streams for many years.

Aquatic Invertebrate Field Collection Trip

THURSDAY, MAY 26

Have you ever gotten to the couplet in your favorite taxonomic key where it says "Found only in Western North America," and you have always wanted to see what that critter looks like? Well, here is your chance! Join California Taxonomists for an old fashioned, taxonomic field collection trip up into the Sierra-Nevada Mountains of California. A bus will pick us up in the morning of Thursday, May 26th, heading up to Sagehen Creek Field Station. We will collect at two stream sites, and one lake site high in the mountains before finally arriving at Sagehen.

Located within the Sagehen Experimental Forest on the eastern slope of the northern Sierra Nevada approximately 20 miles north of Lake Tahoe, Sagehen Creek Field Station has been dedicated to research and teaching since 1951. The University of California operates the station under a long-term, special-use permit from the U.S. Forest Service. The surrounding watershed is also available to researchers and classes through an agreement with the Forest Service and includes extensive stands of yellow pine, mixed conifer, and red fir forests, as well as brush fields, scattered mountain meadows, and fens. There are rustic cabins at the Field Station, so pillow, sleeping bag, outdoor equipment, and toiletries are required!

We will stay the night here at Sagehen, getting to collect both during the day, and to run a mercury vapor night light for aquatic adults. Microscopes will be available in the afternoon and evening for those who want to figure out what critters they got. Dinner, breakfast, and a sack lunch for Friday will be offered at Sagehen. We will collect a couple of other sites on Friday on the way back down to Sacramento.

MEETINGS

Friday

SFS FINANCE COMMITTEE

Friday, May 20, 3:00 pm – 5:00 pm
Sheraton Hotel – Beavis Room

Saturday

FWS EDITORIAL BOARD COMMITTEE

Saturday, May 21, 7:00 am – 9:00 am
Sheraton Hotel – Beavis Room

SFS BOARD OF DIRECTORS MEETING

Saturday, May 21, 9:00 am – 5:00 pm
Sacramento Convention Center, Room 308

INSTARS ORIENTATION

Saturday, May 21, 1:00 pm – 4:30 pm
Convention Center – Room 304-305

Sunday

SFS COMMITTEES – LUNCH MEETINGS

Sunday, May 22, 12:00 pm – 1:30 pm
Sheraton Hotel – Gardenia Room
 ALL COMMITTEES not otherwise listed.

SFS SRC COMMITTEE LUNCH MEETING

Sunday, May 22, 12:00 pm – 1:30 pm
Sheraton Hotel – Camelia Room

TAXONOMIC CERTIFICATION COMMITTEE MEETING

Sunday, May 22, 4:00 pm – 5:00 pm
Convention Center – Room 317-318

Monday

SFS PUBLICATIONS COMMITTEE MEETING

Monday, May 23, 7:00 am – 9:00 am
Sheraton Hotel – Beavis Room

SFS MEMBERSHIP BUSINESS LUNCH MEETING

Monday, May 23, 12:00 pm – 1:30 pm
Convention Center – Hall DE

Tuesday

CHAPTER INFORMATION SESSION

Tuesday, May 24, 4:00 pm – 5:00 pm
Convention Center – Room 301

Wednesday

NEW BOARD OF DIRECTORS BREAKFAST MEETING

Wednesday, May 25, 7:30 am – 9:00 am
Sheraton Hotel – Falor Room

EVENTS AND ACTIVITIES

Opening Reception

Saturday, May 21, 6:00 – 7:00 pm

Convention Center – Exhibit Hall C

A welcome reception to the 2016 SFS Annual Meeting will be held on Saturday, 21 May 2016 in the Convention Center Exhibit Hall C, prior to the SFS Meeting Opening and Awards session which is scheduled from 7:00-10:00 p.m. Conference registration will be open beginning at 4:00 p.m. prior to the reception to allow you to pick up your conference materials. Light hors d'oeuvres and a cash bar will be available.

SFS Student-Mentor Mixer

Sunday, May 22, 6:30 – 8:30 pm

Sheraton Hotel – Camelia/Magnolia Room

SFS Mixer and Live Auction

Sunday, May 22, 7:30 – 10:00 pm

Convention Center – Exhibit Hall C and Hall DE

SFS Mixer – California Chapter Hosts

Monday, May 23, 5:00 – 7:00 pm

Convention Center – Exhibit Hall C

SFS Endowment Reception

Monday, May 23, 5:00 pm – 6:00 pm

Sheraton Hotel – Bataglieri Room

Poster Session

Tuesday, May 24, 1:30 – 4:00 pm

Convention Center – Exhibit Hall C

Fun Run

Tuesday, May 24, 4:30 pm – 6:00 pm

The SFS Annual 5k Run will be centering around Discovery Park. The starting point is the I Street Bridge near Old Sacramento State Historic Park and the Railroad Museum (where the offsite mixer will be later that evening). You'll run north on the American River Bike Trail with the Sacramento River to your left, then head northeast to the Jibboom Street Bridge and cross over the American River. Then east on the American river Bike Trail through Discovery Park. The start/finish area is located approximately 2 km from the Convention Center. Take it as a warm up walk or hop on the bus we will have departing at 4 p.m. and returning at 6 p.m. Runners will receive a Fun Run t-shirt.

OLD TOWN SACRAMENTO

Offsite Social Event

Tuesday, May 24, 7:30 – 10:00 pm

Railroad Museum - Old Town Sacramento

Join us for a fun casual evening event in Old Town Sacramento at the Old Sacramento State Historic Park and the California State Railroad Museum. What used to be called the "banquet" has been reinvented for 2016 with an array of food trucks, museum access, and train rides along the Sacramento River in passenger coach cars pulled by a diesel powered locomotive. We will have access to the exhibits at the Museum of Railroad History including the spectacular Roundhouse and a display of historic locomotives. The 1849 Scene outside the museum consists of historic buildings and lawn which will be peppered with food trucks, drink carts, and live music. The Annual SFS Jam Session also takes place at this event so remember to bring your instruments of choice and join in on the fun. Tickets for this event will be provided at conference registration, and there will also be cash sales available.

Note: Wear your SFS 2016 name badge and bring your picture ID for any of the SFS mixers and social events.

SPECIAL OPPORTUNITIES AND INFORMATION FOR STUDENTS AND POST-DOCS

Outstanding Student Presentation Awards

Three hundred and four (304) student presentations were evaluated by judges at the 2015 SFS conference in Milwaukee, WI. Two hundred and fifty four (254) were presented by graduate students. Fifty (50) were given by undergraduate students. There were many fine presentations and all the students are congratulated for their participation.

2015 Award Winners

MATHEW KAYLOR

Oregon State University

Best Oral Presentation in Basic Research

“INFLUENCES OF RIPARIAN FOREST STAND DEVELOPMENT ON STREAM PERIPHYTON, INVERTEBRATE AND VERTEBRATE POPULATIONS IN CASCADE MOUNTAIN STREAMS, OR.”

SOPHIE CAUVY-FRAUNIE

IRD French Institute for Development Research

Runner Up Oral Presentation in Basic Research

“LOW RESILIENCE OF TROPICAL RIVER BIOTA TO EXPERIMENTAL DECREASE IN GLACIER RUNOFF”

KATHERINE STANDEN

Canadian Rivers Institute, Department of Biology, University of New Brunswick

Best Oral Presentation in Applied Research

“ARROWHEAD (SAGITTARIA CUNEATA) AS A BIOINDICATOR OF NITROGEN AND PHOSPHORUS FOR PRAIRIE STREAMS”

ANA CHARA-SERNA

Department of Forest and Conservation Sciences, University of British Columbia

Runner Up Oral Presentation in Applied Research

“INDIVIDUAL AND CUMULATIVE EFFECTS OF FINE SEDIMENT, NUTRIENT ENRICHMENT, AND INSECTICIDE POLLUTION ON STREAM MICROCOSMS”

BRIAN GILL

Colorado State University

Best Presentation Emphasizing Methodology

“MEASURING ELEVATION RANGE SIZES TO TEST THE CLIMATE VARIABILITY HYPOTHESIS AND ASSESS LATITUDINAL DIFFERENCES IN SPECIES VULNERABILITY TO CLIMATE CHANGE”

KAYLEE FALTYS

South Dakota State University

Best Poster Presentation in Basic Research

“NATIVE UNIONIDAE MUSSELS IN THE GLACIATED PLAINS, SOUTH DAKOTA”

AARON MARTI

Ball State University

Best Poster Presentation in Applied Research

“MACROPHYTE ASSOCIATED MICROBIAL NITROGEN AND PHOSPHOROUS CYCLING IN AN URBAN WETLAND”

BREE BENDER

University of Wisconsin - Stevens Point

Best Oral or Poster Presentation by an Undergraduate Student

“A SEASONAL DENITRIFICATION AND NITROGEN REMOVAL CAPACITY OF SMALL RESERVOIRS”

SFS would like to give a special thanks to Patina Mendez for designing the electronic judging submittal form. Thank you, Tina, for all your hard work.

SFS also thanks Kait Farrell for organizing student judges for the undergraduate student presentations. We are proud to have our talented future scientists participating in the growing undergraduate program.

We thank the continuing support of all our sponsors of the SFS Student Awards Program:

Elsevier/Academic Press

Frigid Units

Turner Designs

Anonymous Donor (Undergraduate award)

Student-Mentor Mixer

Sunday, May 22, 2016, 6:30-8:30pm

Sheraton – Camelia/Magnolia

The SFS-SRC student-mentor mixer is designed to facilitate interactions between students and experienced professionals in the field of freshwater science. Mentors may include aquatic science professors, research associates, post-doctoral researchers, government employees, and private consultants. The SFS Annual Student-Mentor Mixer is open to all undergraduate students, graduate students, and post docs, however, registration is required. The Student-Mentor mixer provides students with the opportunity to make connections with professionals who share similar interests, gain insight into future career opportunities, and receive valuable advice on navigating through the scientific research process. This mixer provides students a great opportunity to network and engage in lively conversation with mentors and peers in a relaxed environment. Every pre-registered participant (21 and over) will receive a group assignment and complimentary drink ticket.

SFS Student Resource Committee Lunch

Sunday, May 22, 2016, 12:00-1:30pm

Sheraton – Camelia

Are you an undergraduate or graduate SFS student member and interested in becoming more involved with the society? Please join the Student Resource Committee (SRC) for our annual luncheon meeting! Learn about the SRC's activities (i.e. live auction, silent auction, student-mentor mixer, etc) and how you can become more involved in the society. We will also be electing leadership positions for the coming year. Free lunch will be provided for all student attendees.

6TH ANNUAL INSTARS PROGRAM



Instars is a program sponsored by the Society for Freshwater Science for undergraduates from under-represented groups interested in the study of freshwater. This program teaches undergraduate students about the many disciplines of freshwater science through interactions with other undergraduates, graduate student mentors, and professional SFS members. The core of the program is attending the 2016 SFS Annual Meeting. Instars activities include:

- A half-day, pre-meeting Instar orientation workshop open only to SFS Instar Fellows.
- Networking activities with peers and mentors during the meeting.
- Attending plenary sessions and a wide choice of special, contributed, and poster sessions.
- Opportunities to present undergraduate research in general sessions with friendly review from professional aquatic ecologists.
- Post-meeting networking and linking to research and educational opportunities in aquatic science.

SFS sponsors a number of Instars Fellows by providing meeting registration fees, travel, and lodging for the pre-meeting activities and the annual meeting.

This is the sixth Instar class! Several previous Fellows are presently in graduate school and will participate as mentors. Photos of previous classes, details of Instars activities, application materials and additional web communications are posted regularly on the SFS website.

Instar workshops, with the exception of the orientation workshop on Saturday, are open to all students or mentors attending the meeting; however, pre-registration is encouraged for planning purposes.

MORE INFO

- <https://www.freshwater-science.org/Education-and-Outreach/Instars-Program.aspx>
- <https://www.facebook.com/pages/Instars>

Faculty and students are encouraged to contact any members of the organizing committee for other information.

DR. CHECO COLON-GAUD

Georgia Southern University
jccolongaud@georgiasouthern.edu

DR. TAMARA SLUSS

Kentucky State University
tamara.sluss@sysu.edu

DR. PATINA MENDEZ

University of California, Berkeley
patina.mendez@berkeley.edu

DR. JUDY LI

Oregon State University
judyli@comcast.net

DR. MARCELO ARDON-SAYAO

East Carolina University
ardonsayaom@ecu.edu

DR. KRISTA CAPPS

University of Georgia
kcapps@uga.edu

SFS Instars Mentoring Workshop Orientation

(Invitation Only)

Saturday, 21 May 2016, 1:00 - 4:00 pm

Sacramento Convention Center – Room 304-305

This is the sixth year that the Society for Freshwater Science (SFS) is sponsoring the Instars Mentoring Program for undergraduates from under-represented groups who are interested in the study of freshwaters. The program is open to students sponsored through Instars Fellowships and others from under-represented minorities. During the annual meeting opportunities for networking among graduate students, faculty and professionals will be promoted as we strive to encourage diversity in our discipline. This workshop is only for Instar Fellows.

PRESENTER INFORMATION

Concurrent Sessions: Orals

Ten concurrent sessions will be held in Sacramento Convention Center in the 3rd floor meeting rooms. Each session room will be equipped with a projector, screen, a PC laptop, remote/pointer, and a microphone. Wifi – wireless internet access has been arranged for our group throughout the facility and in all the meeting rooms. Access the abstract system by the assigned deadline to upload your presentation(s) so that they can be pre-loaded on the laptop in your room prior to your scheduled start time.

Upload your final presentation no later than midnight the day prior to your scheduled presentation (i.e., 11:59 pm Monday for a Tuesday presentation).

Link for uploading

<http://sfsannualmeeting.org/Papers.cfm>

IMPORTANT:

All session presentations will be downloaded from the online system, not manually loaded at the presentation room onsite, however a speaker management team will be on hand if you need assistance.

The speaker management team hours are the same as the registration hours for the conference. Check in at the registration desk and you will be directed to a speaker management team member to assist you if needed. **DO NOT WAIT UNTIL THE DAY OF YOUR PRESENTATION TO DO THIS.**

Session Chair Information

Please arrive 30 minutes early to familiarize yourself with the meeting room and AV equipment. The presentation files for each session will be pre-loaded on the laptop in the room in a folder by date and time. Once the presentation is launched, the presenter will control the program from the podium using a handheld slide advancer/laser pointer (provided). Alternately, the presenter may use the computer mouse or the up/down/right/left keys on a keyboard for navigation. The session chair or other room monitor will serve as a timer and indicate reminder times. We must keep on time! Do not allow speakers or Q&A sessions to run over time. Start sessions on time; do not delay while people return from breaks. If a presenter ends early or a talk is cancelled, wait until the scheduled start of the next presentation before continuing.

Talks are 12 minutes long with 2 minutes for questions and a 1-minute period for changing rooms (except for some special session talks scheduled for 30 minutes). Please briefly introduce the speaker, their affiliation, and the title of their talk - no biographical elaboration is necessary.

To keep talks on schedule, the session chair will use a timer (provided) to keep track of session times. We will use the following timing conventions; at 10 minutes past the start of

the talk, notify the speaker that there are 2 minutes left. At 12 minutes, indicate it is time to begin any questions; At 14 minutes indicate that the talk and questions are over. The session chair or room monitor will be provided with three cards: A yellow card to indicate there are 2 minutes left; a green card to indicate it is time for questions; and a red card to indicate that the talk and questions are over. Note that if you are chairing a 30-minute talk in a special session, the talk and any questions still must end at the same time as a second concurrent 15 minute talk would.

Poster Session

The Poster Session will take place on Tuesday, May 24 from 1:30 to 4:00 pm in the exhibit hall. Posters can be set up any time the exhibit hall is open, beginning on Saturday May 21 at 11:00 a.m. To optimize viewing and interaction opportunities we encourage presenters to leave their posters in place until Wednesday when they need to be removed by 6:00 pm.

Posters will be mounted on poster boards (provided) and must be no larger than 45 inches high by 45 inches wide. If your poster exceeds this size, it may be subject to removal. Posters will adhere to the boards using push pins that will be provided.



Historic District of Sacramento - ADOBE Stock

SESSION INDEX

CONTRIBUTED SESSIONS		ORALS	POSTERS	CONTRIBUTED SESSIONS		ORALS	POSTERS
C01	Algae and Primary Production	50	61	C09	Food Webs	48	64
C02	Bioassessment	36-37, 45	61	C10	Hydroecology	37-38	64
C03	Biogeochemistry	32, 42-43, 48-49, 54	62	C11	Invasive Species	48, 57	64
C04	Climate Change	30, 50-51	62	C12	Invertebrate Ecology	34, 48	64-65
C05	Conservation and Restoration	45, 53	62-63	C13	Land-use and Non-Point Source Impacts	33, 43	65
C06	Disturbance	47, 57	63	C17	Organic Matter Processing	38	65
C07	Ecology of Fish and Other Aquatic Vertebrates	49	63	C18	Population and Community Ecology	31, 44	66
C08	Ecotoxicology	35	63	C20	Gas and Oil	46	–

SPECIAL SESSIONS		ORALS	POSTERS
S01	Future Freshwater Scientists - UNDERGRADS	31	58
S02	Climate and Drought Effects on Mountain Stream Ecosystems	40	58
S03	Global Perspectives on Environmental Flows	56	58
S04	Temporary Wetlands	42	58-59
S05	Eco-hydrology of IRES in a Changing Climate	41-42, 49	59
S06	Molecular Methods in Biomonitoring	39	59
S07	Challenges in Freshwater Conservation	34	59
S08	Hydroclimatic Extremes	32-33	59
S09	Conservation of Freshwater Mussels	38	59
S10	Rivers at Risk	55-56	59
S11	Next-Generation Sequencing in Freshwater Science	33-34	59
S12	Invertebrate Ecology	53	59-60
S13	Session for Vince Resh	51	–
S14	Multiple Stressors in River Ecosystems	41, 47, 52-53	60
S15	Putting Your Publications to Work	39-40	–
S16	Algal Data as a Component of Bioassessment	47	60
S17	Stressed Forested Watersheds	44-45	60
S18	Community Engagement in Science	30-31	60
S19	Session for Cliff Dahm	31-32	–
S20	Ecological Subsidies to Stream and Riparian Ecosystems	53	–
S21	Balancing the Freshwater Budget	37	–
S22	Biotic Responses to Food Web Alterations	43-44	–
S23	Traits-Based Vulnerability Assessment/Climate Change	40-41	60
S24	Scale and Ecosystem Functions	35	61
S25	Modeling Environmental Change in Freshwater Ecosystems	44	61
S26	Exploring Trophic Relationships and Stream Food Webs	54-55	–
S27	Contaminants as Agents of Ecological Change	36	61

FRIDAY, MAY 20, 2016

TIME	SESSION
08:00 - 17:00	Pre-Meeting Field Trips
15:00 - 17:00	SFS Finance Meeting [Sheraton-Beavis]

SATURDAY, MAY 21, 2016

TIME	SESSION						
09:00 - 17:00	<table border="0"> <tr> <td>SFS Board of Directors Meeting [308]</td> <td>Introduction to R [309-310]</td> <td>Introduction to Gastropods [306]</td> <td>Enhancing Taxonomic Data [307]</td> <td>Bioassessment Analytical [311-312]</td> <td>Stream Hydrology [315]</td> </tr> </table>	SFS Board of Directors Meeting [308]	Introduction to R [309-310]	Introduction to Gastropods [306]	Enhancing Taxonomic Data [307]	Bioassessment Analytical [311-312]	Stream Hydrology [315]
SFS Board of Directors Meeting [308]	Introduction to R [309-310]	Introduction to Gastropods [306]	Enhancing Taxonomic Data [307]	Bioassessment Analytical [311-312]	Stream Hydrology [315]		
09:00 - 18:00	Science Communication Workshop [302-303]						
13:00 - 16:30	INSTARS Orientation [304-305]						
16:00 - 22:00	Registration Open						
18:00 - 22:00	Exhibits Open [Exhibit Hall C]						
18:00	Welcome Mixer [Exhibit Hall C]						
19:00 - 22:00	SFS Meeting Opening and Awards [Hall DE]						



Sacramento at Sunset - ADOBE Stock



**SOCIAL MEDIA
HASH TAG:**

#2016SFS

SUNDAY, MAY 22, 2016

TIME	SESSION				
08:00 - 22:00	Exhibits Open [Exhibit Hall C]				
08:00 - 23:00	Registration Open				
13:00 - 16:00	TCP Test Sessions [317-318]				
09:00 - 09:15	Welcome/Announcements [Hall DE]				
09:00 - 12:00	TCP Test Sessions [317-318]				
09:15 - 10:00	PLENARY [Hall DE] 'DROUGHT, FLOODS, AND ALTERNATE STATES OF ALGAL-BASED RIVER FOOD WEBS IN THE THIRSTY EEL' Mary Power				
10:00 - 10:30	Coffee Break				
10:30 - 12:00	302-303	304-305	306	307	308
	C04: Climate Change	S18: Community Engagement in Science	C18: Population and Community Ecology	C03: Biogeochemistry	C13: Land-use and Non-Point Source Impacts
	309-310	311-312	313	314	315
	S07: Challenges in Freshwater Conservation	C12: Invertebrate Ecology	C08: Ecotoxicology	S21: Balancing the Freshwater Budget	C10: Hydroecology
12:00 - 13:30	Lunch On Your Own		SFS Committees Lunch Meeting [Sheraton-Gardenia]	Student Resource Committee Lunch Meeting [Sheraton-Camelia]	
13:30 - 15:00	302-303	304-305	306	307	308
	C04: Climate Change	S01: Future Freshwater Scientists - UNDERGRADS	S19: Session for Cliff Dahm	S08: Hydroclimatic Extremes	S11: Next-Generation Sequencing in Freshwater Science
	309-310	311-312	313	314	315
	S07: Challenges in Freshwater Conservation	S24: Scale and Ecosystem Functions	S27: Contaminants as Agents of Ecological Change	C02: Bioassessment	C10: Hydroecology
15:00 - 15:30	Coffee Break				
15:30 - 17:00	302-303	304-305	306	307	308
	C04: Climate Change	S01: Future Freshwater Scientists - UNDERGRADS	S19: Session for Cliff Dahm	S08: Hydroclimatic Extremes	S11: Next-Generation Sequencing in Freshwater Science
	309-310	311-312	313	314	315
	S07: Challenges in Freshwater Conservation	S24: Scale and Ecosystem Functions	S27: Contaminants as Agents of Ecological Change	C02: Bioassessment	C10: Hydroecology
16:00 - 17:00	TCC Meeting [317-318]				
18:30 - 20:30	SRC Student/Mentor Mixer [Sheraton-Camelia/Magnolia]				
19:30 - 22:00	SFS Mixer [Exhibit Hall C]				
20:00 - 22:00	Live Auction [Hall DE]				

MONDAY, MAY 23, 2016

TIME	SESSION				
08:00 - 19:00	Registration Open				
08:00 - 19:00	Exhibits Open [Exhibit Hall C]	Silent Auction Open [Exhibit Hall C]			Poster Set-Up [Exhibit Hall C]
09:00 - 09:15	Welcome/Announcements [Hall DE]				
09:15 - 10:00	PLENARY [Hall DE] 'AQUATIC CALIFORNIA: ENDEMIC BIOTA, ENDEMIC PROBLEMS, ENDEMIC SOLUTIONS' Peter Moyle				
10:00 - 10:30	Coffee Break				
10:30 - 12:00	302-303	304-305	306	307	308
	C17: Organic Matter Processing	S06: Molecular Methods in Biomonitoring	S23: Traits-Based Vulnerability Assessment/Climate Change	S14: Multiple Stressors in River Ecosystems	S05: Eco-hydrology of IRES in a Changing Climate
	309-310	311-312	313	314	315
	S04: Temporary Wetlands	C13: Land-use and Non-Point Source Impacts	C05: Conservation and Restoration	C18: Population and Community Ecology	C02: Bioassessment
12:00 - 13:30	SFS Membership Business Lunch [Hall DE]				
13:30 - 15:00	302-303	304-305	306	307	308
	S09: Conservation of Freshwater Mussels	S06: Molecular Methods in Biomonitoring	S23: Traits-Based Vulnerability Assessment/Climate Change	S02: Climate and Drought Effects on Mountain Stream Ecosystems	S05: Eco-hydrology of IRES in a Changing Climate
	309-310	311-312	313	314	315
	C03: Biogeochemistry	S22: Biotic Responses to Food Web Alterations	S25: Modeling Environmental Change in Freshwater Ecosystems	S17: Stressed Forested Watersheds	C02: Bioassessment
15:00 - 15:30	Coffee Break				
15:30 - 17:00	302-303	304-305	306	307	308
	S09: Conservation of Freshwater Mussels	S06: Molecular Methods in Biomonitoring	S15: Putting Your Publications to Work	S02: Climate and Drought Effects on Mountain Stream Ecosystems	S05: Eco-hydrology of IRES in a Changing Climate
	309-310	311-312	313	314	315
	C03: Biogeochemistry	S22: Biotic Responses to Food Web Alterations	S25: Modeling Environmental Change in Freshwater Ecosystems	S17: Stressed Forested Watersheds	C18: Population and Community Ecology
17:00 - 18:00	SFS Endowment Reception [Sheraton-Bataglieri]				
17:00 - 19:00	Conference Mixer with California Chapter Hosts [Exhibit Hall C]				

TUESDAY, MAY 24, 2016

TIME	SESSION				
08:00 - 13:00	Taxonomy Fair Set-up [Exhibit Hall C]				
08:00 - 16:00	Registration Open	Exhibits Open [Exhibit Hall C]		Silent Auction Open [Exhibit Hall C]	
09:00 - 09:15	Welcome/Announcements [Hall DE]				
09:15 - 10:00	PLENARY [Hall DE] 'THE FUTURE OF FRESHWATER IN A WORLD OF CLIMATE CHANGE' Peter Gleick				
10:00 - 10:30	Coffee Break				
10:30 - 12:00	302-303	304-305	306	307	308
	C06: Disturbance	C20: Gas and Oil	S16: Algal Data as a Component of Bioassessment	S14: Multiple Stressors in River Ecosystems	C12: Invertebrate Ecology
	309-310	311-312	313	314	315
	C09: Food Webs	C11: Invasive Species	C05: Conservation and Restoration	C03: Biogeochem- istry	S05: Eco-hydrology of IRES in a Changing Climate
12:00 - 13:30	Lunch On Your Own				
13:30 - 16:00	Poster Session [Exhibit Hall C]			Taxonomy Fair [Exhibit Hall C]	
16:00 - 17:00	Chapter Information Session [301]			Taxonomy Fair Tear Down [Exhibit Hall C]	
16:30 - 18:00	Fun Run				
19:30 - 22:00	Offsite Social Event and Jam Session				



Sacramento Skyline - ADOBE Stock

WEDNESDAY, MAY 25, 2016

TIME	SESSION				
07:30 - 09:00	New Board of Directors Breakfast [Sheraton-Falor]				
08:00 - 17:00	Registration Open			Silent Auction Pickup	
09:00 - 09:15	Welcome/Announcements [Hall DE]				
09:15 - 10:00	PLENARY [Hall DE]				
	'OF DROUGHTS AND FLOODING RAINS: INNOVATIVE RESPONSES TO WATER SCARCITY IN TEMPERATE AUSTRALIA'				
	J Angus Webb				
10:00 - 10:30	Coffee Break				
10:30 - 12:00	302-303	304-305	306	307	308
	C07: Ecology of Fish and Other Aquatic Vertebrates	C01: Algae and Primary Production	S13: Session for Vince Resh	S14: Multiple Stressors in River Ecosystems	C05: Conservation and Restoration
	309-310	311-312	313	314	315
	C03: Biogeochemistry	S26: Exploring Trophic Relationships and Stream Food Webs	S10: Rivers at Risk	S03: Global Perspectives on Environmental Flows	C06: Disturbance
12:00 - 13:30	Lunch On Your Own [Offsite]				
13:30 - 15:00	302-303	304-305	306	307	308
	C07: Ecology of Fish and Other Aquatic Vertebrates	C01: Algae and Primary Production	S13: Session for Vince Resh	S14: Multiple Stressors in River Ecosystems	S12: Urban Stream Syndrome
	309-310	311-312	313	314	315
	S20: Ecological Subsidies to Stream and Riparian Ecosystems	S26: Exploring Trophic Relationships and Stream Food Webs	S10: Rivers at Risk	S03: Global Perspectives on Environmental Flows	C11: Invasive Species
15:00 - 15:30	Coffee Break				
15:30 - 17:00	302-303	304-305	306	307	308
	C07: Ecology of Fish and Other Aquatic Vertebrates	C04: Climate Change	S13: Session for Vince Resh	S14: Multiple Stressors in River Ecosystems	S12: Urban Stream Syndrome
	309-310	311-312	313	314	315
	S20: Ecological Subsidies to Stream and Riparian Ecosystems	S26: Exploring Trophic Relationships and Stream Food Webs	S10: Rivers at Risk	S03: Global Perspectives on Environmental Flows	C11: Invasive Species

THURSDAY, MAY 26, 2016

TIME	SESSION
08:00 - 19:00	Field Trips [Depart from Sheraton]

SUNDAY, MAY 22 ORALS

C04 Climate Change

Session Chair(s): Hamish Greig, John L. Bailey, Therese Frauendorf
Location: 302-303

- 10:30 **David Fryxell, Eric Palkovacs**
CONTEMPORARY THERMAL ADAPTATION OF A PREDATOR EXACERBATES ECOLOGICAL CONSEQUENCES OF CLIMATE WARMING
- 10:45 **Emma Moffett, David Fryxell, Kevin Simon, Eric Palkovacs, Michael Kinnison**
SOME LIKE IT HOT: INTRASPECIFIC VARIATION IN CONSUMER METABOLISM AND NUTRIENT EXCRETION DRIVEN BY TEMPERATURE
- 11:00 **Alan Covich, Todd Crowl, Omar Perez-Reyes**
EFFECTS OF DROUGHT ON NON-SEASONAL RAINFOREST STREAMS
- 11:15 **Dean Jacobsen, Kirsten Seestern Christoffersen**
EQUATORIAL PRO-GLACIAL LAKES: ARE THEY DIFFERENT FROM THEIR HIGHER LATITUDE HOMOLOGUES?
- 11:30 **James J. Roberts, Kurt D. Fausch, Matthew P. Zeigler, Kevin B. Rogers, Andrew S. Todd, Douglas P. Peterson, Mevin B. Hooten**
THE COMBINED EFFECTS OF CLIMATE CHANGE AND NON-NATIVE SPECIES ON SOUTHERN ROCKY MOUNTAIN CUTTHROAT TROUT
- 11:45 **Therese C. Frauendorf, Richard MacKenzie, Rana El-Sabaawi**
PREDICTED CLIMATE DRIVEN CHANGES IN FLOW AFFECT STREAM NUTRIENT DYNAMICS IN HAWAII
- 13:30 **Hamish Greig, Krista Capps, Jacquelyn Gill, Robert Northington, Thomas Parr, Amanda Klemmer**
EXPERIMENTAL EVIDENCE THAT HEMLOCK DECLINE CHANGES THE ROLE OF DETRITAL SUBSIDIES IN FRESHWATER FOOD WEBS
- 13:45 **Piet F.M. Verdonschot, Ralf C.M. Verdonschot**
EFFECTS OF SHADING ON STREAM WATER TEMPERATURE AND STENOTHERMIC MACROINVERTEBRATES ALONG A EUROPEAN LATITUDINAL CLIMATE GRADIENT
- 14:00 **Stephanie Parker**
NEON AQUATIC MACROINVERTEBRATE SAMPLING AT THE CONTINENTAL SCALE
- 14:15 **Robert Lusardi, Randy Dahlgren**
INVERTEBRATE COMMUNITY COMPOSITION AND DRIVERS OF ASSEMBLAGE DISSIMILARITY BETWEEN RUNOFF AND SPRING-FED RIVERS
- 14:30 **Barbara Hayford, R. William Bouchard, Leonard Ferrington**
LAKES IN DRYLANDS: VARIATION IN CHIRONOMID COMMUNITIES IN WESTERN MONGOLIA LAKES
- 14:45 **Amanda Rugenski, Andrea Landeira-Dabarca, Carla Atkinson, Jake Sousa, Andrea Encalada, Steven Thomas, LeRoy Poff, Alex Flecker**

CONTRASTING RESPONSES OF MAYFLY GROWTH TO EXPERIMENTAL WARMING ACROSS ELEVATION GRADIENTS IN TEMPERATE AND TROPICAL STREAMS

- 15:30 **Jón S. Ólafsson, Benoit Demars, Gisli Mar Gislason, James Hood, Eoin O’Gorman, Ragnhildur Magnúsdóttir**
GEOTHERMALLY-HEATED STREAM ECOSYSTEMS AT AN ALTITUDINAL GRADIENT IN ICELAND
- 15:45 **James Junker, Wyatt Cross, Jonathan P. Benstead, James Hood, Alexander Hury, Gisli Gislason, Daniel Nelson, Jón Ólafson**
COMPLEX DRIVERS OF ECOSYSTEM BIOMASS AND ELEMENT STORAGE ACROSS A NATURAL STREAM TEMPERATURE GRADIENT
- 16:00 **Daniel Nelson, Jonathan P. Benstead, Alexander Hury, Wyatt Cross, James Hood, Philip Johnson, James Junker, Gisli Gislason, Jón Ólafson**
SYNTHESIZING THE EFFECTS OF EXPERIMENTAL WHOLE-STREAM WARMING ON COMMUNITY AND FOOD WEB STRUCTURE
- 16:15 **Vincent Ouellet Jobin, Julian Olden**
LANDSCAPE POSITION DEFINES LAKE WATER LEVEL FLUCTUATIONS IN RESPONSE TO PAST CLIMATE IN THE PACIFIC NORTHWEST
- 16:30 **Tomo Kurobe, Maxwell Mizel, Sarah Lesmeister, Dolores Baxa, Alice Tung, Swee Teh, Peggy Lehman**
IMPACTS OF THE 2014 SEVERE DROUGHT ON MICROCYSTIS BLOOMS IN SAN FRANCISCO ESTUARY
- 16:45 **John L Bailey, Jocelyne Heneberry, Lisa Graham**
BENEATH THE SURFACE: CHANGES IN FULL TEMPERATURE PROFILES OF LAKES WITH WARMING SURFACE WATERS.

S18 Community Engagement in Science

Session Chair(s): Erick Burres

Location: 304-305

- 10:30 **Erick Burres**
BEYOND LEVERAGING RESOURCES: CITIZEN SCIENCE OFFERS REAL SCIENCE AND REAL DATA TO ADDRESS AND SOLVE REAL PROBLEMS
- 10:45 **Joanne Hild**
CONNECTING WITH OUR LOCAL ENVIRONMENT: CITIZEN SCIENCE IN ACTION
- 11:00 **Patrick Higgins**
CITIZEN WATER QUALITY MONITORING IN THE EEL RIVER WATERSHED 2012-2015
- 11:15 **Jo A. Latimore, Paul J. Steen**
SCORE THE SHORE: DEVELOPMENT OF A SHORELINE HABITAT ASSESSMENT PROTOCOL FOR A VOLUNTEER LAKE MONITORING PROGRAM
- 11:30 **Ali Shakoor**
IMPROVING COMMUNITY AWARENESS FOR DETROIT RIVER FISH CONSUMPTION GUIDELINES

11:45 **Patrick Edwards**
A UNIQUE ROLE FOR CITIZEN SCIENCE IN ECOLOGICAL RESTORATION

S01 Future Freshwater Scientists - UNDERGRADS

Session Chair(s): Matt Cover

Location: 304-305

13:30 **Matthew Cover, Joe Zermeno**
ENGAGING FUTURE FRESHWATER SCIENTISTS AT A REGIONAL STATE COLLEGE

14:15 **Checo Colon-Gaud, Judy Li, Patina Mendez, Tamara Sluss, Marcelo Ardon-Sayao, Krista Capps**
THE INSTARS MENTORING PROGRAM: SUCCESSES, CHALLENGES, AND LESSONS LEARNED OVER 5-YEARS OF BROADENING PARTICIPATION IN FRESHWATER SCIENCE

15:30 **Romi Burks**
WORLDY SCIENCE: DEVELOPING UNDERGRADUATE RESEARCH AND MENTORING ACTIVITIES TO TRAIN DIVERSE GLOBAL SCIENTISTS – A NSF-IRES CASE STUDY

15:45 **Nick Macias, brian dietterick**
CAL POLY'S SWANTON PACIFIC RANCH: A MODEL FOR INFORMED WATERSHED STEWARDSHIP ON CALIFORNIA'S CENTRAL COAST

16:00 **Alison O'Dowd, Patina Mendez, Anne Chin, Roger Levanthal**
INCORPORATING UNDERGRADUATES INTO SMALL-SCALE URBAN STREAM RESTORATION RESEARCH: A TALE OF TWO UNIVERSITIES

16:45 **Allison Rober, Kevin Wyatt**
PREPARING FUTURE FRESHWATER SCIENTISTS THROUGH PROFESSIONAL DEVELOPMENT IN SCIENTIFIC TEACHING

13:45 **Elizabeth Sudduth**
BLOOMING WHERE YOU ARE PLANTED: SCIENCE AND MENTORING AT AN OPEN-ACCESS COLLEGE

14:00 **Kate Boersma, Ruth Hoover, Dominik Corral, Adam Siepielski**
WHAT DOES AN "INCLUSIVE CLASSROOM" LOOK LIKE FOR FUTURE FRESHWATER SCIENTISTS?

14:30 **Arial Shogren, Janet Hsiao, Checo Colón-Gaud**
"GROWING UP" IN SFS: INSTARS PARTICIPATION FROM MENTEES TO MENTORS

16:15 **Rachel Stubbington**
SHORT, ORIGINAL RESEARCH PROJECTS ARE TRANSFORMATIVE EXPERIENCES FOR UNDERGRADUATE CO-RESEARCHERS

16:30 **Patina Mendez, Kurt Spreyer**
UNDERGRADUATE RESEARCH AND WRITING: USING CAPSTONE CURRICULUM ACROSS DISCIPLINES TO INCREASE STUDENT CONFIDENCE, PERFORMANCE AND LEARNING OUTCOMES

C18 Population and Community Ecology

Session Chair(s): Christina Baker

Location: 306

10:30 **Jeff Webb, Sean Sullivan, Luke Jacobus**
PRACTICAL LEVELS OF IDENTIFICATION FOR LARVAE OF BAETIS (EPHEMEROPTERA: BAETIDAE) IN NORTH AMERICA

10:45 **Natalie Stauffer-Olsen, Vincent Resh, Patrick O'Grady**
THE ROLE OF TEMPORAL STRUCTURE IN AQUATIC INSECT GENETICS: A CASE STUDY IN POPULATIONS OF BAETIS TRICAUDATUS

11:00 **Cristina Salgado, Andrea Encalada, Cláudia Pascoal, Fernanda Cássio, Alexander Flecker, LeRoy Poff, Manuel Graça**
PATTERNS OF MICROBIAL DECOMPOSER DIVERSITY ALONG ALTITUDINAL GRADIENTS IN TROPICAL AND TEMPERATE STREAMS

11:15 **Ying Kin So**
HIGH UNEXPLAINED VARIANCE IN COMMUNITY DATA? SPATIAL AUTOCORRELATION MIGHT BE THE KEY: EVIDENCE FROM MACROINVERTEBRATES IN AGRICULTURAL WETLANDS

11:30 **Romain Sarremejane, Heikki Mykrä, Timo Muotka, Jukka Aroviita, Nuria Bonada**
HABITAT CONNECTIVITY AND ORGANISMS' DISPERSAL ABILITY DRIVE THE ASSEMBLY MECHANISMS OF MACROINVERTEBRATE COMMUNITIES IN RIVER NETWORKS

11:45 **Andrew Brooks, Ben Wolfenden, Barbara Downes**
DO POOLS IMPEDE STREAM INSECT DRIFT DISPERSAL?

S19 Session for Cliff Dahm

Session Chair(s): Jennifer F. Shah, Michelle Baker, Rebecca Bixby, Anna Hamilton, Mary Harner, Lydia Zeglin

Location: 306

13:30 **Stan Gregory, Gary Lamberti**
EARLY CAREER OF DR. CLIFF DAHM: THE OREGON YEARS

13:45 **Nicholas Aumen, Amelia Ward, Milton Ward**
INTERDISCIPLINARY COLLABORATION AND GOOD SCIENCE ACROSS FRESHWATER ECOSYSTEMS: A CLIFF DAHM LEGACY

14:00 **H. Maurice Valett**
ADVANCING CAREERS AND INQUIRY THROUGH INTERDISCIPLINARY RESEARCH – CND AND THE UNM HYDROGEOECOLOGY PROGRAM

14:15 **James Markwiese**
MICROBIAL ECOLOGY OF POLLUTION ABATEMENT

14:30 **Stuart Findlay**
APPRECIATING CROSS-DISCIPLINARY TRAINING IN AQUATIC SCIENCES

14:45 **Jennifer Follstad Shah, Chelsea Crenshaw, Mary Harner, Dianne McDonnell, Teresa Tibbets, Lydia Zeglin**
CLIFF DAHM'S LEADERSHIP INFLUENCE ON THE FRESHWATER SCIENCES INTERDISCIPLINARY DOCTORAL PROGRAM

15:30 **Julie Coonrod**
EVAPOTRANSPIRATION IN THE MIDDLE RIO GRANDE BOSQUE, IMPLICATIONS FOR MANAGEMENT AND RESTORATION

15:45 **Ayesha Burdett, Corey Krabbenhoft, Thomas Turner**
THE RIO GRANDE IN NEW MEXICO: MULTIPLE PERSPECTIVES CREATE A GREATER UNDERSTANDING OF THE SYSTEM

16:00 **Vicenç Acuña**
FROM SCIENCE TO POLICY THROUGH TRANSDISCIPLINARY RESEARCH

16:15 **Diane McKnight, Tyler Kohler, Michael Gooseff, Lee Stanish, James Cullis**
THE ECOLOGICAL ROLE OF FLOOD DISTURBANCE IN DESERT STREAMS: FROM THE SOUTHWEST TO THE ANTARCTIC

16:30 **Mike Chotkowski, Nicholas Aumen**
STEWARDSHIP SCIENCE IN THE SAN FRANCISCO ESTUARY: CLIFF DAHM'S YEARS AS DELTA LEAD SCIENTIST FOR CALIFORNIA

16:45 **Michelle Baker**
COLLABORATIVE LEARNING AND INTERDISCIPLINARY FRESHWATER FOUNDATIONS TO ENHANCE SCIENCE FOR UTAH'S WATER FUTURE

C03 Biogeochemistry

Session Chair(s): Erin Hotchkiss

Location: 307

10:30 **H. Maurice Valett, Marc Peipoch Guell, Nicholas Banish, Doug Martin, Beau Downing, Brad Liermann, Nathan Cooke, Pat Saffel**
RESTORATION OF THE UPPER CLARK FORK RIVER, MT: OPPORTUNITIES FOR SYNERGY

10:45 **Marc Peipoch Guell, Maury Valett**
LINKING HABITAT HETEROGENEITY, BIOFILM DIVERSITY, AND ECOSYSTEM METABOLISM IN FLOODPLAIN LANDSCAPES

11:00 **Jay Zarnetske**
HYDROLOGIC TRANSPORT-LIMITATIONS DOMINATE WATERSHED ORGANIC CARBON FLUX ACROSS THE UNITED STATES

11:15 **Dustin Kincaid, Stephen Hamilton, Martin Briggs, Jay Zarnetske, Mantha Phanikumar**
DOES DENSITY-DRIVEN NOCTURNAL WATER COLUMN MIXING DRIVE REDOX OSCILLATIONS IN FLOCCULENT ORGANIC SEDIMENTS?

11:30 **Brady Kohler, Robert Hall, Brad Carr**
BREAKING AWAY FROM BREAKTHROUGH CURVES - ASSESSING THE HYPORHEIC ZONE IN THREE DIMENSIONS USING GEOPHYSICAL IMAGING

11:45 **Puni Jeyasingh**
CONSEQUENCES OF IRON-PHOSPHORUS LINKAGES IN DAPHNIA

S08 Hydroclimatic Extremes

Session Chair(s): Albert Ruhi, John Kominoski, John Sabo

Location: 307

13:30 **Mark Scheuerell, Elizabeth Holmes, Eric Ward, Steve Katz**
USING STATE-SPACE MODELS TO INFER PROCESSES FROM PATTERNS

13:45 **Albert Ruhi, Xiaoli Dong, Courtney Holt, Darold Batzer, John Sabo**
AN ARTIFICIAL FLOW REGIME DAMPENS TOP-DOWN EFFECTS IN A RIVERINE FOOD WEB

14:00 **Qi Deng, Albert Ruhi, John S. Kominoski, Megan Hagler, John Sabo**
BIOTIC AND ABIOTIC INFLUENCES OF FISH COMMUNITY DYNAMICS IN A U.S. SOUTHEAST RIVER

14:15 **Robert O. Hall, Laurel Genzoli**
DROUGHT INTENSIFIES EUTROPHICATION IN THE KLAMATH RIVER: EVIDENCE FROM AN 8 YEARS OF DAILY METABOLISM

14:30 **N. LeRoy Poff, Erin Larson, Boris Kondratieff, Scott Morton, Rachel Harrington, Kayce Anderson, Chris Funk, Alex Flecker**
EXTREME NON-SEASONAL FLOODING OF STREAMS ACROSS AN ELEVATION GRADIENT – USING VULNERABILITY TRAITS TO UNDERSTAND BENTHIC COMMUNITY RESPONSES TO DISTURBANCE

15:30 **John S. Kominoski, Megan Hagler, Albert Ruhi, John Sabo, Tushar Sinha, Sankar Arumugam**
FLOW ANOMALIES IN SOUTHEASTERN U.S. RIVERS: QUANTIFYING LOCAL EXTIRPATION PROBABILITIES OF FRESHWATER FAUNA

15:45 **Jonathan Tonkin, Nuria Bonada, Michael Bogan, David Lytle**
SEASONALITY AND PREDICTABILITY REGULATE TEMPORAL BIODIVERSITY OF STREAM INVERTEBRATES

16:00 **Logan Shoup, Matt Whiles, Jessica Fulgoni**
VARIABILITY IN MACROINVERTEBRATE ASSEMBLAGES AMONG PRAIRIE HEADWATER STREAMS OF THE CENTRAL GREAT PLAINS

16:15 **Sarah D'Amario, Henry Wilson, Marguerite Xenopoulos**
REGIONAL DIFFERENCES IN NUTRIENT CONCENTRATION-DISCHARGE RELATIONSHIPS IN AGRICULTURAL STREAMS

- 16:30 **Jon Marshall, Julian Greer, John Tibby, Cesca McInerney, Melanie Leng, Andrew Henderson, Glenn McGregor, Cameron Barr**
A 7500 YEAR RAINFALL RECONSTRUCTION FOR A DROUGHT-PRONE AUSTRALIAN REGION INDICATES WE HAVEN'T SEEN THE WORST OF IT
- 16:45 **Megan Klaar, Alexander Milner, Anne Robertson, Jessica Picken, Lee Brown**
EFFECT OF CONTRASTING EXTREME FLOODING EVENTS ON BIOTIC COMMUNITIES IN GLACIER BAY, ALASKA
- C13 Land-use and Non-Point Source Impacts**
Session Chair(s): Sally Entreklin
Location: 308
- 10:30 **Maíra Bezerra, Margaret Palmer, Solange Filoso**
DOES COMPLIANCE WITH THE BRAZILIAN FOREST CODE MITIGATE THE IMPACTS OF SUGARCANE AGRICULTURE AND ITS LEGACY ON INSTREAM NUTRIENT CONCENTRATIONS IN BRAZIL?
- 10:45 **Ursula Mahl, Jennifer Tank, Steve Powers, Erik Maag, Matt Trentman**
LINKING AGRICULTURAL CONSERVATION EFFORT TO WATER QUALITY IN THE INDIAN CREEK WATERSHED
- 11:00 **Delilah Clement, Alan Steinman**
DOES PHOSPHORUS FROM AGRICULTURAL TILE DRAINS FUEL ALGAL BLOOMS?
- 11:15 **Claire Hirt, Raina Kaji, Alison Post, Galen Dively, William Lamp**
EXPOSURE OF AQUATIC MACROINVERTEBRATES TO GENETICALLY MODIFIED CORN DEBRIS IN AN AGRICULTURAL STREAM
- 11:30 **Matt Trentman, Jennifer Tank, Brittany Hanrahan, Kara Prior, Rob Davis, Sarah Roley, Todd Royer**
THE INTERACTION BETWEEN FLOODPLAIN RESTORATION AND CHANGING LAND COVER ON STREAM METABOLISM IN A MIDWESTERN AGRICULTURAL STREAM
- 11:45 **Alex Webster, Mary Cadenasso**
VEGETATION AND CHANNEL GEOMORPHIC COMPLEXITY IN AGRICULTURAL WATERWAYS: IMPLICATIONS FOR WATER QUALITY
- S11 Next-Generation Sequencing in Freshwater Science**
Session Chair(s): Scott Hotaling, Brian A. Gill, Debra Finn, and Jane Hughes
Location: 308
- 13:30 **Brandon Pickett**
CONGRUENCE OF PLECOPTERAN TRANSCRIPTOMES AND SANGER-GENERATED MOLECULAR MARKERS WITH EMPHASIS ON RESOLUTION OF THE PERLOIDEA
- 13:45 **Steffen Pauls, Karl Kjer, Wolfram Graf, Alan Lemmon, Paul Frandsen**
ASSESSING THE ECOLOGICAL DIVERSIFICATION OF CADDISFLIES WITH "BIG DATA" PHYLOGENETIC APPROACHES
- 14:00 **Mason Murphy, David Weisrock, Steven Price**
AN ASSESSMENT OF POPULATION STRUCTURE AND GENE FLOW IN A WIDESPREAD AQUATIC SALAMANDER UTILIZING NEXT GENERATION SEQUENCING METHODS
- 14:15 **Matthew Fuller, Martin Doyle**
RIVERSCAPE GENOMICS OF A FRESHWATER INVERTEBRATE
- 14:30 **Scott Hotaling, Clint Muhlfeld, J. Joseph Giersch, Omar Ali, Steve Jordan, Michael R. Miller, Gordon Luikart, David Weisrock**
DEMOGRAPHIC MODEL TESTING REVEALS A HISTORY OF DIVERGENCE WITH GENE FLOW FOR A GLACIALLY-TIED STONEFLY IN A CHANGING POST-PLEISTOCENE LANDSCAPE
- 14:45 **Jane Hughes, Cameron Bishop, Daniel J. Schmidt**
WHOLE MITOCHONDRIAL GENOMES TO IDENTIFY GENETIC VARIATION IN A LONG-LIVED SPECIES, THE AUSTRALIAN LUNGFISH
- 15:30 **Brian Gill, Boris Kondratieff, Andrea Encalada, LeRoy Poff, Chris Funk**
DETERMINING LATITUDINAL DIFFERENCES IN EFFECTS OF SPACE FOR TIME SAMPLING TRADEOFFS USING DNA METABARCODING
- 15:45 **Sharmeen Rahman, Jane Hughes, Daniel J. Schmidt**
DETECTING SIGNATURES OF LOCAL ADAPTATION IN UPSTREAM AND DOWNSTREAM POPULATIONS OF *PARATYA AUSTRALIENSIS*
- 16:00 **Md Lifat Rahi, Peter B Mather, David A Hurwood**
UNDERSTANDING THE GENOMIC BASIS OF FRESHWATER ADAPTATION IN *MACROBRACHIUM* SPECIES
- 16:15 **Lydia Zeglin, Clifford Dahm, Chelsea Crenshaw, Rich Sheibley, Cristina Vesbach**
MICROBIAL DIVERSITY IN DESERT STREAMS IS RELATED TO GEOCHEMISTRY AND SURFACE - SUBSURFACE INTERACTION
- 16:30 **Xiaowei Zhang**
METAGENOMIC PROFILING OF ZOOPLANKTON COMMUNITY REVEAL ENVIRONMENTAL THRESHOLD OF AMMONIA IN EUTROPHIC AQUATIC ECOSYSTEM: A CASE STUDY ON TAI LAKE, CHINA
- 16:45 **Beth Norman, Alexander Ruhs, Andrew Van Alst, Edward Walker**
INFLUENCE OF MOSQUITO LARVAE GRAZING ON LEAF-ASSOCIATED MICROBIAL COMMUNITY STRUCTURE

S07 Challenges in Freshwater Conservation

Session Chair(s): Alonso Ramirez, Blanca Rios-Touma

Location: 309-310

- 10:30 **Alonso Ramirez**
FRESHWATER CONSERVATION IN CENTRAL AMERICA AND THE CARIBBEAN
- 10:45 **Roberto Reis**
SOUTH AMERICA: FRESHWATER FISH MEGADIVERSITY AND CONSERVATION MEGACHALLENGES
- 11:00 **Blanca Rios-Touma**
FRESHWATER CONSERVATION IN THE NORTHERN ANDES, CHALLENGES AND PERSPECTIVES
- 11:15 **David Angeler, Craig Allen, Hannah Birgé, Brendan McKie, Stina Drakare, Richard Johnson**
MANAGEMENT OF FRESHWATER ECOSYSTEMS UNDER FAST ENVIRONMENTAL CHANGE
- 11:30 **Stefanie Kroll, David Keller, Richard Horwitz, John Jackson, Scott Haag, Alison Minerovic, Frank Acker**
PLANNING AND ASSESSING RESTORATION USING MULTIPLE INDICATOR MONITORING AND INTEGRATED DATA MANAGEMENT IN THE DELAWARE RIVER BASIN
- 11:45 **Donald Sada, Rina Schumer, Ryan Morrison, Mark Hausner, Mark Stone**
ENVIRONMENTAL AND BIOLOGICAL RESPONSES TO INCREMENTAL DECREASES IN SPRING DISCHARGE: EXAMPLES FROM THE GREAT BASIN AND MOJAVE DESERTS, USA
- 13:30 **David Penrose**
WATER QUALITY IN NEPAL
- 13:45 **Sonali Saha, Amartya Saha, Bashida Massar**
BUILDING TECHNOLOGICAL CAPACITY TO STRENGTHEN COMMUNITY PARTICIPATION FOR CONSERVATION OF FRESHWATER ECOSYSTEMS IN TROPICAL ASIA
- 14:00 **Subodh Sharma, Hasko Neseemann**
BIODIVERSITY ASSESSMENT, ECOSYSTEM SERVICES, AND DRIVERS OF CHANGE: A REVIEW OF THE MACROINVERTEBRATES IN THE SOUTH ASIAN HINDU-KUSH HIMALAYAN FRESHWATER REGION
- 14:15 **Assefa Mitike Janko**
FISHERMEN'S WILLINGNESS TO PAY FOR FRESH WATER FISHERIES MANAGEMENT: THE CASE OF LAKE ZEWAY, ETHIOPIA
- 14:30 **Ryan Reihart, Camille McNeely, Andy Miller**
WHITE STURGEON (*ACIPENSER TRANSMONTANUS*) LARVAE FEEDING ECOLOGY AND PREY AVAILABILITY IN THE UPPER COLUMBIA RIVER, USA
- 14:45 **Danielle Courcelles, John Richardson, Rylee Murray, Joshua Malt, Wendy Palen**
SEDIMENT AND TADPOLES IN STREAMS WITH RUN-OF-RIVER HYDROPOWER PROJECTS

- 15:30 **Ricardo Taniwaki, Jeremy Piggott, Silvio Ferraz, Christoph Matthaei**
TROPICAL STREAMS UNDER GLOBAL CHANGE: A CALL FOR MULTIPLE STRESSOR RESEARCH IN TROPICAL STREAMS
- 15:45 **Thiago Couto, Julian Olden**
DON'T BE FOOLED BY SIZE ALONE: GLOBAL TRENDS AND ECOLOGICAL IMPLICATIONS OF SMALL HYDROPOWER PLANTS
- 16:00 **Tom Arsuffi**
DO WE HAVE THE \$ AND SENSE, ENVIRONMENTAL LITERACY AND ETHICS TO PROTECT OUR NATURAL RESOURCE CAPITAL??? PROBABLY NOT!
- 16:15 **Miguel Cañedo-Argüelles**
SAVING FRESHWATER FROM SALTS
- 16:30 **Joan Damerow**
CONSERVATION STATUS AND VULNERABILITY OF AQUATIC INSECTS
- 16:45 **David Dudgeon**
APOCALYPSE NOW? THE PROSPECTS FOR FRESHWATER BIODIVERSITY IN ANTHROPOCENE ASIA.

C12 Invertebrate Ecology

Session Chair(s): Tim Jardine

Location: 311-312

- 10:30 **Jessica Lund, Scott Wissinger, Bobbi Peckarsky**
CADDISFLY BEHAVIORAL RESPONSES TO DRYING CUES IN TEMPORARY PONDS: IMPLICATIONS FOR EFFECTS OF CLIMATE CHANGE
- 10:45 **Stephen Srayko, Iain Phillips, Tim Jardine, Doug Chivers**
SPECIES-SPECIFIC FEEDING PATTERNS OF CORIXIDS (HEMIPTERA: CORIXIDAE) AS INDICATED BY STABLE ISOTOPE ANALYSIS
- 11:00 **Mallory Clay**
POPULATION STRUCTURE OF BURROWING BOG CRAYFISHES (*FALLICAMBARUS* SPP.) IN SOUTH ALABAMA, USA
- 11:15 **Eric Sazama, Carmelita Shouldis, Scot Ouellette, Jeff Wesner**
PREVALENCE AND SPATIAL DISTRIBUTION OF *WOLBACHIA* WITHIN AQUATIC INSECTS OF THE MISSOURI RIVER AND ASSOCIATED DRAINAGES
- 11:30 **Don W Schloesser, Dave M Malakauskas, Sarah J Malakauskas**
FRESHWATER POLYCHAETES IN THE DETROIT RIVER OF THE LAURENTIAN GREAT LAKES: ABUNDANCE AND LIFE-HISTORY
- 11:45 **Rebecca Wilson, William Lamp**
FINDING THE SPATIAL CONNECTION BETWEEN PRODUCTIVE LARVAL HABITATS AND ADULT NUISANCE SWARMS OF THE BLACK FLY *SIMULIUM JENNINGSI* (DIPTERA: SIMULIIDAE)

S24 Scale and Ecosystem Functions

Session Chair(s): John Kominoski, Amy Rosemond

Location: 311-312

- 13:30 **Wil Wollheim, Walter Dodds, Matt Whiles, Ken Sheehan, Rob Stewart, Ford Ballantyne, Christina Baker, William Bowden, Kaitlin J. Farrell, Michael Flinn, Keith Gido, Tamara Harms, Ashley Helton, Jeremy Jones, Lauren Koenig, William McDowell, Sam Parker, Amy Rosemond, Janine Ruegg, Chao Song, Matt Trentman, John S. Kominoski**
SCALING LAWS FOR AQUATIC METABOLISM VS. WATERSHED SIZE
- 13:45 **Walter Dodds, Wil Wollheim, Alba Argerich, Christina Baker, Ford Ballantyne, Breck Bowden, Michelle Evans-White, Kait Farrell, Michael Flinn, Brian Frenette, Garcia Erica, James Guinnip, Tamara Harms, Skyler Hedden, Sophie Higgs, David Hoeinghaus, Jeremy Jones, Lauren Koenig, John S. Kominoski, Danelle Larson, Richard Lehrter, Robert Mapes, William McDowell, Damien McMaster, Samuel Parker, Brooke Penaluna, Amy Rosemond, Janine Ruegg, Jeffrey Scott, Ken Sheehan, Adam Siders, Chao Song, Margaret Spangler, Ryland Taylor, Matt Trentman, Matt Whiles**
IMPLICATIONS OF SPATIAL HETEROGENEITY FOR SCALING LOTIC METABOLISM
- 14:00 **Jim Heffernan, Alison Appling, Emily Bernhardt, Natalie Griffiths, Robert Hall, Jud Harvey, Maite Arroita, Emily Stanley, Edward Stets, David Lorenz, Jordan Read, Charles Yackulic**
ANNUAL METABOLISM OF US STREAMS AND RIVERS
- 14:15 **Jesse Vance, Keli Goodman, Claire Lunch**
CONTINUOUS AQUATIC ECOSYSTEM METABOLISM AND SCALING FROM THE SITE TO THE CONTINENT USING THE NATIONAL ECOLOGICAL OBSERVATORY NETWORK
- 14:30 **Eric Scholl, Wyatt Cross, Yuka Tsutsui, Hailey Gelzer, Addie Dutton, Christopher Guy, Colden Baxter, Jay Rotella**
FOOD WEB PERSPECTIVES FOR LARGE, MOBILE FISHES: THE IMPORTANCE OF MATCHING FOOD RESOURCE AVAILABILITY WITH CONSUMER MOVEMENT
- 14:45 **Clara Mendoza-Lera, Thibault Datry**
HYPORHEIC ZONE HYDRAULIC CONDUCTIVITY AND ITS ROLE ON ECOSYSTEM PROCESSES: A REACH-SCALE APPROACH
- 15:30 **Natalie A. Griffiths, Stephen D. Sebestyen**
QUANTIFYING VARIABILITY IN PEATLAND POREWATER CHEMISTRY IN THE CONTEXT OF A LARGE-SCALE CLIMATE CHANGE EXPERIMENT
- 15:45 **Hilary Madinger, Robert Hall**
SCALING FLUXES OF NITROGEN FIXATION BETWEEN CHAMBERS AND THE STREAM REACH
- 16:00 **Kaitlin J. Farrell, Amy D. Rosemond, Ford Ballantyne, Chao Song, John S. Kominoski**
SCALING OF METABOLISM AND NUTRIENT UPTAKE IN A HEADWATER STREAM NETWORK: WHAT DRIVES ECOSYSTEM PROCESSES AT MULTIPLE MEASUREMENT SCALES?
- 16:15 **Samuel Parker, Breck Bowden, Michael Flinn, Joshua Benes, Kyle Arndt, Courtney Giles, Derrick Jent**
THE EFFECT OF SEDIMENT PARTICLE SIZE ON BENTHIC COMMUNITY RESPIRATION AND PRODUCTIVITY IN HIGH LATITUDE STREAMS
- 16:30 **Joseph Lee-Cullin, Jay Zarnetske, Sydney Ruhala, Stephen Plont, Evan Wiewiora**
STREAM NETWORK STRUCTURE AND SPATIAL MEASUREMENT SCALES INFLUENCE DISSOLVED ORGANIC CARBON CHARACTERIZATIONS ACROSS A WATERSHED
- 16:45 **Erin R. Hotchkiss, Paul A. del Giorgio**
CARBON TRANSPORT, LOSSES, AND REPLENISHMENT IN A BOREAL RIVER DISCONTINUUM: PROCESSES CONTROLLING LARGE-SCALE PATTERNS
- C08 Ecotoxicology**
Session Chair(s): Michael Griffith
- Location: 313
- 10:30 **Michael Griffith**
WHAT PHYSIOLOGICAL RESEARCH ON ION TRANSPORT SUGGESTS ABOUT THE POTENTIAL TOXICITY OF SULFATE
- 10:45 **Lee Grapentine**
ENVIRONMENTAL FACTORS ASSOCIATED WITH BENTHIC COMMUNITY DEGRADATION ALONG A GRADIENT OF CONTAMINATION IN ACID MINE DRAINAGE-EXPOSED LAKES
- 11:00 **Christopher Kotalik, William Clements, Pete Cadmus**
STREAM BENTHIC AND ALGAL COMMUNITY RESPONSES TO HEAVY METALS: AN EVALUATION OF ENDPOINT SENSITIVITY
- 11:15 **David Buchwalter, Adeline Lopez**
ARSENIC DYNAMICS AT THE BASE OF AQUATIC FOOD WEBS
- 11:30 **Laura Barral-Fraga, Diego Prieto, María Teresa Barral, Francesc Rubio-Gracia**
BIOFILM ROLE IN AN ARSENIC-POLLUTED RIVER
- 11:45 **Francesc Rubio-Gracia, Baigal-Amar Tuulaikhuu, Berta Bonet, Laura Barral-Fraga, Kit Magellan, Anna M. Romaní**
INFLUENCES OF ARSENIC ON FRESHWATER BIOFILMS, FISH AND THEIR NUTRIENT CYCLING INTERACTIONS
- S27 Contaminants as Agents of Ecological Change**
Session Chair(s): Michelle Hornberger, Emma Rosi-Marshall

Location: 313

- 13:30 **Emily Bernhardt, Emma Rosi-Marshall, David Walters**
ECOSYSTEM TOXICOLOGY? RECOGNIZING CONTAMINANTS AS AGENTS OF GLOBAL CHANGE AFFECTING ECOSYSTEM PROCESSES
- 13:45 **David Walters, Johanna Kraus, Travis Schmidt, Emma Rosi-Marshall**
CONTAMINANT AND ENERGY FLUXES THROUGH FOOD WEBS AS AN INTERSECTION BETWEEN ECOSYSTEM SCIENCE AND ECOTOXICOLOGY
- 14:00 **Travis Schmidt, Holly Rogers, David Walters, Johanna Kraus**
CONTAMINANTS AS AGENTS OF ECOLOGICAL CHANGE IN FRESHWATER AND RIPARIAN ECOSYSTEMS
- 14:15 **Matthew Chumchal, Frank Greenhill, Ashlyn Courville, Luke Lossau, Ray Drenner, James Kennedy, Charlie Gober**
EFFECT OF POND PERMANENCE ON AQUATIC INSECT-MEDIATED FLUX OF METHYLMERCURY TO TERRESTRIAL ECOSYSTEMS
- 14:30 **Edward Williams, Matthew Chumchal, Ray Drenner, James Kennedy**
EFFECTS OF FISH ON ODONATE-MEDIATED METHYL MERCURY FLUX FROM EXPERIMENTAL PONDS
- 14:45 **Brian Wolff, William Clements**
CONTEXT-DEPENDENT RESPONSES OF AQUATIC COMMUNITIES TO CONTAMINANTS AND OTHER ANTHROPOGENIC STRESSORS
- 15:30 **Lauren Kinsman-Costello, Jonathan O'Brien, Stephen Hamilton**
BIOGEOCHEMISTRY OF NATURAL STRESSORS IN FRESHWATER SEDIMENTS
- 15:45 **Terry Short, Michelle Hornberger**
PERIPHYTON PRODUCTIVITY AND METAL UPTAKE IN A MINING IMPACTED RIVER
- 16:00 **Brittanie Dabney, William Clements, Jacob Williamson, James Ranville**
ASSESSING THE COMBINED EFFECTS OF METAL CONTAMINATION AND SEDIMENT DEPOSITION ON BENTHIC INVERTEBRATE COLONIZATION
- 16:15 **Raissa Mendonca, Christian Schlekot, Emily Garman, Jennifer Daley, Michelle Hudson, G. Allen Burton, David Costello**
COUPLING GEOCHEMISTRY AND COMMUNITY ECOLOGY: EFFECTS OF NICKEL-CONTAMINATED SEDIMENTS ON BENTHIC MACROINVERTEBRATE COMMUNITIES
- 16:30 **Matthew Ross, Fabian Nippgen, Kristofor Voss, Brian McGlynn, Emily Bernhardt**
CONTAMINANTS IN TIME AND SPACE: MOUNTAINTOP MINING IMPACTS ON STREAM HYDROLOGY, BIOGEOCHEMISTRY AND MACROINVERTEBRATES
- 16:45 **Emma Rosi-Marshall, Erinn Richmond, Ross Thompson, Michael Grace**

STRESSED FRESHWATER SYSTEMS: SSRIS (ANTIDEPRESSANTS) AFFECT STREAM ECOSYSTEM FUNCTION AT ENVIRONMENTALLY-RELEVANT CONCENTRATIONS

C02 Bioassessment

Session Chair(s): Allison Roy, Jan Ciborowski

Location: 314

- 13:30 **Deborah Silva, Robert Hughes, Alan Herlihy, Marcos Callisto**
CURRENT AND FUTURE PERSPECTIVES ON THE EVALUATION, DEVELOPMENT AND APPLICATION OF BENTHIC MULTIMETRIC INDICES FOR NEOTROPICAL SAVANNA STREAMS
- 13:45 **Bernard Sweeney, Anthony Aufdenkampe, Beth Fisher**
ADVERSE EFFECTS OF URBAN CENTERS ON THE PHYSICAL, CHEMICAL, AND BIOLOGICAL CHARACTERISTICS OF THE PARO, THIMPHU, AND PUNA TSANG RIVERS IN BHUTAN
- 14:00 **James Kurtenbach**
SEASON EFFECTS ON A MACROINVERTEBRATE INTEGRITY INDEX (MII) DEVELOPED FOR STREAMS OF PUERTO RICO
- 14:15 **James Stribling, Benjamin Jessup, Erik Leppo, Valerie Alley, Alice Dossett**
DATA QUALITY ASSOCIATED WITH THE MISSISSIPPI-BENTHIC INDEX OF STREAM QUALITY
- 14:30 **Benjamin Jessup, James Stribling, Erik Leppo, Valerie Alley**
RECALIBRATION AND TESTING OF THE MISSISSIPPI-BENTHIC INDEX OF STREAM QUALITY
- 14:45 **Jan Ciborowski, Katya Kovalenko, Ted Angradi, David Barton, Yakuta Bhagat, Valerie Brady, Meijun Cai, Kenneth Krieger, Michelle Bowman, Sigrid Smith, David Allan, Lucinda Johnson**
ZOOBENTHIC INDICATORS OF THE CONDITION OF LAKE ERIE AND THE GREAT LAKES NEARSHORE
- 15:30 **Michael Shupryt, Jonathan Kult**
ESTIMATING AND UNTANGLING THE EFFECTS OF SAMPLING AND TEMPORAL VARIABILITY OF MACROINVERTEBRATE AND FISH BIOLOGIC INDICES FOR STREAMS IN WISCONSIN, USA.
- 15:45 **Kai Chen, Qiuwen Chen, Yangdong Pan, Beixin Wang, Robert Hughes**
CONCORDANCE IN BIOLOGICAL CONDITION AND BIODIVERSITY BETWEEN DIATOM AND MACROINVERTEBRATE ASSEMBLAGES IN CHINESE ARID-ZONE STREAMS
- 16:00 **Billy Justus, David Burge, Jennifer Cobb, Travis Marsico, Jennifer Bouldin**
A COMPARISON OF MACROINVERTEBRATE AND DIATOM METRICS FOR INDICATING WATER-QUALITY CONDITIONS IN CONNECTED DEPRESSION WETLANDS IN THE MISSISSIPPI ALLUVIAL PLAIN
- 16:15 **Catherine Bentsen, Allison Roy, David Armstrong**

	ACCOUNTING FOR BIOTIC VARIABILITY IN URBANIZING STREAMS: THE ROLE OF LOCAL AND LANDSCAPE FACTORS	11:00	Terutaka Mori, Kei Uchida, Yuichi Kayaba ABIOTIC AND BIOTIC HOMOGENIZATION BY DAMS IN STREAM ECOSYSTEMS
16:30	Robert B. Brua, Natalie Izral, Joseph Culp, Adam Yates USING THE CRAYFISH METABOLOME TO ASSESS HUMAN LAND USE ACTIVITIES	11:15	Antoine Aubeneau RIVERBED FRACTAL TOPOGRAPHY AND HYPORHEIC RESIDENCE TIME DISTRIBUTIONS
16:45	Justin Pomeranz, Jon Harding, Helen Warburton CAN MASS-ABUNDANCE RELATIONSHIPS DETECT ECOLOGICAL IMPACTS ACROSS A CONTAMINANT GRADIENT?	11:30	Fredric Windsor, Alexander Milner, Michael Grocott UPSCALING HYDROECOLOGICAL UNDERSTANDING OF GROUNDWATER-FED STREAM SYSTEMS ACROSS DENALI NATIONAL PARK (DNP), INTERIOR ALASKA
		11:45	Silvia Folegot, Joe Cullin, Jen Drummond, David Hannah, Toralf Keller, Megan Klaar, Marie Kurz, Mark Ledger, Eugènia Martí, Jay Zarnetske, Stefan Krause WATER LEVEL CONTROLS ON SURFACE WATER HEATING AND STREAM-BED TEMPERATURE PATTERNS IN ARTIFICIAL RIVERS
S21 Balancing the Freshwater Budget			
Session Chair(s): Joseph Morgan, Kenton Sena			
Location: 314			
10:30	Joseph Morgan, Palmer Hough EVALUATING COMPENSATORY MITIGATION UNDER THE CLEAN WATER ACT: THE STATE OF THE SCIENCE	13:30	Jack McLachlan, Braden Adams, Erin Nolan, Hamish Greig DRAINING THE TANK TWICE A DAY: WHAT TIDAL FRESHWATERS CAN TELL US ABOUT THE ROLE OF HYDROLOGY IN BENTHIC COMMUNITY STRUCTURE
10:45	Kenton Sena, Joseph Morgan, Brian Topping EVALUATING STREAM COMPENSATION PERFORMANCE: OVERCOMING THE DATA DEFICIT THROUGH STANDARDIZED STUDY DESIGN	13:45	Chad Wiseman, Brian Marotz, Jarvis Caldwell, Robert Sherrick, David Ward BENTHIC RESPONSE TO FLOW ALTERATION IN A NEW MEXICO ARID MOUNTAIN STREAM
11:00	Kelly Hondula, Margaret Palmer MITIGATION MISMATCHES: ECOLOGICAL INTERPRETATION OF SOME COMMON ASSUMPTIONS UNDERLYING MITIGATION PROTOCOLS	14:00	Scott Miller, Matt Schroer, Theodore Kennedy, Jesse Fleri NOVEL HYDROLOGIC REGIMES DISRUPT INSECT LIFE HISTORY STRATEGIES: EFFECTS OF HYDROPEAKING ON INSECT OVIPOSITION
11:15	Eduardo J. Martin, Christopher Robinson, Michael Doering INCORPORATING FLOW/SEDIMENT REGIMES IN RIVER RESTORATION MONITORING	14:15	Pierre Chanut, Christopher Robinson, Thibault Datry LINKING HYDROLOGY AND A MACROINVERTEBRATE METACOMMUNITY ASSEMBLY IN A REGULATED FLOODPLAIN
11:30	Brendan McKie, André Frainer, Eliza Maher Hasselquist, Lina E. Polvi, Roland Jansson, Christer Nilsson QUANTIFYING THE RESTORATION OF HABITAT COMPLEXITY AND ITS EFFECTS ON MULTIPLE ORGANISM GROUPS AND ECOSYSTEM FUNCTIONING	14:30	Kate Macneale, Ray Timm, Andrew Gendaszek RESTORATION OF LARGE WOOD TO A SALMONID STREAM IN WESTERN WASHINGTON: LOOKING FOR EFFECTS BEYOND PHYSICAL HABITAT STRUCTURE
11:45	Francesca Pilotto, Brendan McKie, Lina E. Polvi, Christer Nilsson RESTORING STREAM PHYSICAL HETEROGENEITY: EFFECTS ON BENTHIC MACROINVERTEBRATES	14:45	Peter Caldwell, Andy Hartsell, Chelcy Miniati, Katherine Elliott EFFECTS OF FOREST MESOPHICATION ON STREAMFLOW ACROSS THE EASTERN US
C10 Hydroecology			
Session Chair(s): Ute Risse-Buhl, Claire Ruffing, Robert Smith			
Location: 315			
10:30	Katie Fogg, Geoffrey Poole, Scott O'Daniel, Robert Payn, Sam Carlson, Amanda Hyman WHEN AND HOW DYNAMIC HYPORHEIC TEMPERATURE MOSAICS INFLUENCE CHANNEL TEMPERATURE REGIMES	15:30	Micah Bennett, David Harlan, James Bergan, Gregory Whitledge, Matt Whiles, Michele Eddy, Jessie Allen, Bryan Piazza HYDROLOGIC FILTERING OF FISH LIFE HISTORIES: EFFECTS OF DOWNSCALING ON THE GENERALITY OF PATTERNS IN LOUISIANA FISH COMMUNITIES
10:45	Byron Amerson, Geoffrey Poole, Scott O'Daniel, Michael Lambert SELECTIN ANNUAL TEMPERATURE SIGNALS FOR INVERSE MODELING OF AQUIFER HYDRAULIC PROPERTIES	15:45	Ryan Peek, Helen Dahlke, Sarah Yarnell LINKING WATER SOURCE SIGNATURES WITH NATIVE AMPHIBIAN BREEDING TIMING IN A NORTHERN SIERRA NEVADA WATERSHED

- 16:00 **Ute Risse-Buhl, Christine Anlanger, Katalin Kalla, Thomas R. Neu, Christian Noss, Antonis Chatzinotas, Andreas Lorke, Markus Weitere**
EFFECT OF HYDRODYNAMICS ON MICROBIAL BIOFILM COMMUNITIES REVEALED BY IN-SITU MEASUREMENTS IN MOUNTAINOUS STREAMS
- 16:15 **Catherine Docherty, David Hannah, Alexander Milner**
TEMPORAL AND SPATIAL CHANGES IN MACROINVERTEBRATE ABUNDANCE AND DIVERSITY IN STREAMS OF VARYING STABILITY IN NORTHEAST GREENLAND
- 16:30 **Daniel M. Baldassarre, Robert B. Brua, Joseph M. Culp, Adam G. Yates**
MINIMAL EFFECTS OF FLOW PERMANENCY ON BENTHIC INVERTEBRATE COMMUNITY COMPOSITION ALONG THE LONGITUDINAL PROFILE OF A PRAIRIE STREAM
- 16:45 **Phillip Blaen, Marie Kurz, Julia Knapp, Clara Mendoza-Lera, Joseph Lee-Cullin, Megan Klaar, Jen Drummond, Anna Jaeger, Jay Zarnetske, Joerg Lewandowski, Stefan Krause**
MULTI-SCALE CONTROLS ON SPATIAL VARIABILITY IN RIVER BIOGEOCHEMICAL CYCLING

MONDAY, MAY 23, ORALS

C17 Organic Matter Processing

Session Chair(s): Kenneth Fortino

Location: 302-303

- 10:30 **Jason Taylor**
BROWN PATHWAYS IN GREEN SYSTEMS: SOURCE, HABITAT AND NUTRIENT EFFECTS ON ORGANIC MATTER BREAKDOWN IN LOWER MISSISSIPPI RIVER BASIN AGRICULTURAL BAYOUS
- 10:45 **Marcelo Moretti, Pâmela Barbosa**
EFFECTS OF THE GRADUAL EXCLUSION OF MACROCONSUMERS AND INVERTEBRATE SHREDDERS ON LEAF DECOMPOSITION
- 11:00 **Kenneth Fortino, Jennifer Andrews, Vlad Gulis, Julia Marcellus, Kaitlyn Peters, Matthew Waters**
IMPACTS OF TERRESTRIAL LEAF LITTER ON THE SEDIMENTS OF SMALL MAN-MADE PONDS IN CENTRAL VIRGINIA
- 11:15 **Arial Shogren, Jennifer Tank, Diogo Bolster**
BIOFILM COLONIZATION AND SUBSTRATE INFLUENCE PARTICLE RETENTION IN EXPERIMENTAL STREAMS AT ND-LEEF
- 11:30 **Rebecca Eckert, William Lamp**
MACROINVERTEBRATE DIVERSITY ASSOCIATED WITH PERIPHYTIC ALGAE ON LEAF DEBRIS

S09 Conservation of Freshwater Mussels

Session Chair(s): Erin Miller

Location: 302-303

- 13:30 **Jeremy Tiemann, Alison Stodola, Sarah Douglass, Kevin S. Cummings**
VERMILION RIVER MUSSEL PROJECTS – FROM REINTRODUCTIONS TO DAM REMOVAL
- 13:45 **Jason Wisniewski, Sandy Abbott, Andrew Gascho Landis**
STREAMFLOW AUGMENTATION AS A SHORT-TERM ACTION FOR FRESHWATER MUSSELS CONSERVATION
- 14:00 **Jason Carmignani, Allison Roy**
IMPACT OF WINTER DRAWDOWNS ON MUSSEL DISTRIBUTIONS IN MASSACHUSETTS (USA) LAKES
- 14:15 **Shana Gross, Erin Miller**
WESTERN PEARLSHELL MUSSEL (MARGARITIFERA FALCATA) NATIVE MUSSEL RELOCATION STUDY
- 14:30 **Kaylee Faltys, Nels Troelstrup**
USING QUALITATIVE SURVEYS TO IDENTIFY AREAS FOR UNIONID CONSERVATION IN SOUTH DAKOTA, USA
- 14:45 **Candice Bauer, David Soucek, Sandy Raimondo, Christopher Ingersoll, Edward Hammer, Ning Wang**
CAN IMPROVED LABORATORY TOXICITY DATA FOR FRESHWATER MUSSELS LEAD TO BETTER PROTECTION OF IMPERILED MUSSEL POPULATIONS?
- 15:30 **Ieva Roznere, Marymegan Daly, Barbara Wolfe, G. Thomas Watters**
HEALTH ASSESSMENT OF FRESHWATER MUSSELS USING METABOLITE PROFILING
- 15:45 **David Richards, Theron Miller**
STATUS OF UTAH'S NATIVE MUSSELS AND REASONS FOR THEIR DECLINE: FOCUS ON METAPOPOPULATION DYNAMICS
- 16:00 **Traci Popejoy, Charles R. Randklev, Steve Wolverton, Lisa Nagaoka**
USING ZOOARCHAEOLOGICAL DATA FOR UNIONID CONSERVATION: A CASE STUDY FOR A CENTRAL TEXAS RIVER
- 16:15 **Ellen Preece**
EVALUATION OF ENVIRONMENTAL DNA TO CHARACTERIZE THE PRESENCE OF FRESHWATER MUSSELS IN THE SACRAMENTO-SAN JOAQUIN DELTA
- 16:30 **Dave Thomas**
VALIDATION OF ENVIRONMENTAL DNA FOR DETERMINING PRESENCE OF UNIONID MUSSELS IN A RIVER ENVIRONMENT
- 16:45 **Kevin S. Cummings, Daniel L. Graf**
THE FRESHWATER MUSSELS (BIVALVIA: UNIONOIDA) OF SOUTH AMERICA AND THEIR CONSERVATION STATUS

S06 Molecular Methods in Biomonitoring

Session Chair(s): Erik Pilgrim, Eric Stein

Location: 304-305

- 10:30 **Erik Pilgrim, Eric Stein**
MOVING GENETIC BIOMONITORING FROM A CONCEPT TO A TOOL
- 10:45 **Caren Goldberg, Katherine Strickler, Alexander Fremier**
ADAPTIVE SAMPLING TO IMPROVE SPECIES DETECTION USING ENVIRONMENTAL DNA
- 11:00 **Eric Larson, Mark Renshaw, Crysta Gantz, John Umek, Sudeep Chandra, Scott Egan, David Lodge**
A TEST OF ENVIRONMENTAL DNA FOR BENTHIC ARTHROPODS USING THE RECIPROCAL INVASIVE RANGES OF THE RUSTY (GREAT LAKES) AND SIGNAL CRAYFISHES (CALIFORNIA, NEVADA)
- 11:15 **Jonas Bylemans, Elise Furlan, Christopher Hardy, Mark Lintermans, Dianne Gleeson**
AN ENVIRONMENTAL DNA BASED METHOD FOR MONITORING SPAWNING ACTIVITY: A CASE STUDY USING THE ENDANGERED MACQUARIE PERCH (MACQUARIA AUSTRALASICA)
- 11:30 **Barry Baldigo, Lee Ann Sporn, Scott George**
EFFICACY OF ENVIRONMENTAL DNA TO DETECT AND QUANTIFY BROOK TROUT POPULATIONS IN STREAMS OF THE ADIRONDACK MOUNTAINS, NEW YORK, USA
- 11:45 **Kristy Deiner, Yiyuan Li, Mark Renshaw, Michael Pfrender, David Lodge, Christopher Jerde**
WHEN SHOULD YOU USE GENETIC DETECTION OF A SINGLE SPECIES VERSUS ENVIRONMENTAL DNA METABARCODING IN MANAGEMENT?
- 13:30 **Nicole-Marie Novodvorsky, Lynne Witty, Mehrdad Hajibabaei, John L Bailey**
COMPARISON OF ZOOPLANKTON SPECIES IDENTIFICATION USING ENVIRONMENTAL DNA AND MORPHOLOGICAL METHODS FOR APPLICATION IN LAKE MONITORING
- 13:45 **Xiaowei Zhang, Jianghua Yang**
BARCODING MICRO-ZOOPLANKTON WITHOUT CULTIVATION BY HIGH-THROUGHPUT PARALLEL SEQUENCING
- 14:00 **Shadi Shokralla, Joel Gibson, Ian King, Donald Baird, Mehrdad Hajibabaei**
CONTRASTING BIODIVERSITY PATTERNS FROM WATER AND BENTHOS AS SOURCES OF ENVIRONMENTAL DNA SEQUENCES FOR AQUATIC BIOMONITORING
- 14:15 **Chelsea Hatzenbuhler, Joel Hoffman, Julie Lietz, John Martinson, Sara Okum, Greg Peterson, Erik Pilgrim, John R. Kelly**
SENSITIVITY AND ACCURACY OF HIGH-THROUGHPUT METABARCODING METHODS USED TO DESCRIBE AQUATIC COMMUNITIES FOR EARLY DETECTION OF INVASIVE FISH SPECIES

- 14:30 **Christy Meredith, Anett Trebitz, Greg Peterson, Julie Lietz, Chelsea Hatzenbuhler, Erik Pilgrim, Sara Okum, John Martinson, Joel Hoffman**
THE TRUTH IS OUT THERE: INTEGRATING DNA-BASED DATA INTO BIOASSESSMENTS IMPROVES OUR UNDERSTANDING OF SPECIES DISTRIBUTIONS AND SPECIES-HABITAT RELATIONSHIPS
- 15:30 **Donald Baird**
BIOMONITORING, BUT NOT AS WE KNOW IT. MEETING THE CHALLENGE OF DNA-BASED OBSERVATION IN BIOASSESSMENT.
- 15:45 **Vasco Elbrecht, Florian Leese**
GROUND TRUTHING DNA METABARCODING: PRIMERS, BIOMASS AND SPECIMEN SORTING
- 16:00 **Valentin Vasselon, Isabelle Domaizon, Maria Kahlert, Frédéric Rimet, Agnès Bouchez**
TOWARDS STANDARDIZATION OF DNA EXTRACTION FOR NEXT-GENERATION BIOMONITORING WITH DIATOMS
- 16:15 **Agnès Bouchez, Cecile Chardon, François Keck, Frédéric Rimet, Kalman Tapolczai, Valentin Vasselon**
METABARCODING AND HIGH-THROUGHPUT SEQUENCING FOR ASSESSING RIVER ECOLOGICAL QUALITY WITH DIATOM INDICES AT THE SCALE OF A REGULAR MONITORING NETWORK.
- 16:30 **Richard Mitchell, Lester Yuan, Amina Pollard, Erik Pilgrim**
COMPARING METAGENOMIC AND MORPHOLOGICAL PERIPHYTON ASSEMBLAGE DATA TO MAJOR ENVIRONMENTAL GRADIENTS
- 16:45 **Colin Curry, Shadi Shokralla, Mehrdad Hajibabaei, Donald Baird, Joel Gibson**
A COI LIBRARY FOR NORTH AMERICAN FRESHWATER INVERTEBRATE GENERA: PROGRESS, PITFALLS AND PROSPECTS

S15 Putting Your Publications to Work

Session Chair(s): Sue Nichols, Kate Schofield, Sue Norton, Angus Webb, Andreas Melcher, Mike Peat

Location: 306

- 15:30 **Neal Haddaway**
SYSTEMATIC REVIEWS AS GOLD STANDARDS IN EVIDENCE SYNTHESIS, AND WHAT WE CAN LEARN FROM THEM
- 15:45 **Susan Nichols, Michael Peat, J Angus Webb**
CHALLENGES FOR EVIDENCE-BASED ENVIRONMENTAL MANAGEMENT: WHAT IS ACCEPTABLE AND SUFFICIENT EVIDENCE OF CAUSATION?
- 16:00 **Alexandra Collins**
USING EVIDENCE REVIEWS TO INFORM WATER POLICY AND PRACTICE DECISION MAKING: EXPERIENCES FROM THE UNITED KINGDOM
- 16:15 **Laurie Alexander, Caroline Ridley**
APPLYING SCIENCE SYNTHESIS TO NATIONAL ENVIRONMENTAL POLICY NEEDS: A BOUNDARY WORK PERSPECTIVE

16:30 **Paul Ringold, Matt Weber, Kim Hall, Kirsten Winters**
WHAT EVIDENCE DO WE HAVE TO IDENTIFY
ECOLOGICAL INDICATORS THAT DIRECTLY MATTER TO
PEOPLE?

16:45 **Kate Schofield, Micah Bennett**
MOVING FROM PUBLISHED RESEARCH RESULTS TO
POLICY DECISIONS WITH THE HELP OF CONCEPTUAL
MODEL DIAGRAMS

S02 Climate and Drought Effects on Mountain Stream

Ecosystems

Session Chair(s): Dave Herbst

Location: 307

13:30 **Jason May, Daren Carlisle, David Wolock, Jeanette Howard, Larry Brown**
ESTIMATING UNIMPAIRED STREAMFLOWS AS A
BASELINE FOR ASSESSMENT OF CLIMATE CHANGE AND
ANTHROPOGENIC MODIFICATION

13:45 **Ted Grantham, Daren Carlisle, David Wolock, Greg McCabe, Mike Wieczorek, Jeanette Howard**
SENSITIVITY OF RIVER FLOWS TO CLIMATE CHANGE IN
CALIFORNIA

14:00 **Sophie Cauvy-Fraunié**
TEMPORAL FLOW FLUCTUATION EFFECTS ON
MOUNTAIN STREAM ECOSYSTEMS

14:15 **Carolyn Hunsaker, Dave Herbst**
VARIABILITY IN HYDROLOGY, WATER CHEMISTRY,
AND SEDIMENT LOADS FOR HEADWATERS OF THE
SOUTHERN SIERRA NEVADA

14:30 **Bruce Medhurst, Dave Herbst, Scott Cooper, Sheila Wiseman, Carolyn Hunsaker**
BENTHIC MACROINVERTEBRATE COMMUNITIES IN
RIFFLE AND POOL HABITATS IN FORESTED STREAMS
OF THE SIERRA NEVADA OF CALIFORNIA DURING
DROUGHT

14:45 **Dave Herbst, Bruce Medhurst, Ian Bell, Michael Bogan**
OBSERVATIONS OF CHANGING HABITAT AND BENTHIC
INVERTEBRATE COMMUNITIES FROM THE SIERRA
NEVADA SENTINEL STREAM NETWORK DURING
EXTENDED DROUGHT

15:30 **Matthew Kaylor, Dana Warren**
DROUGHT EFFECTS ON VERTEBRATE BIOTA IN
HEADWATER STREAMS OF THE CASCADE MOUNTAINS,
OR

15:45 **Daniel Magoulick, Dustin Lynch, Doug Leasure**
THE INFLUENCE OF DROUGHT ON FLOW-ECOLOGY
RELATIONSHIPS IN OZARK HIGHLAND STREAMS

16:00 **Felicita Hoppeler**
RUNNING DRY: DROUGHT INDUCED TRANSCRIPTOME-
WIDE GENE EXPRESSION IN THE AQUATIC CADDISFLY
LARVAE MICROPTERNA LATERALIS (INSECTA:
TRICHOPTERA)

16:15 **Bruce Hammock**
TROUT REVERSE THE EFFECT OF WATER TEMPERATURE
ON THE FORAGING OF A MAYFLY

16:30 **Debra Finn, Henrietta Hampel, Raúl Vázquez, Andrea Encalada**
CLIMATE CHANGE COULD INCREASE MAYFLY LIFE-
HISTORY MISMATCH BETWEEN RUNOFF- AND
GROUNDWATER-DOMINATED ALPINE STREAMS.

16:45 **Parsa Saffarinia, Dave Herbst, Bruce Medhurst, Kurt Anderson**
EXPERIMENTAL DROUGHT IN EASTERN SIERRA
NEVADA STREAMS

S23 Traits-Based Vulnerability Assessment

Session Chair(s): Britta Bierwagen, Anna Hamilton, Jen Stamp

Location: 306

10:30 **Britta Bierwagen, Anna Hamilton, Susan Julius, Jen Stamp, Jonathan Witt**
TRAITS-BASED VULNERABILITY ASSESSMENT AND
MONITORING UNDER CLIMATE CHANGE

10:45 **Matthew Pyne**
A REVIEW AND EVALUATION OF TRAIT-FLOW
RELATIONSHIPS IN STREAM ECOSYSTEMS

11:00 **Karan Kakouei, Martin Pusch, Jens Kiesel, Sonja Jähnig**
DETERMINATION OF BENTHIC INVERTEBRATE FLOW
TRAITS IN GERMAN RIVERS

11:15 **Kate Boersma, Michael Bogan, Laura Dee, Steve Miller, Alix Gitelman, Adam Siepielski, David Lytle**
WHAT CAN TRAITS TELL US THAT TAXONOMY
CANNOT? A CASE STUDY OF A DRYING STREAM IN THE
AMERICAN SOUTHWEST

11:30 **Bruce Chessman**
RHEOPHILY AND THERMOPHILY AS POWERFUL
TRAITS FOR PREDICTING RESPONSES OF AQUATIC
MACROINVERTEBRATE ASSEMBLAGES TO DROUGHT
AND CLIMATE CHANGE

11:45 **Kieran Khamis, Alexander Milner, Lee Brown, David Hannah**
IMPLICATIONS OF GLACIER RETREAT FOR
MACROINVERTEBRATE FUNCTIONAL DIVERSITY IN
ALPINE RIVERS

13:30 **Ralf Schäfer**
USING TRAITS OF INVERTEBRATES TO QUANTIFY
EFFECTS OF STRESSORS

13:45 **Lise Comte, Julian Olden**
GLOBAL ANALYSIS OF FRESHWATER FISH
VULNERABILITY TO CLIMATE CHANGE

14:00 **Anna Hamilton, Britta Bierwagen, Jen Stamp, Jonathan Witt, Lei Zheng**
THE USE OF BENTHIC MACROINVERTEBRATE TRAITS
TO ASSESS CLIMATE CHANGE RESPONSES AND
VULNERABILITIES

- 14:15 **Ralf C.M. Verdonshot, Piet F.M. Verdonshot**
ASSESSING THE EFFECTS OF RESTORATION OF INCISED STREAMS ON MACROINVERTEBRATES BASED ON TAXONOMIC- AND TRAIT-BASED INDICATORS
- 14:30 **Meryl Mims, Deanna Olson, David Pilliod, Jason Dunham**
RARITY CLASSIFICATIONS OF ECTOTHERMIC VERTEBRATES: APPLICATIONS FOR REGIONAL MULTISPECIES VULNERABILITY ASSESSMENTS
- 14:45 **Jollene Reich, Susan Nichols, Bill Maher, Ben Kefford**
CAN TRAIT COMPOSITIONS OF BENTHIC MACROINVERTEBRATE COMMUNITIES DISTINGUISH BETWEEN TWO ENVIRONMENTAL STRESSORS AND ASSESS STREAM ECOSYSTEM FUNCTION
- S14 Multiple Stressors in River Ecosystems**
Session Chair(s): Sergi Sabater, Vicenç Acuña, Mazeika P. Sullivan, Arturo Elosegi
Location: 307
- 10:30 **Sergi Sabater, Vicenç Acuña, Ladislav Mandaric, Jordi-René Mor, Isabel Muñoz, Olatz Pereda, Mira Petrovic, Daniel von Schiller, Arturo Elosegi**
ACCOUNTING FOR THE EFFECTS OF COMBINED STRESSORS ON THE BIOLOGICAL STRUCTURE OF MEDITERRANEAN STREAMS
- 10:45 **Arturo Elosegi, Vicenç Acuña, Ladislav Mandaric, Isabel Muñoz, Olatz Pereda, Mira Petrovic, Jordi-René Mor, Daniel von Schiller, Sergi Sabater**
SUBSIDY-STRESS UNDER MULTIPLE STRESSORS: INTERACTION BETWEEN WATER SCARCITY AND POINT-SOURCE POLLUTION ON STREAM COMMUNITIES AND ECOSYSTEM FUNCTIONING
- 11:00 **S. Mazeika P. Sullivan, Adam Kautza, Tagwireyi Paradzayi, Jeremy M. Alberts**
A "COCKTAIL" OF STRESSORS: INDEPENDENT AND JOINT EFFECTS OF ENVIRONMENTAL PERTURBATIONS IN A MIDWESTERN US RIVER
- 11:15 **William Herb, Lucinda Johnson, William Bartsch, Meijun Cai, John Jereczek, Ralph Garono, Kristen Blann**
FLOW AND TEMPERATURE AS DRIVERS OF LAKE SUPERIOR TRIBUTARY BIOTA
- 11:30 **Tenna Riis, Daniel Graeber, Jes J. Rasmussen, Peter S. Levi, Annette Baattrup-Pedersen, Simon L. Rosenhøj, Tinna M. Jensen, Erika M. Neif**
HOW DOES ECOSYSTEM STRUCTURE AND FUNCTION RESPOND TO LOW-FLOW CONDITIONS IN AGRICULTURAL STREAMS?
- 11:45 **James Hood, Jonathan P. Benstead, Wyatt Cross, Paula Furey, Luke Ginger, Alexander Huryn, Philip Johnson, Delorianne Sander, Jill Welter, Jón Ólafsson, Gisli Gislason**
INTERACTIVE EFFECTS OF TEMPERATURE AND NITROGEN SUPPLY ON STREAM BIOFILM STRUCTURE AND FUNCTION
- S05 Eco-hydrology of IRES in a Changing Climate**
Session Chair(s): Thibault Datry, Dan Allen, Michael Bogan, Kristin Jaeger, Katie Costigan, Raphael Mazor
Location: 308
- 10:30 **Daniel Magoulick, Doug Leasure**
TEMPORAL VARIATION IN FLOW ALTERATION OF INTERMITTENT AND PERENNIAL STREAMS IN THE INTERIOR HIGHLANDS
- 10:45 **Daniel Allen, Katie Costigan, Gita Bodner, Darin Kopp, Timothy Flood, Dale Turner, Thibault Datry, Bernard Hugueny**
CAN STREAM GAGE DATA PREDICT LARGE-SCALE DRYING PATTERNS IN INTERMITTENT RIVER NETWORKS? AN ANALYSIS USING LONG-TERM WET/ DRY MAPPING DATA FROM 3 RIVERS
- 11:00 **Abel Porras, Mateo Scoggins**
PREDICTING FLOW PERMANENCE IN THE URBAN SOUTHWEST
- 11:15 **Ryan Burrows, Nick Bond, Mark Kennard**
PATTERNS OF ORGANIC MATTER PROCESSING IN SURFACE AND SUB-SURFACE HABITATS OF GROUNDWATER-INFLUENCED INTERMITTENT STREAMS
- 11:30 **Sanja Zlatanovic, Katrin Premke, Michael Mutz**
LINK OF STREAM MICROBIAL ACTIVITY WITH SHADING AND SEDIMENT HETEROGENEITY AND ITS SIGNIFICANCE UNDER DROUGHT STRESS
- 11:45 **Lindsay Reynolds, Patrick Shafroth, N. LeRoy Poff**
STREAM DRYING UNDER CLIMATE CHANGE IN THE UPPER COLORADO RIVER BASIN: HOW WILL LOW FLOWS SHAPE FUTURE RIPARIAN VEGETATION?
- 13:30 **Anthony Sanabria, Michael Bogan, Stephanie Carlson**
THE EFFECTS OF DROUGHT AND STREAM DRYING ON AQUATIC INVERTEBRATES AT POINT REYES NATIONAL SEASHORE
- 13:45 **Katie Costigan, Charles Goss, Kristin Jaeger, P. Charles Goebel**
HYDROLOGIC VARIATION AND AQUATIC MACROINVERTEBRATE COMMUNITIES IN INTERMITTENT STREAMS OF NORTH-CENTRAL OHIO
- 14:00 **Allyson Yarra, Daniel Magoulick**
INFLUENCE OF FLOW REGIME, GEOMORPHOLOGY, AND HABITAT ON CRAYFISH ASSEMBLAGES OF THE OZARK HIGHLANDS
- 14:15 **Rachel Stubbington, Paul J. Wood**
MACROINVERTEBRATE SEEDBANK RESISTANCE AND RESILIENCE IN RESPONSE TO SEVERE SUPRA-SEASONAL DROUGHT

- 14:30 **Thibault Datry, Edgar Goitia, Jose Zubieta, Nabor Moya, Thierry Oberdorff, Ross Vander Vorste**
DESICCATION-RESISTANCE AS A PROMOTER FOR INVERTEBRATE COMMUNITY RESILIENCE IN TEMPORARY TROPICAL FRESHWATERS: THE INFLUENCE OF ENVIRONMENTAL HARSHNESS
- 14:45 **Ross Vander Vorste, Thibault Datry**
STORAGE EFFECTS IN INTERMITTENT RIVER ECOLOGY: IMPLICATIONS FOR COEXISTENCE, BIOTIC INTERACTIONS AND COLONIZATION DYNAMICS
- 15:30 **Catherine Leigh, Thibault Datry, Working Group of IRBAS**
THE BIODIVERSITY AND ECOHYDROLOGY OF INTERMITTENT AND EPHEMERAL RIVERS: INTRODUCING THE IRBAS DATABASE AND AN ANALYTICAL EXAMPLE
- 15:45 **Michael Bogan**
RISE UP LAZARUS! LIFE HISTORY AND DISTRIBUTION OF AN INTERMITTENT STREAM SPECIALIST (MESOCAPNIA ARIZONENSIS)
- 16:00 **Nick Bond, David Crook, Jon Marshall, Jaye Lobegeiger, Norbert Menke, Stephen Balcombe**
SPATIAL HABITAT DYNAMICS AND POPULATION PERSISTENCE IN INTERMITTENT STREAMS
- 16:15 **Jane Fencel, Julian Olden**
FISH LIFE-HISTORY STRATEGIES DEFINE META-POPULATION DYNAMICS IN A DRYLAND STREAM
- 16:30 **Avital Gasith**
TO WHAT EXTENT INVERTEBRATE BIODIVERSITY OF INTERMITTENT STREAMS IN MEDITERRANEAN-CLIMATE REGION IS THREATENED BY CLIMATE CHANGE?
- 14:30 **Roseanna Gamlen-Greene, David Hawke, Jon Harding**
BIOGEOCHEMISTRY OF SEABIRD SUBSIDIES IN STREAM ECOSYSTEMS: PATTERNS IN ECOLOGICAL STOICHIOMETRY
- 15:30 **Adrienne Smits, Daniel Schindler, Gordon Holtgrieve**
GEOMORPHIC INFLUENCES ON AGE OF CARBON SOURCES TO STREAM DIC AND AQUATIC FOOD WEBS
- 15:45 **Juliana D'Andrilli, Eric Scholl, Heidi Smith, Christine Foreman, James Junker**
INTEGRATING CHEMISTRY, MICROBIOLOGY, AND ECOSYSTEM ECOLOGY TO DISCERN THE NATURE AND FATE OF DISSOLVED ORGANIC MATTER IN STREAMS
- 16:00 **Brittany Hanrahan, Jennifer Tank, Ariel Shogren, Emma Rosi-Marshall**
USING THE NOVEL RAZ-RRU METRIC TO QUANTIFY THE INFLUENCE OF BIOFILM COLONIZATION AND SUBSTRATE HETEROGENEITY ON STREAM METABOLISM
- 16:15 **Denise Bruesewitz, Charles MacCaulay, Anne Schechner, Whitney King**
USING PATTERNS OF ECOSYSTEM METABOLISM TO UNDERSTAND A CHANGING, MESOTROPHIC LAKE
- 16:30 **Laurel Genzoli, Robert Hall**
SUMMER STORMS CAUSED LOWER-THAN EXPECTED GROSS PRIMARY PRODUCTION ON THE KLAMATH RIVER DURING THE 2015 DROUGHT YEAR
- 16:45 **Alison Appling, Robert Hall, Charles Yackulic, Maite Arroita**
BALANCING ACCURACY AND COMPUTATION TIME IN STREAM METABOLISM MODELING

S04 Temporary Wetlands

Session Chair(s): Brian O'Neill, D. Christopher Rogers, Kelley Fritz

Location: 309-310

- 10:30 **Niall McCarten**
RESPONSE OF PLANT SPECIES TO MODIFICATION IN HYDROLOGICAL FUNCTIONING IN VERNAL POOLS DUE TO PREDICTED CHANGES IN THE CALIFORNIA CLIMATE
- 10:45 **Michael Peterson, Kevin Lunde, Ming-Chih Chiu, Vincent Resh**
SEASONAL VARIATION OF MACROINVERTEBRATES IN A TEMPORARY WETLAND OF NORTHERN CALIFORNIA
- 11:00 **Jamie Kneitel**
HYDROREGIME INTERACTS WITH SPATIAL AND TEMPORAL SUBSIDIES IN CALIFORNIA VERNAL POOLS
- 11:15 **Christopher Rogers**
RELATING ANOSTRACAN DISTRIBUTION TO PHYSICAL HABITAT CHARACTERISTICS IN NORTH AMERICA (CRUSTACEA: BRANCHIOPODA)
- C03 Biogeochemistry**
Session Chair(s): Denise Bruesewitz, James Heffernan
Location: 309-310
- 13:30 **Anne Hershey, Peter Blum, Martin Tsui, Steven Whalen**
METHANE AND METHYLMERCURY PRODUCTION POTENTIALS IN NORTH CAROLINA PIEDMONT STREAM SEDIMENTS
- 13:45 **Shan Zuidema, Wilfred Wollheim**
CHARACTERIZING THE PRESENT AND FUTURE EXTENT OF CHLORIDE IMPAIRMENT IN THE MERRIMACK RIVER NEW HAMPSHIRE USA
- 14:00 **Jose Caprile**
THE GEOCHEMICAL INFLUENCE OF TRACE ELEMENT CONCENTRATIONS FROM MARINE SEDIMENTARY BEDROCK ON FRESHWATER STREAMS IN THE WESTERN TRANSVERSE MOUNTAIN RANGES
- 14:15 **Lisa Kunza, Jaime Haueter, Christopher Schiller, Sarah Spaulding, Emily Stickney**
DIDYMOSPHENIA GEMINATA IN GRAND TETON NATIONAL PARK, WY: DISTRIBUTION, MAT STOICHIOMETRY, AND BIOGEOCHEMISTRY

- 11:30 **Kelley Fritz, Lucas Kirschman, Matt Whiles**
NUTRIENT FLOWS AND SUBSIDIES ACROSS AQUATIC-
TERRESTRIAL BOUNDARIES OF TEMPORARY PONDS
VIA AMPHIBIAN MIGRATIONS
- 11:45 **Brian O'Neill**
COMMUNITY DISASSEMBLY IN EPHEMERAL
ECOSYSTEMS

C13 Land-use and Non-Point Source Impacts

Session Chair(s): Steve Thomas

Location: 311-312

- 10:30 **Stanley Kemp**
MECHANISMS OF URBANIZATION IMPACT ON A
SENSITIVE LITHOPHILIC SPAWNER, RIVER CHUB
(NOCOMIS MICROPOGON)
- 10:45 **Amy D. Rosemond, David W.P. Manning, Phillip M.
Bumpers, John kominoski, Vlad Gulis, Jonathan P.
Benstead, John Maerz**
NUTRIENT ENRICHMENT FLIPS
NITROGEN:PHOSPHORUS RATIOS OF DIVERSE
DETRITAL RESOURCES
- 11:00 **Flavia Tromboni, Steven Thomas, Rafael Feijó de
Lima, Eduardo Silva-Júnior, Timothy Moulton,
Christine Lourenço-Amorim, Eugenia Zandonà**
THE EFFECTS OF RIPARIAN DEFORESTATION AND
WATER CHEMISTRY ON NUTRIENT UPTAKE RATES IN
THE ATLANTIC FOREST OF BRAZIL
- 11:15 **Christopher Cook**
UNDERSTANDING STORM EVENT NITRATE EXPORT IN
DIFFERENT LAND USES
- 11:30 **Edward Krynak, Adam Yates**
BENTHIC INVERTEBRATE DIVERSITY IN AN
AGRICULTURALLY STRESSED SYSTEM: A RECIPROCAL
TRANSFER EXPERIMENT
- 11:45 **Iain Phillips, Doug Chivers, John-Mark Davies**
WATER CHEMISTRY INFLUENCES ON BENTHIC
COMMUNITY STRUCTURE IN NORTHERN GREAT
PLAINS LOTIC SYSTEMS.
- 14:00 **Anya Metcalfe, Theodore Kennedy, Jane Marks**
COMPOUNDING IMPOUNDMENTS: AQUATIC INSECT
DISTRIBUTION AND EMERGENCE IN A FRAGMENTED
RIVERSCAPE
- 14:15 **Judy Li, William Gerth, Richard VanDriesche,
Douglas Bateman**
SEASONAL AND SPATIAL DIFFERENCES IN CUTTHROAT
(ONCORHYNCHUS CLARKII CLARKII) AND STEELHEAD
(O. MYKISS IRIDEUS) TROUT DIET AT HINKLE CREEK,
OR., USA.
- 14:30 **Sarah Laske, Amanda Rosenberger, Mark Wipfli,
Christian Zimmerman**
HYDROLOGY AND FISH COMPOSITION DRIVES LENTIC
FOOD WEB STRUCTURE IN ARCTIC ALASKA
- 14:45 **David Roon, Jason Dunham, Bret Harvey, Ryan
Bellmore, Dede Olson, Gordie Reeves**
RIPARIAN THINNING: EVALUATING THE ECOLOGICAL
TRADEOFFS OF TEMPERATURE AND PRODUCTIVITY
FOR HEADWATER STREAMS IN REDWOOD
ECOSYSTEMS OF NORTHERN CALIFORNIA
- 15:30 **Ryan Bellmore, Joseph Benjamin, Michael Newsom,
Jennifer Bountry, Daniel Dombroski**
EXPLORING RESPONSES TO RIVER RESTORATION WITH
DYNAMIC FOOD WEB MODELS
- 15:45 **Brooke Penaluna, Alba Argerich**
THE ROLE OF AQUATIC CONSUMERS TO
MACROINVERTEBRATES: A FIELD EXPERIMENT IN A
PACIFIC NORTHWEST STREAM
- 16:00 **Alba Argerich, Brooke Penaluna**
SPATIAL AND TEMPORAL VARIABILITY OF STREAM
FUNCTIONAL PROCESSES IN RESPONSE TO AQUATIC
CONSUMER MANIPULATIONS
- 16:15 **Matthew Schenk, Colden Baxter, G. Wayne Minshall,
Mirjam Schärer**
FIRE, FOOD AND FISH: FOOD-WEB RESPONSES TO
WILDFIRE AT MULTIPLE SCALES IN TIME AND SPACE
- 16:30 **Colden Baxter**
CLIMATE CHANGE, WILDFIRE AND A MESSAGE OF
RESILIENCE FROM THE "RIVER OF NO RETURN"

S22 Biotic Responses to Food Web Alterations

Session Chair(s): Janine Rüegg, Brooke Penaluna, Alba Argerich

Location: 311-312

- 13:30 **Janine Rüegg**
UNDERSTANDING THE EXTENT OF FOOD WEB
ALTERATIONS ON AQUATIC ECOSYSTEM STRUCTURE
AND FUNCTION REQUIRES CAREFUL CONSIDERATION
OF SCALE
- 13:45 **Kristine Korzow Richter**
HISTORICAL RECORDS OF FRESHWATER ECOSYSTEMS:
USING PROTEIN BARCODING OF ARCHAEOLOGICAL
SAMPLES TO PROVIDE TEMPORAL DATA

C05 Conservation and Restoration

Session Chair(s): Rebecca Bixby

Location: 313

- 10:30 **Michael Paul, Kim Caviness-Reardon**
DEVELOPING NUMERIC NUTRIENT CRITERIA TO
PROTECT LAKES AND RESERVOIRS IN MISSISSIPPI
- 10:45 **Myrto Nikolakopoulou, Alba Argerich, Susana
Bernal, Esperança Gacia, Eugènia Martí, Miquel
Ribot, Albert Sorolla, Francesc Sabater, Timothy
Vaessen**
THE EFFECT OF TWO MACROPHYTE SPECIES USED
FOR RIVER RESTORATION ON THE REDUCTION OF
NUTRIENT LOADS. A STUDY IN FLOW-THROUGH
STREAM MESOCOSMS

- 11:00 **Rebecca Bixby, Sherri Johnson, Linda Ashkenas**
EFFECTS OF FOREST HARVEST METHODS ON ALGAL BIOFILMS IN HEADWATER STREAMS
- 11:15 **Emily Argo, Allison Roy, Robert Ryan, Anita Milman**
FACTORS INFLUENCING INDIVIDUALS' OUTDOOR RESIDENTIAL WATER USE DECISIONS IN SUBURBAN BOSTON (USA)
- 11:30 **Jordan Mihalicz, Tim Jardine, Helen Baulch, Iain Phillips**
EFFECTS OF A HYDROPEAKING DAM ON DOWNSTREAM MACROINVERTEBRATE COMMUNITIES AND RIVER HEALTH
- 11:45 **Bashida Massar**
OVEREXPLOITATION: THREAT TO FISH DIVERSITY IN INDIAN NORTHEAST

S25 Modeling Environmental Change in Freshwater Ecosystems

Session Chair(s): Mathias Kuemmerlen, Sami Domisch

Location: 313

- 13:30 **Simon Linke, Bernhard Lehner**
HYDROATLAS: A GLOBAL DATABASE OF RIVER AND CATCHMENT ATTRIBUTES TO FACILITATE AQUATIC ECOSYSTEM MODELLING AND CONSERVATION PLANNING
- 13:45 **Tamara Wilson, D. Richard Cameron**
GROWING DEMANDS, SHRINKING SUPPLIES? MODELING CALIFORNIA'S LAND-USE AND WATER USE FUTURE
- 14:00 **John Olson**
CURRENT AND FUTURE EFFECTS OF LAND USE AND CLIMATE CHANGE ON RIVER AND STREAM SALINITY
- 14:15 **Vanessa Reis, Virgilio Hерmoso, Simon Linke**
GLOBAL ASSESSMENT OF WETLAND DISTRIBUTION, THREATS AND CONSERVATION STATUS
- 14:30 **Joe Ebersole, Allen Brookes, Jordan Massie, Brenda Rashleigh, Nathan Schumaker**
ASSESSING SUFFICIENCY OF THERMAL RIVERSCAPES FOR RESILIENT SALMON AND STEELHEAD POPULATIONS
- 14:45 **Mathias Kuemmerlen, Stefan Stoll, Peter Haase**
HOW MANY ARE TOO MANY BARRIERS FOR FRESHWATER FISH?
- 15:30 **Ryan Hill, Scott Leibowitz, Anthony Olsen, Darren Thornbrugh, Eric Fox, Marc Weber**
VARIABLE SELECTION WITH RANDOM FOREST: BALANCING STABILITY, PERFORMANCE, AND INTERPRETATION IN ECOLOGICAL AND ENVIRONMENTAL MODELING
- 15:45 **Francisco Guerrero, Victor Penaranda**
INFORMATION THEORY AND THE ASSESSMENT OF HYDROLOGICAL CHANGE IN FRESHWATER ECOSYSTEMS

- 16:00 **Leopold Füreder, Georg Niedrist, Stefan Schütz**
PROGNOSIS, DIAGNOSIS AND TESTING OF HYDROECOLOGICAL INDICATORS IN A LONG-TERM MONITORING OF ALPINE RIVERS
- 16:15 **Sami Domisch, Walter Jetz**
COMBINING POINT OCCURRENCES AND EXPERT RANGE INFORMATION TO MODEL FINE-GRAIN DIVERSITY PATTERNS OF THE NORTH AMERICAN FRESHWATER FISH FAUNA
- 16:30 **Elizabeth Montgomery**
EVIDENCE FOR NEGATIVE EFFECTS OF DROUGHT ON BAETIS SP. (SMALL MINNOW MAYFLY) ABUNDANCE IN A SOUTHERN CALIFORNIA STREAM

C18 Population and Community Ecology

Session Chair(s): Christina Baker, Timothy Hoellein, Eric Larsen

Location: 314

- 10:30 **Jasmine Hamilton, Barbara Peckarsky, Kara Cromwell**
HEAVY METAL POLLUTION AND PARASITISM AFFECT MAYFLY DRIFT BEHAVIOR AND SUSCEPTIBILITY TO STONEFLY PREDATION
- 10:45 **Kara Cromwell, Barbara Peckarsky**
HOW DO HOST-PARASITE LIFE HISTORY AND ABIOTIC ENVIRONMENTAL CONTEXT INTERACT TO DETERMINE PARASITE PREVALENCE?
- 11:00 **Benjamin Swift, Kara Cromwell, Barbara Peckarsky**
THE EFFECT OF PARASITISM ON DRIFT BEHAVIOR AND CONSEQUENCES FOR TROUT PREDATION ON LARVAE OF THE MAYFLY BAETIS BICAUDATUS
- 11:15 **Judith Westveer**
BIOTIC INTERACTION ENHANCES SURVIVAL AND FITNESS: INTERSPECIFIC FACILITATION AMONG AQUATIC MACROINVERTEBRATES
- 11:30 **Anna Belyaeva, John Downing**
NICHE DIFFERENTIATION OF TWO CLOSELY RELATED SPECIES: INFLUENCES OF FISH COMMUNITIES AND ABIOTIC ENVIRONMENT
- 11:45 **Bianca Hernandez**
BURROWING BEHAVIOR OF UNIONID MUSSELS IN CENTRAL TEXAS

S17 Stressed Forested Watersheds

Session Chair(s): Alex Yeung, Maitane Erdozain Ibarra,

Jordan Musetta-Lambert

Location: 314

- 13:30 **Paul Sibley, David Kreutzweiser, Karen Kidd, John Richardson, Alex Yeung, Jordan Musetta-Lambert, Maitane Erdozain**
SEEING THE FOREST AND THE TREES: EMERGING TOOLS AND PERSPECTIVES FOR MANAGING RIPARIAN FORESTS AND THEIR ECOSYSTEM SERVICES

- 13:30 **Paul Sibley, David Kreutzweiser, Karen Kidd, John Richardson, Alex Yeung, Jordan Musetta-Lambert, Maitane Erdozain**
SEEING THE FOREST AND THE TREES: EMERGING TOOLS AND PERSPECTIVES FOR MANAGING RIPARIAN FORESTS AND THEIR ECOSYSTEM SERVICES
- 14:00 **Dana Warren**
ALTERNATE TRAJECTORIES OF STAND DEVELOPMENT IN THE RIPARIAN FOREST AFFECT LONG-TERM STREAM LIGHT DYNAMICS, AND ECOSYSTEM FUNCTION IN TEMPERATE HEADWATERS
- 14:15 **Jakob Schelker, Karin Eklöf, Ryan Sponseller, Kevin Bishop, Hjalmar Laudon**
RESPONSE OF BOREAL CATCHMENTS TO FOREST DISTURBANCE: FROM NUTRIENT MOBILIZATION AT THE SOIL-STREAM INTERFACE TO LANDSCAPE SCALE IMPLICATIONS ON WATER QUALITY
- 14:30 **Paul Sibley, David Kreutzweiser, Elisa Muto, Jordan Musetta-Lambert**
WILDFIRE IN BOREAL FOREST CATCHMENTS INFLUENCES LEAF LITTER SUBSIDIES AND CONSUMER COMMUNITIES IN STREAMS: IMPLICATIONS FOR RIPARIAN MANAGEMENT STRATEGIES
- 14:45 **Maitane Erdozain, Karen Kidd, David Kreutzweiser, Paul Sibley**
RESPONSE OF AQUATIC INDICATORS OF STREAM INTEGRITY TO DIFFERENT FOREST CONDITIONS RESULTING FROM FORESTRY
- 15:30 **Alex Yeung, John Richardson, Antoine Lecerf**
ASSESSING THE LONG-TERM RESPONSE OF HEADWATER STREAM CONDITIONS TO RIPARIAN MANAGEMENT PRACTICES
- 15:45 **Jered Studinski, Andrew Hafs, Kyle Hartman**
THE EFFECT OF RIPARIAN DISTURBANCE ON THE HABITAT, SUMMER DIET, AND CONDITION OF AGE-0 BROOK TROUT (*SALVELINUS FONTINALIS*) IN CENTRAL APPALACHIAN STREAMS
- 16:00 **Timo Muotka, Jukka Aroviita, Pauliina Louhi, Heikki Mykrä, Emmi Putkonen, Jarno Turunen**
SEDIMENTATION, HABITAT LOSS AND CONNECTIVITY AS DRIVERS OF STREAM COMMUNITIES AND ECOSYSTEM PROCESSES: IMPLICATIONS FOR STREAM RESTORATION
- 16:15 **Peter Kiffney, John Richardson, Adam Goodwin, Adam Wei**
THE INFLUENCE OF FOREST MANAGEMENT AND NATURAL DISTURBANCE ON LOTIC FOOD WEBS
- 16:30 **Aitor Larrañaga, Libe Solagaistua, Arturo Elosegi**
PHYSIOLOGICAL RESPONSES OF FRESHWATER CONSUMERS TO VARIATIONS OF THE DURATION AND INTENSITY OF THE STOICHIOMETRIC IMBALANCE WITH THE RESOURCE
- 16:45 **Liliana Garcia, Wyatt Cross, Isabel Pardo, John Richardson**
ISOTOPIC VARIATION OF BASAL RESOURCES AND DEGRADATION OF STREAM ECOSYSTEMS THROUGH LAND-USE INTENSIFICATION
- C02 Bioassessment**
Session Chair(s): Brian Helms, James Stribling
Location: 315
- 10:30 **Lauren Kuehne, Julian Olden, Josh Lawler, Angela Strecker, Dave Theobald**
MAKING GOOD OR BROKEN PROMISES? TRENDS IN ECOLOGICAL INTEGRITY ASSESSMENT ACROSS THE UNITED STATES
- 10:45 **Jennifer Courtwright, Anthony Olsen, Philip Kaufmann, Steven Paulsen, Scott Miller**
STREAM AND RIVER CONDITION ACROSS THE BLM'S NATIONAL SYSTEM OF PUBLIC LANDS
- 11:00 **Eric Bauer, Brian Helms, Jack Feminella, David Werneke, Jason Zink, Greg Jennings**
REGIONAL REFERENCE CURVES AND ECOLOGICAL ENDPOINTS FOR THE APPALACHIAN PLATEAU OF ALABAMA
- 11:15 **Steven Rier**
ASSESSING PERIPHYTON PHOSPHORUS LIMITATION IN CENTRAL PENNSYLVANIA STREAMS USING PULSE AMPLITUDE MODULATED FLUOROMETRY
- 11:30 **Trefor Reynoldson, John L Bailey, Robert Bailey, Monica Boudreau, Kyle Knysh, Simon Courtenay**
REQUIRED SAMPLING EFFORT FOR BIOASSESSMENT OF ATLANTIC ESTUARIES IN A CITIZEN MONITORING PROGRAMME
- 11:45 **Bartosz Grudzinski, Melinda Daniels**
BISON AND CATTLE GRAZING MANAGEMENT, BARE GROUND COVERAGE, AND LINKS TO SUSPENDED SEDIMENT CONCENTRATIONS IN GRASSLAND STREAMS
- 13:30 **Ryan S. King, Mateo Scoggins, Abel Porras**
STREAM BIODIVERSITY IS DISPROPORTIONATELY LOST TO URBANIZATION WHEN FLOW PERMANENCE DECLINES: EVIDENCE FROM SOUTHWESTERN NORTH AMERICA
- 13:45 **Andrea Erwin**
EVALUATING FISH HABITAT COMPENSATION IN THE CANADIAN ARCTIC: STREAM HABITAT ATTRIBUTES AND MACROINVERTEBRATE ASSEMBLAGES
- 14:00 **Rebeka Šiling**
DISENTANGLING THE EFFECTS OF MULTIPLE STRESSORS IN LAKES; SHOULD WE USE LITTORAL BENTHIC INVERTEBRATES?

- 14:15 **John Rudolph, Ted Von Bitner, Ruth Kolb**
INVESTIGATION OF THE INFLUENCE OF NATURALLY ELEVATED TOTAL DISSOLVED SOLIDS CONCENTRATIONS ON FRESHWATER BENTHIC MACROINVERTEBRATE STREAM COMMUNITIES IN THE SOUTHERN CALIFORNIA REGION.
- 14:30 **Lester Yuan**
COMBINING LOCAL AND REGIONAL DATA TO IMPROVE ENVIRONMENTAL DECISION MAKING
- 14:45 **Susan Norton, Geoffrey Smith, Josh Lookenbill, Dustin Shull**
SYNTHESIZING EVIDENCE TO ASSESS THE CAUSES OF SMALLMOUTH BASS DECLINES AT THE SUSQUEHANNA AND JUNIATA RIVERS, PENNSYLVANIA, USA

C18 Population and Community Ecology

Session Chair(s): Timothy Hoellein

Location: 315

- 15:30 **Daniel McGarvey**
FACEBOOK FOR FISH: NEW INSIGHT INTO FISH ASSEMBLAGE STRUCTURE AND STABILITY THROUGH SOCIAL NETWORK ANALYSIS
- 15:45 **Sophia Bonjour, Matt Whiles, Keith Gido**
INFLUENCES OF FISHES ON MACROINVERTEBRATE AND ALGAL COLONIZATION OF PRAIRIE STREAM POOL MESOCOSMS
- 16:00 **Xingli Giam, Julian Olden**
WHAT MAKES A FISH RARE? DRIVERS AND INTERRELATIONSHIPS BETWEEN MULTIPLE FORMS OF RARITY
- 16:15 **Stephen A. Sefick, Jack W. Feminella, Nina N. Noreika**
DISTURBANCE MODIFIES THE IMPORTANCE OF DETERMINISTIC AND STOCHASTIC ASSEMBLY MECHANISMS IN STREAM MACROINVERTEBRATE COMMUNITIES
- 16:30 **Bryan Brown, Brett Tornwall**
COMMUNITY TRAITS DEVIATE IN RESPONSE TO A DISTURBANCE AT DIFFERENT LOCATIONS WITHIN A STREAM NETWORK.
- 16:45 **Nicole T.K. Kit, David Dudgeon, Nancy E. Karraker**
BIODIVERSITY AND ECOSYSTEM FUNCTIONS – CAN TADPOLES TELL US ANYTHING ABOUT THEIR RELATIONSHIP?

TUESDAY, MAY 24, ORALS

C06 Disturbance

Session Chair(s): Peter Kiffney

Location: 302-303

- 10:30 **Brian Shelley**
USE OF GAME CAMERAS TO MONITOR FLOW IN SMALL, HIGH-GRADIENT STREAMS IN THE WHITE MOUNTAINS NATIONAL FOREST, MAINE AND NEW HAMPSHIRE, U.S.A.
- 10:45 **Johnny Richardson**
EFFECTS OF DROUGHT ON WATERBODIES IN LEON COUNTY FLORIDA
- 11:00 **Yo Miyake, Kento Yoshimura, Yuya Watanabe, Terutaka Mori, Takumi Akasaka**
FLOW REGIME AND INVERTEBRATE COMMUNITY RESPONSE ACROSS JAPANESE RIVERS
- 11:15 **Annika Walters**
THE ROLE OF CONTEXT DEPENDENCY IN UNDERSTANDING THE EFFECTS OF LOW FLOW EVENTS ON FISH
- 11:30 **Karen Baumann, Eric Scholl, Heidi Rantala, Matt Whiles**
TEMPORAL PATTERNS OF MACROINVERTEBRATE COMMUNITY STRUCTURE THROUGH RECORD FLOODING AND DROUGHT IN A FRAGMENTED RIVER
- 11:45 **Michael Kendrick, Alexander Huryn, Anne Hershey**
UNTANGLING THE DIRECT AND INDIRECT EFFECTS OF DISTURBANCE ON CONSUMER COMMUNITIES IN AN ARCTIC RIVER

C20 Gas and Oil

Session Chair(s): Nicole-Marie Novodvorsky

Location: 304-305

- 10:30 **Eric Mysak**
WWF-CANADA WATERSHED REPORTS: CREATING A NATIONAL ASSESSMENT OF THE HEALTH OF AND THREATS TO CANADA'S RIVERS
- 10:45 **Nancy Glozier, Allison Ritcey**
PATTERNS IN BENTHIC INVERTEBRATE COMMUNITIES IN REFERENCE AREAS IN RIVERS WITHIN THE OIL SANDS DEVELOPMENT REGION OF NORTHERN ALBERTA, CANADA.
- 11:00 **Patricia Chambers, Alexa Alexander Trusiak**
HISTORICAL PATTERNS IN WATER QUALITY IN RELATION TO OIL SANDS INDUSTRIAL DEVELOPMENT
- 11:15 **Vanessa Bourne, John L Bailey, Aaron Todd, Nicole Novodvorsky**
SEASONAL VARIABILITY OF WATER CHEMISTRY AND BIOTIC COMMUNITIES IN TWO ECOZONES IN NORTHERN ONTARIO, CANADA
- 11:30 **Lucy Baker, Stephanie Stoughton**
STREAM BASIN PHYSICAL CHARACTERISTICS AND HUMAN ACTIVITIES INTERACT TO INFLUENCE AQUATIC MACROINVERTEBRATE COMMUNITIES

S16 Algal Data as a Component of Bioassessment

Session Chair(s): Julianne Heinlein, Gina LaLiberte

Location: 306

- 10:30 **Gina LaLiberte, Matthew Diebel**
TAXONOMIC (IN)CONSISTENCY IN ALGAL BIOASSESSMENT DATA: AN ANALYST'S PERSPECTIVE, AND RESULTS FROM A STATEWIDE STUDY OF NUTRIENT EFFECTS ON DIATOM COMMUNITIES
- 10:45 **Daniel Sobota, Shannon Hubler, Michael Paul, Rochelle Labiosa**
USING PERIPHYTON COMMUNITIES TO INDICATE NUTRIENT LEVELS IN PACIFIC NORTHWEST STREAMS
- 11:00 **R. Jan Stevenson**
EFFECTS OF TAXONOMIC CONSISTENCY ON DIATOM METRIC PERFORMANCE
- 11:15 **Rosalina Stancheva, Robert Sheath**
DO WE NEED SOFT-BODIED ALGAE AS BIOINDICATORS IN STREAM BIOASSESSMENT?
- 11:30 **Eli Asarian, Jacob Kann, Ann St. Amand**
STANDARDIZATION AND LONG-TERM TRENDS IN A MULTI-DECADAL PHYTOPLANKTON DATABASE FOR UPPER KLAMATH LAKE, OREGON
- 11:45 **Clinton Davis, Ana Burliga, Dennis Vander Meer, Sean Sullivan**
ASSESSING IMPACTS OF RECENT DROUGHTS ON PERIPHYTON ASSEMBLAGES IN PACIFIC NORTHWEST (WASHINGTON)

S14 Multiple Stressors in River Ecosystems

Session Chair(s): Sergi Sabater, Vicenç Acuña, Mazeika P. Sullivan, Arturo Elosegi

Location: 307

- 10:30 **Vicenç Acuña, Ibon Aristi, Arturo Elosegi, Sergi Sabater, Mira Petrovic, Sara Insa, Maria Casellas**
NUTRIENTS VERSUS EMERGING CONTAMINANTS - OR A DYNAMIC MATCH BETWEEN SUBSIDY AND STRESS EFFECTS ON STREAM BIOFILMS
- 10:45 **Elizabeth Ogata, Donald Long, Michelle Baker, Zachary Aanderud, Emma Rosi-Marshall, Susan Durham**
HOW DO THE STIMULATORY EFFECTS OF NUTRIENTS AND INHIBITORY EFFECTS OF PHARMACEUTICALS ADD UP?
- 11:00 **Melody Bernot, Jason Doll**
A META-ANALYSIS OF PHARMACEUTICALS AND PERSONAL CARE PRODUCTS (PPCPs) IN US FRESHWATERS: SPATIAL AND TEMPORAL TRENDS
- 11:15 **David W. P. Manning, S. Mazeika P. Sullivan**
BENTHIC MACROINVERTEBRATE COMMUNITY RESPONSES TO MULTIPLE STRESSORS ASSOCIATED WITH DAM REMOVAL

- 11:30 **Angus McIntosh, Catherine Febria, Helen Warburton, Hayley Devlin, Katie Collins, Brandon Goeller, Jon Harding**
THE MULTIPLE STRESSOR CHALLENGE IN THE CANTERBURY WATERWAY REHABILITATION EXPERIMENT (CAREX): DEFINING THE SCALE OF WEED X NUTRIENT X FINE SEDIMENT INFLUENCE
- 11:45 **Francis Burdon**
WHAT CAN RANKED ABUNDANCE DISTRIBUTIONS TELL US ABOUT ANTHROPOGENIC CHANGE IN STREAM ECOSYSTEMS?

C12 Invertebrate Ecology

Session Chair(s): Checo Colon-Gaud

Location: 308

- 10:30 **Jeffrey Muehlbauer, Theodore Kennedy**
DAMMED AND ADRIFT: PATTERNS OF INVERTEBRATE DRIFT THROUGHOUT COLORADO RIVER BASIN TAILWATERS
- 10:45 **Travis McDevitt-Galles, Pieter Johnson**
HOW FISH PREDATORS AFFECT PARASITE INFECTION WITHIN LARVAL ODONATES: TESTING THE ROLES OF HOST DENSITY, SPECIES IDENTITY, AND TRANSMISSION SUCCESS
- 11:00 **Halvor Halvorson, Chris Fuller, Michelle Evans-White, Stephanie Stoughton, Thad Scott**
STOICHIOMETRY OF HOMEOSTASIS AND GROWTH ACROSS AQUATIC INVERTEBRATE DETRITIVORES
- 11:15 **Matthew McTammany, Matthew Wilson, Nicole King, Jordan Barton, Meghan Reilly**
VARIABILITY IN BENTHIC INVERTEBRATE COMMUNITIES IN A LARGE RIVER EXPLAINED BY PROCESSES OPERATING AT DIFFERENT SPATIAL AND TEMPORAL SCALES
- 11:30 **Brian Helms, Jim Stoeckel**
IS SUBTERRANEAN BIODIVERSITY MEDIATED BY BURROWING CRAYFISH?
- 11:45 **Lyntausha Kuehl, Chad Kaiser, Katie Bertrand, Nels Troelstrup**
REGIONWIDE ANALYSIS OF MACROINVERTEBRATE ASSEMBLAGE STRUCTURE AND ITS RELATION TO HABITAT CHARACTERISTICS

C09 Food Webs

Session Chair(s): Angela Holland

Location: 309-310

- 10:30 **Amanda G DeVecchia, Jack A Stanford, Brian L Reid, Jon Graham, Bonnie Ellis**
RAPID TURNOVER OF METHANOGENIC METHANE INFLUENCES CARBON SUPPLY AND INVERTEBRATE BIOMASS IN AN EXPANSIVE FLOODPLAIN AQUIFER
- 10:45 **Adam Siders, Zacchaeus Compson, Jane Marks**
CARBON AND NITROGEN FLUXES FROM ISOTOPICALLY-ENRICHED LEAF LITTER TO AQUATIC INSECT COMMUNITIES REVEAL DIFFERENCES IN LITTER QUALITY
- 11:00 **Kaleb Heinrich, Colden Baxter, Kelsey Robson**
WATER-LAND LINKAGES: AN INQUIRY BASED LESSON ON EMERGENCE OF ADULT AQUATIC INSECTS AND THEIR IMPORTANCE TO TERRESTRIAL PREDATORS
- 11:15 **Alayna Dorobek, S. Mazeika P. Sullivan**
SHIFTS IN FISH-CENTERED FOOD WEBS FOLLOWING DAM REMOVAL IN AN URBAN RIVER SYSTEM
- 11:30 **Emily Dean**
SEASONAL FISH MIGRATION SUPPLEMENTS A TROPHIC LEVEL IN A COASTAL LAKE MICHIGAN STREAM
- 11:45 **William Deacy**
KODIAK BROWN BEARS SURF THE SALMON RED WAVE: DIRECT EVIDENCE FROM GPS COLLARED INDIVIDUALS

C11 Invasive Species

Session Chair(s): Mark Pyron

Location: 311-312

- 10:30 **Mathis L. Messenger, Julian Olden**
JUST A MATTER OF TIME? MODELING THE RAPID SPREAD OF INVASIVE CRAYFISH IN THE COLUMBIA RIVER
- 10:45 **Matthew Schliebe, Dessie Underwood**
IMPACT OF AN INVASIVE CRAYFISH, PROCAMBARUS CLARKII, ON BENTHIC COMMUNITY STRUCTURE IN SOUTHERN CALIFORNIA DEPRESSIONAL WETLANDS
- 11:00 **Dana Calhoun, Pieter Johnson**
PARASITE FAUNA OF INVASIVE FRESHWATER FISHES WITH INSIGHTS INTO DRIVING FACTORS OF PARASITE OCCURRENCE.
- 11:15 **Corey Krabbenhoft, Donna Kashian**
INDICATORS OF SITE CONDITION CORRELATE WITH ROUND GOBY DISTRIBUTION IN MICHIGAN RIVERS
- 11:30 **James Pearson, Jason Dunham**
MODELING THE EFFECTS OF CONTROL EFFORTS ON A POPULATION OF COMMON CARP (CYPRINUS CARPIO) IN A SHALLOW EUTROPHIC DESERT LAKE
- 11:45 **Chunlong Liu, Julian Olden**
INVASIONS THREATEN THE ANTIQUITY OF CHINA'S FRESHWATER FISH FAUNA

C05 Conservation and Restoration

Session Chair(s): Rebecca Bixby, Michael Paul, Rachel Voight

Location: 313

- 10:30 **Katie Collins, Jon Harding, Catherine Febria, Angus McIntosh**
TESTING AND DEVELOPING TOOLS FOR WEED MACROPHYTE CONTROL IN NEW ZEALAND AGRICULTURAL WATERWAYS
- 10:45 **Bronwen Stanford, Erika Zavaleta**
RESTORATION SCALE AND STREAM BENEFITS IN CALIFORNIA RANGELANDS
- 11:00 **Barbara Scudder Eikenberry, Hayley Templar, Daniel Burns, Amanda Bell**
BENTHOS AND PLANKTON STUDIES AT SELECTED RIVERS AND HARBORS ALONG LAKE MICHIGAN
- 11:15 **Robin Henderson, James Pratt**
COMPARING BIOINDICATORS TO MEASURE THE EFFICACY OF RESTORATION IN MIDDLE FORK JOHN DAY RIVER, OR
- 11:30 **Jessica Fulgoni, Sophia Bonjour, Kerry McLeran, Matt Whiles**
LIMITED INFLUENCE OF MIDWESTERN STREAM RESTORATIONS ON MACROINVERTEBRATE COMMUNITIES
- 11:45 **Eliza Montoya, Edward Martinez**
ASSESSING AQUATIC HABITAT QUALITY IN RESTORED ARROYOS AT RIO MORA NATIONAL WILDLIFE REFUGE

C03 Biogeochemistry

Session Chair(s): Ariel Shogren

Location: 314

- 10:30 **Eugènia Martí, Miquel Ribot, Timothy Vaessen, Myrto Nikolakopoulou, Paul Romeijn, Tanja Brandt, Esperança Gacia, Albert Sorolla, Susana Bernal, Alba Argerich, Francesc Sabater**
THE INFLUENCE OF CARBON QUALITY ON NITROGEN REMOVAL ALONG SUBSURFACE FLOWPATHS RECEIVING INPUTS FROM WASTEWATER TREATMENT PLANT EFFLUENTS
- 10:45 **Adam Wymore, Bianca Rodriguez-Cardona, William McDowell, Pavel Kram, Jakub Hruska**
EXAMINING THE ROLE OF DISSOLVED ORGANIC NITROGEN IN STREAM ECOSYSTEMS ACROSS BIOMES
- 11:00 **Shannon Speir, Jason Taylor, Thad Scott**
SEASONAL PATTERNS IN DENITRIFICATION RATES AS A FUNCTION OF NITRATE AVAILABILITY IN VEGETATED AGRICULTURAL DITCH SEDIMENTS
- 11:15 **Lauren Koenig, Janine Ruegg, Wilfred Wollheim, William McDowell**
VARIATION IN AMMONIUM UPTAKE RATES THROUGHOUT A TROPICAL WATERSHED: IMPLICATIONS FOR SCALING ECOSYSTEM PROCESSES

- 11:30 **Sam Carlson, Geoffrey Poole, Robert Hall, Ellen Wohl, Michael Venarsky, David Walters**
TEMPERATURE EFFECTS ON STREAM NETWORK
NITRATE REMOVAL: EXPLORING PHYSICAL DRIVERS OF SEASONAL VARIATION
- 11:45 **Sam Carlson, Robert Hall, Ellen Wohl, Michael Venarsky, David Walters, Geoffrey Poole**
TEMPERATURE EFFECTS ON STREAM NETWORK
NITRATE REMOVAL: RECONSIDERING THE ROLE OF LARGE STREAMS.

S05 Eco-hydrology of IRES in a Changing Climate

Session Chair(s): Thibault Datry, Dan Allen, Michael Bogan, Kristin Jaeger, Katie Costigan, Raphael Mazor

Location: 315

- 10:30 **Stacey Ostermann-Kelm, Raphael D. Mazor, Scott Johnson, Chad Loflen, A. Elizabeth Fetscher, Heather Boyd, Patricia Pendleton, Regan Maas, Danielle Bram, Eric Stein**
INTEGRATING PERENNIAL AND INTERMITTENT RIVERS INTO REGIONAL AMBIENT ASSESSMENTS IN DRY CLIMATES: CASE STUDIES FROM SOUTHERN CALIFORNIA
- 10:45 **Wayne Robinson**
FIXED SITES AND MONITORING/BIOASSESSMENT BIAS IN EPHEMERAL SYSTEMS
- 11:00 **Núria Cid, Narcis Prat, Nuria Bonada, Pablo Rodríguez-Lozano, Dolors Vinyoles, Pau Fortuño, Francesc Gallart, Jérôme Latron, Pilar Llorens, Raúl Acosta**
BIOASSESSMENT OF INTERMITTENT RIVERS AND EPHEMERAL STREAMS IN THE MEDITERRANEAN BASIN: ARE CURRENT METHODS ADEQUATE?
- 11:15 **Patrice Spindler, Meghan Smart**
CAMO, HOSE CLAMPS, AND PIXELS: ARIZONA'S APPROACH TO MONITORING IN INTERMITTENT STREAMS
- 11:30 **Alisha Steward, Jon Marshall, Peter Negus, Sara Clifford, Cate Dent**
HOW DO WE ASSESS THE HEALTH OF RIVERS WHEN THEY ARE DRY?
- 11:45 **Atish N. Vadher, Rachel Stubbington, Paul J. Wood, Jonathan Millett**
INCREASING FINE SEDIMENT LOAD LIMITS VERTICAL MOVEMENT OF GAMMARUS PULEX (CRUSTACEA: AMPHIPODA) DURING DEWATERING EXPERIMENTS

WEDNESDAY, MAY 25, ORALS

C07 Ecology of Fish and Other Aquatic Vertebrates

Session Chair(s): David Janetski, Jessica Grady

Location: 302-303

- 10:30 **Amelia Johnson, Angela Strecker, Mariska Obedzinski**
WHY DO THE FISH MOVE? MULTIPLE SPATIAL SCALE PREDICTORS OF JUVENILE COHO SALMON WINTER MOVEMENT TIMING.
- 10:45 **Brian Kennedy, Natasha Wingerter**
THE INTERACTING EFFECTS OF CLIMATE, DENSITY AND WATER WITHDRAWAL ON JUVENILE STEELHEAD SURVIVAL AND MIGRATION: INSIGHTS FROM AN 8-YEAR STUDY
- 11:00 **Justin Wegner, Graeme Zaparzynski, Mark Luttenton**
SUMMERTIME MOVEMENT AND MICROHABITAT USE BY BROOK TROUT IN A SMALL MICHIGAN STREAM
- 11:15 **Elizabeth Perkin, John Richardson**
SEASONAL VARIATION IN FORAGING AND COMPETITIVE BEHAVIORS IN CUTTHROAT TROUT
- 11:30 **Steve Blumenshine, Taylor Spaulding**
VARIATION IN TEMPERATURE-DEPENDENT GROWTH RATES IN JUVENILE CHINOOK SALMON: THE NEED FOR POPULATION-SPECIFIC BIOENERGETICS
- 11:45 **Mariska Obedzinski, Andrew Bartshire**
EFFECTS OF LOW STREAM FLOW ON JUVENILE SALMONIDS IN TRIBUTARIES OF THE RUSSIAN RIVER, CALIFORNIA
- 13:30 **Tim Jardine, Meghan Carr, Karl Lindenschmidt, Lorne Doig, Paul Jones, Lalita Bharadwaj**
TRACKING FISH MOVEMENTS IN A LARGE RIVER USING STABLE SULFUR ISOTOPES
- 13:45 **Graeme Zaparzynski, Justin Wegner, Mark Luttenton**
EVALUATING FORAGING HABITS, AND ESTIMATING PREY CONSUMPTION AND GROWTH OF BROOK TROUT IN A COOLWATER MICHIGAN STREAM
- 14:00 **Meghna Marjadi, Allison Roy, Adrian Jordaan, Julianne Rosset, Andrew Whiteley, Ben Gahagan**
EARLIER ARRIVAL AND LARGER BODY SIZE INCREASE REPRODUCTIVE SUCCESS IN ALEWIFE
- 14:15 **Erika Sutherland, Julian Olden**
THE ROLE OF DISPERSAL IN RANGE EXPANSION: A STUDY OF SMALLMOUTH BASS INVASION AT ITS UPSTREAM EDGE
- 14:30 **Alicia Beattie, Philip Willink, Matt Whiles**
POPULATION CHARACTERISTICS, CAPTURE SUCCESS, AND FEEDING ECOLOGY OF MUDPUPIPIES (NECTURUS MACULOSUS) IN AN URBAN LAKE

- 14:45 **Guido A Herrera-R, Pedro Torres**
FACTORS REGULATING THE DISTRIBUTION AND ABUNDANCE OF SICYDIUM (GOBIIDAE: PERCIFORMES) IN HEADWATER STREAMS WITHIN EL YUNQUE NATIONAL FOREST, PUERTO RICO.
- 15:30 **Tara Chestnut, Deanna Olson, Chauncey Anderson, Andrew Blaustein**
PATTERNS AND PROCESSES RELATED TO AMPHIBIAN CHYTRID FUNGI DETECTION IN LENTIC SYSTEMS
- 15:45 **Jessica Grady, Rebecca Blanton Johansen, Courtney Weyand, Sarah Lundin-Schiller, Eva Grebe, Zachary Holtel**
SCALE SHAPE VARIATION IN A SPECIOSE AND HIGHLY IMPERILED GROUP OF FISHES, THE DARTERS (PERCIDAE: ETHEOSTOMATINAE)
- 16:00 **Larry R. Brown, Heather Dyer, Kerwin Russell, Kai Palenscar, Jason May**
BIOLOGY OF SANTA ANA SUCKER (CATOSTOMUS SANTAANAE) AND ARROYO CHUB (GILA ORCUTTII) IN THE SANTA ANA RIVER, AN EFFLUENT DOMINATED URBAN RIVER
- 16:15 **Jeff Wesner, Jerry Warmbold**
CONTRASTING EFFECTS OF FISH PREDATION ON BENTHIC VERSUS EMERGING INSECTS
- 16:30 **Nicola Glenjarman, Jon Harding, Angus McIntosh, Katie Collins, Catherine Febria, Helen Warburton**
THE ROLE OF BED SEDIMENT IN NEW ZEALAND FISH COMMUNITY COMPOSITION.
- 11:45 **Paula Furey, Jill Welter, Jim Hood, Delorianne Sander, Wyatt Cross, Jonathan P. Benstead, Alexander Huryn, Philip Johnson, Jón S. Ólafsson, Gisli Gislason**
SPECIES MATTER: THE RESPONSE OF DIATOMS AND N₂-FIXING ALGAL TAXA TO INCREASING TEMPERATURE AND NITROGEN ADDITION
- 13:30 **Andrea Fitzgibbon, David Costello**
MICRON-SCALE SPATIAL AND DIEL VARIATION IN OXYGEN AT THE BIOFILM-SEDIMENT INTERFACE
- 13:45 **Steve Francoeur**
STIMULATION OF SAGINAW BAY CHAROPHYCEAN ALGAE BY P
- 14:00 **Francine Mejia, Alex Fremier, Joseph Benjamin, Ryan Bellmore, Grace Watson, Michael Newsom, Adrienne Zuckerman**
STREAM METABOLISM INCREASES WITH DRAINAGE AREA AND PEAKS ASYNCHRONOUSLY ACROSS A STREAM NETWORK
- 14:15 **Yuqing Lin, Qiuwen Chen**
APPLICATION OF CELLULAR AUTOMATA TO MODELING ALGAE BLOOM AND ITS ASSIMILATION PROCESS USING MULTI-RESOURCES OF DATA
- 14:30 **Nathan Smucker, Susanna DeCelles, Stefania Guglielmi, Christopher Nietch**
EXPERIMENTAL EFFECTS OF CONDUCTIVITY AND MAJOR IONS ON STREAM PERIPHYTON

C01 Algae and Primary Production

Session Chair(s): Paula Furey, Steve Francoeur

Location: 304-305

- 10:30 **Katherine V. Hooker, Thayer Hallidayschult, Jie Wang, Jessica Beyer, Brandon Chien, Daniella L. Glidewell, Xiangming Xiao, K. David Hambricht**
DETECTING AND MAPPING CYANOBACTERIA BLOOMS USING REMOTE SENSING AND CLASSIFICATION TREES
- 10:45 **Jacob Kann**
PATTERNS OF CYANOBACTERIAL DOMINANCE AND SUCCESSION IN TWO CONTRASTING KLAMATH BASIN SYSTEMS DOMINATED BY APHANIZOMENON AND MICROCYSTIS.
- 11:00 **Jacob Gaskill, Megan Woller-Skar**
EXAMINING SPATIAL AND TEMPORAL DYNAMICS OF MICROCYSTIS AEOGINOSA AND MICROCYSTIN IN A LOW NUTRIENT LAKE IN NORTHWESTERN MICHIGAN
- 11:15 **Keith Bouma-Gregson, Raphael Kudela, Mary Power**
BENTHIC MACROINVERTEBRATES IN A CALIFORNIA RIVER BIOACCUMULATE CYANOTOXINS PRODUCED BY CYANOBACTERIAL MATS
- 11:30 **Tara McAllister, Susie Wood, Ian Hawes**
SPATIOTEMPORAL DYNAMICS OF PHORMIDIUM ACCRUAL AND TOXIN PRODUCTION IN EIGHT NEW ZEALAND RIVERS WITH CONTRASTING NUTRIENT AND FLOW REGIMES

C04 Climate Change

Session Chair(s): Scott Wissinger

Location: 304-305

- 15:30 **John Jackson, David Funk, Bernard Sweeney, Goggy Davidowitz, Charles Hawkins, David Buchwalter**
LETHAL AND SUBLETHAL RESPONSES OF 3 BAETID MAYFLIES EXPOSED TO TEMPERATURE EXTREMES
- 15:45 **David Lytle, David Merritt, Julian Olden, Jonathan Tonkin**
FLOW-POPULATION MODELS FOR TRACKING NON-STATIONARY CHANGES IN AQUATIC AND RIPARIAN ECOSYSTEMS
- 16:00 **Geraldine Nogaro, Thibaut Feret, Jean-François Fruget, Nina Dagens, Christian Chauvin**
LONG-TERM EVOLUTION OF THE MACROPHYTE COMMUNITIES RELATED TO NUTRIENT DECREASE AND TEMPERATURE INCREASE IN A FRENCH LARGE RIVER
- 16:15 **LeRoy Poff, Alexander Flecker, Andrea Encalada, Andrea Landeira-Dabarca, Amanda Rugenski, Manuel Graça, Steven Thomas**
CHANGES IN LEAF AND COTTON DECOMPOSITION RATES EXPOSED TO DIFFERENT TEMPERATURES IN TROPICAL STREAM MESOCOSMS
- 16:30 **Gisli Mar Gislason, Aron Dalin Jonasson**
THE EFFECT OF WHOLE STREAM WARMING ON ITS INSECT EMERGENCE

- 16:45 **Susan Washko, Jared Balik, Brad Taylor, Hamish Greig, Scott Wissinger**
PREDICTING HOW SHIFTS IN CADDISFLY DISTRIBUTIONS ALONG HYDROPERIOD AND ELEVATIONAL GRADIENTS AFFECT ECOSYSTEM PROCESSES IN SHALLOW HIGH-ELEVATION PONDS
- S13 Session for Vince Resh**
Session Chair(s): Michael Peterson, Gary Lamberti, Jack Feminella
Location: 306
- 10:30 **David Rosenberg**
INTRODUCTION TO "A CONFLUENCE OF AQUATIC RESEARCH INFLUENCED BY VINCE RESH"
- 10:45 **Jack W. Feminella**
ODE TO HERACLITUS AND VINCE RESH: THE ROLE OF DISTURBANCE IN STREAM ECOLOGY
- 11:00 **Mary Power**
RIVER FOOD WEBS OF THE CALIFORNIA NORTH COAST: STANDING ON THE SHOULDERS OF PROFESSOR VINCENT H. RESH
- 11:15 **Bruce Chessman, Ian Campbell**
BIOASSESSMENT IN THE LOWER MEKONG RIVER: TECHNOLOGY TRANSFER TO A DEVELOPING REGION
- 11:30 **G. Mathias Kondolf**
DAMS ON MEDITERRANEAN-CLIMATE RIVERS: SUSTAINABILITY AND ECOLOGICAL EFFECTS
- 11:45 **Gary Lamberti**
REFLECTIONS FROM A FUMAROLE: PASSING ON VINCE RESH'S LESSONS TO THE NEXT GENERATION OF GRADUATE STUDENTS
- 13:30 **Nuria Bonada, Stefano Amalfitano, Joan Artigas, Susana Bernal, Scott D. Cooper, Helen Dallas, Peter M. Davies, Jenny A. Day, Ferdy C. de Moor, Tom Dudley, Stefano Fazi, A. Filipa Filipa, Ricardo Figueroa, Avital Gasith, Antoni Ginebreda, Yaron Hershkovitz, G. Mathias Kondolf, P. Sam Lake, Julio López-Doval, Sean M. Marr, John M. Melack, Isabel Muñoz, Mira Petrovic, Keith Bouma-Gregson, Narcis Prat, Maria Rieradevall, Belinda J. Robson, Patricia M. Rodríguez-González, Anna M. Romaní, Sergi Sabater, John Sabo, John C. Stella, J. Manuel Tierno de Figueroa, Xisca Timoner, Iraima Verkaik, Irene Ylla, Annamaria Zoppini**
CHALLENGES AND OPPORTUNITIES FOR RESEARCH AND MANAGEMENT IN MEDITERRANEAN CLIMATE RIVERS: CONTRIBUTIONS BY PROFESSOR VINCENT H. RESH
- 13:45 **Andreas Hoffmann**
OVIPOSITION BEHAVIOR OF TRICHOPTERA: FROM CALIFORNIAN MEDITERRANEAN-TYPE STREAMS TO EUROPEAN CENTRAL MOUNTAIN STREAMS
- 14:00 **Robert Bailey, Sonja Teichert, Trefor Reynoldson**
CITIZEN V PROFESSIONAL SCIENCE IN BIOASSESSMENT OF AQUATIC ECOSYSTEMS: CHALLENGING "VALUE-ADDED", "GREENWASH", AND OTHER TIRED GENERALITIES
- 14:15 **Avital Gasith**
SEASONAL DRYING AND WETTING IN MEDITERRANEAN-CLIMATE REGIONS: LAKES LIKE STREAMS ARE SIGNIFICANTLY IMPACTED BY THIS MAJOR HYDROLOGIC DRIVER
- 14:30 **Bruce Orr, Zooey Diggory, Peter Downs, Tom Dudley, Adam Lambert, Amy Merrill, Erin Beller, Robin Grossinger**
BALANCING UNCERTAINTIES: RIVER CORRIDOR CONSERVATION AND RESTORATION IN A MEDITERRANEAN-CLIMATE RIVER IN SOUTHERN CALIFORNIA
- 14:45 **Lisa Hunt**
FROM AFRICA TO SOUTH AMERICA – RECENT RESEARCH ON PESTICIDES AND AQUATIC ECOSYSTEMS
- 15:30 **Joshua Collins**
FROM VINCE TO BEYOND
- 15:45 **Alison O'Dowd, Matthew Cover, Justin Lawrence**
THE LEGACY OF VINCE RESH IN SCIENTIFIC COMMUNICATION: A VISIONARY SCIENTIST WITH BROAD SOCIETAL IMPACTS
- 16:00 **Patina Mendez, Marilyn Myers, John Wood, John Jackson, Andreas Hoffmann, Alison O'Dowd, Leah Bêche, Deborah Rudnick, Joan Damerow, Matthew Cover**
CADDISFLIES, DRAGONFLIES, FISHFLIES & MITTEN CRABS: WHAT DO WE NOW KNOW ABOUT LIFE HISTORY, TAXONOMY, AND FAUNAL PATTERNS?
- 16:15 **Raphael D. Mazor, Kevin Lunde**
RESEARCH AND EDUCATION LAY THE GROUNDWORK FOR A PARADIGM SHIFT IN STREAM MANAGEMENT
- 16:30 **Leon Blaustein, Burt Kotler**
INFLUENCES OF FOOD LEVEL AND A PREDATOR (NOTONECTA MACULATA) ON MOSQUITO LARVA (CULISETA LONGIAREOLATA)-TADPOLE (BUFO VIRIDIS) INTERACTIONS
- 16:45 **John Jackson, Michael Peterson, Natalie Stauffer-Olsen**
DEFINING POPULATION AND SPECIES BOUNDARIES – WHY THE RESH LAB ENDED UP LOOKING AT GENETICS, DISPERSAL, AND MATING BEHAVIOR

S14 Multiple Stressors in River Ecosystems

Session Chair(s): Sergi Sabater, Vicenç Acuña, Mazeika P. Sullivan, Arturo Elosegí

Location: 307

- 10:30 **Christoph Matthaei, Romana Salis, Andreas Bruder, Jeremy Piggott, Tina Summerfield**
HIGH-THROUGHPUT AMPLICON SEQUENCING AND STREAM BENTHIC BACTERIA: IDENTIFYING THE BEST TAXONOMIC LEVEL FOR MULTIPLE-STRESSOR RESEARCH
- 10:45 **Matthew Baker**
ASSESSING CAUSALITY WITH PROBABILISTIC REASONING AND GRAPHICAL MODELS: A CASE STUDY IN APPALACIAN SURFACE MINING
- 11:00 **Sarah Kupferberg, Andrea Adams**
MULTIPLE STRESSORS PREDICT FUNGAL INFECTION IN A DECLINING CALIFORNIA FROG DURING AN HISTORIC DROUGHT
- 11:15 **Chris Robinson, Simone Baumgartner**
MACROINVERTEBRATE RESPONSES TO MULTIPLE STRESSORS IN A LOWLAND STREAM NETWORK
- 11:30 **Scott Leibowitz, Darren Thornbrugh, Ryan Hill, Marc Weber, John Stoddard, Joseph Flotemersch**
MAPPING WATERSHED INTEGRITY FOR THE CONTERMINOUS UNITED STATES
- 11:45 **Ian Waite**
UNDERSTANDING AGRICULTURAL LAND USE DISTURBANCE IN STREAMS: A COMPARISON OF ALGAE AND INVERTEBRATE MULTI-STRESSOR MODELS
- 13:30 **Richard Walker, Carlin Girard, Annika Walters**
DOES OIL AND NATURAL GAS DEVELOPMENT AND HYDROLOGY INTERACT TO AFFECT FISH POPULATIONS?
- 13:45 **Richard Johnson, Brendan McKie, David Angeler, Leonard Sandin, Simon Hallstan**
EFFECTS OF MULTIPLE PRESSURES ON INVERTEBRATE ASSEMBLAGES OF BOREAL STREAMS
- 14:00 **Andrew Turner, Brianna Reed**
WATER POLLUTION AND INFODISRUPTION: CHEMOSENSORY PERCEPTION OF FOOD AND PREDATORS BY RIVERINE INVERTEBRATES IS IMPAIRED BY A BRINE WASTEWATER EFFLUENT
- 14:15 **Brent Tweedy, Caryn Vaughn**
MERCURY CONTAMINATION AND THERMAL STRESS COMBINES TO HAVE DETRIMENTAL EFFECTS ON FRESHWATER MUSSEL-DRIVEN ECOSYSTEMS
- 14:30 **Mary Szafraniec, Margaret Guyette**

MULTI-CAUSAL INTERACTIONS OF ECOLOGICAL DRIVERS IN FLORIDA SPRING-FED RIVERS

- 14:45 **Ana Chara-Serna, Luis B. Epele, John Richardson**
EVALUATING CUMULATIVE IMPACTS OF NUTRIENT ENRICHMENT, SEDIMENTATION, AND NEONICOTINOID INSECTICIDE POLLUTION ON FRESHWATER ECOSYSTEM FUNCTIONING
- 15:30 **Kevin Shaffer**
FISHERIES ACTIONS TO RESPOND TO CALIFORNIA'S PROLONGED DROUGHT
- 15:45 **Kate Mathers, Stephen Rice, Paul Wood**
THE INTERACTION AND IMPLICATIONS OF FINE SEDIMENT DEPOSITION AND INVASIVE CRAYFISH PREDATION ON THE AMPHIPOD GAMMARUS PULEX
- 16:00 **Xiaowei Zhang, Yuwei Xie**
USING IN SITU BACTERIAL COMMUNITIES TO MONITOR CONTAMINANTS IN RIVER SEDIMENTS

C05 Conservation and Restoration

Session Chair(s): Rachel Voight

Location: 308

- 10:30 **Jane Marks, Ben Koch, Cathy Gibson, Matthew O'Neill, Bruce Hungate**
CAN A RIVER BE RESTORED AFTER A CENTURY OF DISTURBANCE? LESSONS FROM FOSSIL CREEK
- 10:45 **Joseph Furnish, Jeanette Howard, Kurt Fesenmyer, Kirk Klausmeyer**
PATTERNS OF FRESHWATER SPECIES RICHNESS, ENDEMISM AND VULNERABILITY IN CALIFORNIA, USA AND THE CALIFORNIA FRESHWATER CONSERVATION BLUEPRINT
- 11:00 **Ming-Chih Chiu, Lisa Hunt, Vincent Resh**
RESPONSE OF MACROINVERTEBRATE COMMUNITIES TO DYNAMICS OF PESTICIDE MIXTURES
- 11:15 **Katie Ross-Smith**
FLOW REGIME MANAGEMENT FOR RIPARIAN RESTORATION
- 11:30 **Elizabeth Sudduth, Courtney Dobash, Annalise Reagan, Mikayla Oglesby**
LETTING BEAVERS DO THE WORK: ECOLOGICAL RECOVERY OF A DRAINED STREAM-WETLAND SYSTEM THROUGH BEAVER ACTIVITY
- 11:45 **Richard Hauer, Victoria Dreitz, Mark Hebblewhite, Winsor Lowe, Clint Muhlfeld, Cara Nelson, Michael Proctor, Stewart Rood, Harvey Locke**
GRAVEL-BED RIVER FLOODPLAINS ARE THE ECOLOGICAL NEXUS OF GLACIATED MOUNTAIN LANDSCAPES

S12 Urban Stream Syndrome

Session Chair(s): Alex Reisinger, Joanna R. Blaszczak, Sylvia S. Lee, Peter S. Levi and Emma J. Rosi-Marshall

Location: 308

- 13:30 **Emma Rosi-Marshall, Peter Groffman, Sylvia Lee, Emily Bernhardt, Joanna Blaszczak, Nancy Grimm, Sujay Kaushal, John Kelly, Peter S. Levi, Emily Stanley, Alexander Reisinger**
BIOGEOCHEMICAL SYMPTOMS OF THE URBAN STREAM SYNDROME: HOMOGENIZATION OF WATER CHEMISTRY AND IMPLICATIONS FOR ECOSYSTEM FUNCTIONING IN URBAN STREAMS
- 13:45 **Alonso Ramirez, Jody Potter, William H. McDowell**
EXPORT OF CARBON, NUTRIENTS, AND WEATHERING PRODUCTS FROM A HIGHLY URBANIZED TROPICAL WATERSHED
- 14:00 **Nadine Ruchter, Bernd Sures**
PLATINUM: AN INDICATOR FOR TRAFFIC INDUCED POLLUTION IN URBAN FRESHWATER SYSTEMS
- 14:15 **Clint Boschen, Jerome Diamond, Ruth Kolb, Michael Paul**
DECIPHERING CAUSES OF BIOLOGICAL IMPAIRMENT IN A HEAVILY URBANIZED WATERSHED
- 14:30 **Peter S. Levi, Peter J. Lisi, Etienne Fluet-Chouinard, Matthew Diebel, Peter B. McIntyre**
LONG-TERM TRENDS REVEAL VARYING CONTROLS ON NITROGEN, PHOSPHORUS, AND CHLORIDE CONCENTRATIONS AMONG URBAN RIVER NETWORKS
- 14:45 **Sylvia Lee, Emma Rosi-Marshall, Alexander Reisinger, John Kelly, Miguel Rojas, Sujay Kaushal**
EFFECTS OF URBAN CHEMICAL STRESSORS ON STREAM BIOFILMS
- 15:30 **Joanna Blaszczak, Joseph Delesantro, Dean Urban, Emily Bernhardt**
BENTHIC HABITAT SUSCEPTIBILITY TO PERTURBATIONS INFLUENCES URBAN STREAM METABOLISM
- 15:45 **Thomas Doody, Alexander Reisinger, Emma Rosi-Marshall, Sujay Kaushal, Peter Groffman**
BIOGEOCHEMICAL EVALUATION OF RESTORED URBAN STREAMS
- 16:00 **Heather Frazier, John Melack**
ECOSYSTEM METABOLISM RESPONSE TO URBAN DEVELOPMENT IN COASTAL CALIFORNIA STREAMS
- 16:15 **Joanna Solins, Mary Cadenasso**
LINKING URBANIZATION TO CHANGES IN RIPARIAN VEGETATION IN A MEDITERRANEAN CLIMATE: CONSEQUENCES FOR ECOSYSTEM FUNCTION IN HEADWATER STREAMS

- 16:30 **Julia E Kelso, Michelle Baker**
CHARACTERIZATION OF DISSOLVED ORGANIC MATTER SOURCES ALONG A MOUNTAIN TO URBAN GRADIENT OF LANDUSE

- 16:45 **Megan Fork, Joanna Blaszczak, Jim Heffernan**
DISSOLVED ORGANIC MATTER IN URBAN EPHEMERAL HEADWATERS

C03 Biogeochemistry

Session Chair(s): Erin Hotchkiss, Denise Bruesewitz, James Heffernan, Ariel Shogren, John Kominoski

Location: 309-310

- 10:30 **Stephen K. Hamilton, Patricia Hoch-Melluish, Brian Boyer, Sylvia Heaton, Mark Kieser**
PHOSPHORUS INTERNAL LOADING FROM RESERVOIR SEDIMENTS: A HISTORICAL LEGACY, OR SUSTAINED BY ONGOING INPUTS?
- 10:45 **Aaron Swink, Weston Nowlin, Benjamin Schwartz**
A META-ANALYSIS OF P UPTAKE RATES IN LOTIC ECOSYSTEMS: INFLUENCE OF LOCAL CONDITIONS ON GLOBAL PATTERNS
- 11:00 **Weston Nowlin, Aaron Swink, Benjamin Schwartz**
FACTORS AFFECTING PHOSPHORUS UPTAKE IN KARST RIVERS IN CENTRAL TEXAS
- 11:15 **Martha M. Dee, Jennifer Tank, Alessandra Marzadri, Daniele Tonina, Alberto Bellin**
A SPATIAL ANALYSIS OF SEASONAL VARIATION IN DISSOLVED NUTRIENTS AND GREENHOUSE GASSES ALONG TWO STREAM-RIVER NETWORKS DRAINING WATERSHEDS OF CONTRASTING LAND USE
- 11:30 **Keli Goodman, Stephanie Parker, Caren Scott, Jesse Vance**
THE NATIONAL ECOLOGICAL OBSERVATORY NETWORK'S EVOLVING AQUATIC DATA PIPELINES AND DATA AVAILABILITY
- 11:45 **Ann Marie Reinhold, Geoffrey Poole, Ashley Helton, Clemente Izurieta, Robert Payn, Emily Bernhardt**
A CONSTRAINT-BASED, COMPOUND SPECIFIC APPROACH TO MODELING LINKED BIOGEOCHEMICAL CYCLES

S20 Ecological Subsidies to Stream and Riparian Ecosystems

Session Chair(s): Clay Arango, Sally Entrekin

Location: 309-310

- Clay Arango, Sally Entrekin, Jennifer Lipton**
ECOLOGICAL SUBSIDIES FROM AN OUTBREAK INSECT CAN AFFECT HEADWATER CONIFEROUS STREAM ECOSYSTEMS
- 13:45 **Kristen M. Diesburg, S. Mazeika P. Sullivan**
ECOLOGICAL LINKAGES BETWEEN STREAMS AND THEIR ADJACENT RIPARIAN ZONES FOLLOWING HEMLOCK WOOLLY ADELGID INVASION
- 14:00 **Hiroimi Uno**
SPATIAL HETEROGENEITY IN STREAM TEMPERATURE PROLONGS AQUATIC-TO-TERRESTRIAL SUBSIDY ENHANCING SPIDER GROWTH
- 14:15 **Martha J. Zapata, S. Mazeika P. Sullivan**
SEASONAL VARIABILITY OF AQUATIC-TERRESTRIAL FOOD-WEB LINKAGES IN A SUBTROPICAL ESTUARINE SYSTEM
- 14:30 **Rachel E. McNeish, M. Eric Benbow, Ryan W. McEwan**
TERRESTRIAL-AQUATIC CONNECTIONS: A RIPARIAN INVASIVE SHRUB ALTERS ECOSYSTEM SUBSIDIES AND AQUATIC FUNCTIONAL DIVERSITY
- 14:45 **John Richardson**
COMPLEX INTERACTIONS AMONG PHENOLOGY, COMPOSITION, RETENTION AND TEMPERATURES AFFECTING INCORPORATION OF CROSS-ECOSYSTEM RESOURCE SUBSIDIES TO STREAMS
- 15:30 **Hannah Riedl, William Clements, Liba Pejchar**
IMPACTS OF AN INTRODUCED TREE ON FOOD WEB FUNCTIONALITY
- 15:45 **Johanna Kraus, David Walters, Richard Wanty, Travis Schmidt, Justin Pomeranz, Andrew S. Todd, Laura Heiker**
HOW STRESSORS SHAPE SUBSIDIES: LESSONS FROM METAL-IMPACTED STREAMS
- 16:00 **Laura Heiker, Holly Rogers, Travis Schmidt, Johanna Kraus, Rick Adams**
ASSOCIATIONS BETWEEN STREAM METAL CONTAMINATION AND BAT ACTIVITY IN THE EASTERN COLORADO ROCKIES
- 16:15 **Brianna Henry, Jake Kerby, Jeff Wesner**
EFFECTS OF SELENIUM AND PESTICIDES ON AQUATIC-TERRESTRIAL RESOURCE SUBSIDIES IN THE PRAIRIE POTHOLES
- 16:30 **Nicholas Jones, Robert Mackereth**
RESOURCE SUBSIDIES FROM AFLUVIAL FISH INCREASE STREAM PRODUCTIVITY

- 16:45 **Dominic Chaloner, Brandon Gerig, David Janetski, Peter S. Levi, Ashley Moerke, Richard Rediske, Janine Rüegg, Jennifer Tank, Scott Tiegs, Gary Lamberti**
INFLUENCE OF PACIFIC SALMON SPAWNERS ON STREAM ECOSYSTEMS: WHY CONTEXT MATTERS

S26 Exploring Trophic Relationships and Stream Food Webs

Session Chair(s): Claire Ruffing, Sherri Johnson

Location: 311-312

- 10:30 **Zacchaeus Compson, Wendy Monk, Colin Curry, Christopher Baker, Alexandre Riazanov, Ahmad Bukhari, Rob Beiko, Mehrdad Hajibabaei, Michael Wright, Donald Baird**
OF TRAITS, TEXT-MINING, AND DNA: NOVEL TECHNIQUES TO RESOLVE FOOD WEB PROPERTIES IN RIVER DELTA HABITATS
- 10:45 **Mark Pyron, Robert Shields, Mario Minder, Brent Murry, Jesse Becker**
FOOD WEB OF THE WABASH RIVER
- 11:00 **Justin Murdock, Natalie Knorp, Lucas Hix, Andrea Engle**
THE IMPACT OF DIDYMOSPHEA GEMINATA MATS VARIES ACROSS TROPHIC LEVELS IN SOUTHERN APPALACHIAN STREAMS
- 11:15 **Francesc Rubio-Gracia, David Almeida, Berta Bonet, Frederic Casals, Carmen Espinosa, Alexander Flecker, Emili Garcia-Berthou, Eugènia Martí, Baigal-Amar Tuulaikhuu, Anna Vila, Lluís Zamora, Francesc Rubio-Gracia**
HYDROLOGICAL ALTERATION MEDIATES TROPHIC CASCADE EFFECTS IN A MEDITERRANEAN STREAM
- 11:30 **Erin Peterson**
FAMILY-LEVEL DIVERSITY OF AQUATIC MACROINVERTEBRATES IN WESTERN SOUTH DAKOTA AND IMPLICATIONS FOR CHANNEL CATFISH DIETS
- 11:45 **Helen Warburton, Pete McHugh, Phillip Jellyman, Hamish Greig, Angus McIntosh**
CONSEQUENCES OF CHANGES IN COMMUNITY STRUCTURE ACROSS ENVIRONMENTAL GRADIENTS REVEALED USING BODY MASS-ABUNDANCE RELATIONSHIPS
- 13:30 **Maruxa Álvarez, Bobbi Peckarsky, Andrea Landeira-Dabarca**
FISH SCENT: EPISODE I – ORIGIN AND SPECIFICITY OF THE CUE THAT MAKE LARVAE (INSECTA) RUN SCARED FROM FISH
- 13:45 **Andrea Landeira-Dabarca, Maruxa Álvarez, Bobbi Peckarsky**
FISH SCENT: EPISODE II – NATURE OF THE CUE THAT MAKE LARVAE (INSECTA) RUN SCARED FROM FISH
- 14:00 **James Wood, Jon Skaggs, Mary Freeman**
WHAT IF STRUCTURE HAS MORE FUNCTION THAN WE REALIZE? WATER VELOCITY REGULATES HERBIVORY PRESSURE ON PODOSTEMUM CERATOPHYLLUM.

- 14:15 **Anna Harris, Eric Snyder, Andrea Encalada, Blanca Rios-Touma**
MACROINVERTEBRATE COMMUNITY COMPOSITION, EMERGENCE RATE, AND FOOD WEB STRUCTURE OF NEOTROPICAL CLOUD-FOREST STREAMS IN MINDO, ECUADOR
- 14:30 **Russell Death**
FOOD WEB STABILITY: ARE WET OR DRY WEBS DIFFERENT?
- 14:45 **Andrew Kirk, Daniel McGarvey**
A TWO-YEAR STUDY OF FISH AND INVERTEBRATE BIOMASS SPECTRA IN THREE SOUTHERN WEST VIRGINIA STREAMS
- 15:30 **Kurt Anderson, Sean Hayes, Jonathan Sarhad**
FOOD WEB DYNAMICS ON BRANCHING RIVER NETWORKS
- 15:45 **Christina Murphy, Ivan Arismendi, Sherri Johnson**
A MECHANISTIC MODEL OF FORAGING AND BIOENERGETICS TO EXPLORE SALMON GROWTH IN PACIFIC NORTHWEST RESERVOIRS DURING DROUGHT
- 16:00 **Sherri Johnson, Brooke Penaluna, Alba Argerich, James Larson, Erica Garcia, Christina Murphy, Claire Ruffing, Scott Cooper, Daniel Allen, Jeremy Jones, Matt Whiles**
EXPLORING LINKAGES IN HEADWATER FOOD WEBS BEFORE AND AFTER FOREST HARVEST USING STRUCTURAL EQUATION AND MECHANISTIC MODELS
- 16:15 **Angela Holland, Eric Hellgren, Matt Whiles**
STREAM COMMUNITY RESPONSES TO RIVER OTTER REINTRODUCTIONS IN ILLINOIS
- 16:30 **Daniel Allen, Wyatt Cross, Arthur Benke, Thomas Brey, Alexander Huryn, Jeremy Jones, Daniel McGarvey, Christina Murphy, Christopher Patrick, Claire Ruffing, Parsa Saffarinia, Matt Whiles, Guy Woodward**
TOWARDS UNDERSTANDING DRIVERS OF COMMUNITY-LEVEL INVERTEBRATE PRODUCTION USING STRUCTURAL EQUATION MODELING
- 16:45 **Claire Ruffing, Jeremy Jones, Matt Whiles, Daniel Allen, Kurt Anderson, Alba Argerich, Ana Chara-Serna, Scott Cooper, Wyatt Cross, Nika Galic, Erica Garcia, James Grace, Angela Holland, Sherri Johnson, James Larson, Daniel McGarvey, Christina Murphy, Roger Nisbet, Christopher Patrick, Brooke Penaluna, Parsa Saffarinia**
CHALLENGES AND OPPORTUNITIES FOR ADVANCING FOOD WEB THEORY AND ANALYSIS IN STREAM ECOSYSTEMS THROUGH MODELING
- S10 Rivers at Risk**
Session Chair(s): Laura Craig, Erin Singer McCombs
Location: 313
- 10:30 **Charles Hawkins, Daniel Isaak**
CLIMATE CHANGE AND FRESHWATER BIODIVERSITY
- 10:45 **David Strayer**
EFFECTS OF BIOLOGICAL INVASIONS ON LARGE-RIVER ECOSYSTEMS
- 11:00 **Allison Roy**
URBANIZATION: USING RESISTANCE TO THIS HOMOGENIZING FORCE TO INFORM MANAGEMENT
- 11:15 **Matthew Wooten, Robert Hawley, Elizabeth Fet, Katherine MacMannis**
MINIMIZING STORMWATER RUNOFF IMPACTS TO STREAMS AND RIVERS THROUGH TARGETED FLOW THRESHOLDS: THE BIOLOGICAL RELEVANCE OF QCRITICAL
- 11:30 **Jennifer L. Tank, Martha M. Dee, Alessandra Marzadri, Daniele Tonina, Alberto Bellin**
MIDWESTERN RIVERS: ARE THEY HOTSPOTS, BUFFERS, OR SENTINELS OF AGRICULTURAL LAND USE?
- 11:45 **Amie West, Justin Nolan, Thad Scott**
OPTICAL WATER QUALITY AND HUMAN PERCEPTIONS OF RIVERS: AN ETHNOHYDROLOGY STUDY
- 13:30 **Angela Arthington**
ECOLOGICAL IMPACTS OF ALTERED RIVER FLOW REGIMES
- 13:45 **Ted Kennedy, Jeffrey Muehlbauer, Charles Yackulic, David Lytle, Scott Miller, Kimberly Dibble, Eric Kortenhoeven, Anya Metcalfe, Colden Baxter**
FLOW MANAGEMENT FOR HYDROPOWER EXTIRPATES AQUATIC INSECTS, THE FOUNDATION OF RIVERINE FOOD WEBS
- 14:00 **Erin Singer McCombs, Laura Craig, Brian Graber, Serena McClain**
ADDRESSING THE ECOLOGICAL IMPACTS OF DAMS THROUGH DAM REMOVAL IN THE U.S.
- 14:15 **Bryan Maitland, Axel Anderson, Mark Poesch**
CULVERTS IN THE BOREAL FOREST: IMPACTS AND RESTORATION METHODS FOR NATIVE FRESHWATER FISHES
- 14:30 **Nicholas Pinter**
RIVER NAVIGATION INFRASTRUCTURE AND IMPACTS
- 14:45 **Julian Olden**
EXPLORING OPPORTUNITIES FOR ADDRESSING MULTIPLE THREATS IN FRESHWATER CONSERVATION
- 15:30 **Travis Schmidt, William Clements, Pete Cadmus**
EVALUATING RESTORATION EFFECTIVENESS IN MINING-POLLUTED STREAMS FOLLOWING SHIFTS TO ALTERNATIVE STABLE STATES

- 15:45 **Sally Entrekin**
UNCONVENTIONAL OIL AND GAS EXTRACTION
POSES NEW RISKS TO STREAM WATER QUALITY AND
QUANTITY.
- 16:00 **Emma Rosi-Marshall, Sylvia Lee, Erinn Richmond,
John Kelly, Michael Grace, David Walters, Emily
Bernhardt, Alexander Reisinger**
PHARMACEUTICALS AND PERSONAL CARE PRODUCTS
AS A THREAT TO RIVERS
- 16:15 **John Kelly, Tiezheng Tong, Jean-Francois Gaillard,
Kimberly Gray, Christopher Peterson, Chu Thi Thanh
Binh, Alexandra Ozaki**
A COMMON ENGINEERED NANOMATERIAL, NANO-
TITANIUM DIOXIDE, IS A POTENTIAL EMERGING
THREAT TO RIVER ECOSYSTEMS
- 16:30 **Laura Craig, Erin Singer McCombs**
HOW THREATS TO RIVERS TRIGGER INNOVATION,
ACTION AND POLICY
- S03 Global Perspectives on Environmental Flows**
Session Chair(s): Jonathan Kennen, Eric Stein, Angus Webb
Location: 314
- 10:30 **Thomas Cuffney, Jonathan Kennen**
AGGREGATING DATA FROM MULTIPLE AGENCIES:
IMPLICATIONS FOR DETECTING BIOLOGICAL
COMMUNITY CHANGE ACROSS A FLOW ALTERATION
GRADIENT
- 10:45 **Ashmita Sengupta, Kenneth McCune, Raphael
Mazor, Eric Stein, Brian Bledsoe, Stephen Adams,
Christopher Konrad, Jason May**
FROM GAGED TO UNGAGED: LINKING HYDROLOGIC
ALTERATIONS TO BIOLOGY
- 11:00 **Daren Carlisle, David Wolock**
TRENDS IN FLOW ALTERATION OF CALIFORNIA'S
RIVERS AND STREAMS (1950-PRESENT)
- 11:15 **Jeanette Howard**
FUNCTIONAL FLOW NEEDS FOR CONSERVATION
TARGETS IN THE CENTRAL VALLEY OF CALIFORNIA
- 11:30 **William Chen, Julian Olden**
DESIGNING MULTI-YEAR ENVIRONMENTAL FLOW
REGIMES TO BENEFIT NATIVE FISHES AND DETER-
NONNATIVE FISHES DURING TIMES OF WATER
SCARCITY
- 11:45 **Avril Horne**
USING CONDITIONAL PROBABILITY NETWORK MODELS
TO OPTIMIZE ENVIRONMENTAL FLOW RELEASES
- 13:30 **Dustin Perkins, Mark Wondzell, Aneth Wight, Mark
Miller, Michael Scott**
HAVE ENVIRONMENTAL FLOWS LIMITED VEGETATION
ENCROACHMENT ALONG THE GREEN AND COLORADO
RIVERS IN CANYONLANDS NATIONAL PARK?
- 13:45 **James McKenna, Howard Reeves, David Holtschlag,
Paul Seelbach, Michael Slattery, Carol Luukkonen**
MEASURING AND EVALUATING ECOLOGICAL FLOWS
FROM STREAMS TO REGIONS: STEPS TOWARD
NATIONAL COVERAGE
- 14:00 **Shannon Brewer, Worthington Thomas, Jonathan
Kennen**
THE RELATIONSHIPS BETWEEN FLOW ALTERATION AND
FISH-TRAIT COMBINATIONS IN A LARGE GREAT PLAINS
RIVER
- 14:15 **Ernie Hain, Jonathan Kennen, Peter Caldwell, Stacy
Nelson, Ge Sun, Steven McNulty**
WATER ABSTRACTION COULD TRUMP CLIMATE AND
LAND COVER CHANGE IN ALTERING FUTURE FISH
SPECIES RICHNESS IN NORTH CAROLINA PIEDMONT
STREAMS
- 14:30 **Daniela Cortez, Ben Kefford, Ross Thompson, Ivor
Growth**
DISTURBING FLOWS: RECOVERY CAPACITY OF
MACROINVERTEBRATE ASSEMBLAGE AND TRAITS TO
ENVIRONMENTAL FLOW EXTREMES
- 14:45 **Piotr Parasiewicz, Pawel Prus, Katarzyna Suska**
DETERMINATION OF METHOD FOR ESTIMATING
ENVIRONMENTAL FLOWS (EFLWS) IN POLAND
- 15:30 **Wouter van de Bund**
E-FLOWS FOR THE EU WATER FRAMEWORK DIRECTIVE
- FROM THEORY TO PRACTICE
- 15:45 **Sarah Yarnell, John Schmidt, Alison Whipple, Erin
Beller, Cliff Dahm, Peter Goodwin, Joshua Viers,
Geoffrey Petts**
FUNCTIONAL FLOWS IN MODIFIED RIVERSCAPES:
HYDROGRAPHS, HABITATS AND OPPORTUNITIES
- 16:00 **James White**
QUANTIFYING MACROINVERTEBRATE COMMUNITY
RESPONSES TO FLOW AND THERMAL VARIABILITY
ASSOCIATED WITH RESERVOIR OPERATIONS
- 16:15 **Christopher Konrad**
RESOLVING THE INFLUENCE OF STREAMFLOW ON
ECOLOGICAL PROCESSES IN THE LOWER CEDAR RIVER,
WASHINGTON
- 16:30 **Ross Thompson, Alison King, Richard Kingsford,
Ralph Mac Nally, N. LeRoy Poff**
LEGACIES, LAGS, AND SHIFTING BASELINES:
ENVIRONMENTAL FLOW RESTORATION IN A CHANGED
AND CHANGING WORLD

16:45 **Eric Stein, Jonathan Kennen, J. Angus Webb**
FROM COBBLES TO CAUSATION: TRANSLATING FLOW
ECOLOGY RELATIONSHIPS TO MANAGEMENT ACTIONS

C06 Disturbance

Session Chair(s): Peter Kiffney, Brent Tweedy

Location: 315

10:30 **Peter Carlson, Leonard Sandin, Erik Degerman, Claudia Von Brömssen**
UNDERSTANDING THE ECOLOGICAL COSEQUENCES
OF DAM REMOVAL UTILIZING TRENDS IN
MACROINVERTEBRATE COMMUNITY DATA

10:45 **Hao-Yen Chang, Ming-Chih Chiu, Hsing-Juh Lin**
DAM REMOVAL INFLUENCES THE DIETS OF THE FILTER
FEEDER STENOPOSYCHIDAE SP. IN STREAM ECOSYSTEMS

11:00 **Elliot Koontz, Ashley Steel, Julian Olden**
EFFECT OF WILDFIRES ON STREAM THERMAL REGIMES
AND IMPLICATIONS FOR FRESHWATER FISH ACROSS
THE PACIFIC NORTHWEST

11:15 **Kevin Eliason, E.F. Benfield**
THE RESPONSES OF MACROINVERTEBRATES
TO REMOVAL OF RIPARIAN RHODODENDRON
UNDERSTORY IN SOUTHERN APPALACHIAN STREAMS

11:30 **Simon Townsend, Michael Douglas, Julia Schult**
RECOVERY OF BENTHIC PRIMARY PRODUCERS TO
FLOOD DISTURBANCE IN A TROPICAL SAVANNAH
RIVER

11:45 **Jessica Haghkerdar, Hamish Greig, Emma Toth, Alexis Ireland, Jack McLachlan**
THE INFLUENCE OF SUCCESSIONAL STATE ON
COMMUNITY RESPONSES TO DISTURBANCE IN POND
MESOCOSMS

C11 Invasive Species

Session Chair(s): Mark Pyron, Elisabeth I. Meyer, Mateo Scoggins

Location: 315

13:30 **Elisabeth I. Meyer, Jessica Rosolowski, H. Wolfgang Riss**
DOES INCREASING DENSITY STRESS FAVOR INVASIVE
AMPHIPOD SPECIES IN CENTRAL EUROPEAN
STREAMS? EVIDENCE FROM A LAB EXPERIMENT

13:45 **James McNair, Ryan Thum, Syndell Parks**
MODELING LAKE INVASIONS BY CRYPTIC
WATERMILFOIL TAXA AND THEIR ECO-EVOLUTIONARY
RESPONSES TO MANAGEMENT

14:00 **Michele Larson, Amy Krist**
INFLUENCE OF SPECIFIC ELECTRICAL CONDUCTIVITY
ON NATIVE AND INVASIVE SNAIL GROWTH RATE AND
MORTALITY

14:15 **Ronald Griffiths, Donald Schloesser**
THE ENIGMATIC MUD SNAIL, MARSTONIA LETSONI,
INVADES LAKE ST. CLAIR.

14:30 **Thayer Hallidayschult, K David Hambright, Jessica Beyer**
PERSISTENT ECOSYSTEM CHANGES LINKED TO ZEBRA
MUSSELS IN A SUBTROPICAL RESERVOIR

14:45 **Anna Boegehold, Donna Kashian, Karim Alame, Nicholas Johnson**
EFFECTS OF CYANOBACTERIA ON QUAGGA
MUSSEL (DREISSENA ROSTRIFORMIS BUGENSIS)
REPRODUCTION

15:30 **Tim Counihan, Steve Bollens**
QUAGGA AND ZEBRA MUSSEL MONITORING IN THE
PACIFIC NORTHWEST, USA: HOW MUCH EFFORT IS
NEEDED TO DETECT RARE PLANKTONIC TAXA IN THE
COLUMBIA AND SNAKE RIVERS

15:45 **Karim Alame, Anna Boegehold, Nicholas Johnson, Donna Kashian**
CYANOBACTERIA REDUCES QUAGGA MUSSEL
(DREISSENA ROSTRIFORMIS BUGENSIS) SPERM
MOVEMENT

16:00 **Jessica Beyer, K. David Hambright, Richard M. Zamor**
PREDICTING THE PRESENCE OF AN INVASIVE
TOXIGENIC ALGAL SPECIES ON A REGIONAL SCALE

16:15 **K. David Hambright, David A. Caron, Adriane C. Jones, Brenda Allison Witt, Richard M. Zamor**
WHOLE FOOD WEB RESTRUCTURING BY AN
ECOSYSTEM DISRUPTIVE ALGAL BLOOM SPECIES

16:30 **Courtney Larson, Jennifer L. Pechal, Deborah McCullough, M. Eric Benbow**
A TERRESTRIAL INVADER, EMERALD ASH BORER
(AGRILUS PLANIPENNIS), INFLUENCES STREAM
COMMUNITY SPECIES SORTING

POSTERS

S01 Future Freshwater Scientists - Undergrads

- 1 **Ivan Arismendi, Brooke Penaluna**
EXAMINING DIVERSITY INEQUITIES IN FISHERIES SCIENCE: A CALL TO ACTION
- 2 **Alyssa Anderson, Tessa Durnin, Jon Mitchell, April Moeller, Samantha Bahr, Larissa Kempf, Nathan Roberts, Annika van Oosbree, Alison Byrd, Miranda Ristau, Ian Muirhead**
A THREE-YEAR SURVEY OF MOSQUITO POPULATIONS IN BROWN COUNTY, SOUTH DAKOTA, USA, AND IMPLICATIONS FOR WEST NILE VIRUS
- 3 **Heather Lochotzki, Leslie Riley, Robert Verb**
EPIZOOIC ALGAL COMMUNITIES AND BRANCHIOBDELLIDS ON RUSTY CRAYFISH (*ORONECTES RUSTICUS*) IN A HEADWATER STREAM IN WEST CENTRAL OHIO
- 4 **Paige Kleindl, Robert Verb, Leslie Riley, Fred Tucker, Michael Commons**
INFLUENCES OF AN EASTERN HEMLOCK (*TSUGA CANADENSIS* [L.] CARRIERE) RIPARIAN HABITAT ON A LOTIC BENTHIC COMMUNITY
- 5 **Stephanie Estell, Jonathan Stechschulte, Michael Commons, Robert Verb, Leslie Riley, Janet Deardorff**
A COMPARISON OF SPRING SYSTEMS IN JOHN BRYAN STATE PARK BASED ON THE INFLUENCE OF *LONICERA MAACKII* (RUPR.) HERDER
- 6 **Andrew Camilleri, Donna Kashian, Anna Boegehold**
IMPACTS OF DREISSENID MUSSEL SHELLS ON A BENTHIC STREAM COMMUNITY
- 7 **Christopher Hernandez, Stephanie Carlson, Michael Bogan**
SEASONAL VARIATION IN THE INVERTEBRATE COMMUNITY COMPOSITION OF A COASTAL CALIFORNIA INTERMITTENT STREAM
- 8 **Daniel Suh**
THE IMPACT OF TURBIDITY ON THE PREDATOR-PREY RELATIONSHIP BETWEEN RED SWAMP CRAYFISH (*PROCAMBARUS CLARKII*) AND PACIFIC TREE FROG (*PSEUDACRIS REGILLA*) TADPOLES
- 9 **Emily Henneman, Janet Deardorff, Paige Kleindl, Nicole Berry, Leslie Riley, Robert Verb**
INFLUENCE OF *CLADOPHORA GLOMERATA* BEDS AS HABITAT MODIFIERS IN BEDROCK DOMINATED RIFFLE HABITATS
- 10 **Paul Petrowski, Andrew Sheldon, Alicia Slater**
POPULATIONS OF THE MONTANE STONEFLY *HESPEROPERLA PACIFICA* EXHIBIT WIDESPREAD HAPLOTYPE SHARING
- 11 **Brian Kim**
THE ABUNDANCE, DISTRIBUTION, AND TOXIN PRODUCTION OF *GLOEOTRICHIA ECHINULATA* BLOOMS IN MAINE LAKES AND ITS IMPACT ON MICROBIAL DIVERSITY AND HUMAN HEALTH

- 12 **Tyler Davis**
BASELINE ASSESSMENT OF SCOTTS CREEK RESTORATION PHASE 2 UTILIZING BACI DESIGN BENTHIC MACROINVERTEBRATE SURVEYS
- 13 **Nicholas Addison**
TROPIC BEHAVIOR AND PRESENCE-ABSENCE EFFECTS OF *BOYERIA* SPP. (ODONATA:AESHNIDAE) IN WILDCAT CREEK, SOUTH CAROLINA

S02 Climate and Drought Effects on Mountain Stream Ecosystems

- 14 **Jo-an Chen, Patina Mendez**
THE EFFECTS OF WARMING TEMPERATURES ON BIOMONITORING METRICS IN CALIFORNIA
- 15 **Raja Ram Pote Shrestha**
CLIMATE RESILIENCE IN THE HIMALAYAS OF NEPAL-A REVIEW OF GOOD PRACTICES
- 16 **Steven Thomas, Alexander Flecker, Amanda Rugenski, Carla Atkinson, Andrea Encalada, LeRoy Poff**
ALTITUDINAL TRENDS IN SELECT PHYSICOCHEMICAL VARIABLES IN TROPICAL AND TEMPERATE STREAMS
- 17 **Heather Fair-Wu**
OSMOTIC REGULATION AS A POTENTIAL FACTOR IN DISTRIBUTION OF AQUATIC NYMPHS IN GLACIER WATERSHEDS

S03 Global Perspectives on Environmental Flows

- 18 **Jordan Stepro, Jessica Orlofske**
REVITALIZATION OF URBAN STREAMS: A BIOLOGICAL AND HYDROLOGICAL ANALYSIS OF THE OAK CREEK WATERSHED IN SOUTHEASTERN WISCONSIN, USA

S04 Temporary Wetlands

- 19 **Matthew Bird**
IMPACTS OF TERRESTRIAL HABITAT TRANSFORMATION ON TEMPORARY WETLAND INVERTEBRATES IN A SCLEROPHYLLOUS LANDSCAPE (CAPE TOWN, SOUTH AFRICA)
- 20 **Scott Mcleay, Lora L. Smith, Carla Atkinson**
EXAMINING THE FUNCTIONAL ROLES OF AMPHIBIAN COMMUNITIES IN GEOGRAPHICALLY ISOLATED WETLANDS
- 21 **Fredric Govedich, Bonnie Bain, Nayla Rhein**
EXAMINATION OF TEMPORARY ROCK POOLS IN SOUTHERN UTAH
- 22 **Luis Rosas-Saenz**
HYDRO-REGIME, NUTRIENT, AND THATCH EFFECTS ON ENDANGERED VERNAL POOL CRUSTACEANS: RECRUITMENT AND LIFE CYCLE
- 23 **Brandy Schnettler, Steven W. Hamilton, Joseph R. Schiller**
TEMPORARY WOODLAND POOLS OF THE PENNYROYAL PLAIN: INVESTIGATING THE EFFECTS OF DISTURBANCE ON AQUATIC MACROINVERTEBRATE COMMUNITIES

24 **Patricia Saunders**

INTERANNUAL VARIABILITY IN HYDROPERIOD AND THE ECOLOGY OF TEMPORARY PONDS IN A FLOODPLAIN (BLACK FORK WETLANDS, OHIO)

S05 Eco-hydrology of IRES in a Changing Climate25 **Allyn Dodd, Doug Leasure, Daniel Magoulick, Michelle Evans-White**

CHARACTERIZING TWO NATURAL FLOW REGIMES OF THE OZARK AND BOSTON MOUNTAINS, ARKANSAS, USA

26 **Silvia Folegot, Stefan Krause, Thibault Datry**

THE "HYPORHEIC REFUGE HYPOTHESIS" UNDER THE LENS OF CLIMATE CHANGE

S06 Molecular Methods in Biomonitoring27 **Nicole Fahner, Donald Baird, Mehrdad Hajibabaei, Shadi Shokralla**

MONITORING WETLAND PLANT DIVERSITY WITH ENVIRONMENTAL DNA: IMPACT OF DNA MARKER SELECTION ON ASSESSMENTS

28 **Marie Leys, Katja Räsänen, Christopher Robinson, Irene Keller**

CONTRASTING LIFE CYCLES OF CRYPTIC LINEAGES OF THE ALPINE MAYFLY BAETIS ALPINUS (EPHEMEROPTERA: BAETIDAE)

S07 Challenges in Freshwater Conservation29 **KathJo Jankowski**

FERTILIZER NUTRIENT EXPORT AND UPTAKE IN SMALL STREAMS ALONG BRAZIL'S AGRICULTURAL FRONTIER

30 **Otome Lindsey**

YOLO/CACHE SLOUGH SURFACE WATER QUALITY EVALUATION

S08 Hydroclimatic Extremes31 **Jennifer Stamp, Aaron Moore, Steve Fiske, Britta Bierwagen, Anna Hamilton**

VULNERABILITY OF VERMONT STREAM COMMUNITIES TO HEAVY PRECIPITATION EVENTS AND FLOODING

S09 Conservation of Freshwater Mussels32 **Dan Hornbach, Mark Hove, Kelly MacGregor, Maya Agata, Clara Friedman, Molly Guiney, Brooke Hunter, Jessica Kozarek**

IMPACT OF SUSPENDED SEDIMENT LOAD ON FRESHWATER MUSSEL ASSEMBLAGES: A COMPARISON OF TWO MINNESOTA WATERSHEDS

33 **Patrick Olson, Caryn Vaughn, Richard Broughton**

USING SIX MICROSATELLITE LOCI TO ANALYZE POPULATION STRUCTURE AND PATERNITY OF THE THREE RIDGE MUSSEL (AMBLEMA PPLICATA) IN SOUTHEAST OKLAHOMA

34 **Kathryn Murphy, Caryn Vaughn**

PATTERNS OF MUSSEL SPECIES CO-OCCURENCE WITHIN MUSSEL BEDS

35 **Rebecca Winterringer, Lindsey Moss**

ARE STANDARDIZED MUSSEL SURVEY PROTOCOLS EFFECTIVE? AN EVALUATION OF PROTOCOL IMPLEMENTATION IN 80 SURVEYS

36 **Brian van Ee, Carla Atkinson**

ECOSYSTEM LEVEL IMPACTS OF UNIONID DECLINES ON SESTON COMPOSITION.

S10 Rivers at Risk37 **Arianna Tabibzadeh Nuri, Keith Bouma-Gregson, Mary Power**

BENTHIC CYANOBACTERIAL DIVERSITY AND TOXIN PRODUCTION IN A CALIFORNIA WATERSHED

38 **Peter Zaidel, Allison Roy, Keith Nislow, Christopher Smith, Benjamin Letcher**

IMPACTS OF SMALL, SURFACE-RELEASE DAMS ON STREAM TEMPERATURE

39 **Timothy Hoellein**

INFLUENCE OF ANTHROPOGENIC LITTER ON ECOSYSTEM PROCESSES IN URBAN STREAMS

S11 Next-Generation Sequencing in Freshwater Science40 **Alicia Slater, Michael Branton, Andrew Sheldon, Hailey Hernandez**

GBS PHYLOGEOGRAPHY OF GREAT BASIN STONEFLIES

41 **Samantha Keyport, John Kelly, Nancy Tuchman, Brendan Carson, Beth Lawrence, Shane Lishawa, Olivia Johnson**

THE EFFECTS OF HARVESTING AN INVASIVE HYBRID CATTAIL ON ABIOTIC AND BIOTIC WETLAND PROPERTIES

42 **Teofana Chonova, Agnès Bouchez, Cecile Chardon, François Keck, Jérôme Labanowski, Leslie Mondamert, Bernard Montuelle, Frédéric Rimet, Valentin Vasselon**

NEXT-GENERATION SEQUENCING TO HIGHLIGHT COMMUNITY CHANGES IN RIVER BIOFILMS LINKED TO PHARMACEUTICAL LOADS FROM A WASTEWATER TREATMENT PLANT.

S12 Urban Stream Syndrome43 **Phillip M. Bumpers, John Spencer, Seth Wenger, Amy Rosemond**

TEMPORAL PATTERNS AND DRIVERS OF CONDUCTIVITY IN URBAN PIEDMONT STREAMS OF GEORGIA, USA

44 **Madeline Rubenson**

THE INFLUENCE OF STORMWATER DRAINS AND LAND USE ON PHOSPHORUS LOADING IN AN URBAN WATERSHED

45 **Sarah Whorley, Nathan Smucker, Anne Kuhn, John Wehr**

URBANIZATION ALTERS FATTY ACID CONCENTRATIONS OF STREAM FOOD WEBS WITHIN THE NARRAGANSETT BAY WATERSHED

- 46 **Rachel Usher, Amy Rosemond, James Wood, Phillip Bumpers**
DETERMINING HOW STREAMS 'WORK' IN CITIES: NUTRIENTS ASSOCIATED WITH WATERSHED URBANIZATION STIMULATE MICROBIAL RESPIRATION AND BREAKDOWN OF C

- 47 **Michael Peterson**
FORGING LINKS BETWEEN ECOLOGICAL FIELD STATIONS, RESEARCHERS, AND COLLEGE EDUCATION

S14 Multiple Stressors in River Ecosystems

- 48 **Nick Banish, Marc Peipoch Guell, Maury Valett**
CLADOPHORA PHENOLOGY DRIVES STREAM PHYSICOCHEMICAL CONDITIONS IN SUMMER LOW FLOW PERIOD

- 49 **Christian Perry, Scott Miller, Charles Hawkins**
VARIABILITY IN ANALYTICAL APPROACH AFFECTS COMPARABILITY AND INTERPRETATION OF LANDSCAPE-SCALE AQUATIC ECOSYSTEM ASSESSMENTS

- 50 **Anna Harrison, G. Allen Burton, Sara Nedrich, Michelle Hudson**
EVALUATING MULTIPLE STRESSORS: AN ASSESSMENT OF VANADIUM AND WATER LEVEL FLUCTUATIONS

- 51 **Natalie Abram**
USING THE PROQUEST ASFA DATABASE FOR ALL OF YOUR LITERATURE NEEDS

S16 Algal Data as a Component of Bioassessment

- 52 **Sabrina Kamae Kamae, Sergio Mendoza**
A TEST OF ISLAND BIOGEOGRAPHY THEORY USING DIATOMS ON SANTA CATALINA ISLAND AND HAWAII

- 53 **Kalina Manoylov, Michele Brossett, Cody Smoth**
ALGAL COMMUNITY ATTRIBUTES IN ESTABLISHING NUTRIENT CRITERIA FOR GEORGIA STREAMS

S17 Stressed Forested Watersheds

- 54 **Kristin Daoust, Paul Sibley, David Kreutzweiser, Irena Creed, Junting Guo**
ASSESSING THE IMPACTS OF FOREST DISTURBANCE ON AQUATIC ECOSYSTEM SERVICES THROUGH PREDICTIVE MODELING OF BENTHIC COMMUNITY COMPOSITION AND HYDROLOGIC INDICATORS

- 55 **Casey Steadman, Kevin Bladon, Alba Argerich, Sherri Johnson**
EARLY TRAJECTORY OF CHEMICAL WATER QUALITY RESPONSE TO DISTURBANCE BY FOREST HARVESTING IN THE NORTHERN COAST RANGE OF OREGON

S18 Community Engagement in Science

- 56 **James Wood**
DIFFERENCES IN STUDENT PERCEPTION OF ECOSYSTEM HEALTH

- 57 **Michael Hassett, Maggie Oudsema, Mary Ogdahl, Alan Steinman**
MUSKEGON LAKE LONG-TERM MONITORING AND STAKEHOLDER COMMUNICATION

S18 Community Engagement in Science

- 58 **Nolan Brown, Colden Baxter, James Paris, Chris Loether, Drusilla Gould, Doyle Punkin, Hunter Osborne**
COMBINING INDIGENOUS CULTURE AND ECOLOGICAL SCIENCE: A FOODWEB STUDY ON THE SNAKE RIVER FLOODPLAIN IN SHOSHONI LANGUAGE

- 59 **Natalie Levesque, Clay Arango**
WESTERN SPRUCE BUDWORM FRASS INPUTS AFFECT HETEROTROPHIC METABOLISM OF A HEADWATER CONIFEROUS STREAM

- 60 **Emily Heaston**
CHARACTERIZING SHORT-TERM LIGHT DYNAMICS IN FORESTED HEADWATER STREAMS

- 61 **Jacey Brooks, Kelley Fritz, Jessica Fulgoni, Kerry McLeran, Regina Goldkuhl, Matt Whites**
THE EFFECTS OF AN IN-STREAM RESTORATION PROJECT ON MOBILE RIPARIAN CONSUMERS

- 62 **Jonathan Hollis, Peggy Wilzbach**
EXPORT OF INVERTEBRATE DRIFT FROM FISHLESS HEADWATER STREAMS TO DOWNSTREAM REACHES AND ITS USE BY TROUT IN THE LOWER KLAMATH RIVER BASIN, CALIFORNIA

- 63 **Elise Coffelt, Garrett Frandson, Clay Arango, Sally Entrekin**
WESTERN SPRUCE BUDWORM HERBIVORY INFLUENCES MACROINVERTEBRATE STREAM FOOD WEBS

- 64 **Nick Baer, Jenisha Shrestha, Hannah Broadley, Ramsa Chaves-Ulloa, Kathleen Weathers, Holly Ewing, Kathryn Cottingham, Celia Chen**
AQUATIC TO TERRESTRIAL LINKAGES: EFFECTS OF WATER CHEMISTRY AND HYDROLOGY ON THE MOVEMENT OF HG TO LAND VIA EMERGING STREAM INSECT SUBSIDIES

- 65 **Scot Peterson, Howard Whiteman**
EFFECT OF HABITAT DEGRADATION ON STREAM INSECT EMERGENCE AND RIPARIAN BIRD COMMUNITIES

S23 Traits-Based Vulnerability Assessment/Climate Change

- 66 **David Buchwalter, David Funk, Tina Chou**
LINKING PHYSIOLOGICAL MECHANISMS AND GENE EXPRESSION TO THERMALLY DRIVEN LIFE HISTORY OUTCOMES IN THE MAYFLY NEOCLOEON TRIANGULIFER

S24 Scale and Ecosystem Functions

- 67 **Ryan Sleeper, William Bowden, Andrew Schroth, Matthew Vaughan**
ECOSYSTEM METABOLISM IN THREE STREAMS WITH CONTRASTING LAND USE
- 68 **Christina Baker, Jeremy Jones, Tamara Harms, Janine Ruegg, Claire Ruffing**
DETERMINING THE RELATIVE STRENGTH OF WATERSHED AND IN-STREAM PREDICTORS OF STREAM METABOLISM

S25 Modeling Environmental Change in Freshwater Ecosystems

- 69 **Stephen Cook, Ryan S. King, Lauren Housley, Jeffrey A. Back, Morgan W. Bettcher, Stephen R. Elser, Katherine V. Hooker, Caleb Robbins**
TEMPORAL BETA DIVERSITY OF BENTHIC MACROINVERTEBRATE COMMUNITIES DECLINES ALONG A STREAM PHOSPHORUS GRADIENT
- 70 **Christina Lew, Patina Mendez**
SPECIES DISTRIBUTION MODELING OF 12 TRICHOPTERA GENERA IN CALIFORNIA USING BIOMONITORING DATASETS
- 71 **Daniel Castro, Narcis Prat, Victor Guerra**
INTEGRATED PROTOCOL TO PREDICT THE ECOLOGICAL STATUS OF RIVERS AND FOR ADAPTING WATERSHED MANAGEMENT TO GLOBE CHANGE
- 72 **Joshua Brigham, Anne Hershey**
EXAMINING METHANE PROCESSES AND METHANE DERIVED CARBON IN FOOD WEBS IN NORTH CAROLINA PIEDMONT STREAMS
- 73 **Moriah Evans**
VARIABILITY IN BLACKFLY, MIDGE, AND CADDISFLY RESOURCE UTILIZATION DOWNSTREAM OF A LARGE DAM

S27 Contaminants as Agents of Ecological Change

- 74 **Michelle Hornberger, Terry Short**
SPECIES TRAITS AND METAL RISKS: LINKAGES BETWEEN DIETARY EXPOSURE AND CONTAMINANT TRANSPORT
- 75 **Günter Köck**
CADDISFLY

C01 Algae and Primary Production

- 76 **Kalina Manoylov, Debora Figueroa-Nieves, William McDowell**
EFFECTS OF SEWAGE EFFLUENTS ON BENTHIC ALGAL COMMUNITIES IN TROPICAL STREAMS
- 77 **Eilleen Salas, Dessie Underwood**
EFFECTS OF POLYCYCLIC AROMATIC HYDROCARBONS ON DIATOM VALVE MORPHOLOGIES FROM A SOUTHERN CALIFORNIA CREEK

- 78 **Adam Eckersell, Colden Baxter, Matthew Schenk**
DIATOM ASSEMBLAGE RESPONSES TO WILDFIRE IN WILDERNESS STREAMS OF CENTRAL IDAHO
- 79 **Andrea Engle, Justin Murdock, Gregory Moyer**
MONITORING FOR DIDYMOSPHENIA GEMINATA IN TENNESSEE: AN ENVIRONMENTAL DNA APPROACH
- 80 **Whitney Beck, Alexander Flecker, N. LeRoy Poff, Amanda Rugenski**
BENTHIC ALGAE NUTRIENT LIMITATION ALONG AN ELEVATION GRADIENT IN THE POUDDRE WATERSHED, COLORADO
- 81 **Kevin Wyatt, Dawn DeColibus, Merritt Turetsky, Allison Rober**
VARIABLE HYDROLOGY ALTERS THE AQUATIC COMMUNITY STRUCTURE OF A BOREAL PEATLAND
- 82 **Ellen Preece**
THE CHANGING DYNAMICS OF MICROCYSTIN: FRESHWATER CYANOTOXINS IN MARINE ENVIRONMENTS

C02 Bioassessment

- 83 **Jon Gelhaus, Vaughn Shirey, Yan Li**
TIPULA (NIPPOTIPULA) ABDOMINALIS (DIPTERA: TIPULIDAE), A COMMON EASTERN NEARCTIC SHREDDER CRANE FLY, IS ACTUALLY THREE SPECIES.
- 84 **Stephen Maurano, Mary Freeman**
MODELING STREAM FISH BIOGEOGRAPHY TO ASSESS WATER QUALITY IN A SPECIES-RICH REGION
- 85 **Michelle Evans-White, Stephanie Stoughton, Chris Fuller, Halvor Halvorson, Andrew Sanders, Thad Scott, Erin Scott, Ayla Smartt**
CAN STREAM INSECT THRESHOLD ELEMENTAL RATIOS INFORM WADEABLE STREAM NUTRIENT MANAGEMENT?
- 86 **José Mello, Juliano Corbi, Guilherme Gorni, Daniel Abrahão**
EFFECTS OF PYRIMETHANIL FUNGICIDE IN COMMUNITY STRUCTURE OF CHIRONOMIDAE (INSECTA: DIPTERA): A MESOCOSMS APPROACH
- 87 **Gary Scrimgeour**
USING REFERENCE CONDITION MODELS TO ASSESS ENVIRONMENTAL CONDITIONS IN NATIONAL PARKS IN THE ROCKY MOUNTAINS OF ALBERTA AND BRITISH COLUMBIA, CANADA
- 88 **Peggy Morgan, Robin Barnes**
PINELLAS COUNTY, FLORIDA, FRESHWATER BIOLOGICAL PROGRAM
- 89 **Bethany Vazquez, DeShawn Johnson, Ferenc de Szalay**
TESTING IF OHIO RAPID ASSESSMENT METHOD PREDICTS WETLAND MACROINVERTEBRATE ASSEMBLAGES

C03 Biogeochemistry

- 90 **Eric Strauss, Katherine Bohrman**
EFFECT OF STREAM HYDROLOGY ON PHOSPHORUS UPTAKE IN A COLD WATER STREAM IN WESTERN WISCONSIN
- 91 **Todd Royer, Kara Prior, Jennifer Tank, Matt Trentman, Brittany Hanrahan, Sheila Christopher, Ursula Mahl**
DOC, CH₄, AND CO₂ DYNAMICS IN TWO AGRICULTURAL WATERSHEDS IN NORTHERN INDIANA
- 92 **Ina Goodman, Robert O. Hall, Hilary Madinger**
USE OF ARGON AS TRACER GAS IN STREAMS
- 93 **Sophie Higgs, Walter Dodds**
COMPOUND-SPECIFIC DISSOLVED ORGANIC CARBON UPTAKE IN PRAIRIE STREAMS
- 94 **Stephen Plont, Jay Zarnetske, Joseph Lee-Cullin, Sydney Ruhala, Evan Wiewiora**
USING MESOCOSMS TO ASSESS CONTROLS OF FLOCCULANT ORGANIC RICH SEDIMENTS ON ORGANIC CARBON AND NITRATE CHEMISTRY AT THE STREAM-GROUNDWATER INTERFACE
- 95 **Rich Sheibley, Christopher Konrad, Robert Black**
INSTREAM ATTENUATION OF NITROGEN AND PHOSPHORUS IN THE PUGET SOUND BASIN
- 96 **Sarah Clark, Clay Arango**
ORGANIC MATTER SUPPRESSES NITRIFICATION IN A NITROGEN-LIMITED STREAM
- 97 **Sydney Ruhala, Jay Zarnetske, Joseph Lee-Cullin, Stephen Plont, Evan Wiewiora**
DISSOLVED ORGANIC CARBON CONDITIONS ACROSS THE STREAM-GROUNDWATER INTERFACE OF A THIRD-ORDER RIVER NETWORK
- 98 **Timothy Vaessen, Gilles Pinay, Miquel Ribot, Stephanie Merbt, Emilio Casamayor, Eugènia Martí**
DEVELOPMENT OF DENITRIFYING BACTERIA IN NEWLY CREATED BIOFILMS IN URBAN STREAMS
- 99 **Robert Brown, Anne Hershey**
THE IMPACT OF CORBICULA FLUMINEA ON METHANE CYCLING IN STREAM SEDIMENTS
- 100 **Adamaris Muñoz Tirado, Dustin Kincaid, Stephen Hamilton**
CHANGES IN SEDIMENT POREWATER CHEMISTRY AND WILD RICE GROWTH AS A RESULT OF REDUCED HYPORHEIC FLOW
- 101 **Amy Burgin, Karla Jarecke, Terrance Loecke**
USING OXYGEN SENSORS TO UNDERSTAND WETLAND GREENHOUSE GAS HOT SPOTS AND HOT MOMENTS
- 102 **Robert Stelzer, Eric Strauss**
COMPARING THE CONTRIBUTIONS OF SPRINGS AND SEEPS TO NITRATE FLUX IN A STREAM NETWORK IN CENTRAL WISCONSIN

- 103 **James Guinnip, Walter Dodds**
LONG TERM TRENDS OF NITROGEN CONCENTRATION IN A TALLGRASS PRAIRIE STREAM NETWORK
- 104 **Jaynell Nicholson**
NUTRIENT CONCENTRATIONS AS INDICATORS OF WETLAND CONDITION: EVALUATING THE OHIO RAPID ASSESSMENT METHOD
- 105 **Taylor Michael, Lauren Kinsman-Costello, Anne Jefferson**
DOES AN ON-CAMPUS STORMWATER RETENTION WETLAND IMPROVE WATER QUALITY?

C04 Climate Change

- 106 **Darrin Hunt, Donna Kashian**
INCREASING WATER TEMPERATURES MAY REDUCE HATCHING SUCCESS OF DAPHNIA
- 107 **Jared Balik, Scott Wissinger, Brad Taylor, Susan Washko**
USING SPECIES-SPECIFIC RATES OF NUTRIENT REGENERATION BY DETRITIVORES TO PREDICT HOW DISTRIBUTIONAL SHIFTS RELATED TO CLIMATE CHANGE AFFECT ECOSYSTEM FUNCTION
- 108 **Jami Brown, Matthew Pyne**
THERMAL TOLERANCE VARIABILITY IN A WARM-WATER CHEUMATOPSYCHE CADDISFLY.
- 109 **Cody Morse**
LIFE CYCLE ANALYSIS OF A STREAM RESTORATION PROJECT IN A CENTRAL CALIFORNIA WATERSHED
- 110 **Joseph M. Culp, Jennifer Lento, Willem Goedkoop**
CIRCUMPOLAR ASSESSMENT OF TRENDS IN ARCTIC FRESHWATER BIODIVERSITY

C05 Conservation and Restoration

- 111 **Eric Snyder, Anna Harris, Jane Lyons**
PHYSICAL HABITAT, MACROINVERTEBRATE COMMUNITY STRUCTURE AND STREAM METABOLISM IN THE HEADWATERS OF AN ECUADORIAN CLOUD FOREST STREAM NETWORK
- 112 **Eric South, R. Edward DeWalt, Yong Cao**
RELATIVE IMPORTANCE OF CONSERVATION RESERVE PROGRAMS TO MAYFLY, STONEFLY, AND CADDISFLY SPECIES RICHNESS IN THE KASKASKIA RIVER BASIN OF ILLINOIS
- 113 **Jacob Dyste, Maury Valett**
ECOLOGICAL REORGANIZATION AFTER PLACER MINING RESTORATION
- 114 **Amanda Wittmann, John L Bailey, John Gunn**
EVALUATION OF RESTORATION MEASURES FOR AN INDUSTRIAL URBAN STREAM IN SUDBURY, ONTARIO, CANADA

- 115 **Guido A Herrera-R, Javier A Maldonado-Ocampo**
FISH ENDEMISM PATTERNS IN COLOMBIAN ANDEAN ORINOCO REGION FROM SPECIES DISTRIBUTION MODELS: IMPLICATIONS FOR THEIR CONSERVATION
- 116 **Peter Davis, Marc Peipoch Guell, Maury Valett**
REMOTE SENSING & SPATIAL ANALYSIS OF RIVERSCAPE DIVERSITY AND VARIABILITY
- 117 **Kyra Reumann-Moore, Megan Wiitala, Hazel Groman, Katie Flahive**
THE HYPOXIA TASK FORCE

C06 Disturbance

- 118 **Jesse Fleri, Matt Schroer, Scott Miller**
IMPACTS OF HYDROELECTRIC DAMS ON AQUATIC MACROINVERTEBRATE LIFE HISTORY STRATEGIES: THE ROLE OF DESICCATION
- 119 **Erin Abernethy, Theodore Kennedy, Jeffrey Muehlbauer, Richard Van Driesche, David Lytle**
BENTHIC AQUATIC INVERTEBRATE COMMUNITY COMPOSITION AND SPECIES ABUNDANCES IN THE COLORADO RIVER BASIN DOWNSTREAM OF SIX DAMS
- 120 **Izak Neziri, Clay Arango**
DOES WESTERN SPRUCE BUDWORM HERBIVORY CHANGE CATCHMENT-STREAM CONNECTIVITY BY ALTERING CARBON AND NITROGEN DYNAMICS IN FOREST SOILS?
- 121 **Roberto Reyes-Maldonado, Alonso Ramírez**
DROUGHT EFFECTS ON MACROINVERTEBRATE ASSEMBLAGES IN TROPICAL STREAMS, PUERTO RICO
- 122 **Emily Wolfe, Carri LeRoy, Shannon Claeson**
STREAM COMMUNITY ASSEMBLY FOLLOWING THE CATASTROPHIC ERUPTION OF MOUNT ST. HELENS, WA, USA
- 123 **Brian McGann**
RECOVERY OF ZOOPLANKTON COMMUNITIES FOLLOWING WHOLE-LAKE DISTURBANCE
- 124 **Niall Clancy, Eric Scholl, Wyatt Cross**
THE EFFECTS OF A LARGE RIVER IMPOUNDMENT ON RIVER CHANNEL COMPLEXITY: IMPLICATIONS FOR MACROINVERTEBRATE COMMUNITY STRUCTURE.

C07 Ecology of Fish and Other Aquatic Vertebrates

- 125 **Emily Khazan**
POPULATION DENSITY AND DISTRIBUTION OF SPECTACLED CAIMAN (CAIMAN CROCODYLUS) IN CAÑO PALMA, COSTA RICA

- 126 **David Janetski, Lauren Prasko**
INFLUENCE OF ENVIRONMENTAL FACTORS ON YOUNG-OF-THE-YEAR BROOK TROUT DENSITY IN PENNSYLVANIA HEADWATER STREAMS
- 127 **Lauren Henning, Jeff Wesner**
A SYSTEMATIC REVIEW OF THE STUDY OF FISH EFFECTS ON BENTHIC AND EMERGING AQUATIC INSECTS
- 128 **Kevin D. Seagle**
UNDERWATER VIDEO COLLECTION METHODS FROM A FISH POPULATION STUDY OF SELENIUM EXPOSED STREAMS AND LAKES IN WEST VIRGINIA
- 129 **Francis Olaniyan**
ICHTHYOFAUNA OF IGBOKODA RIVER, ONDO STATE, NIGERIA
- 130 **Ben Tumolo, Bradley Richardson, Neal Jackson, Michael Flinn**
ORGANISMAL RESPONSE TO HUMAN MANIPULATED ECOSYSTEMS: VARYING BODY CONDITION IN PADDLEFISH (POLYODON SPATHULA) ACROSS LARGE RIVER IMPOUNDMENTS

C08 Ecotoxicology

- 131 **Lei Zheng, Susan Cormier**
RELATIONSHIP BETWEEN SALT-INTOLERANT BENTHIC INVERTEBRATE COMMUNITIES AND BACKGROUND SPECIFIC CONDUCTIVITY
- 132 **Alexandria Keeble-Toll, Carrie Monohan**
MERCURY IN FISH OF THE AMERICAN AND BEAR WATERSHEDS: MINIMIZING EXPOSURE RISK WITH SITE-SPECIFIC FISH CONSUMPTION ADVISORIES
- 133 **Ray Drenner, Matthew Chumchal, Kimberly Adams**
PREDICTING MERCURY CONTAMINATION IN FISH IN THE SOUTH CENTRAL UNITED STATES: INTERACTIONS BETWEEN MERCURY DEPOSITION, FISH TROPHIC POSITION AND FISH SIZE
- 134 **Daniel Cain, Marie-Noele Croteau, Christopher Fuller**
WATER CHEMISTRY CONTROLS AQUEOUS COPPER AND ZINC UPTAKE IN THE STONEFLY ZAPADA
- 135 **Dean Fletcher, Angela Lindell, John Seaman, Paul Stankus, J McArthur**
LAND USE EFFECTS ON TRACE ELEMENT ACCUMULATION IN SEDIMENT AND BIOTA OF COASTAL PLAIN STREAMS

C09 Food Webs

- 136 **Kate Prestie**
CRAYFISH: LENGTHENED AQUATIC FOOD CHAINS AND IMPLICATIONS FOR MERCURY CONCENTRATIONS IN FISH
- 137 **James Paris, Colden Baxter, Hunter Osborne, Preston Buckskin, Zachary Wadsworth**
IMPACT OF LOST FLOODS ON FISH AND FOOD WEBS IN A REGULATED RIVER-FLOODPLAIN
- 138 **Katherine O'Reilly, Amelia McReynolds, Craig Stricker, Gary Lamberti**
QUANTIFYING LAKE MICHIGAN COASTAL WETLAND – NEARSHORE LINKAGES FOR SUSTAINING SPORT FISHERIES
- 139 **Darin Kopp, Daniel Allen, Juliet Stromberg, Kevin Hultine**
CLIMATE EFFECTS ON RECIPROCAL TERRESTRIAL-AQUATIC LINKAGES: PRELIMINARY RESULTS AND FUTURE DIRECTIONS
- 140 **Jade Ortiz, Colden Baxter**
A CONCEPTUAL MODEL OF SPATIAL COMPLEXITY IN RIVER-FLOODPLAINS AND ITS EFFECTS ON INSECT EMERGENCE AND TERRESTRIAL INSECTIVORES

C10 Hydroecology

- 141 **Ashley Moerke, Kristin Arend, Paul Ripple, Geoffrey Steinhart, Frank Zomer**
INFLUENCE OF LOW-ORDER TRIBUTARY INPUTS ON THE NEARSHORE DYNAMICS OF WHITEFISH BAY, LAKE SUPERIOR
- 142 **Anna Steel, Sarah Yarnell, Ryan Peek, Robert Lusardi**
NATURAL AND ANTHROPOGENIC VARIABILITY IN SPRING SNOWMELT RECESSON FLOWS AND ASSOCIATION WITH BENTHIC MACROINVERTEBRATE COMMUNITIES
- 143 **Rachel Voight, Jeremy Jones**
CARBON DIOXIDE IN STREAM DRAINING WATERSHEDS OF BOREAL FOREST STREAMS OF INTERIOR ALASKA
- 144 **Jose Schreckinger, Andrea Encalada, Alexander Flecker, Erin Larson, Dan Auerbach, Todd Walter, Brian Buchanan, James Knighton**
TOWARDS THE CONSTRUCTION OF AN ECOHYDROLOGICAL CLASSIFICATION OF STREAMS OF ECUADOR
- 145 **Megan Wiitala, Mark Gessner, Simone M.J.H. Baptiste, Lydia Oschwald, Francisco Vasquez, Kornelia Zepp**
EFFECTS OF WATER ABSTRACTION ON LITTER BREAKDOWN IN STREAMS
- 146 **Kristy Hopfensperger, James Brown, Corey Shrader**
EFFICIENCY AND FUNCTION OF URBAN STORMWATER WETLANDS

C11 Invasive Species

- 147 **Stephanie Estell**
ARE DECLINING DENSITIES OF THE INTRODUCED NEW ZEALAND MUD SNAIL (POTAMOPYRGUS ANTIPODARUM) RELATED TO CHANGES IN BENTHIC COMMUNITY STRUCTURE IN THE PAST DECADE?
- 148 **Nadine Folino-Rorem**
THE REGENERATION OF DORMANT TISSUE (MENONTS) IN THE INVASIVE HYDROID CORDYLOPHORA (PHYLUM CNIDARIA, CLASS HYDROZOA) AT VARIOUS SALINITIES
- 149 **Roger Haro, Alicia Weeks, Nathan De Jager, Gregory Sandland**
SUBMERSED AQUATIC VEGETATION AS HABITAT FOR THE INVASIVE SNAIL BITHYNIA TENTACULATA: IMPLICATIONS FOR THE TRANSMISSION OF TREMATODIASIS TO WATERFOWL
- 150 **Jenae Olson, Todd Swannack, Robert McMahon, Astrid Schwalb**
DISPERSAL OF ZEBRA MUSSELS, DREISSENA POLYMORPHA, DOWNSTREAM OF AN INVADDED RESERVOIR
- 151 **Trent Henry, Reuben Keller, Jonathon Brenner, Gabrielle Habeeb**
DISTRIBUTION AND SPREAD OF NON-NATIVE INVERTEBRATES IN THE CHICAGO AREA WATERWAY SYSTEM: IMPLICATIONS FOR INVASIONS IN THE GREAT LAKES AND MISSISSIPPI
- 152 **Robert Shields, Mario Minder, Mark Pyron**
EFFECTS OF SILVER CARP ON THE WABASH RIVER ECOSYSTEM
- 153 **Isabel Pardo, Noe Ferreira-Rodriguez**
TEMPERATURE AND NUTRIENT ENRICHMENT EFFECT ON THE INTERACTION BETWEEN EXOTIC AND NATIVE FRESHWATER BIVALVES
- 154 **Jeremy Tiemann, Mark Davis, Sarah Douglass, Kevin S. Cummings**
AMERICA'S NEWEST INVADER? - DISCOVERY OF A THIRD CORBICULA SPECIES IN ILLINOIS

C12 Invertebrate Ecology

- 155 **Matthew Cover, Haider Alkaabi, Kim Moll Lee, Janette Salinas, David Son, Taylor Young, Joe Zermeno**
AQUATIC INVERTEBRATE COMMUNITY DYNAMICS AND LIFE HISTORY PATTERNS IN THE REGULATED TUOLUMNE RIVER
- 156 **Matthew Cover, Elena Lombardo, Patricia-Ann Baker, Alfred Brennan, Derek Brewer, Jessica Gomez, Ethan Skiles, Meghan Weiby**
AQUATIC INVERTEBRATE BIODIVERSITY AND COMMUNITY DYNAMICS IN INTERMITTENT STREAMS OF CENTRAL CALIFORNIA
- 157 **Jane Mazack, Bruce Vondracek, Leonard Ferrington**
WINTER INVERTEBRATE DYNAMICS IN GROUNDWATER-FED STREAMS IN SOUTHEASTERN MINNESOTA

- 158 **Keith Pecor**
RESPONSES TO INJURED CONSPECIFICS AND HETEROSPECIFICS BY THE WATER FLEA CHYDORUS SPHAERICUS
- 159 **Susanna LaGory, Carl R. Ruetz III, Matthew E. Altenritter**
LEAF PACKS REDUCE PREDATION RISK FOR STREAM INVERTEBRATES
- 160 **Andrew Sanders, Brad Taylor**
STOICHIOMETRIC HOMEOSTASIS IN THE OLIGOCHAETE WORM THAT IS THE INVERTEBRATE HOST OF WHIRLING DISEASE
- 161 **Jose Sanchez, Pablo Gutierrez, Alonso Ramirez**
TEMPORAL AND SPATIAL PATTERNS IN MAYFLY EMERGENCE IN TROPICAL STREAMS IN PUERTO RICO
- 162 **Nicholas Gezon, Kevin Strychar, Ian Hewson**
UNDERSTANDING VIRAL PATHOGENS AND THEIR IMPACT ON IMPORTANT ENDEMIC INVERTEBRATE SPECIES
- 163 **Lee Demi, Jonathan P. Benstead, Amy Rosemond, John Maerz, Vlad Gulis, Wyatt Cross**
RESOURCE QUALITY, NOT QUANTITY, DRIVES CONSUMER PRODUCTION IN HEADWATER STREAMS: RESULTS FROM MULTIPLE N AND P ENRICHMENT EXPERIMENTS AT COWEETA
- 164 **Victoria Harris, Brian Scull, Richard Rediske**
IMPACTS OF MILL DEBRIS ON THE BENTHIC MACROINVERTEBRATE COMMUNITY IN MUSKEGON LAKE, MICHIGAN
- 165 **Kazuki Miura, Nozomi Watanabe, Junjiro Negishi**
FRESHWATER MUSSELS LINK MULTIPLE ECOSYSTEMS THROUGH PROVIDING OVERWINTERING HABITATS FOR AMPHIBIANS
- 166 **Limarie Reyes, Alonso Ramirez**
LIFE HISTORY OF PHYLLOICUS PULCHRUS (TRICHOPTERA: CALAMOCERATIDAE) IN PUERTO RICO
- 167 **Madeline S. Genco, John C. Morse**
PUPAE OF NORTH AMERICAN GLOSSOSOMATIDAE (TRICHOPTERA) GENERA
- 168 **Guilherme Gorni, Juliano Corbi, José Mello, Daniel Abrahão**
OLIGOCHAETA ASSEMBLAGE IN A NEOTROPICAL STREAM: INFLUENCE OF ENVIRONMENTAL VARIABLES
- 169 **Rebecca Zawalski, Weston Nowlin, Astrid Schwalb**
METACOMMUNITY STRUCTURING OF MACROINVERTEBRATES IN THE GUADALUPE RIVER BASIN, TX
- 170 **Matthew Cover, Julianna Avalos-Gracia, Samantha Kotelnicki, Nathan Nguyen, Hou Mai Xiong**
PHYLOGEOGRAPHY OF NEOHERMES (MEGALOPTERA: CORYDALIDAE)
- C13 Land-use and Non-Point Source Impacts**
- 171 **Stephanie Stoughton, Sally Entekin**
HOW DO URBAN INTENSITY AND ORIENTATION INFLUENCE STREAM WATER QUALITY?
- 172 **Simone Jackson**
PATTERNS IN NITROGEN STABLE ISOTOPE RATIOS IN ALGAE AND MACROINVERTEBRATES ALONG MONTANE TO URBAN STREAM GRADIENTS
- 173 **Jordan Barton, Matthew McTammany, Meghan Reilly**
IN-STREAM LEAF DECOMPOSITION AS AN INDICATOR OF MARCELLUS SHALE IMPAIRMENT ACROSS A LAND USE GRADIENT
- 174 **Petra Kranzfelder, Lian Rampi, Joseph Knight, Jennifer Corcoran, Leonard Ferrington**
REMOTE SENSING OF LAND COVER CHANGE IN TROPICAL WATERSHEDS PREDICTS DIFFERENCES IN COASTAL WATER QUALITY ALONG CARIBBEAN COAST OF COSTA RICA
- 175 **Aaron Suehring, Nels Troelstrup**
COMPARISON OF WATERSHED LANDSCAPE CHARACTERISTICS USING ATTILA WITHIN THE NORTHWESTERN GREAT PLAINS LEVEL III ECOREGION OF WESTERN SOUTH DAKOTA
- 176 **Emily Kindervater, Alan Steinman**
PHOSPHORUS RETENTION IN WEST MICHIGAN TWO-STAGE AGRICULTURAL DITCHES
- 177 **Timothy Moulton, Christine Lourenço-Amorim, Vinicius Neres-Lima, Flavia Tromboni, Thomas Heatherly, Rafael Feijó de Lima, Monalisa Silva-Araujo, Eduardo Silva-Júnior, Steven Thomas, Eugenia Zandonà**
EFFECTS OF RIPARIAN CHANGE ON PERIPHYTON ACCRUAL, NUTRIENT LIMITATION, STOICHIOMETRY AND COMPOSITION IN TROPICAL STREAMS OF ATLANTIC FOREST, BRAZIL
- C17 Organic Matter Processing**
- 178 **V. Byron Collins, Checo Colon-Gaud**
LEAF DECAY RATES AND LITTER DWELLING INVERTEBRATES IN GEORGIA COASTAL PLAIN RIVERS
- 179 **Caleb Robbins, Sarah Hester, Stephen Cook, Lauren Housley, Swastika Raut, Will Matthaeus, Erick LeBrun, Chi-Yen Tseng, Matt Garbarino, Ryan S. King**
LITTER SPECIES INFLUENCES WHOLE-STREAM MESOCOSM NUTRIENT UPTAKE AND BREAKDOWN RESPONSE TO SHADING
- 180 **Corrie Nyquist, Tracey Anderson**
EVALUATING THE ROLE OF CRAYFISH AS VECTORS OF ORGANIC MATTER IN PRAIRIE POTHOLE LAKES

C18 Population and Community Ecology

- 181 **Allison Lutz, Checo Colón-Gaud**
MACROINVERTEBRATE COMMUNITY STRUCTURE ALONG A
~200-KM STRETCH OF THE OGEECHEE RIVER
- 182 **Keysa G. Rosas, Checo Colón-Gaud, Alonso Ramírez**
HABITAT SHAPES ASSEMBLAGE COMPOSITION, PRODUCTION
AND FOODWEB STRUCTURE OF SHRIMP DOMINATED
TROPICAL ISLAND HEADWATER STREAMS
- 183 **Robert Verb, Leslie Riley, Janet Deardorff, Paige Kleindl,
Chad Carroll**
IMPACT OF SULFUR SPRING DISCHARGE ON BENTHIC
COMMUNITIES.
- 184 **Natasha Wingerter, Brian Kennedy**
MODIFICATION IN DIET DUE TO INTER-COHORT
COMPETITION AT LOW POPULATION DENSITIES IN
STEELHEAD (*ONCORHYNCHUS MYKISS*)
- 185 **Rody Seballos**
PRELIMINARY ANALYSIS OF AQUATIC COMMUNITY
STRUCTURE NEAR A LOWHEAD DAM
- 186 **Rebecca Fritz, Michaela Hayer, Rebecca Mau, Bruce
Hungate, Egbert Schwartz, Jane Marks**
APPLICATIONS FOR QUANTITATIVE STABLE ISOTOPE
PROBING IN FRESHWATER ECOLOGY
- 187 **Josian Sanchez Ruiz, Alonso Ramirez**
NATURAL HISTORY OF *TELEBASIS VULNERATA* IN PUERTO
RICO
- 188 **John Hardy, Nick Macias, brian dietterick**
ASSESSMENT OF SPATIAL AND TEMPORAL VARIANCE OF
MACROINVERTEBRATE COMMUNITY STRUCTURE, LITTLE
CREEK, DAVENPORT CA
- 189 **Núria Cid, Nuria Bonada, Pablo Rodríguez-Lozano, Biel
Obrador, Iraima Verkaik, Narcis Prat, Miguel Cañedo-
Argüelles**
MARIA RIERADEVALL (1960-2015), ECOLOGIST,
ENTOMOLOGIST, AND PROFESSOR
- 190 **Brenainn Turner, John Kelly, Nina Oforji, Ayomide
Ogunsola, Timothy Hoellein**
MICROPLASTIC REPRESENTS A DISTINCT MICROBIAL NICHE
WITHIN FRESHWATER ECOSYSTEMS
- 191 **Travis J. Ellens, Carl R. Ruetz III, Steven L. Kohler**
TOP-DOWN EFFECTS OF FISH ON BENTHIC
MACROINVERTEBRATES AND PERIPHYTON IN A MICHIGAN
STREAM
- 192 **Bolortsetseg Erdenee**
A CONTRIBUTION TO MAYFLY STUDIES OF WESTERN
MONGOLIA (INSECTA: EPHEMEROPTERA)
- 193 **Ashley Mariani, Keysa G. Rosas**
DOES RESOURCE AVAILABILITY AFFECT FOOD PREFERENCE
AND BIOMASS OF A COLLECTOR-GATHERER MAYFLY?
- 194 **Juliano Corbi, Guilherme Gorni, Thais Falcoski, Vanessa
Colombo-Corbi**
SUGAR-CANE CULTIVATION DRIVES GENETIC DIVERSITY OF
CHIRONOMIDS IN NEOTROPICAL STREAMS
- 195 **Natalie Knorp, Justin Murdock**
INVESTIGATING HERBIVORE-BIOFILM INTERACTIONS USING
INVERTEBRATE EXCLUSIONS: A DESIGN COMPARISON
- 196 **Cheryl Black**
SEASONALITY AND HABITAT PREFERENCE OF THE BLUE
DASHER DRAGONFLY, *PACHYDIPLAX LONGIPENNIS*, IN A
DISTURBED SOUTHWEST FLORIDA SWAMP SLOUGH SYSTEM



White Egret in Flight - ADOBE Stock

INDEX

T=Contributed Oral Session / S=Special Oral Session / P=Poster

- AANDERUD, Zachary S14 Multiple Stressors in River Ecosystems
- ABBOTT, Sandy S09 Conservation of Freshwater Mussels
- ABERNETHY, Erin C06 Disturbance, P119
- ABRAHÃO, Daniel C02 Bioassessment, P86, C12 Invertebrate Ecology, P168
- ABRAM, Natalie S15 Putting Your Publications to Work, P51
- ACKER, Frank S07 Challenges in Freshwater Conservation
- ACOSTA, Raúl S05 Eco-hydrology of IRES in a Changing Climate
- ACUÑA, Vicenç S14 Multiple Stressors in River Ecosystems, S19 Session for Cliff Dahm
- ADAMS, Andrea S14 Multiple Stressors in River Ecosystems
- ADAMS, Braden C10 Hydroecology
- ADAMS, Kimberly C08 Ecotoxicology, P133
- ADAMS, Rick S20 Ecological Subsidies to Stream and Riparian Ecosystems
- ADAMS, Stephen S03 Global Perspectives on Environmental Flows
- ADDISON, Nicholas S01 Future Freshwater Scientists – Undergrads, P13
- AGATA, Maya S09 Conservation of Freshwater Mussels, P32
- AKASAKA, Takumi C06 Disturbance
- ALAME, Karim C11 Invasive Species
- ALBERTS, Jeremy M. S14 Multiple Stressors in River Ecosystems
- ALEXANDER, Laurie S15 Putting Your Publications to Work
- ALEXANDER TRUSIAK, Alexa C20 Gas and Oil
- ALI, Omar S11 Next-Generation Sequencing in Freshwater Science
- ALKAABI, Haider C12 Invertebrate Ecology, P155
- ALLAN, David C02 Bioassessment
- ALLEN, Craig S07 Challenges in Freshwater Conservation
- ALLEN, Daniel S05 Eco-hydrology of IRES in a Changing Climate, S26 Exploring Trophic Relationships and Stream Food Webs, C09 Food Webs, P139 S26 Exploring Trophic Relationships and Stream Food Webs
- ALLEN, Jessie C10 Hydroecology
- ALLEY, Valerie C02 Bioassessment
- ALLISON WITT, Brenda C11 Invasive Species
- ALMEIDA, David S26 Exploring Trophic Relationships and Stream Food Webs
- ALTENRITTER, Matthew E. C12 Invertebrate Ecology, P159
- ÁLVAREZ, Maruxa S26 Exploring Trophic Relationships and Stream Food Webs
- AMALFITANO, Stefano S13 Session for Vince Resh
- AMERSON, Byron C10 Hydroecology
- ANDERSON, Alyssa S01 Future Freshwater Scientists - Undergrads, P2
- ANDERSON, Axel S10 Rivers at Risk
- ANDERSON, Chauncey C07 Ecology of Fish and Other Aquatic Vertebrates
- ANDERSON, Kayce S08 Hydroclimatic Extremes
- ANDERSON, Kurt S02 Climate and Drought Effects on Mountain Stream Ecosystems, S26 Exploring Trophic Relationships and Stream Food Webs
- ANDERSON, Tracey C17 Organic Matter Processing, P180
- ANDREWS, Jennifer C17 Organic Matter Processing
- ANGELER, David S14 Multiple Stressors in River Ecosystems; S07 Challenges in Freshwater Conservation
- ANGRADI, Ted C02 Bioassessment
- ANLANGER, Christine C10 Hydroecology
- APPLING, Alison C03 Biogeochemistry, S24 Scale and Ecosystem Functions
- ARANGO, Clay S20 Ecological Subsidies to Stream and Riparian Ecosystems, C03 Biogeochemistry, P96, S20 Ecological Subsidies to Stream and Riparian Ecosystems, P63, P59 C06 Disturbance, P120
- ARDON-SAYAO, Marcelo S01 Future Freshwater Scientists - Undergrads
- AREND, Kristin C10 Hydroecology, P141
- ARGERICH, Alba C03 Biogeochemistry, S17 Stressed Forested Watersheds, C05 Conservation and Restoration, S22 Biotic Responses to Food Web Alterations, S24 Scale and Ecosystem Functions, S26 Exploring Trophic, P55
- ARGO, Emily C05 Conservation and Restoration
- ARISMENDI, Ivan S26 Exploring Trophic Relationships and Stream Food Webs, S01 Future Freshwater Scientists - Undergrads, P1
- ARISTI, Ibon S14 Multiple Stressors in River Ecosystems
- ARMSTRONG, David C02 Bioassessment
- ARNDT, Kyle S24 Scale and Ecosystem Functions
- AROVIIITA, Jukka C18 Population and Community Ecology, S17 Stressed Forested Watersheds
- ARROITA, Maite C03 Biogeochemistry, S24 Scale and Ecosystem Functions
- ARSUFFI, Tom S07 Challenges in Freshwater Conservation
- ARTINGTON, Angela S10 Rivers at Risk
- ARTIGAS, Joan S13 Session for Vince Resh
- ARUMUGAM, Sankar S08 Hydroclimatic Extremes
- ASARIAN, Eli S16 Algal Data as a Component of Bioassessment
- ASHKENAS, Linda C05 Conservation and Restoration
- ATKINSON, Carla C04 Climate Change, S02 Climate and Drought Effects on Mountain Stream Ecosystems, P16, S04 Temporary Wetlands, P20, S09 Conservation of Freshwater Mussels, P36
- AUBENEAU, Antoine C10 Hydroecology
- AUERBACH, Dan C10 Hydroecology, P144
- AUFDENKAMPE, Anthony C02 Bioassessment
- AUMEN, Nicholas S19 Session for Cliff Dahm
- AVALOS-GRACIA, Julianna C12 Invertebrate Ecology, P170
- BAATTRUP-PEDERSEN, Annette S14 Multiple Stressors in River Ecosystems
- BACK, Jeffrey A. S25 Modeling Environmental Change in Freshwater Ecosystems, P69
- BAER, Nick S20 Ecological Subsidies to Stream and Riparian Ecosystems, P64
- BAHR, Samantha S01 Future Freshwater Scientists - Undergrads, P2
- BAILEY, John L. C02 Bioassessment, C04 Climate Change, C20 Gas and Oil, S06 Molecular Methods in Biomonitoring, C05 Conservation and Restoration, P114
- BAILEY, Robert C02 Bioassessment; S13 Session for Vince Resh
- BAIN, Bonnie S04 Temporary Wetlands, P21
- BAIRD, Donald S06 Molecular Methods in Biomonitoring, S26 Exploring Trophic Relationships and Stream Food Webs, S06 Molecular Methods in Biomonitoring, P27
- BAKER, Christina S24 Scale and Ecosystem Functions, P68
- BAKER, Christopher S26 Exploring Trophic Relationships and Stream Food Webs
- BAKER, Lucy C20 Gas and Oil
- BAKER, Matthew S14 Multiple Stressors in River Ecosystems
- BAKER, Michelle S12 Urban Stream Syndrome, S14 Multiple Stressors in River Ecosystems, S19 Session for Cliff Dahm
- BAKER, Patricia-Ann C12 Invertebrate Ecology, P156
- BALCOMBE, Stephen S05 Eco-hydrology of IRES in a Changing Climate
- BALDASSARRE, Daniel M. C10 Hydroecology
- BALDIGO, Barry S06 Molecular Methods in Biomonitoring
- BALIK, Jared C04 Climate Change, P107
- BALLANTYNE, Ford S24 Scale and Ecosystem Functions S24 Scale and Ecosystem Functions
- BANISH, Nicholas C03 Biogeochemistry
- BANISH, Nick S14 Multiple Stressors in River Ecosystems, P48
- BAPTISTE, Simone M.J.H. C10 Hydroecology, P145
- BARBOSA, Pâmela C17 Organic Matter Processing
- BARNES, Robin C02 Bioassessment, P88
- BARR, Cameron S08 Hydroclimatic Extremes
- BARRAL, Maria Teresa C08 Ecotoxicology
- BARRAL-FRAGA, Laura C08 Ecotoxicology
- BARTON, David C02 Bioassessment
- BARTON, Jordan C12 Invertebrate Ecology, C13 Land-use and Non-Point Source Impacts, P173
- BARTSCH, William S14 Multiple Stressors in River Ecosystems
- BARTSHIRE, Andrew C07 Ecology of Fish and Other Aquatic Vertebrates
- BATEMAN, Douglas S22 Biotic Responses to Food Web Alterations
- BATZER, Darold S08 Hydroclimatic Extremes
- BAUER, Candice S09 Conservation of Freshwater Mussels
- BAUER, Eric C02 Bioassessment
- BAULCH, Helen C05 Conservation and Restoration
- BAUMANN, Karen C06 Disturbance
- BAUMGARTNER, Simone S14 Multiple Stressors in River Ecosystems
- BAXA, Dolores C04 Climate Change
- BAXTER, Colden C09 Food Webs, S10 Rivers at Risk, S22 Biotic Responses to Food Web Alterations, S24 Scale and Ecosystem Functions, C01 Algae and Primary Production, P78, C09 Food Webs, P140, P137, S18 Community Engagement in Science, P58
- BEATTIE, Alicia C07 Ecology of Fish and Other Aquatic Vertebrates
- BÊCHE, Leah S13 Session for Vince Resh
- BECK, Whitney C01 Algae and Primary Production, P80
- BECKER, Jesse S26 Exploring Trophic Relationships and Stream Food Webs
- BEIKO, Rob S26 Exploring Trophic Relationships and Stream Food Webs
- BELL, Amanda C05 Conservation and Restoration

BELL, Ian	S02 Climate and Drought Effects on Mountain Stream Ecosystems	BOSCHEN, Clint	S12 Urban Stream Syndrome
BELLER, Erin	S03 Global Perspectives on Environmental Flows, S13 Session for Vince Resh	BOUCHARD, R. William	C04 Climate Change
BELLIN, Alberto	C03 Biogeochemistry, S10 Rivers at Risk	BOUCHEZ, Agnès	S06 Molecular Methods in Biomonitoring , S11 Next-Generation Sequencing in Freshwater Science, P42
BELLMORE, Ryan	C01 Algae and Primary Production, S22 Biotic Responses to Food Web Alterations	BOUDREAU, Monica	C02 Bioassessment
BELYAEVA, Anna	C18 Population and Community Ecology	BOULDIN, Jennifer	C02 Bioassessment
BENBOW, M. Eric	C11 Invasive Species S20 Ecological Subsidies to Stream and Riparian Ecosystems	BOUMA-GREGSON, Keith	S13 Session for Vince Resh, S10 Rivers at Risk, P37 C01 Algae and Primary Production
BENES, Joshua	C03 Biogeochemistry, S24 Scale and Ecosystem Functions	BOUNTRY, Jennifer	S22 Biotic Responses to Food Web Alterations
BENFIELD, E.F.	C06 Disturbance	BOURNE, Vanessa	C20 Gas and Oil
BENJAMIN, Joseph	C01 Algae and Primary Production, S22 Biotic Responses to Food Web Alterations	BOWDEN, William	S24 Scale and Ecosystem Functions, C03 Biogeochemistry, P67
BENKE, Arthur	S26 Exploring Trophic Relationships and Stream Food Webs	BOWMAN, Michelle	C02 Bioassessment
BENNETT, Micah	C10 Hydroecology, S15 Putting Your Publications to Work	BOYD, Heather	S05 Eco-hydrology of IRES in a Changing Climate
BENSTEAD, Jonathan P.	C01 Algae and Primary Production, C04 Climate Change, C13 Land-use and Non-Point Source Impacts, S14 Multiple Stressors in River Ecosystems, C12 Invertebrate Ecology, P163	BOYER, Brian	C03 Biogeochemistry
BENTSEN, Catherine	C02 Bioassessment	BRADY, Valerie	C02 Bioassessment
BERGAN, James	C10 Hydroecology	BRAM, Danielle	S05 Eco-hydrology of IRES in a Changing Climate
BERNAL, Susana	C03 Biogeochemistry, C05 Conservation and Restoration, S13 Session for Vince Resh	BRANDT, Tanja	C03 Biogeochemistry
BERNHARDT, Emily	C03 Biogeochemistry, S10 Rivers at Risk, S12 Urban Stream Syndrome , S24 Scale and Ecosystem Functions, S27 Contaminants as Agents of Ecological Change S27 Contaminants as Agents of Ecological Change	BRANTON , Michael	S11 Next-Generation Sequencing in Freshwater Science, P40
BERNOT, Melody	S14 Multiple Stressors in River Ecosystems	BRENNAN, Alfred	C12 Invertebrate Ecology, P156
BERRY, Nicole	S01 Future Freshwater Scientists - Undergrads, P9	BRENNER, Jonathon	C11 Invasive Species, P151
BERTRAND, Katie	C12 Invertebrate Ecology	BREWER, Derek	C12 Invertebrate Ecology, P156
BETTCHER, Morgan W.	S25 Modeling Environmental Change in Freshwater Ecosystems, P69	BREWER, Shannon	S03 Global Perspectives on Environmental Flows
BEYER, Jessica	C01 Algae and Primary Production, C11 Invasive Species	BREY, Thomas	S26 Exploring Trophic Relationships and Stream Food Webs
BEZERRA, Maíra	C13 Land-use and Non-Point Source Impacts	BRIGGS, Martin	C03 Biogeochemistry
BHAGAT, Yakuta	C02 Bioassessment	BRIGHAM, Joshua	S26 Exploring Trophic Relationships and Stream Food Webs, P72
BHARADWAJ, Lalita	C07 Ecology of Fish and Other Aquatic Vertebrates	BROADLEY, Hannah	S20 Ecological Subsidies to Stream and Riparian Ecosystems, P64
BIERWAGEN, Britta	S23 Traits-Based Vulnerability Assessment, S08 Hydroclimatic Extremes, P31	BROOKES, Allen	S25 Modeling Environmental Change in Freshwater Ecosystems
BINH, Chu Thi Thanh	S10 Rivers at Risk	BROOKS, Andrew	C18 Population and Community Ecology
BIRD, Matthew	S04 Temporary Wetlands, P19	BROOKS, Jacey	S20 Ecological Subsidies to Stream and Riparian Ecosystems, P61
BIRGÉ, Hannah	S07 Challenges in Freshwater Conservation	BROSSETT, Michele	S16 Algal Data as a Component of Bioassessment, P53
BISHOP, Cameron	S11 Next-Generation Sequencing in Freshwater Science	BROUGHTON, Richard	S09 Conservation of Freshwater Mussels, P33
BISHOP, Kevin	S17 Stressed Forested Watersheds	BROWN, Bryan	C18 Population and Community Ecology
BIXBY, Rebecca	C05 Conservation and Restoration	BROWN, James	C10 Hydroecology, P146
BLACK, Cheryl	C18 Population and Community Ecology, P196	BROWN, Jami	C04 Climate Change, P108
BLACK, Robert	C03 Biogeochemistry, P95	BROWN, Larry	S02 Climate and Drought Effects on Mountain Stream Ecosystems
BLADON, Kevin	S17 Stressed Forested Watersheds, P55	BROWN, Larry R.	C07 Ecology of Fish and Other Aquatic Vertebrates
BLAEN, Phillip	C10 Hydroecology	BROWN, Lee	S08 Hydroclimatic Extremes, S23 Traits-Based Vulnerability Assessment
BLANN, Kristen	S14 Multiple Stressors in River Ecosystems	BROWN, Nolan	S18 Community Engagement in Science, P58
BLANTON JOHANSEN, Rebecca	C07 Ecology of Fish and Other Aquatic Vertebrates	BROWN, Robert	C03 Biogeochemistry, P99
BLASZCZAK, Joanna	S12 Urban Stream Syndrome	BRUA, Robert B.	C02 Bioassessment, C10 Hydroecology
BLAUSTEIN, Andrew	C07 Ecology of Fish and Other Aquatic Vertebrates	BRUDER, Andreas	S14 Multiple Stressors in River Ecosystems
BLAUSTEIN, Leon	S13 Session for Vince Resh	BRUESEWITZ, Denise	C03 Biogeochemistry
BLEDSON, Brian	S03 Global Perspectives on Environmental Flows	BUCHANAN, Brian	C10 Hydroecology, P144
BLUM, Peter	C03 Biogeochemistry	BUCHWALTER, David	C04 Climate Change, C08 Ecotoxicology, S23 Traits-Based Vulnerability Assessment/Climate Change, P66
BLUMENSHINE, Steve	C07 Ecology of Fish and Other Aquatic Vertebrates	BUCKSKIN, Preston	C09 Food Webs, P137
BODNER, Gita	S05 Eco-hydrology of IRES in a Changing Climate	BUKHARI, Ahmad	S26 Exploring Trophic Relationships and Stream Food Webs
BOEGEHOLD, Anna	C11 Invasive Species, S01 Future Freshwater Scientists - Undergrads, P6	BUMPERS, Phillip	S12 Urban Stream Syndrome , C13 Land-use and Non-Point Source Impacts, P46, P43
BOERSMA, Kate	S23 Traits-Based Vulnerability Assessment/Climate Change, S01 Future Freshwater Scientists - Undergrads	BURDETT, Ayesha	S19 Session for Cliff Dahm
BOGAN, Michael	S02 Climate and Drought Effects on Mountain Stream Ecosystems, S05 Eco-hydrology of IRES in a Changing Climate, S08 Hydroclimatic Extremes, S23 Traits-Based Vulnerability Assessment/Climate Change, S01 Future Freshwater Scientists - Undergrads, P7	BURDON, Francis	S14 Multiple Stressors in River Ecosystems
BOHRMAN, Katherine	C03 Biogeochemistry, P90	BURGE, David	C02 Bioassessment
BOLLENS, Steve	C11 Invasive Species	BURGIN, Amy	C03 Biogeochemistry, P101
BOLSTER, Diogo	C17 Organic Matter Processing	BURKS, Romi	S01 Future Freshwater Scientists - Undergrads
BONADA, Nuria	C18 Population and Community Ecology, S05 Eco-hydrology of IRES in a Changing Climate, S08 Hydroclimatic Extremes, S13 Session for Vince Resh, C18 Population and Community Ecology, P189	BURLIGA, Ana	S16 Algal Data as a Component of Bioassessment
BOND, Nick	S05 Eco-hydrology of IRES in a Changing Climate	BURNS, Daniel	C05 Conservation and Restoration
BONET, Berta	C08 Ecotoxicology, S26 Exploring Trophic Relationships and Stream Food Webs	BURRES, Erick	S18 Community Engagement in Science
BONJOUR, Sophia	C05 Conservation and Restoration, C18 Population and Community Ecology	BURROWS, Ryan	S05 Eco-hydrology of IRES in a Changing Climate
		BURTON, G. Allen	S27 Contaminants as Agents of Ecological Change S14 Multiple Stressors in River Ecosystems, P50
		BYLEMANS, Jonas	S06 Molecular Methods in Biomonitoring
		BYRD, Alison	S01 Future Freshwater Scientists - Undergrads, P2
		CADENASSO, Mary	C13 Land-use and Non-Point Source Impacts, S12 Urban Stream Syndrome
		CADMUS, Pete	C08 Ecotoxicology, S10 Rivers at Risk
		CAI, Meijun	C02 Bioassessment, S14 Multiple Stressors in River Ecosystems
		CAIN, Daniel	C08 Ecotoxicology, P134
		CALDWELL, Jarvis	C10 Hydroecology
		CALDWELL, Peter	C10 Hydroecology, S03 Global Perspectives on Environmental Flows

CALHOUN, Dana	C11 Invasive Species	CLIFFORD, Sara	S05 Eco-hydrology of IRES in a Changing Climate
CALLISTO, Marcos	C02 Bioassessment	COBB, Jennifer	C02 Bioassessment
CAMERON, D. Richard	S25 Modeling Environmental Change in Freshwater Ecosystems	COFFELT, Elise	S20 Ecological Subsidies to Stream and Riparian Ecosystems, P63
CAMILLERI, Andrew	S01 Future Freshwater Scientists - Undergrads, P6	COLLINS, Alexandra	S15 Putting Your Publications to Work
CAMPBELL, Ian	S13 Session for Vince Resh	COLLINS, Joshua	S13 Session for Vince Resh
CAÑEDO-ARGÜELLES, Miguel	S07 Challenges in Freshwater Conservation, C18 Population and Community Ecology, P189	COLLINS, Katie	C05 Conservation and Restoration, C07 Ecology of Fish and Other Aquatic Vertebrates, S14 Multiple Stressors in River Ecosystems
CAO, Yong	C05 Conservation and Restoration, P112	COLLINS, V. Byron	C17 Organic Matter Processing, P178
CAPPS, Krista	C04 Climate Change, S01 Future Freshwater Scientists - Undergrads	COLOMBO-CORBI, Vanessa	C18 Population and Community Ecology, P194
CAPRILE, Jose	C03 Biogeochemistry	COLON-GAUD, Checo	S01 Future Freshwater Scientists - Undergrads, C17 Organic Matter Processing, C18 Population and Community Ecology, P182, P181, P178
CARLISLE, Daren	S02 Climate and Drought Effects on Mountain Stream Ecosystems, S03 Global Perspectives on Environmental Flows	COMMONS, Michael	S01 Future Freshwater Scientists - Undergrads, P5, P4
CARLSON, Peter	C06 Disturbance	COMPSON, Zacchaeus	C09 Food Webs, S26 Exploring Trophic Relationships and Stream Food Webs
CARLSON, Sam	C03 Biogeochemistry, C10 Hydroecology	COMTE, Lise	S23 Traits-Based Vulnerability Assessment
CARLSON, Stephanie	S05 Eco-hydrology of IRES in a Changing Climate, S01 Future Freshwater Scientists - Undergrads, P7	COOK, Christopher	C13 Land-use and Non-Point Source Impacts
CARMIGNANI, Jason	S09 Conservation of Freshwater Mussels	COOK, Stephen	C17 Organic Matter Processing, P179, S25 Modeling Environmental Change in Freshwater Ecosystems, P69
CARON, David A.	C11 Invasive Species	COOKE, Nathan	C03 Biogeochemistry
CARR, Brad	C03 Biogeochemistry	COONROD, Julie	S19 Session for Cliff Dahm
CARR, Meghan	C07 Ecology of Fish and Other Aquatic Vertebrates	COOPER, Scott	S02 Climate and Drought Effects on Mountain Stream Ecosystems, S26 Exploring Trophic Relationships and Stream Food Webs
CARROLL, Chad	C18 Population and Community Ecology, P183	COOPER, Scott D.	S13 Session for Vince Resh
CARSON, Brendan	S11 Next-Generation Sequencing in Freshwater Science, P41	CORBI, Juliano	C02 Bioassessment, P86, C12 Invertebrate Ecology, P168, C18 Population and Community Ecology, P194
CASALS, Frederic	S26 Exploring Trophic Relationships and Stream Food Webs	CORCORAN, Jennifer	C13 Land-use and Non-Point Source Impacts, P174
CASAMAYOR, Emilio	C03 Biogeochemistry, P98	CORMIER, Susan	C08 Ecotoxicology, P131
CASELLAS, Maria	S14 Multiple Stressors in River Ecosystems	CORRAL, Dominik	S01 Future Freshwater Scientists - Undergrads
CÁSSIO, Fernanda	C18 Population and Community Ecology	CORTEZ, Daniela	S03 Global Perspectives on Environmental Flows
CASTRO, Daniel	S25 Modeling Environmental Change in Freshwater Ecosystems, P71	COSTELLO, David	C01 Algae and Primary Production, S27 Contaminants as Agents of Ecological Change
CAUVY-FRAUNIE, Sophie	S02 Climate and Drought Effects on Mountain Stream Ecosystems	COSTIGAN, Katie	S05 Eco-hydrology of IRES in a Changing Climate
CAVINESS-REARDON, Kim	C05 Conservation and Restoration	COTTINGHAM, Kathryn	S20 Ecological Subsidies to Stream and Riparian Ecosystems, P64
CHALONER, Dominic	S20 Ecological Subsidies to Stream and Riparian Ecosystems	COUNIHAN, Tim	C11 Invasive Species
CHAMBERS, Patricia	C20 Gas and Oil	COURCELLES, Danielle	S07 Challenges in Freshwater Conservation
CHANDRA, Sudeep	S06 Molecular Methods in Biomonitoring	COURTENAY, Simon	C02 Bioassessment
CHANG, Hao-Yen	C06 Disturbance	COURTWRIGHT, Jennifer	C02 Bioassessment
CHANUT, Pierre	C10 Hydroecology	COURVILLE, Ashlyn	S27 Contaminants as Agents of Ecological Change
CHARA-SERNA, Ana	S14 Multiple Stressors in River Ecosystems, S26 Exploring Trophic Relationships and Stream Food Webs	COUTO, Thiago	S07 Challenges in Freshwater Conservation
CHARDON, Cecile	S06 Molecular Methods in Biomonitoring, S11 Next-Generation Sequencing in Freshwater Science, P42	COVER, Matthew	S13 Session for Vince Resh, S01 Future Freshwater Scientists - Undergrads, C12 Invertebrate Ecology, P156, P155, P170
CHATZINOTAS, Antonis	C10 Hydroecology	COVICH, Alan	C04 Climate Change
CHAUVIN, Christian	C04 Climate Change	CRAIG, Laura	S10 Rivers at Risk
CHAVES-ULLOA, Ramsa	S20 Ecological Subsidies to Stream and Riparian Ecosystems, P64	CREED, Irena	S17 Stressed Forested Watersheds, P54
CHEN, Celia	S20 Ecological Subsidies to Stream and Riparian Ecosystems, P64	CRENSHAW, Chelsea	S11 Next-Generation Sequencing in Freshwater Science, S19 Session for Cliff Dahm
CHEN, Jo-an	S02 Climate and Drought Effects on Mountain Stream Ecosystems, P14	CROMWELL, Kara	C18 Population and Community Ecology
CHEN, Kai	C02 Bioassessment	CROOK, David	S05 Eco-hydrology of IRES in a Changing Climate
CHEN, Qiwen	C01 Algae and Primary Production, C02 Bioassessment	CROSS, Wyatt	C01 Algae and Primary Production, C04 Climate Change, S14 Multiple Stressors in River Ecosystems, S17 Stressed Forested Watersheds, S24 Scale and Ecosystem Functions, S26 Exploring Trophic Relationships and Stream Food Webs, C06 Disturbance, P124, C12 Invertebrate Ecology, P163
CHEN, William	S03 Global Perspectives on Environmental Flows	CROTEAU, Marie-Noele	C08 Ecotoxicology, P134
CHESSMAN, Bruce	S23 Traits-Based Vulnerability Assessment/Climate Change, S13 Session for Vince Resh	CROWL, Todd	C04 Climate Change
CHESTNUT, Tara	C07 Ecology of Fish and Other Aquatic Vertebrates	CUFFNEY, Thomas	S03 Global Perspectives on Environmental Flows
CHIEN, Brandon	C01 Algae and Primary Production	CULLIN, Joe	C10 Hydroecology
CHIN, Anne	S01 Future Freshwater Scientists - Undergrads	CULLIS, James	S19 Session for Cliff Dahm
CHIU, Ming-Chih	C05 Conservation and Restoration, C06 Disturbance, S04 Temporary Wetlands	CULP, Joseph M.	C02 Bioassessment, C10 Hydroecology, C04 Climate Change, P110
CHIVERS, Doug	C12 Invertebrate Ecology, C13 Land-use and Non-Point Source Impacts	CUMMINGS, Kevin S.	S09 Conservation of Freshwater Mussels, C11 Invasive Species, P154
CHONOVA, Teofana	S11 Next-Generation Sequencing in Freshwater Science, P42	CURRY, Colin	S06 Molecular Methods in Biomonitoring, S26 Exploring Trophic Relationships and Stream Food Webs
CHOTKOWSKI, Mike	S19 Session for Cliff Dahm	D'AMARIO, Sarah	S08 Hydroclimatic Extremes
CHOU, Tina	S23 Traits-Based Vulnerability Assessment/Climate Change, P66	D'ANDRILLI, Juliana	C03 Biogeochemistry
CHRISTOPHER, Sheila	C03 Biogeochemistry, P91	DABNEY, Brittanie	S27 Contaminants as Agents of Ecological Change
CHUMCHAL, Matthew	S27 Contaminants as Agents of Ecological Change, C08 Ecotoxicology, P133	DAGENS, Nina	C04 Climate Change
CIBOROWSKI, Jan	C02 Bioassessment	DAHLGREN, Randy	C04 Climate Change
CID, Núria	S05 Eco-hydrology of IRES in a Changing Climate, C18 Population and Community Ecology, P189	DAHLKE, Helen	C10 Hydroecology
CLAESON, Shannon	C06 Disturbance, P122	DAHM, Clifford	S03 Global Perspectives on Environmental Flows, S11 Next-Generation Sequencing in Freshwater Science
CLANCY, Niall	C06 Disturbance, P124	DALEY, Jennifer	S27 Contaminants as Agents of Ecological Change
CLARK, Sarah	C03 Biogeochemistry, P96		
CLAY, Mallary	C12 Invertebrate Ecology		
CLEMENT, Delilah	C13 Land-use and Non-Point Source Impacts		
CLEMENTS, William	S10 Rivers at Risk, S27 Contaminants as Agents of Ecological Change C08 Ecotoxicology, S20 Ecological Subsidies to Stream and Riparian Ecosystems, S27 Contaminants as Agents of Ecological Change		

- INDEX
- DALLAS, Helen S13 Session for Vince Resh
- DALY, Marymegan S09 Conservation of Freshwater Mussels
- DAMEROW, Joan S07 Challenges in Freshwater Conservation, S13 Session for Vince Resh
- DANIELS, Melinda C02 Bioassessment
- DAOUST, Kristin S17 Stressed Forested Watersheds, P54
- DATRY, Thibault C10 Hydroecology, S05 Eco-hydrology of IRES in a Changing Climate, S24 Scale and Ecosystem Functions, S05 Eco-hydrology of IRES in a Changing Climate, P26
- DAVIDOWITZ, Goggy C04 Climate Change
- DAVIES, John-Mark C13 Land-use and Non-Point Source Impacts
- DAVIES, Peter M. S13 Session for Vince Resh
- DAVIS, Clinton S16 Algal Data as a Component of Bioassessment
- DAVIS, Mark C11 Invasive Species, P154
- DAVIS, Peter C05 Conservation and Restoration, P116
- DAVIS, Rob C13 Land-use and Non-Point Source Impacts
- DAVIS, Tyler S01 Future Freshwater Scientists - Undergrads, P12
- DAY, Jenny A. S13 Session for Vince Resh
- DE JAGER, Nathan C11 Invasive Species, P149
- DE MOOR, Ferdy C. S13 Session for Vince Resh
- DE SZALAY, Ferenc C02 Bioassessment, P89
- DEACY, William C09 Food Webs
- DEAN, Emily C09 Food Webs
- DEARDORFF, Janet C18 Population and Community Ecology, P183, S01 Future Freshwater Scientists - Undergrads, P9 S01 Future Freshwater Scientists - Undergrads, P5
- DEATH, Russell S26 Exploring Trophic Relationships and Stream Food Webs
- DECELLES, Susanna C01 Algae and Primary Production
- DECOLIBUS, Dawn C01 Algae and Primary Production, P81
- DEE, Laura S23 Traits-Based Vulnerability Assessment/Climate Change
- DEE, Martha M. C03 Biogeochemistry S10 Rivers at Risk
- DEGERMAN, Erik C06 Disturbance
- DEINER, Kristy S06 Molecular Methods in Biomonitoring
- DEL GIORGIO, Paul A. S24 Scale and Ecosystem Functions
- DELESANTRO, Joseph S12 Urban Stream Syndrome
- DELVECCHIA, Amanda G C09 Food Webs
- DEMARS, Benoit C04 Climate Change
- DEMI, Lee C12 Invertebrate Ecology, P163
- DENG, Qi S08 Hydroclimatic Extremes
- DENT, Cate S05 Eco-hydrology of IRES in a Changing Climate
- DEVLIN, Hayley S14 Multiple Stressors in River Ecosystems
- DEWALT, R. Edward C05 Conservation and Restoration, P112
- DIAMOND, Jerome S12 Urban Stream Syndrome
- DIBBLE, Kimberly S10 Rivers at Risk
- DIEBEL, Matthew S12 Urban Stream Syndrome , S16 Algal Data as a Component of Bioassessment
- DIESBURG, Kristen M. S20 Ecological Subsidies to Stream and Riparian Ecosystems
- DIETTERICK, brian S01 Future Freshwater Scientists - Undergrads, C18 Population and Community Ecology, P188
- DIGGORY, Zoey S13 Session for Vince Resh
- DIVELY, Galen C13 Land-use and Non-Point Source Impacts
- DOBASH, Courtney C05 Conservation and Restoration
- DOCHERTY, Catherine C10 Hydroecology
- DODD, Allyn S05 Eco-hydrology of IRES in a Changing Climate, P25
- DODDS, Walter S24 Scale and Ecosystem Functions, C03 Biogeochemistry, P93, P103
- DOERING, Michael S21 Balancing the Freshwater Budget
- DOIG, Lorne C07 Ecology of Fish and Other Aquatic Vertebrates
- DOLL, Jason S14 Multiple Stressors in River Ecosystems
- DOMAIZON, Isabelle S06 Molecular Methods in Biomonitoring
- DOMBROSKI, Daniel S22 Biotic Responses to Food Web Alterations
- DOMISCH, Sami S25 Modeling Environmental Change in Freshwater Ecosystems
- DONG, Xiaoli S08 Hydroclimatic Extremes
- DOODY, Thomas S12 Urban Stream Syndrome
- DOROBK, Alayna C09 Food Webs
- DOSSETT, Alice C02 Bioassessment
- DOUGLAS, Michael C06 Disturbance
- DOUGLASS, Sarah S09 Conservation of Freshwater Mussels, C11 Invasive Species, P154
- DOWNES, Barbara C18 Population and Community Ecology
- DOWNING, Beau C03 Biogeochemistry
- DOWNING, John C18 Population and Community Ecology
- DOWNS, Peter S13 Session for Vince Resh
- DOYLE, Martin S11 Next-Generation Sequencing in Freshwater Science
- DRAKARE, Stina S07 Challenges in Freshwater Conservation
- DREITZ, Victoria C05 Conservation and Restoration
- DRENNER, Ray S27 Contaminants as Agents of Ecological Change, C08 Ecotoxicology, P133
- DRUMMOND, Jen C10 Hydroecology
- DUDGEON, David C18 Population and Community Ecology, S07 Challenges in Freshwater Conservation
- DUDLEY, Tom S13 Session for Vince Resh
- DUNHAM, Jason C11 Invasive Species, S22 Biotic Responses to Food Web Alterations, S23 Traits-Based Vulnerability Assessment
- DURHAM, Susan S14 Multiple Stressors in River Ecosystems
- DURNIN, Tessa S01 Future Freshwater Scientists - Undergrads, P2
- DUTTON, Addie S24 Scale and Ecosystem Functions
- DYER, Heather C07 Ecology of Fish and Other Aquatic Vertebrates
- DYSTE, Jacob C05 Conservation and Restoration, P113
- EBERSOLE, Joe S25 Modeling Environmental Change in Freshwater Ecosystems
- ECKERSELL, Adam C01 Algae and Primary Production, P78
- ECKERT, Rebecca C17 Organic Matter Processing
- EDDY, Michele C10 Hydroecology
- EDWARDS, Patrick S18 Community Engagement in Science
- EGAN, Scott S06 Molecular Methods in Biomonitoring
- EKLÖF, Karin S17 Stressed Forested Watersheds
- EL-SABAAWI, Rana C04 Climate Change
- ELBRECHT, Vasco S06 Molecular Methods in Biomonitoring
- ELIASON, Kevin C06 Disturbance
- ELLENS, Travis J. C18 Population and Community Ecology, P191
- ELLIOTT, Katherine C10 Hydroecology
- ELLIS, Bonnie C09 Food Webs
- ELOSEGI, Arturo S14 Multiple Stressors in River Ecosystems, S17 Stressed Forested Watersheds
- ELSER, Stephen R. S25 Modeling Environmental Change in Freshwater Ecosystems, P69
- ENCALADA, Andrea C04 Climate Change, C18 Population and Community Ecology, S02 Climate and Drought Effects on Mountain Stream Ecosystems, S11 Next-Generation Sequencing in Freshwater Science, S26 Exploring Trophic Relationships and Stream Food Webs, C10 Hydroecology, P144, S02 Climate and Drought Effects on Mountain Stream Ecosystems, P16
- ENGLE, Andrea S26 Exploring Trophic Relationships and Stream Food Webs, C01 Algae and Primary Production, P79
- ENTREKIN, Sally S10 Rivers at Risk, S20 Ecological Subsidies to Stream and Riparian Ecosystems, P63, C13 Land-use and Non-Point Source Impacts, P171
- EPELE, Luis B. S14 Multiple Stressors in River Ecosystems
- ERDENEE, Bolortsetseg C18 Population and Community Ecology, P192
- ERDOZAIN, Maitane S17 Stressed Forested Watersheds
- ERICA, Garcia S24 Scale and Ecosystem Functions
- ERWIN, Andrea C02 Bioassessment
- ESPINOSA, Carmen S26 Exploring Trophic Relationships and Stream Food Webs
- ESTELL, Stephanie S01 Future Freshwater Scientists - Undergrads, P5 C11 Invasive Species, P147
- EVANS, Moriah S26 Exploring Trophic Relationships and Stream Food Webs, P73
- EVANS-WHITE, Michelle S05 Eco-hydrology of IRES in a Changing Climate, P25 C12 Invertebrate Ecology, C02 Bioassessment, P85 S24 Scale and Ecosystem Functions
- EWING, Holly S20 Ecological Subsidies to Stream and Riparian Ecosystems, P64
- FAHNER, Nicole S06 Molecular Methods in Biomonitoring , P27
- FAIR-WU, Heather S02 Climate and Drought Effects on Mountain Stream Ecosystems, P17
- FALCOSKI, Thais C18 Population and Community Ecology, P194
- FALTYS, Kaylee S09 Conservation of Freshwater Mussels
- FARRELL, Kaitlin J. S24 Scale and Ecosystem Functions
- FAUSCH, Kurt D. C04 Climate Change
- FAZI, Stefano S13 Session for Vince Resh
- FEBRIA, Catherine C05 Conservation and Restoration, C07 Ecology of Fish and Other Aquatic Vertebrates, S14 Multiple Stressors in River Ecosystems
- FEIJÓ DE LIMA, Rafael C13 Land-use and Non-Point Source Impacts, P177
- FEMINELLA, Jack W. C02 Bioassessment, C18 Population and Community Ecology, S13 Session for Vince Resh
- FENCL, Jane S05 Eco-hydrology of IRES in a Changing Climate
- FERET, Thibaut C04 Climate Change
- FERRAZ, Silvio S07 Challenges in Freshwater Conservation

- FERREIRA-RODRIGUEZ, Noe C11 Invasive Species, P153
- FERRINGTON, Leonard C04 Climate Change, C12 Invertebrate Ecology, P157, C13 Land-use and Non-Point Source Impacts, P174
- FESENMYER, Kurt C05 Conservation and Restoration
- FET, Elizabeth S10 Rivers at Risk
- FETSCHER, A. Elizabeth S05 Eco-hydrology of IRES in a Changing Climate
- FIGUEROA, Ricardo S13 Session for Vince Resh
- FIGUEROA-NIEVES, Debora C01 Algae and Primary Production, P76
- FILIPA, A. Filipa S13 Session for Vince Resh
- FILOSO, Solange C13 Land-use and Non-Point Source Impacts
- FINDLAY, Stuart S19 Session for Cliff Dahm
- FINN, Debra S02 Climate and Drought Effects on Mountain Stream Ecosystems
- FISHER, Beth C02 Bioassessment
- FISKE, Steve S08 Hydroclimatic Extremes, P31
- FITZGIBBON, Andrea C01 Algae and Primary Production
- FLAHIVE, Katie C05 Conservation and Restoration, P117
- FLECKER, Alexander C04 Climate Change, C18 Population and Community Ecology, S08 Hydroclimatic Extremes, S26 Exploring Trophic Relationships and Stream Food Webs, C01 Algae and Primary Production, P80, C10 Hydroecology, P144, S02 Climate and Drought Effects on Mountain Stream Ecosystems, P16
- FLERI, Jesse C10 Hydroecology, C06 Disturbance, P118
- FLETCHER, Dean C08 Ecotoxicology, P135
- FLINN, Michael S24 Scale and Ecosystem Functions, C07 Ecology of Fish and Other Aquatic Vertebrates, P130 S24 Scale and Ecosystem Functions
- FLOOD, Timothy S05 Eco-hydrology of IRES in a Changing Climate
- FLOTEMERSCH, Joseph S14 Multiple Stressors in River Ecosystems
- FLUET-CHOUINARD, Etienne S12 Urban Stream Syndrome
- FOGG, Katie C10 Hydroecology
- FOLEGOT, Silvia C10 Hydroecology, S05 Eco-hydrology of IRES in a Changing Climate, P26
- FOLINO-ROREM, Nadine C11 Invasive Species, P148
- FOLLSTAD SHAH, Jennifer S19 Session for Cliff Dahm
- FOREMAN, Christine C03 Biogeochemistry
- FORK, Megan S12 Urban Stream Syndrome
- FORTINO, Kenneth C17 Organic Matter Processing
- FORTUÑO, Pau S05 Eco-hydrology of IRES in a Changing Climate
- FOX, Eric S25 Modeling Environmental Change in Freshwater Ecosystems
- FRAINER, André S21 Balancing the Freshwater Budget
- FRANCOEUR, Steve C01 Algae and Primary Production
- FRANSEN, Paul S11 Next-Generation Sequencing in Freshwater Science
- FRANSON, Garrett S20 Ecological Subsidies to Stream and Riparian Ecosystems, P63
- FRAUENDORF, Therese C. C04 Climate Change
- FRAZIER, Heather S12 Urban Stream Syndrome
- FREEMAN, Mary S26 Exploring Trophic Relationships and Stream Food Webs, C02 Bioassessment, P84
- FREMIER, Alexander S06 Molecular Methods in Biomonitoring, C01 Algae and Primary Production
- FRENETTE, Brian S24 Scale and Ecosystem Functions
- FRIEDMAN, Clara S09 Conservation of Freshwater Mussels, P32
- FRITZ, Kelley S04 Temporary Wetlands, S20 Ecological Subsidies to Stream and Riparian Ecosystems, P61
- FRITZ, Rebecca C18 Population and Community Ecology, P186
- FRUGET, Jean-François C04 Climate Change
- FRYXELL, David C04 Climate Change
- FULGONI, Jessica C05 Conservation and Restoration, S08 Hydroclimatic Extremes, S20 Ecological Subsidies to Stream and Riparian Ecosystems, P61
- FULLER, Chris C12 Invertebrate Ecology, C02 Bioassessment, P85
- FULLER, Christopher C08 Ecotoxicology, P134
- FULLER, Matthew S11 Next-Generation Sequencing in Freshwater Science
- FUNK, Chris S08 Hydroclimatic Extremes, S11 Next-Generation Sequencing in Freshwater Science
- FUNK, David C04 Climate Change, S23 Traits-Based Vulnerability Assessment/Climate Change, P66
- FÜREDER, Leopold S25 Modeling Environmental Change in Freshwater Ecosystems
- FUREY, Paula C01 Algae and Primary Production, S14 Multiple Stressors in River Ecosystems
- FURLAN, Elise S06 Molecular Methods in Biomonitoring
- FURNISH, Joseph C05 Conservation and Restoration
- GACIA, Esperança C03 Biogeochemistry, C05 Conservation and Restoration
- GAHAGAN, Ben C07 Ecology of Fish and Other Aquatic Vertebrates
- GAILLARD, Jean-Francois S10 Rivers at Risk
- GALIC, Nika S26 Exploring Trophic Relationships and Stream Food Webs
- GALLART, Francesc S05 Eco-hydrology of IRES in a Changing Climate
- GAMLEN-GREENE, Roseanna C03 Biogeochemistry
- GANTZ, Crysta S06 Molecular Methods in Biomonitoring
- GARBARINO, Matt C17 Organic Matter Processing, P179
- GARCIA, Erica S26 Exploring Trophic Relationships and Stream Food Webs
- GARCIA, Liliana S17 Stressed Forested Watersheds
- GARCIA-BERTHOU, Emili S26 Exploring Trophic Relationships and Stream Food Webs
- GARMAN, Emily S27 Contaminants as Agents of Ecological Change
- GARONO, Ralph S14 Multiple Stressors in River Ecosystems
- GASCHO LANDIS, Andrew S09 Conservation of Freshwater Mussels
- GASITH, Avital S05 Eco-hydrology of IRES in a Changing Climate, S13 Session for Vince Resh
- GASKILL, Jacob C01 Algae and Primary Production
- GELHAUS, Jon C02 Bioassessment, P83
- GELZER, Hailey S24 Scale and Ecosystem Functions
- GENCO, Madeline S. C12 Invertebrate Ecology, P167
- GENDASZEK, Andrew C10 Hydroecology
- GENZOLI, Laurel C03 Biogeochemistry, S08 Hydroclimatic Extremes
- GEORGE, Scott S06 Molecular Methods in Biomonitoring
- GERIG, Brandon S20 Ecological Subsidies to Stream and Riparian Ecosystems
- GERTH, William S22 Biotic Responses to Food Web Alterations
- GESSNER, Mark C10 Hydroecology, P145
- GEZON, Nicholas C12 Invertebrate Ecology, P162
- GIAM, Xingli C18 Population and Community Ecology
- GIBSON, Cathy C05 Conservation and Restoration
- GIBSON, Joel S06 Molecular Methods in Biomonitoring
- GIDO, Keith C18 Population and Community Ecology, S24 Scale and Ecosystem Functions
- GIERSCH, J. Joseph S11 Next-Generation Sequencing in Freshwater Science
- GILES, Courtney S24 Scale and Ecosystem Functions
- GILL, Brian S11 Next-Generation Sequencing in Freshwater Science
- GILL, Jacquelyn C04 Climate Change
- GINEBREDA, Antoni S13 Session for Vince Resh
- GINGER, Luke S14 Multiple Stressors in River Ecosystems
- GIRARD, Carlin S14 Multiple Stressors in River Ecosystems
- GISLASON, Gisli C01 Algae and Primary Production, C04 Climate Change, S14 Multiple Stressors in River Ecosystems
- GISLASON, Gisli Mar C04 Climate Change
- GITELMAN, Alix S23 Traits-Based Vulnerability Assessment/Climate Change
- GLEESON, Dianne S06 Molecular Methods in Biomonitoring
- GLEICK, Peter
- GLENJARMAN, Nicola C07 Ecology of Fish and Other Aquatic Vertebrates
- GLIDEWELL, Daniella L. C01 Algae and Primary Production
- GLOZIER, Nancy C20 Gas and Oil
- GOBER, Charlie S27 Contaminants as Agents of Ecological Change
- GOEBEL, P. Charles S05 Eco-hydrology of IRES in a Changing Climate
- GOEDKOOP, Willem C04 Climate Change, P110
- GOELLER, Brandon S14 Multiple Stressors in River Ecosystems
- GOITIA, Edgar S05 Eco-hydrology of IRES in a Changing Climate
- GOLDBERG, Caren S06 Molecular Methods in Biomonitoring
- GOLDKUHL, Regina S20 Ecological Subsidies to Stream and Riparian Ecosystems, P61
- GOMEZ, Jessica C12 Invertebrate Ecology, P156
- GOODMAN, Ina C03 Biogeochemistry, P92
- GOODMAN, Keli C03 Biogeochemistry, S24 Scale and Ecosystem Functions
- GOODWIN, Adam S17 Stressed Forested Watersheds
- GOODWIN, Peter S03 Global Perspectives on Environmental Flows
- GOOSEFF, Michael S19 Session for Cliff Dahm
- GORNI, Guilherme C02 Bioassessment, P86, C12 Invertebrate Ecology, P168, C18 Population and Community Ecology, P194
- GOSS, Charles S05 Eco-hydrology of IRES in a Changing Climate
- GOULD, Drusilla S18 Community Engagement in Science, P58
- GOVEDICH, Fredric S04 Temporary Wetlands, P21
- GRABER, Brian S10 Rivers at Risk

- GRAÇA, Manuel C04 Climate Change, C18 Population and Community Ecology
 GRACE, James S26 Exploring Trophic Relationships and Stream Food Webs
 GRACE, Michael S10 Rivers at Risk, S27 Contaminants as Agents of Ecological Change
 GRADY, Jessica C07 Ecology of Fish and Other Aquatic Vertebrates
 GRAEBER, Daniel S14 Multiple Stressors in River Ecosystems
 GRAF, Daniel L. S09 Conservation of Freshwater Mussels
 GRAF, Wolfram S11 Next-Generation Sequencing in Freshwater Science
 GRAHAM, Jon C09 Food Webs
 GRAHAM, Lisa C04 Climate Change
 GRANTHAM, Ted S02 Climate and Drought Effects on Mountain Stream Ecosystems
 GRAPENTINE, Lee C08 Ecotoxicology
 GRAY, Kimberly S10 Rivers at Risk
 GREBE, Eva C07 Ecology of Fish and Other Aquatic Vertebrates
 GREENHILL, Frank S27 Contaminants as Agents of Ecological Change
 GREER, Julian S08 Hydroclimatic Extremes
 GREGORY, Stan S19 Session for Cliff Dahm
 GREIG, Hamish C04 Climate Change, C06 Disturbance, C10 Hydroecology, S26 Exploring Trophic Relationships and Stream Food Webs
 GRIFFITH, Michael C08 Ecotoxicology
 GRIFFITHS, Natalie A. S24 Scale and Ecosystem Functions
 GRIFFITHS, Ronald C11 Invasive Species
 GRIMM, Nancy S12 Urban Stream Syndrome
 GROCCOTT, Michael C10 Hydroecology
 GROFFMAN, Peter S12 Urban Stream Syndrome
 GROMAN, Hazel C05 Conservation and Restoration, P117
 GROSS, Shana S09 Conservation of Freshwater Mussels
 GROSSINGER, Robin S13 Session for Vince Resh
 GROWNS, Ivor S03 Global Perspectives on Environmental Flows
 GRUDZINSKI, Bartosz C02 Bioassessment
 GUERRA, Victor S25 Modeling Environmental Change in Freshwater Ecosystems, P71
 GUERRERO, Francisco S25 Modeling Environmental Change in Freshwater Ecosystems
 GUGLIELMI, Stefania C01 Algae and Primary Production
 GUINEY, Molly S09 Conservation of Freshwater Mussels, P32
 GUINNIP, James S24 Scale and Ecosystem Functions, C03 Biogeochemistry, P103
 GULIS, Vlad C13 Land-use and Non-Point Source Impacts, C17 Organic Matter Processing, C12 Invertebrate Ecology, P163
 GUNN, John C05 Conservation and Restoration, P114
 GUO, Junting S17 Stressed Forested Watersheds, P54
 GUTIERREZ, Pablo C12 Invertebrate Ecology, P161
 GUY, Christopher S24 Scale and Ecosystem Functions
 GUYETTE, Margaret S14 Multiple Stressors in River Ecosystems
 HAAG, Scott S07 Challenges in Freshwater Conservation
 HAASE, Peter S25 Modeling Environmental Change in Freshwater Ecosystems
 HABEEB, Gabrielle C11 Invasive Species, P151
 HADDAWAY, Neal S15 Putting Your Publications to Work
 HAFS, Andrew S17 Stressed Forested Watersheds
 HAGHKERDAR, Jessica C06 Disturbance
 HAGLER, Megan S08 Hydroclimatic Extremes
 HAIN, Ernie S03 Global Perspectives on Environmental Flows
 HAJIBABAEI, Mehrdad S06 Molecular Methods in Biomonitoring , S26 Exploring Trophic Relationships and Stream Food Webs, S06 Molecular Methods in Biomonitoring , P27
 HALL, Kim S15 Putting Your Publications to Work
 HALL, Robert C03 Biogeochemistry, S24 Scale and Ecosystem Functions
 HALL, Robert O. S08 Hydroclimatic Extremes, C03 Biogeochemistry, P92
 HALLIDAYSCHULT, Thayer C01 Algae and Primary Production, C11 Invasive Species
 HALLSTAN, Simon S14 Multiple Stressors in River Ecosystems
 HALVORSON, Halvor C12 Invertebrate Ecology, C02 Bioassessment, P85
 HAMBRIGHT, K. David C01 Algae and Primary Production, C11 Invasive Species
 HAMILTON, Anna S23 Traits-Based Vulnerability Assessment, S08 Hydroclimatic Extremes, P31
 HAMILTON, Jasmine C18 Population and Community Ecology
 HAMILTON, Stephen C03 Biogeochemistry, S27 Contaminants as Agents of Ecological Change, C03 Biogeochemistry, P100
 HAMILTON, Steven W. S04 Temporary Wetlands, P23
 HAMMER, Edward S09 Conservation of Freshwater Mussels
 HAMMOCK, Bruce S02 Climate and Drought Effects on Mountain Stream Ecosystems
 HAMPEL, Henrietta S02 Climate and Drought Effects on Mountain Stream Ecosystems
 HANNAH, David C10 Hydroecology, S23 Traits-Based Vulnerability Assessment
 HANRAHAN, Brittany C03 Biogeochemistry, C13 Land-use and Non-Point Source Impacts, C03 Biogeochemistry, P91
 HARDING, Jon C02 Bioassessment, C03 Biogeochemistry, C05 Conservation and Restoration, C07 Ecology of Fish and Other Aquatic Vertebrates, S14 Multiple Stressors in River Ecosystems
 HARDY, Christopher S06 Molecular Methods in Biomonitoring
 HARDY, John C18 Population and Community Ecology, P188
 HARLAN, David C10 Hydroecology
 HARMS, Tamara S24 Scale and Ecosystem Functions, P68
 HARNER, Mary S19 Session for Cliff Dahm
 HARO, Roger C11 Invasive Species, P149
 HARRINGTON, Rachel S08 Hydroclimatic Extremes
 HARRIS, Anna S26 Exploring Trophic Relationships and Stream Food Webs, C05 Conservation and Restoration, P111
 HARRIS, Victoria C12 Invertebrate Ecology, P164
 HARRISON, Anna S14 Multiple Stressors in River Ecosystems, P50
 HARTMAN, Kyle S17 Stressed Forested Watersheds
 HARTSELL, Andy C10 Hydroecology
 HARVEY, Bret S22 Biotic Responses to Food Web Alterations
 HARVEY, Jud S24 Scale and Ecosystem Functions
 HASSETT, Michael S18 Community Engagement in Science, P57
 HATZENBUHLER, Chelsea S06 Molecular Methods in Biomonitoring
 HAUER, Richard C05 Conservation and Restoration
 HAUETER, Jaime C03 Biogeochemistry
 HAUSNER, Mark S07 Challenges in Freshwater Conservation
 HAWES, Ian C01 Algae and Primary Production
 HAWKE, David C03 Biogeochemistry
 HAWKINS, Charles C04 Climate Change, S10 Rivers at Risk, S14 Multiple Stressors in River Ecosystems, P49
 HAWLEY, Robert S10 Rivers at Risk
 HAYER, Michaela C18 Population and Community Ecology, P186
 HAYES, Sean S26 Exploring Trophic Relationships and Stream Food Webs
 HAYFORD, Barbara C04 Climate Change
 HEASTON, Emily S20 Ecological Subsidies to Stream and Riparian Ecosystems, P60
 HEATHERLY, Thomas C13 Land-use and Non-Point Source Impacts, P177
 HEATON, Sylvia C03 Biogeochemistry
 HEBBLEWHITE, Mark C05 Conservation and Restoration
 HEDDEN, Skyler S24 Scale and Ecosystem Functions
 HEFFERNAN, Jim S12 Urban Stream Syndrome , S24 Scale and Ecosystem Functions
 HEIKER, Laura S20 Ecological Subsidies to Stream and Riparian Ecosystems
 HEINRICH, Kaleb C09 Food Webs
 HELLGREN, Eric S26 Exploring Trophic Relationships and Stream Food Webs
 HELMS, Brian C02 Bioassessment, C12 Invertebrate Ecology
 HELTON, Ashley C03 Biogeochemistry, S24 Scale and Ecosystem Functions
 HENDERSON, Andrew S08 Hydroclimatic Extremes
 HENDERSON, Robin C05 Conservation and Restoration
 HENEBERRY, Jocelyne C04 Climate Change
 HENNEMAN, Emily S01 Future Freshwater Scientists - Undergrads, P9
 HENNING, Lauren C07 Ecology of Fish and Other Aquatic Vertebrates, P127
 HENRY, Brianna S20 Ecological Subsidies to Stream and Riparian Ecosystems
 HENRY, Trent C11 Invasive Species, P151
 HERB, William S14 Multiple Stressors in River Ecosystems
 HERBST, Dave S02 Climate and Drought Effects on Mountain Stream Ecosystems
 HERLIHY, Alan C02 Bioassessment
 HERMOSO, Virgilio S25 Modeling Environmental Change in Freshwater Ecosystems
 HERNANDEZ, Bianca C18 Population and Community Ecology
 HERNANDEZ, Christopher S01 Future Freshwater Scientists - Undergrads, P7
 HERNANDEZ , Hailey S11 Next-Generation Sequencing in Freshwater Science, P40
 HERRERA-R, Guido A C07 Ecology of Fish and Other Aquatic Vertebrates, C05 Conservation and Restoration, P115
 HERSHEY, Anne C03 Biogeochemistry, C06 Disturbance, C03 Biogeochemistry, P99, S26 Exploring Trophic Relationships and Stream Food Webs, P72
 HERSHKOVITZ, Yaron S13 Session for Vince Resh
 HESTER, Sarah C17 Organic Matter Processing, P179
 HEWSON, Ian C12 Invertebrate Ecology, P162
 HIGGINS, Patrick S18 Community Engagement in Science
 HIGGS, Sophie S24 Scale and Ecosystem Functions, C03 Biogeochemistry, P93

HILD, Joanne	S18 Community Engagement in Science	JACKSON, Simone	C13 Land-use and Non-Point Source Impacts, P172
HILL, Ryan	S14 Multiple Stressors in River Ecosystems, S25 Modeling Environmental Change in Freshwater Ecosystems	JACOBSEN, Dean	C04 Climate Change
HIRT, Claire	C13 Land-use and Non-Point Source Impacts	JACOBUS, Luke	C18 Population and Community Ecology
HIX, Lucas	S26 Exploring Trophic Relationships and Stream Food Webs	JAEGER, Anna	C10 Hydroecology
HOCH-MELLUISH, Patricia	C03 Biogeochemistry	JAEGER, Kristin	S05 Eco-hydrology of IRES in a Changing Climate
HOEINGHAUS, David	S24 Scale and Ecosystem Functions	JÄHNIG, Sonja	S23 Traits-Based Vulnerability Assessment/Climate Change
HOELLEIN, Timothy	C18 Population and Community Ecology, P190, S10 Rivers at Risk, P39	JANETSKI, David	S20 Ecological Subsidies to Stream and Riparian Ecosystems, C07 Ecology of Fish and Other Aquatic Vertebrates, P126
HOFFMAN, Joel	S06 Molecular Methods in Biomonitoring	JANKO, Assefa Mitike	S07 Challenges in Freshwater Conservation
HOFFMANN, Andreas	S13 Session for Vince Resh	JANKOWSKI, Kathijo	S07 Challenges in Freshwater Conservation, P29
HOLLAND, Angela	S26 Exploring Trophic Relationships and Stream Food Webs	JANSSON, Roland	S21 Balancing the Freshwater Budget
HOLLIS, Jonathan	S20 Ecological Subsidies to Stream and Riparian Ecosystems, P62	JARDINE, Tim	C05 Conservation and Restoration, C07 Ecology of Fish and Other Aquatic Vertebrates, C12 Invertebrate Ecology
HOLMES, Elizabeth	S08 Hydroclimatic Extremes	JARECKE, Karla	C03 Biogeochemistry, P101
HOLT, Courtney	S08 Hydroclimatic Extremes	JEFFERSON, Anne	C03 Biogeochemistry, P105
HOLTEL, Zachary	C07 Ecology of Fish and Other Aquatic Vertebrates	JELLYMAN, Phillip	S26 Exploring Trophic Relationships and Stream Food Webs
HOLTGRIEVE, Gordon	C03 Biogeochemistry	JENNINGS, Greg	C02 Bioassessment
HOLTSCHLAG, David	S03 Global Perspectives on Environmental Flows	JENSEN, Tinna M.	S14 Multiple Stressors in River Ecosystems
HONDULA, Kelly	S21 Balancing the Freshwater Budget	JENT, Derrick	S24 Scale and Ecosystem Functions
HOOD, James	C04 Climate Change, S14 Multiple Stressors in River Ecosystems	JERDE, Christopher	S06 Molecular Methods in Biomonitoring
HOOD, Jim	C01 Algae and Primary Production	JERECZEK, John	S14 Multiple Stressors in River Ecosystems
HOOKER, Katherine V.	S25 Modeling Environmental Change in Freshwater Ecosystems, C01 Algae and Primary Production, P69	JESSUP, Benjamin	C02 Bioassessment C02 Bioassessment
HOOTEN, Mevin B.	C04 Climate Change	JETZ, Walter	S25 Modeling Environmental Change in Freshwater Ecosystems
HOOVER, Ruth	S01 Future Freshwater Scientists – Undergrads	JEYASINGH, Puni	C03 Biogeochemistry
HOPFENSBERGER, Kristy	C10 Hydroecology, P146	JOHNSON, Amelia	C07 Ecology of Fish and Other Aquatic Vertebrates
HOPPELER, Felicitas	S02 Climate and Drought Effects on Mountain Stream Ecosystems	JOHNSON, DeShawn	C02 Bioassessment, P89
HORNBACK, Dan	S09 Conservation of Freshwater Mussels, P32	JOHNSON, Lucinda	C02 Bioassessment, S14 Multiple Stressors in River Ecosystems
HORNBERGER, Michelle	S27 Contaminants as Agents of Ecological Change, P74	JOHNSON, Nicholas	C11 Invasive Species
HORNE, Avril	S03 Global Perspectives on Environmental Flows	JOHNSON, Olivia	S11 Next-Generation Sequencing in Freshwater Science, P41
HORWITZ, Richard	S07 Challenges in Freshwater Conservation	JOHNSON, Philip	C01 Algae and Primary Production, C04 Climate Change S14 Multiple Stressors in River Ecosystems
HOTALING, Scott	S11 Next-Generation Sequencing in Freshwater Science	JOHNSON, Pieter	C11 Invasive Species, C12 Invertebrate Ecology
HOTCHKISS, Erin R.	S24 Scale and Ecosystem Functions	JOHNSON, Richard	S07 Challenges in Freshwater Conservation, S14 Multiple Stressors in River Ecosystems
HOUGH, Palmer	S21 Balancing the Freshwater Budget	JOHNSON, Scott	S05 Eco-hydrology of IRES in a Changing Climate
HOUSLEY, Lauren	C17 Organic Matter Processing, P179, S25 Modeling Environmental Change in Freshwater Ecosystems, P69	JOHNSON, Sherri	C05 Conservation and Restoration, S26 Exploring Trophic Relationships and Stream Food Webs
HOVE, Mark	S09 Conservation of Freshwater Mussels, P32	JOHNSON, Sherri	S17 Stressed Forested Watersheds, P55
HOWARD, Jeanette	C05 Conservation and Restoration, S02 Climate and Drought Effects on Mountain Stream Ecosystems, S03 Global Perspectives on Environmental Flows	JONASSON, Aron Dalin	C04 Climate Change
HRUSKA, Jakob	C03 Biogeochemistry	JONES, Adriane C.	C11 Invasive Species
HSIAO, Janet	S01 Future Freshwater Scientists – Undergrads	JONES, Jeremy	S26 Exploring Trophic Relationships and Stream Food Webs, C10 Hydroecology, P143, S24 Scale and Ecosystem Functions, P68
HUBLER, Shannon	S16 Algal Data as a Component of Bioassessment	JONES, Nicholas	S20 Ecological Subsidies to Stream and Riparian Ecosystems
HUDSON, Michelle	S27 Contaminants as Agents of Ecological Change, S14 Multiple Stressors in River Ecosystems, P50	JONES, Paul	C07 Ecology of Fish and Other Aquatic Vertebrates
HUGENY, Bernard	S05 Eco-hydrology of IRES in a Changing Climate	JORDAAN, Adrian	C07 Ecology of Fish and Other Aquatic Vertebrates
HUGHES, Jane	S11 Next-Generation Sequencing in Freshwater Science	JORDAN, Steve	S11 Next-Generation Sequencing in Freshwater Science
HUGHES, Robert	C02 Bioassessment	JULIUS, Susan	S23 Traits-Based Vulnerability Assessment
HULTINE, Kevin	C09 Food Webs, P139	JUNKER, James	C03 Biogeochemistry, C04 Climate Change
HUNGATE, Bruce	C05 Conservation and Restoration, C18 Population and Community Ecology, P186	JUSTUS, Billy	C02 Bioassessment
HUNSAKER, Carolyn	S02 Climate and Drought Effects on Mountain Stream Ecosystems	KAHLERT, Maria	S06 Molecular Methods in Biomonitoring
HUNT, Darrin	C04 Climate Change, P106	KAISER, Chad	C12 Invertebrate Ecology
HUNT, Lisa	C05 Conservation and Restoration, S13 Session for Vince Resh	KAJI, Raina	C13 Land-use and Non-Point Source Impacts
HUNTER, Brooke	S09 Conservation of Freshwater Mussels, P32	KAKOUEI, Karan	S23 Traits-Based Vulnerability Assessment/Climate Change
HURWOOD, David A	S11 Next-Generation Sequencing in Freshwater Science	KALLA, Katalin	C10 Hydroecology
HURYN, Alexander	C01 Algae and Primary Production, C04 Climate Change, C06 Disturbance, S14 Multiple Stressors in River Ecosystems, S26 Exploring Trophic Relationships and Stream Food Webs	KAMAE, Sabrina Kamae	S16 Algal Data as a Component of Bioassessment, P52
HYMAN, Amanda	C10 Hydroecology	KANN, Jacob	C01 Algae and Primary Production, S16 Algal Data as a Component of Bioassessment
INGERSOLL, Christopher	S09 Conservation of Freshwater Mussels	KARRAKER, Nancy E.	C18 Population and Community Ecology
INSA, Sara	S14 Multiple Stressors in River Ecosystems	KASHIAN, Donna	C11 Invasive Species, C04 Climate Change, P106, S01 Future Freshwater Scientists - Undergrads, P6
IRBAS, Working Group of	S05 Eco-hydrology of IRES in a Changing Climate	KATZ, Steve	S08 Hydroclimatic Extremes
IRELAND, Alexis	C06 Disturbance	KAUFMANN, Philip	C02 Bioassessment
ISAAK, Daniel	S10 Rivers at Risk	KAUSHAL, Sujay	S12 Urban Stream Syndrome
IZRAL, Natalie	C02 Bioassessment	KAUTZA, Adam	S14 Multiple Stressors in River Ecosystems
IZURIETA, Clemente	C03 Biogeochemistry	KAYABA, Yuichi	C10 Hydroecology
JACKSON, John	C04 Climate Change, S07 Challenges in Freshwater Conservation, S13 Session for Vince Resh	KAYLOR, Matthew	S02 Climate and Drought Effects on Mountain Stream Ecosystems
JACKSON, Neal	C07 Ecology of Fish and Other Aquatic Vertebrates, P130	KECK, François	S06 Molecular Methods in Biomonitoring , S11 Next-Generation Sequencing in Freshwater Science, P42
		KEEBLE-TOLL, Alexandria	C08 Ecotoxicology, P132

- KEFFORD, Ben S03 Global Perspectives on Environmental Flows, S23 Traits-Based Vulnerability Assessment
- KELLER, David S07 Challenges in Freshwater Conservation
- KELLER, Irene S06 Molecular Methods in Biomonitoring , P28
- KELLER, Reuben C11 Invasive Species, P151
- KELLER, Toralf C10 Hydroecology
- KELLY, John S10 Rivers at Risk, S12 Urban Stream Syndrome , C18 Population and Community Ecology, P190, S11 Next-Generation Sequencing in Freshwater Science, P41
- KELLY, John R. S06 Molecular Methods in Biomonitoring
- KELSO, Julia E S12 Urban Stream Syndrome
- KEMP, Stanley C13 Land-use and Non-Point Source Impacts
- KEMPF, Larissa S01 Future Freshwater Scientists - Undergrads, P2
- KENDRICK, Michael C06 Disturbance
- KENNARD, Mark S05 Eco-hydrology of IRES in a Changing Climate
- KENNEDY, Brian C07 Ecology of Fish and Other Aquatic Vertebrates, C18 Population and Community Ecology, P184
- KENNEDY, James S27 Contaminants as Agents of Ecological Change
- KENNEDY, Ted S10 Rivers at Risk
- KENNEDY, Theodore C10 Hydroecology, C12 Invertebrate Ecology, S22 Biotic Responses to Food Web Alterations, C06 Disturbance, P119
- KENNEN, Jonathan S03 Global Perspectives on Environmental Flows
- KERBY, Jake S20 Ecological Subsidies to Stream and Riparian Ecosystems
- KEYPORT, Samantha S11 Next-Generation Sequencing in Freshwater Science, P41
- KHAMIS, Kieran S23 Traits-Based Vulnerability Assessment
- KHAZAN, Emily C07 Ecology of Fish and Other Aquatic Vertebrates, P125
- KIDD, Karen S17 Stressed Forested Watersheds
- KIESEL, Jens S23 Traits-Based Vulnerability Assessment/Climate Change
- KIESER, Mark C03 Biogeochemistry
- KIFFNEY, Peter S17 Stressed Forested Watersheds
- KIM, Brian S01 Future Freshwater Scientists - Undergrads, P11
- KINCAID, Dustin C03 Biogeochemistry, P100
- KINDERVATER, Emily C13 Land-use and Non-Point Source Impacts, P176
- KING, Alison S03 Global Perspectives on Environmental Flows
- KING, Ian S06 Molecular Methods in Biomonitoring
- KING, Nicole C12 Invertebrate Ecology
- KING, Ryan S. C02 Bioassessment, C17 Organic Matter Processing, P179, S25 Modeling Environmental Change in Freshwater Ecosystems, P69
- KING, Whitney C03 Biogeochemistry
- KINGSFORD, Richard S03 Global Perspectives on Environmental Flows
- KINNISON, Michael C04 Climate Change
- KINSMAN-COSTELLO, Lauren S27 Contaminants as Agents of Ecological Change, C03 Biogeochemistry, P105
- KIRK, Andrew S26 Exploring Trophic Relationships and Stream Food Webs
- KIRSCHMAN, Lucas S04 Temporary Wetlands
- KIT, Nicole T.K. C18 Population and Community Ecology
- KJER, Karl S11 Next-Generation Sequencing in Freshwater Science
- KLAAR, Megan C10 Hydroecology, S08 Hydroclimatic Extremes
- KLAUSMEYER, Kirk C05 Conservation and Restoration
- KLEINDL, Paige C18 Population and Community Ecology, P183, S01 Future Freshwater Scientists - Undergrads, P4, P9
- KLEMMER, Amanda C04 Climate Change
- KNAPP, Julia C10 Hydroecology
- KNEITEL, Jamie S04 Temporary Wetlands
- KNIGHT, Joseph C13 Land-use and Non-Point Source Impacts, P174
- KNIGHTON, James C10 Hydroecology, P144
- KNORP, Natalie S26 Exploring Trophic Relationships and Stream Food Webs, C18 Population and Community Ecology, P195
- KNYSH, Kyle C02 Bioassessment
- KOCH, Ben C05 Conservation and Restoration
- KÖCK, Günter S27 Contaminants as Agents of Ecological Change, P75
- KOENIG, Lauren C03 Biogeochemistry, S24 Scale and Ecosystem Functions
- KOHLER, Brady C03 Biogeochemistry
- KOHLER, Steven L. C18 Population and Community Ecology, P191
- KOHLER, Tyler S19 Session for Cliff Dahm
- KOLB, Ruth C02 Bioassessment, S12 Urban Stream Syndrome
- KOMINOSKI, John S. C13 Land-use and Non-Point Source Impacts, S08 Hydroclimatic Extremes, S24 Scale and Ecosystem Functions
- KONDOLF, G. Mathias S13 Session for Vince Resh
- KONDRATIEFF, Boris S08 Hydroclimatic Extremes, S11 Next-Generation Sequencing in Freshwater Science
- KONRAD, Christopher S03 Global Perspectives on Environmental Flows, C03 Biogeochemistry, P95
- KOONTZ, Elliot C06 Disturbance
- KOPP, Darin S05 Eco-hydrology of IRES in a Changing Climate, C09 Food Webs, P139
- KORTENHOEVEN, Eric S10 Rivers at Risk
- KOTALIK, Christopher C08 Ecotoxicology
- KOTELNICKI, Samantha C12 Invertebrate Ecology, P170
- KOTLER, Burt S13 Session for Vince Resh
- KOVALENKO, Katya C02 Bioassessment
- KOZAREK, Jessica S09 Conservation of Freshwater Mussels, P32
- KRABBENHOFT, Corey C11 Invasive Species, S19 Session for Cliff Dahm
- KRAM, Pavel C03 Biogeochemistry
- KRANZFELDER, Petra C13 Land-use and Non-Point Source Impacts, P174
- KRAUS, Johanna S20 Ecological Subsidies to Stream and Riparian Ecosystems, S27 Contaminants as Agents of Ecological Change
- KRAUSE, Stefan C10 Hydroecology, S05 Eco-hydrology of IRES in a Changing Climate, P26
- KREUTZWEISER, David S17 Stressed Forested Watersheds, P54
- KRIEGER, Kenneth C02 Bioassessment
- KRIST, Amy C11 Invasive Species
- KROLL, Stefanie S07 Challenges in Freshwater Conservation
- KRYNAK, Edward C13 Land-use and Non-Point Source Impacts
- KUDELA, Raphael C01 Algae and Primary Production
- KUEHL, Lyntausha C12 Invertebrate Ecology
- KUEHNE, Lauren C02 Bioassessment
- KUEMMERLEN, Mathias S25 Modeling Environmental Change in Freshwater Ecosystems
- KUHN, Anne S12 Urban Stream Syndrome , P45
- KULT, Jonathan C02 Bioassessment
- KUNZA, Lisa C03 Biogeochemistry
- KUPFERBERG, Sarah S14 Multiple Stressors in River Ecosystems
- KUROBE, Tomo C04 Climate Change
- KURTENBACH, James C02 Bioassessment
- KURZ, Marie C10 Hydroecology
- LABANOWSKI, Jérôme S11 Next-Generation Sequencing in Freshwater Science, P42
- LABIOSA, Rochelle S16 Algal Data as a Component of Bioassessment
- LAGORY, Susanna C12 Invertebrate Ecology, P159
- LAKE, P. Sam S13 Session for Vince Resh
- LALIBERTE, Gina S16 Algal Data as a Component of Bioassessment
- LAMBERT, Adam S13 Session for Vince Resh
- LAMBERT, Michael C10 Hydroecology
- LAMBERTI, Gary S20 Ecological Subsidies to Stream and Riparian Ecosystems S13 Session for Vince Resh, S19 Session for Cliff Dahm, C09 Food Webs, P138
- LAMP, William C12 Invertebrate Ecology, C13 Land-use and Non-Point Source Impacts, C17 Organic Matter Processing
- LANDEIRA-DABARCA, Andrea C04 Climate Change, S26 Exploring Trophic Relationships and Stream Food Webs
- LARRAÑAGA, Aitor S17 Stressed Forested Watersheds
- LARSON, Courtney C11 Invasive Species
- LARSON, Danelle S24 Scale and Ecosystem Functions
- LARSON, Eric S06 Molecular Methods in Biomonitoring
- LARSON, Erin S08 Hydroclimatic Extremes, C10 Hydroecology, P144
- LARSON, James S26 Exploring Trophic Relationships and Stream Food Webs
- LARSON, Michele C11 Invasive Species
- LASKE, Sarah S22 Biotic Responses to Food Web Alterations
- LATIMORE, Jo A. S18 Community Engagement in Science
- LATRON, Jérôme S05 Eco-hydrology of IRES in a Changing Climate
- LAUDON, Hjalmar S17 Stressed Forested Watersheds
- LAWLER, Josh C02 Bioassessment
- LAWRENCE, Beth S11 Next-Generation Sequencing in Freshwater Science, P41
- LAWRENCE, Justin S13 Session for Vince Resh
- LEASURE, Doug S02 Climate and Drought Effects on Mountain Stream Ecosystems, S05 Eco-hydrology of IRES in a Changing Climate, P25
- LEBRUN, Erick C17 Organic Matter Processing, P179
- LECERF, Antoine S17 Stressed Forested Watersheds
- LEDGER, Mark C10 Hydroecology
- LEE, Kim Moll C12 Invertebrate Ecology, P155
- LEE, Sylvia S10 Rivers at Risk, S12 Urban Stream Syndrome

LEE-CULLIN, Joseph	C10 Hydroecology, S24 Scale and Ecosystem Functions, C03 Biogeochemistry, P97, P94	LUTZ, Allison	C18 Population and Community Ecology, P181
LEESE, Florian	S06 Molecular Methods in Biomonitoring	LUUKKONEN, Carol	S03 Global Perspectives on Environmental Flows
LEHMAN, Peggy	C04 Climate Change	LYNCH, Dustin	S02 Climate and Drought Effects on Mountain Stream Ecosystems
LEHNER, Bernhard	S25 Modeling Environmental Change in Freshwater Ecosystems	LYONS, Jane	C05 Conservation and Restoration, P111
LEHRTER, Richard	S24 Scale and Ecosystem Functions	LYTLE, David	C04 Climate Change, S08 Hydroclimatic Extremes, S10 Rivers at Risk, S23 Traits-Based Vulnerability Assessment/Climate Change, C06 Disturbance, P119
LEIBOWITZ, Scott	S14 Multiple Stressors in River Ecosystems, S25 Modeling Environmental Change in Freshwater Ecosystems	MAAG, Erik	C13 Land-use and Non-Point Source Impacts
LEIGH, Catherine	S05 Eco-hydrology of IRES in a Changing Climate	MAAS, Regan	S05 Eco-hydrology of IRES in a Changing Climate
LEMMON, Alan	S11 Next-Generation Sequencing in Freshwater Science	MAC NALLY, Ralph	S03 Global Perspectives on Environmental Flows
LENG, Melanie	S08 Hydroclimatic Extremes	MACAULAY, Charles	C03 Biogeochemistry
LENTO, Jennifer	C04 Climate Change, P110	MACGREGOR, Kelly	S09 Conservation of Freshwater Mussels, P32
LEPPO, Erik	C02 Bioassessment	MACIAS, Nick	S01 Future Freshwater Scientists - Undergrads, C18 Population and Community Ecology, P188
LEROY, Carri	C06 Disturbance, P122	MACKENZIE, Richard	C04 Climate Change
LESMEISTER, Sarah	C04 Climate Change	MACKERETH, Robert	S20 Ecological Subsidies to Stream and Riparian Ecosystems
LETCHER, Benjamin	S10 Rivers at Risk, P38	MACMANNIS, Katherine	S10 Rivers at Risk
LEVANTHAL, Roger	S01 Future Freshwater Scientists - Undergrads	MACNEALE, Kate	C10 Hydroecology
LEVESQUE, Natalie	S20 Ecological Subsidies to Stream and Riparian Ecosystems, P59	MADINGER, Hilary	S24 Scale and Ecosystem Functions, C03 Biogeochemistry, P92
LEVI, Peter S.	S14 Multiple Stressors in River Ecosystems, S12 Urban Stream Syndrome, S20 Ecological Subsidies to Stream and Riparian Ecosystems	MAERZ, John	C13 Land-use and Non-Point Source Impacts, C12 Invertebrate Ecology, P163
LEW, Christina	S25 Modeling Environmental Change in Freshwater Ecosystems, P70	MAGELLAN, Kit	C08 Ecotoxicology
LEWANDOWSKI, Joerg	C10 Hydroecology	MAGNUSDOTTIR, Ragnhildur	C04 Climate Change
LEYS, Marie	S06 Molecular Methods in Biomonitoring, P28	MAGOULICK, Daniel	S02 Climate and Drought Effects on Mountain Stream Ecosystems, S05 Eco-hydrology of IRES in a Changing Climate, P25
LI, Judy	S22 Biotic Responses to Food Web Alterations, S01 Future Freshwater Scientists - Undergrads	MAHER, Bill	S23 Traits-Based Vulnerability Assessment
LI, Yan	C02 Bioassessment, P83	MAHER HASSELQUIST, Eliza	S21 Balancing the Freshwater Budget
LI, Yiyuan	S06 Molecular Methods in Biomonitoring	MAHL, Ursula	C13 Land-use and Non-Point Source Impacts, C03 Biogeochemistry, P91
LIERMANN, Brad	C03 Biogeochemistry	MAITLAND, Bryan	S10 Rivers at Risk
LIENTZ, Julie	S06 Molecular Methods in Biomonitoring	MALAKAUSKAS, Dave M	C12 Invertebrate Ecology
LIN, Hsing-Juh	C06 Disturbance	MALAKAUSKAS, Sarah J	C12 Invertebrate Ecology
LIN, Yuqing	C01 Algae and Primary Production	MALDONADO-OCAMPO, Javier A	C05 Conservation and Restoration, P115
LINDELL, Angela	C08 Ecotoxicology, P135	MALT, Joshua	S07 Challenges in Freshwater Conservation
LINDENSCHMIDT, Karl	C07 Ecology of Fish and Other Aquatic Vertebrates	MANDARIC, Ladislav	S14 Multiple Stressors in River Ecosystems
LINDSEY, Otome	S07 Challenges in Freshwater Conservation, P30	MANNING, David W.P.	S14 Multiple Stressors in River Ecosystems, C13 Land-use and Non-Point Source Impacts
LINKE, Simon	S25 Modeling Environmental Change in Freshwater Ecosystems	MANOYLOV, Kalina	C01 Algae and Primary Production, P76, S16 Algal Data as a Component of Bioassessment, P53
LINTERMANS, Mark	S06 Molecular Methods in Biomonitoring	MAPES, Robert	S24 Scale and Ecosystem Functions
LIPTON, Jennifer	S20 Ecological Subsidies to Stream and Riparian Ecosystems	MARCELLUS, Julia	C17 Organic Matter Processing
LISHAWA, Shane	S11 Next-Generation Sequencing in Freshwater Science, P41	MARIANI, Ashley	C18 Population and Community Ecology, P193
LISI, Peter J.	S12 Urban Stream Syndrome	MARJADI, Meghna	C07 Ecology of Fish and Other Aquatic Vertebrates
LIU, Chunlong	C11 Invasive Species	MARKS, Jane	C05 Conservation and Restoration, C09 Food Webs, S22 Biotic Responses to Food Web Alterations, C18 Population and Community Ecology, P186
LLORENS, Pilar	S05 Eco-hydrology of IRES in a Changing Climate	MARKWIESE, James	S19 Session for Cliff Dahm
LOBEGEIGER, Jaye	S05 Eco-hydrology of IRES in a Changing Climate	MAROTZ, Brian	C10 Hydroecology
LOCHOTZKI, Heather	S01 Future Freshwater Scientists - Undergrads, P3	MARR, Sean M.	S13 Session for Vince Resh
LOCKE, Harvey	C05 Conservation and Restoration	MARSHALL, Jon	S05 Eco-hydrology of IRES in a Changing Climate, S08 Hydroclimatic Extremes
LODGE, David	S06 Molecular Methods in Biomonitoring S06 Molecular Methods in Biomonitoring	MARSICO, Travis	C02 Bioassessment
LOECKE, Terrance	C03 Biogeochemistry, P101	MARTÍ, Eugènia	C03 Biogeochemistry, C05 Conservation and Restoration, C10 Hydroecology, S26 Exploring Trophic Relationships and Stream Food Webs, C03 Biogeochemistry, P98
LOETHER, Chris	S18 Community Engagement in Science, P58	MARTIN, Doug	C03 Biogeochemistry
LOFLEN, Chad	S05 Eco-hydrology of IRES in a Changing Climate	MARTIN, Eduardo J.	S21 Balancing the Freshwater Budget
LOMBARDO, Elena	C12 Invertebrate Ecology, P156	MARTINEZ, Edward	C05 Conservation and Restoration
LONG, Donald	S14 Multiple Stressors in River Ecosystems	MARTINSON, John	S06 Molecular Methods in Biomonitoring
LOOKENBILL, Josh	C02 Bioassessment	MARZADRI, Alessandra	C03 Biogeochemistry, S10 Rivers at Risk
LOPEZ, Adeline	C08 Ecotoxicology	MASSAR, Bashida	C05 Conservation and Restoration, S07 Challenges in Freshwater Conservation
LÓPEZ-DOVAL, Julio	S13 Session for Vince Resh	MASSIE, Jordan	S25 Modeling Environmental Change in Freshwater Ecosystems
LORENZ, David	S24 Scale and Ecosystem Functions	MATHER, Peter B	S11 Next-Generation Sequencing in Freshwater Science
LORKE, Andreas	C10 Hydroecology	MATHERS, Kate	S14 Multiple Stressors in River Ecosystems
LOSSAU, Luke	S27 Contaminants as Agents of Ecological Change	MATTHAEI, Christoph	S07 Challenges in Freshwater Conservation, S14 Multiple Stressors in River Ecosystems
LOUHI, Pauliina	S17 Stressed Forested Watersheds	MATTHAEUS, Will	C17 Organic Matter Processing, P179
LOURENÇO-AMORIM, Christine	C13 Land-use and Non-Point Source Impacts, P177	MAU, Rebecca	C18 Population and Community Ecology, P186
LOWE, Winsor	C05 Conservation and Restoration	MAURANO, Stephen	C02 Bioassessment, P84
LUIKART, Gordon	S11 Next-Generation Sequencing in Freshwater Science		
LUNCH, Claire	S24 Scale and Ecosystem Functions		
LUND, Jessica	C12 Invertebrate Ecology		
LUNDE, Kevin	S13 Session for Vince Resh S04 Temporary Wetlands		
LUNDIN-SCHILLER, Sarah	C07 Ecology of Fish and Other Aquatic Vertebrates		
LUSARDI, Robert	C04 Climate Change, C10 Hydroecology, P142		
LUTTENTON, Mark	C07 Ecology of Fish and Other Aquatic Vertebrates		

- INDEX
- MAY, Jason C07 Ecology of Fish and Other Aquatic Vertebrates, S02 Climate and Drought Effects on Mountain Stream Ecosystems, S03 Global Perspectives on Environmental Flows
- MAZACK, Jane C12 Invertebrate Ecology, P157
- MAZOR, Raphael D. S03 Global Perspectives on Environmental Flows, S05 Eco-hydrology of IRES in a Changing Climate, S13 Session for Vince Resh
- MCALLISTER, Tara C01 Algae and Primary Production
- MCARTHUR, J C08 Ecotoxicology, P135
- MCCABE, Greg S02 Climate and Drought Effects on Mountain Stream Ecosystems
- MCCARTEN, Niall S04 Temporary Wetlands
- MCCLAIN, Serena S10 Rivers at Risk
- MCCULLOUGH, Deborah C11 Invasive Species
- MCCUNE, Kenneth S03 Global Perspectives on Environmental Flows
- MCDEVITT-GALLES, Travis C12 Invertebrate Ecology
- MCDONNELL, Dianne S19 Session for Cliff Dahm
- MCDOWELL, William C03 Biogeochemistry, S24 Scale and Ecosystem Functions, C01 Algae and Primary Production, P76
- MCDOWELL, William H. S12 Urban Stream Syndrome
- MCEWAN, Ryan W. S20 Ecological Subsidies to Stream and Riparian Ecosystems
- MCGANN, Brian C06 Disturbance, P123
- MCGARVEY, Daniel C18 Population and Community Ecology, S26 Exploring Trophic Relationships and Stream Food Webs
- MCGLYNN, Brian S27 Contaminants as Agents of Ecological Change
- MCGREGOR, Glenn S08 Hydroclimatic Extremes
- MCHUGH, Pete S26 Exploring Trophic Relationships and Stream Food Webs
- MCINERNEY, Cesca S08 Hydroclimatic Extremes
- MCINTOSH, Angus C05 Conservation and Restoration, C07 Ecology of Fish and Other Aquatic Vertebrates, S14 Multiple Stressors in River Ecosystems, S26 Exploring Trophic Relationships and Stream Food Webs
- MCINTYRE, Peter B. S12 Urban Stream Syndrome
- MCKENNA, James S03 Global Perspectives on Environmental Flows
- MCKIE, Brendan S14 Multiple Stressors in River Ecosystems, S07 Challenges in Freshwater Conservation, S21 Balancing the Freshwater Budget
- MCKNIGHT, Diane S19 Session for Cliff Dahm
- MCLACHLAN, Jack C06 Disturbance, C10 Hydroecology
- MCLEAY, Scott S04 Temporary Wetlands, P20
- MCLERAN, Kerry C05 Conservation and Restoration, S20 Ecological Subsidies to Stream and Riparian Ecosystems, P61
- MCMAHON, Robert C11 Invasive Species, P150
- MCMMASTER, Damien S24 Scale and Ecosystem Functions
- MCNAIR, James C11 Invasive Species
- MCNEELY, Camille S07 Challenges in Freshwater Conservation
- MCNEISH, Rachel E. S20 Ecological Subsidies to Stream and Riparian Ecosystems
- MCNULTY, Steven S03 Global Perspectives on Environmental Flows
- MCREYNOLDS, Amelia C09 Food Webs, P138
- MCTAMMANY, Matthew C12 Invertebrate Ecology, C13 Land-use and Non-Point Source Impacts, P173
- MEDHURST, Bruce S02 Climate and Drought Effects on Mountain Stream Ecosystems
- MEJIA, Francine C01 Algae and Primary Production
- MELACK, John M. S12 Urban Stream Syndrome, S13 Session for Vince Resh
- MELLO, José C02 Bioassessment, P86, C12 Invertebrate Ecology, P168
- MENDEZ, Patina S13 Session for Vince Resh, S01 Future Freshwater Scientists - Undergrads, S01 Future Freshwater Scientists - Undergrads, S02 Climate and Drought Effects on Mountain Stream Ecosystems, P14, S25 Modeling Environmental Change in Freshwater Ecosystems, P70
- MENDONCA, Raissa S27 Contaminants as Agents of Ecological Change
- MENDOZA, Sergio S16 Algal Data as a Component of Bioassessment, P52
- MENDOZA-LEA, Clara C10 Hydroecology, S24 Scale and Ecosystem Functions
- MENKE, Norbert S05 Eco-hydrology of IRES in a Changing Climate
- MERBT, Stephanie C03 Biogeochemistry, P98
- MEREDITH, Christy S06 Molecular Methods in Biomonitoring
- MERRILL, Amy S13 Session for Vince Resh
- MERRITT, David C04 Climate Change
- MESSAGER, Mathis L. C11 Invasive Species
- METCALFE, Anya S10 Rivers at Risk, S22 Biotic Responses to Food Web Alterations
- MEYER, Elisabeth I. C11 Invasive Species
- MICHAEL, Taylor C03 Biogeochemistry, P105
- MIHALICZ, Jordan C05 Conservation and Restoration
- MILLER, Andy S07 Challenges in Freshwater Conservation
- MILLER, Erin S09 Conservation of Freshwater Mussels
- MILLER, Mark S03 Global Perspectives on Environmental Flows
- MILLER, Michael R. S11 Next-Generation Sequencing in Freshwater Science
- MILLER, Scott C02 Bioassessment, C10 Hydroecology, S10 Rivers at Risk, C06 Disturbance, P118, S14 Multiple Stressors in River Ecosystems, P49
- MILLER, Steve S23 Traits-Based Vulnerability Assessment/Climate Change
- MILLER, Theron S09 Conservation of Freshwater Mussels
- MILLET, Jonathan S05 Eco-hydrology of IRES in a Changing Climate
- MILMAN, Anita C05 Conservation and Restoration
- MILNER, Alexander C10 Hydroecology, S08 Hydroclimatic Extremes, S23 Traits-Based Vulnerability Assessment
- MIMS, Meryl S23 Traits-Based Vulnerability Assessment
- MINDER, Mario S26 Exploring Trophic Relationships and Stream Food Webs, C11 Invasive Species, P152
- MINEROVIC, Alison S07 Challenges in Freshwater Conservation
- MINIAT, Chelcy C10 Hydroecology
- MINSHALL, G. Wayne S22 Biotic Responses to Food Web Alterations
- MITCHELL, Jon S01 Future Freshwater Scientists - Undergrads, P2
- MITCHELL, Richard S06 Molecular Methods in Biomonitoring
- MIURA, Kazuki C12 Invertebrate Ecology, P165
- MIYAKE, Yo C06 Disturbance
- MIZEL, Maxwell C04 Climate Change
- MOELLER, April S01 Future Freshwater Scientists - Undergrads, P2
- MOERKE, Ashley S20 Ecological Subsidies to Stream and Riparian Ecosystems, C10 Hydroecology, P141
- MOFFETT, Emma C04 Climate Change
- MONDAMERT, Leslie S11 Next-Generation Sequencing in Freshwater Science, P42
- MONK, Wendy S26 Exploring Trophic Relationships and Stream Food Webs
- MONOHAN, Carrie C08 Ecotoxicology, P132
- MONTGOMERY, Elizabeth S25 Modeling Environmental Change in Freshwater Ecosystems
- MONTOYA, Eliza C05 Conservation and Restoration
- MONTUELLE, Bernard S11 Next-Generation Sequencing in Freshwater Science, P42
- MOORE, Aaron S08 Hydroclimatic Extremes, P31
- MOR, Jordi-René S14 Multiple Stressors in River Ecosystems
- MORETTI, Marcelo C17 Organic Matter Processing
- MORGAN, Joseph S21 Balancing the Freshwater Budget
- MORGAN, Peggy C02 Bioassessment, P88
- MORI, Terutaka C06 Disturbance, C10 Hydroecology
- MORRISON, Ryan S07 Challenges in Freshwater Conservation
- MORSE, Cody C04 Climate Change, P109
- MORSE, John C. C12 Invertebrate Ecology, P167
- MORTON, Scott S08 Hydroclimatic Extremes
- MOSS, Lindsey S09 Conservation of Freshwater Mussels, P35
- MOULTON, Timothy C13 Land-use and Non-Point Source Impacts, P177
- MOYA, Nabor S05 Eco-hydrology of IRES in a Changing Climate
- MOYER, Gregory C01 Algae and Primary Production, P79
- MOYLE, Peter
- MUEHLBAUER, Jeffrey C12 Invertebrate Ecology, S10 Rivers at Risk, C06 Disturbance, P119
- MUHLFELD, Clint C05 Conservation and Restoration, S11 Next-Generation Sequencing in Freshwater Science
- MUIRHEAD, Ian S01 Future Freshwater Scientists - Undergrads, P2
- MUÑIZ TIRADO, Adamaris C03 Biogeochemistry, P100
- MUÑOZ, Isabel S13 Session for Vince Resh, S14 Multiple Stressors in River Ecosystems
- MUOTKA, Timo C18 Population and Community Ecology, S17 Stressed Forested Watersheds
- MURDOCK, Justin S26 Exploring Trophic Relationships and Stream Food Webs, C01 Algae and Primary Production, P79, C18 Population and Community Ecology, P195
- MURPHY, Christina S26 Exploring Trophic Relationships and Stream Food Webs
- MURPHY, Kathryn S09 Conservation of Freshwater Mussels, P34
- MURPHY, Mason S11 Next-Generation Sequencing in Freshwater Science
- MURRAY, Rylee S07 Challenges in Freshwater Conservation
- MURRY, Brent S26 Exploring Trophic Relationships and Stream Food Webs
- MUSETTA-LAMBERT, Jordan S17 Stressed Forested Watersheds
- MUTO, Elisa S17 Stressed Forested Watersheds
- MUTZ, Michael S05 Eco-hydrology of IRES in a Changing Climate
- MYERS, Marilyn S13 Session for Vince Resh
- MYKRÄ, Heikki C18 Population and Community Ecology, S17 Stressed Forested Watersheds
- MYSAK, Eric C20 Gas and Oil

NAGAOKA, Lisa	S09 Conservation of Freshwater Mussels	OLSON, Jenae	C11 Invasive Species, P150
NEDRICH, Sara	S14 Multiple Stressors in River Ecosystems, P50	OLSON, John	S25 Modeling Environmental Change in Freshwater Ecosystems
NEGISHI, Junjiro	C12 Invertebrate Ecology, P165	OLSON, Patrick	S09 Conservation of Freshwater Mussels, P33
NEGUS, Peter	S05 Eco-hydrology of IRES in a Changing Climate	ORLOFSKE, Jessica	S03 Global Perspectives on Environmental Flows, P18
NEIF, Erika M.	S14 Multiple Stressors in River Ecosystems	ORR, Bruce	S13 Session for Vince Resh
NELSON, Cara	C05 Conservation and Restoration	ORTIZ, Jade	C09 Food Webs, P140
NELSON, Daniel	C04 Climate Change C04 Climate Change	OSBORNE, Hunter	C09 Food Webs, P137, S18 Community Engagement in Science, P58
NELSON, Stacy	S03 Global Perspectives on Environmental Flows	OSCHWALD, Lydia	C10 Hydroecology, P145
NERES-LIMA, Vinicius	C13 Land-use and Non-Point Source Impacts, P177	OSTERMANN-KELM, Stacey	S05 Eco-hydrology of IRES in a Changing Climate
NESEMANN, Hasko	S07 Challenges in Freshwater Conservation	OUDESEMA, Maggie	S18 Community Engagement in Science, P57
NEU, Thomas R.	C10 Hydroecology	OUELLET JOBIN, Vincent	C04 Climate Change
NEWSOM, Michael	C01 Algae and Primary Production, S22 Biotic Responses to Food Web Alterations	OUELLETTE, Scot	C12 Invertebrate Ecology
NEZIRI, Izak	C06 Disturbance, P120	OZAKI, Alexandra	S10 Rivers at Risk
NGUYEN, Nathan	C12 Invertebrate Ecology, P170	PALEN, Wendy	S07 Challenges in Freshwater Conservation
NICHOLS, Susan	S15 Putting Your Publications to Work, S23 Traits-Based Vulnerability Assessment	PALENSCAR, Kai	C07 Ecology of Fish and Other Aquatic Vertebrates
NICHOLSON, Jaynell	C03 Biogeochemistry, P104	PALKOVACS, Eric	C04 Climate Change
NIEDRIST, Georg	S25 Modeling Environmental Change in Freshwater Ecosystems	PALMER, Margaret	C13 Land-use and Non-Point Source Impacts, S21 Balancing the Freshwater Budget
NIETCH, Christopher	C01 Algae and Primary Production	PAN, Yangdong	C02 Bioassessment
NIKOLAKOPOULOU, Myrto	C03 Biogeochemistry, C05 Conservation and Restoration	PARADZAVI, Tagwireyi	S14 Multiple Stressors in River Ecosystems
NILSSON, Christer	S21 Balancing the Freshwater Budget	PARASIEWICZ, Piotr	S03 Global Perspectives on Environmental Flows
NIPPGEN, Fabian	S27 Contaminants as Agents of Ecological Change	PARDO, Isabel	S17 Stressed Forested Watersheds, C11 Invasive Species, P153
NISBET, Roger	S26 Exploring Trophic Relationships and Stream Food Webs	PARIS, James	C09 Food Webs, P137, S18 Community Engagement in Science, P58
NISLOW, Keith	S10 Rivers at Risk, P38	PARKER, Sam	C03 Biogeochemistry, S24 Scale and Ecosystem Functions
NOGARO, Geraldine	C04 Climate Change	PARKER, Samuel	S24 Scale and Ecosystem Functions
NOLAN, Erin	C10 Hydroecology	PARKER, Stephanie	C03 Biogeochemistry, C04 Climate Change
NOLAN, Justin	S10 Rivers at Risk	PARKS, Syndell	C11 Invasive Species
NOREIKA, Nina N.	C18 Population and Community Ecology	PARR, Thomas	C04 Climate Change
NORMAN, Beth	S11 Next-Generation Sequencing in Freshwater Science	PASCOAL, Cláudia	C18 Population and Community Ecology
NORTHINGTON, Robert	C04 Climate Change	PATRICK, Christopher	S26 Exploring Trophic Relationships and Stream Food Webs
NORTON, Susan	C02 Bioassessment	PAUL, Michael	C05 Conservation and Restoration, S12 Urban Stream Syndrome, S16 Algal Data as a Component of Bioassessment
NOSS, Christian	C10 Hydroecology	PAULS, Steffen	S11 Next-Generation Sequencing in Freshwater Science
NOVODVORSKY, Nicole-Marie	C20 Gas and Oil, S06 Molecular Methods in Biomonitoring	PAULSEN, Steven	C02 Bioassessment
NOWLIN, Weston	C03 Biogeochemistry, C12 Invertebrate Ecology, P169	PAYN, Robert	C03 Biogeochemistry, C10 Hydroecology
NYQUIST, Corrie	C17 Organic Matter Processing, P180	PEARSON, James	C11 Invasive Species
O'BRIEN, Jonathan	S27 Contaminants as Agents of Ecological Change	PEAT, Michael	S15 Putting Your Publications to Work
O'DANIEL, Scott	C10 Hydroecology	PECHAL, Jennifer L.	C11 Invasive Species
O'DOWD, Alison	S13 Session for Vince Resh S13 Session for Vince Resh, S01 Future Freshwater Scientists - Undergrads	PECKARSKY, Barbara	C18 Population and Community Ecology
O'GORMAN, Eoin	C04 Climate Change	PECKARSKY, Bobbi	C12 Invertebrate Ecology, S26 Exploring Trophic Relationships and Stream Food Webs
O'GRADY, Patrick	C18 Population and Community Ecology	PECOR, Keith	C12 Invertebrate Ecology, P158
O'NEILL, Brian	S04 Temporary Wetlands	PEEK, Ryan	C10 Hydroecology, P142
O'NEILL, Matthew	C05 Conservation and Restoration	PEIPOCH GUELL, Marc	C03 Biogeochemistry, C05 Conservation and Restoration, P116, S14 Multiple Stressors in River Ecosystems, P48
O'REILLY, Katherine	C09 Food Webs, P138	PEJCHAR, Liba	S20 Ecological Subsidies to Stream and Riparian Ecosystems
OBEDZINSKI, Mariska	C07 Ecology of Fish and Other Aquatic Vertebrates	PENALUNA, Brooke	S22 Biotic Responses to Food Web Alterations, S24 Scale and Ecosystem Functions, S26 Exploring Trophic Relationships and Stream Food Webs, S01 Future Freshwater Scientists - Undergrads, P1
OBERDORFF, Thierry	S05 Eco-hydrology of IRES in a Changing Climate	PENARANDA, Victor	S25 Modeling Environmental Change in Freshwater Ecosystems
OBRADOR, Biel	C18 Population and Community Ecology, P189	PENDLETON, Patricia	S05 Eco-hydrology of IRES in a Changing Climate
OFORJI, Nina	C18 Population and Community Ecology, P190	PENROSE, David	S07 Challenges in Freshwater Conservation
OGATA, Elizabeth	S14 Multiple Stressors in River Ecosystems	PEREDA, Olatz	S14 Multiple Stressors in River Ecosystems S14 Multiple Stressors in River Ecosystems
OGDAHL, Mary	S18 Community Engagement in Science, P57	PEREZ-REYES, Omar	C04 Climate Change
OGLESBY, Mikayla	C05 Conservation and Restoration	PERKIN, Elizabeth	C07 Ecology of Fish and Other Aquatic Vertebrates
OGUNSOLA, Ayomide	C18 Population and Community Ecology, P190	PERKINS, Dustin	S03 Global Perspectives on Environmental Flows
OKUM, Sara	S06 Molecular Methods in Biomonitoring	PERRY, Christian	S14 Multiple Stressors in River Ecosystems, P49
ÓLAFSSON, Jón	C01 Algae and Primary Production, C04 Climate Change, S14 Multiple Stressors in River Ecosystems	PETERS, Kaitlyn	C17 Organic Matter Processing
OLANIYAN, Francis	C07 Ecology of Fish and Other Aquatic Vertebrates, P129	PETERSON, Christopher	S10 Rivers at Risk
OLDEN, Julian	C02 Bioassessment, C04 Climate Change, C06 Disturbance, C07 Ecology of Fish and Other Aquatic Vertebrates, C11 Invasive Species, C18 Population and Community Ecology, S03 Global Perspectives on Environmental Flows, S05 Eco-hydrology of IRES in a Changing Climate, S07 Challenges in Freshwater Conservation, S10 Rivers at Risk, S23 Traits-Based Vulnerability Assessment	PETERSON, Douglas P.	C04 Climate Change
OLSEN, Anthony	C02 Bioassessment, S25 Modeling Environmental Change in Freshwater Ecosystems	PETERSON, Erin	S26 Exploring Trophic Relationships and Stream Food Webs
OLSON, Deanna	C07 Ecology of Fish and Other Aquatic Vertebrates; S23 Traits-Based Vulnerability Assessment	PETERSON, Greg	S06 Molecular Methods in Biomonitoring
OLSON, Dede	S22 Biotic Responses to Food Web Alterations	PETERSON, Michael	S04 Temporary Wetlands, S13 Session for Vince Resh, P47
		PETERSON, Scot	S20 Ecological Subsidies to Stream and Riparian Ecosystems, P65
		PETROVIC, Mira	S13 Session for Vince Resh, S14 Multiple Stressors in River Ecosystems
		PETROWSKI, Paul	S01 Future Freshwater Scientists - Undergrads, P10
		PETTS, Geoffrey	S03 Global Perspectives on Environmental Flows

PFRENDER, Michael	S06 Molecular Methods in Biomonitoring	READ, Jordan	S24 Scale and Ecosystem Functions
PHANIKUMAR, Mantha	C03 Biogeochemistry	REAGAN, Annalise	C05 Conservation and Restoration
PHILLIPS, Iain	C12 Invertebrate Ecology, C05 Conservation and Restoration, C13 Land-use and Non-Point Source Impacts	REDISKE, Richard	S20 Ecological Subsidies to Stream and Riparian Ecosystems, C12 Invertebrate Ecology, P164
PIAZZA, Bryan	C10 Hydroecology	REED, Brianna	S14 Multiple Stressors in River Ecosystems
PICKEN, Jessica	S08 Hydroclimatic Extremes	REEVES, Gordie	S22 Biotic Responses to Food Web Alterations
PICKETT, Brandon	S11 Next-Generation Sequencing in Freshwater Science	REEVES, Howard	S03 Global Perspectives on Environmental Flows
PIGGOTT, Jeremy	S07 Challenges in Freshwater Conservation, S14 Multiple Stressors in River Ecosystems	REICH, Jollene	S23 Traits-Based Vulnerability Assessment
PILGRIM, Erik	S06 Molecular Methods in Biomonitoring	REID, Brian L	C09 Food Webs
PILLIOD, David	S23 Traits-Based Vulnerability Assessment	REIHART, Ryan	S07 Challenges in Freshwater Conservation
PILOTTO, Francesca	S21 Balancing the Freshwater Budget	REILLY, Meghan	C12 Invertebrate Ecology, C13 Land-use and Non-Point Source Impacts, P173
PINAY, Gilles	C03 Biogeochemistry, P98	REINHOLD, Ann Marie	C03 Biogeochemistry
PINTER, Nicholas	S10 Rivers at Risk	REIS, Roberto	S07 Challenges in Freshwater Conservation
PLONT, Stephen	S24 Scale and Ecosystem Functions, C03 Biogeochemistry, P97, P94	REIS, Vanessa	S25 Modeling Environmental Change in Freshwater Ecosystems
POESCH, Mark	S10 Rivers at Risk	REISINGER, Alexander	S10 Rivers at Risk, S12 Urban Stream Syndrome
POFF, LeRoy	S03 Global Perspectives on Environmental Flows, S08 Hydroclimatic Extremes, C01 Algae and Primary Production, P80 S05 Eco-hydrology of IRES in a Changing Climate, C04 Climate Change, C18 Population and Community Ecology, S02 Climate and Drought Effects on Mountain Stream Ecosystems, P16 C04 Climate Change S11 Next-Generation Sequencing in Freshwater Science	RENSHAW, Mark	S06 Molecular Methods in Biomonitoring
POLLARD, Amina	S06 Molecular Methods in Biomonitoring	RESH, Vincent	C05 Conservation and Restoration, C18 Population and Community Ecology, S04 Temporary Wetlands
POLVI, Lina E.	S21 Balancing the Freshwater Budget	REUMANN-MOORE, Kyra	C05 Conservation and Restoration, P117
POMERANZ, Justin	C02 Bioassessment, S20 Ecological Subsidies to Stream and Riparian Ecosystems	REYES, Limarie	C12 Invertebrate Ecology, P166
POOLE, Geoffrey	C03 Biogeochemistry, C10 Hydroecology	REYES-MALDONADO, Roberto	C06 Disturbance, P121
POPEJOY, Traci	S09 Conservation of Freshwater Mussels	REYNOLDS, Lindsay	S05 Eco-hydrology of IRES in a Changing Climate
PORRAS, Abel	C02 Bioassessment, S05 Eco-hydrology of IRES in a Changing Climate	REYNOLDS, Trefor	C02 Bioassessment, S13 Session for Vince Resh
POST, Alison	C13 Land-use and Non-Point Source Impacts	RHEIN, Nayla	S04 Temporary Wetlands, P21
POTE SHRESTHA, Raja Ram	S02 Climate and Drought Effects on Mountain Stream Ecosystems, P15	RIAZANOV, Alexandre	S26 Exploring Trophic Relationships and Stream Food Webs
POTTER, Jody	S12 Urban Stream Syndrome	RIBOT, Miquel	C03 Biogeochemistry, P98 C05 Conservation and Restoration
POWER, Mary	, C01 Algae and Primary Production, S13 Session for Vince Resh, S10 Rivers at Risk, P37	RICE, Stephen	S14 Multiple Stressors in River Ecosystems
POWERS, Steve	C13 Land-use and Non-Point Source Impacts	RICHARDS, David	S09 Conservation of Freshwater Mussels
PRASKO, Lauren	C07 Ecology of Fish and Other Aquatic Vertebrates, P126	RICHARDSON, Bradley	C07 Ecology of Fish and Other Aquatic Vertebrates, P130
PRAT, Narcis	S05 Eco-hydrology of IRES in a Changing Climate, S13 Session for Vince Resh, C18 Population and Community Ecology, P189, S25 Modeling Environmental Change in Freshwater Ecosystems, P71	RICHARDSON, John	C07 Ecology of Fish and Other Aquatic Vertebrates, S07 Challenges in Freshwater Conservation, , S14 Multiple Stressors in River Ecosystems, S17 Stressed Forested Watersheds, S20 Ecological Subsidies to Stream and Riparian Ecosystems
PRATT, James	C05 Conservation and Restoration	RICHARDSON, Johnny	C06 Disturbance
PREECE, Ellen	S09 Conservation of Freshwater Mussels, C01 Algae and Primary Production, P82	RICHMOND, Erinn	S10 Rivers at Risk, S27 Contaminants as Agents of Ecological Change
PREMKE, Katrin	S05 Eco-hydrology of IRES in a Changing Climate	RICHTER, Kristine Korzow	S22 Biotic Responses to Food Web Alterations
PRESTIE, Kate	C09 Food Webs, P136	RIDLEY, Caroline	S15 Putting Your Publications to Work
PRICE, Steven	S11 Next-Generation Sequencing in Freshwater Science	RIEDL, Hannah	S20 Ecological Subsidies to Stream and Riparian Ecosystems
PRIETO, Diego	C08 Ecotoxicology	RIER, Steven	C02 Bioassessment
PRIOR, Kara	C13 Land-use and Non-Point Source Impacts, C03 Biogeochemistry, P91	RIERADEVALL, Maria	S13 Session for Vince Resh
PROCTOR, Michael	C05 Conservation and Restoration	RIIS, Tenna	S14 Multiple Stressors in River Ecosystems
PRUS, Pawel	S03 Global Perspectives on Environmental Flows	RILEY, Leslie	C18 Population and Community Ecology, P183, S01 Future Freshwater Scientists - Undergrads, P4, P3, P5, P9
PUNKIN, Doyle	S18 Community Engagement in Science, P58	RIMET, Frédéric	S06 Molecular Methods in Biomonitoring , S11 Next-Generation Sequencing in Freshwater Science, P42
PUSCH, Martin	S23 Traits-Based Vulnerability Assessment/Climate Change	RINGOLD, Paul	S15 Putting Your Publications to Work
PUTKONEN, Emmi	S17 Stressed Forested Watersheds	RIOS-TOUMA, Blanca	S26 Exploring Trophic Relationships and Stream Food Webs, S07 Challenges in Freshwater Conservation
PYNE, Matthew	S23 Traits-Based Vulnerability Assessment, C04 Climate Change, P108	RIPPLE, Paul	C10 Hydroecology, P141
PYRON, Mark	S26 Exploring Trophic Relationships and Stream Food Webs, C11 Invasive Species, P152	RISS, H. Wolfgang	C11 Invasive Species
RAHI, Md Lifat	S11 Next-Generation Sequencing in Freshwater Science	RISSE-BUHL, Ute	C10 Hydroecology
RAHMAN, Sharmeen	S11 Next-Generation Sequencing in Freshwater Science	RISTAUI, Miranda	S01 Future Freshwater Scientists - Undergrads, P2
RAIMONDO, Sandy	S09 Conservation of Freshwater Mussels	RITCEY, Allison	C20 Gas and Oil
RAMIREZ, Alonso	S07 Challenges in Freshwater Conservation, S12 Urban Stream Syndrome , C12 Invertebrate Ecology, P166, P161, C18 Population and Community Ecology, P187	ROBBINS, Caleb	C17 Organic Matter Processing, P179, S25 Modeling Environmental Change in Freshwater Ecosystems, P69
RAMÍREZ, Alonso	C06 Disturbance, P121, C18 Population and Community Ecology, P182	ROBER, Allison	S01 Future Freshwater Scientists - Undergrads, C01 Algae and Primary Production, P81
RAMPI, Lian	C13 Land-use and Non-Point Source Impacts, P174	ROBERTS, James J.	C04 Climate Change
RANDKLEV, Charles R.	S09 Conservation of Freshwater Mussels	ROBERTS, Nathan	S01 Future Freshwater Scientists - Undergrads, P2
RANTALA, Heidi	C06 Disturbance	ROBERTSON, Anne	S08 Hydroclimatic Extremes
RANVILLE, James	S27 Contaminants as Agents of Ecological Change	ROBINSON, Chris	S14 Multiple Stressors in River Ecosystems
RÄSÄNEN, Katja	S06 Molecular Methods in Biomonitoring , P28	ROBINSON, Christopher	C10 Hydroecology, S21 Balancing the Freshwater Budget, S06 Molecular Methods in Biomonitoring , P28
RASHLEIGH, Brenda	S25 Modeling Environmental Change in Freshwater Ecosystems	ROBINSON, Wayne	S05 Eco-hydrology of IRES in a Changing Climate
RASMUSSEN, Jes J.	S14 Multiple Stressors in River Ecosystems	ROBSON, Belinda J.	S13 Session for Vince Resh
RAUT, Swastika	C17 Organic Matter Processing, P179	ROBSON, Kelsey	C09 Food Webs
		RODRIGUEZ-CARDONA, Bianca	C03 Biogeochemistry

- RODRÍGUEZ-GONZÁLEZ, Patricia M. S13 Session for Vince Resh
- RODRÍGUEZ-LOZANO, Pablo S05 Eco-hydrology of IRES in a Changing Climate, C18 Population and Community Ecology, P189
- ROGERS, Christopher S04 Temporary Wetlands
- ROGERS, Holly S20 Ecological Subsidies to Stream and Riparian Ecosystems, S27 Contaminants as Agents of Ecological Change
- ROGERS, Kevin B. C04 Climate Change
- ROJAS, Miguel S12 Urban Stream Syndrome
- ROLEY, Sarah C13 Land-use and Non-Point Source Impacts
- ROMANÍ, Anna M. C08 Ecotoxicology, S13 Session for Vince Resh
- ROMEIJN, Paul C03 Biogeochemistry
- ROOD, Stewart C05 Conservation and Restoration
- ROON, David S22 Biotic Responses to Food Web Alterations
- ROSAS, Keysa G. C18 Population and Community Ecology, P182, P193
- ROSAS-SAENZ, Luis S04 Temporary Wetlands, P22
- ROSEMOND, Amy C13 Land-use and Non-Point Source Impacts, , S24 Scale and Ecosystem Functions, C12 Invertebrate Ecology, P163, S12 Urban Stream Syndrome , P46, P43
- ROSENBERG, David S13 Session for Vince Resh
- ROSENBERGER, Amanda S22 Biotic Responses to Food Web Alterations
- ROSENHØJ, Simon L. S14 Multiple Stressors in River Ecosystems
- ROSI-MARSHALL, Emma C03 Biogeochemistry, S10 Rivers at Risk, S12 Urban Stream Syndrome , S14 Multiple Stressors in River Ecosystems, S27 Contaminants as Agents of Ecological Change
- ROSOLOWSKI, Jessica C11 Invasive Species
- ROSS, Matthew S27 Contaminants as Agents of Ecological Change
- ROSS-SMITH, Katie C05 Conservation and Restoration
- ROSSET, Julianne C07 Ecology of Fish and Other Aquatic Vertebrates
- ROTELLA, Jay S24 Scale and Ecosystem Functions
- ROY, Allison C02 Bioassessment, C05 Conservation and Restoration, C07 Ecology of Fish and Other Aquatic Vertebrates, S09 Conservation of Freshwater Mussels, S10 Rivers at Risk, P38
- ROYER, Todd C13 Land-use and Non-Point Source Impacts, C03 Biogeochemistry, P91
- ROZNERE, Ieva S09 Conservation of Freshwater Mussels
- RUBENSON, Madeline S12 Urban Stream Syndrome , P44
- RUBIO-GRACIA, Francesc S26 Exploring Trophic Relationships and Stream Food Webs C08 Ecotoxicology, S26 Exploring Trophic Relationships and Stream Food Webs
- RUCHTER, Nadine S12 Urban Stream Syndrome
- RUDNICK, Deborah S13 Session for Vince Resh
- RUDOLPH, John C02 Bioassessment
- RÜEGG, Janine C03 Biogeochemistry, S24 Scale and Ecosystem Functions, P68, S20 Ecological Subsidies to Stream and Riparian Ecosystems, S22 Biotic Responses to Food Web Alterations
- RUETZ III, Carl R. C18 Population and Community Ecology, P191, C12 Invertebrate Ecology, P159
- RUFFING, Claire S26 Exploring Trophic Relationships and Stream Food Webs, S24 Scale and Ecosystem Functions, P68
- RUGENSKI, Amanda C04 Climate Change, C01 Algae and Primary Production, P80, S02 Climate and Drought Effects on Mountain Stream Ecosystems, P16
- RUHALA, Sydney S24 Scale and Ecosystem Functions, C03 Biogeochemistry, P97, P94
- RUHI, Albert S08 Hydroclimatic Extremes
- RUHS, Alexander S11 Next-Generation Sequencing in Freshwater Science
- RUSSELL, Kerwin C07 Ecology of Fish and Other Aquatic Vertebrates
- RYAN, Robert C05 Conservation and Restoration
- SABATER, Francesc C03 Biogeochemistry, C05 Conservation and Restoration
- SABATER, Sergi S13 Session for Vince Resh, S14 Multiple Stressors in River Ecosystems
- SABO, John S08 Hydroclimatic Extremes, S13 Session for Vince Resh
- SADA, Donald S07 Challenges in Freshwater Conservation
- SAFFARINIA, Parsa S02 Climate and Drought Effects on Mountain Stream Ecosystems, S26 Exploring Trophic Relationships and Stream Food Webs
- SAFFEL, Pat C03 Biogeochemistry
- SAHA, Amartya S07 Challenges in Freshwater Conservation
- SAHA, Sonali S07 Challenges in Freshwater Conservation
- SALAS, Eileen C01 Algae and Primary Production, P77
- SALGADO, Cristina C18 Population and Community Ecology
- SALINAS, Janette C12 Invertebrate Ecology, P155
- SALIS, Romana S14 Multiple Stressors in River Ecosystems
- SANABRIA, Anthony S05 Eco-hydrology of IRES in a Changing Climate
- SANCHEZ, Jose C12 Invertebrate Ecology, P161
- SANCHEZ RUIZ, Josian C18 Population and Community Ecology, P187
- SANDER, Delorianne C01 Algae and Primary Production, S14 Multiple Stressors in River Ecosystems
- SANDERS, Andrew C02 Bioassessment, P85, C12 Invertebrate Ecology, P160
- SANDIN, Leonard C06 Disturbance, S14 Multiple Stressors in River Ecosystems
- SANDLAND, Gregory C11 Invasive Species, P149
- SARHAD, Jonathan S26 Exploring Trophic Relationships and Stream Food Webs
- SARREMEJANE, Romain C18 Population and Community Ecology
- SAUNDERS, Patricia S04 Temporary Wetlands, P24
- SAZAMA, Eric C12 Invertebrate Ecology
- SCHÄFER, Ralf S23 Traits-Based Vulnerability Assessment/Climate Change
- SCHÄRER, Mirjam S22 Biotic Responses to Food Web Alterations
- SCHECHNER, Anne C03 Biogeochemistry
- SCHELKER, Jakob S17 Stressed Forested Watersheds
- SCHENK, Matthew S22 Biotic Responses to Food Web Alterations, C01 Algae and Primary Production, P78
- SCHEUERELL, Mark S08 Hydroclimatic Extremes
- SCHILLER, Christopher C03 Biogeochemistry
- SCHILLER, Joseph R. S04 Temporary Wetlands, P23
- SCHINDLER, Daniel C03 Biogeochemistry
- SCHLEKAT, Christian S27 Contaminants as Agents of Ecological Change
- SCHLIEBE, Matthew C11 Invasive Species
- SCHLOESSER, Donald C12 Invertebrate Ecology, C11 Invasive Species
- SCHMIDT, Daniel J. S11 Next-Generation Sequencing in Freshwater Science
- SCHMIDT, John S03 Global Perspectives on Environmental Flows
- SCHMIDT, Travis S10 Rivers at Risk, S20 Ecological Subsidies to Stream and Riparian Ecosystems, S27 Contaminants as Agents of Ecological Change
- SCHNETTLER, Brandy S04 Temporary Wetlands, P23
- SCHOFIELD, Kate S15 Putting Your Publications to Work
- SCHOLL, Eric C03 Biogeochemistry, C06 Disturbance, S24 Scale and Ecosystem Functions, C06 Disturbance, P124
- SCHRECKINGER, Jose C10 Hydroecology, P144
- SCHROER, Matt C10 Hydroecology, C06 Disturbance, P118
- SCHROTH, Andrew S24 Scale and Ecosystem Functions, P67
- SCHULT, Julia C06 Disturbance
- SCHUMAKER, Nathan S25 Modeling Environmental Change in Freshwater Ecosystems
- SCHUMER, Rina S07 Challenges in Freshwater Conservation
- SCHÜTZ, Stefan S25 Modeling Environmental Change in Freshwater Ecosystems
- SCHWALB, Astrid C11 Invasive Species, P150, C12 Invertebrate Ecology, P169
- SCHWARTZ, Benjamin C03 Biogeochemistry
- SCHWARTZ, Egbert C18 Population and Community Ecology, P186
- SCOGGINS, Mateo C02 Bioassessment, S05 Eco-hydrology of IRES in a Changing Climate
- SCOTT, Caren C03 Biogeochemistry
- SCOTT, Erin C02 Bioassessment, P85
- SCOTT, Jeffrey S24 Scale and Ecosystem Functions
- SCOTT, Michael S03 Global Perspectives on Environmental Flows
- SCOTT, Thad C03 Biogeochemistry, C12 Invertebrate Ecology, S10 Rivers at Risk, C02 Bioassessment, P85
- SCRIMGEOUR, Gary C02 Bioassessment, P87
- SCUDDER EIKENBERRY, Barbara C05 Conservation and Restoration
- SCULL, Brian C12 Invertebrate Ecology, P164
- SEAGLE, Kevin D. C07 Ecology of Fish and Other Aquatic Vertebrates, P128
- SEAMAN, John C08 Ecotoxicology, P135
- SEBALLOS, Rody C18 Population and Community Ecology, P185
- SEBESTYEN, Stephen D. S24 Scale and Ecosystem Functions
- SEELBACH, Paul S03 Global Perspectives on Environmental Flows
- SEESTERN C04 Climate Change
- CHRISTOFFERSEN, Kirsten
- SEFICK, Stephen A. C18 Population and Community Ecology
- SENA, Kenton S21 Balancing the Freshwater Budget
- SENGUPTA, Ashmita S03 Global Perspectives on Environmental Flows
- SHAFFER, Kevin S14 Multiple Stressors in River Ecosystems
- SHAFROTH, Patrick S05 Eco-hydrology of IRES in a Changing Climate
- SHAKOOR, Ali S18 Community Engagement in Science
- SHARMA, Subodh S07 Challenges in Freshwater Conservation
- SHEATH, Robert S16 Algal Data as a Component of Bioassessment
- SHEEHAN, Ken S24 Scale and Ecosystem Functions

- SHEIBLEY, Rich S11 Next-Generation Sequencing in Freshwater Science, C03 Biogeochemistry, P95
- SHELDON, Andrew S11 Next-Generation Sequencing in Freshwater Science, P40, S01 Future Freshwater Scientists - Undergrads, P10
- SHELLEY, Brian C06 Disturbance
- SHERRICK, Robert C10 Hydroecology
- SHIELDS, Robert S26 Exploring Trophic Relationships and Stream Food Webs, C11 Invasive Species, P152
- SHIREY, Vaughn C02 Bioassessment, P83
- SHOGREN, Ariel C03 Biogeochemistry, C17 Organic Matter Processing, S01 Future Freshwater Scientists – Undergrads
- SHOKRALLA, Shadi S06 Molecular Methods in Biomonitoring , P27
- SHORT, Terry S27 Contaminants as Agents of Ecological Change, P74
- SHOULDIS, Carmelita C12 Invertebrate Ecology
- SHOUP, Logan S08 Hydroclimatic Extremes
- SHRADER, Corey C10 Hydroecology, P146
- SHRESTHA, Jenisha S20 Ecological Subsidies to Stream and Riparian Ecosystems, P64
- SHULL, Dustin C02 Bioassessment
- SHUPRYT, Michael C02 Bioassessment
- SIBLEY, Paul S17 Stressed Forested Watersheds, P54
- SIDERS, Adam C09 Food Webs, S24 Scale and Ecosystem Functions
- SIEPIELSKI, Adam S23 Traits-Based Vulnerability Assessment/Climate Change, S01 Future Freshwater Scientists – Undergrads
- ŠILING, Rebeka C02 Bioassessment
- SILVA, Deborah C02 Bioassessment
- SILVA-ARAUJO, Monalisa C13 Land-use and Non-Point Source Impacts, P177
- SILVA-JÚNIOR, Eduardo C13 Land-use and Non-Point Source Impacts, P177
- SIMON, Kevin C04 Climate Change
- SINGER MCCOMBS, Erin S10 Rivers at Risk
- SINHA, Tushar S08 Hydroclimatic Extremes
- SKAGGS, Jon S26 Exploring Trophic Relationships and Stream Food Webs
- SKILES, Ethan C12 Invertebrate Ecology, P156
- SLATER, Alicia S11 Next-Generation Sequencing in Freshwater Science, P40, S01 Future Freshwater Scientists - Undergrads, P10
- SLATTERY, Michael S03 Global Perspectives on Environmental Flows
- SLEEPER, Ryan S24 Scale and Ecosystem Functions, P67
- SLUSS, Tamara S01 Future Freshwater Scientists - Undergrads
- SMART, Meghan S05 Eco-hydrology of IRES in a Changing Climate
- SMARTT, Ayla C02 Bioassessment, P85
- SMITH, Christopher S10 Rivers at Risk, P38
- SMITH, Geoffrey C02 Bioassessment
- SMITH, Heidi C03 Biogeochemistry
- SMITH, Lora L. S04 Temporary Wetlands, P20
- SMITH, Sigrid C02 Bioassessment
- SMITH, Tyler C02 Bioassessment
- SMITS, Adrienne C03 Biogeochemistry
- SMOTH, Cody S16 Algal Data as a Component of Bioassessment, P53
- SMUCKER, Nathan C01 Algae and Primary Production, S12 Urban Stream Syndrome , P45
- SNYDER, Eric S26 Exploring Trophic Relationships and Stream Food Webs, C05 Conservation and Restoration, P111
- SO, Ying Kin C18 Population and Community Ecology
- SOBOTA, Daniel S16 Algal Data as a Component of Bioassessment
- SOLAGAISTUA, Libe S17 Stressed Forested Watersheds
- SOLINS, Joanna S12 Urban Stream Syndrome
- SON, David C12 Invertebrate Ecology, P155
- SONG, Chao S24 Scale and Ecosystem Functions
- SOROLLA, Albert C03 Biogeochemistry, C05 Conservation and Restoration
- SOUCEK, David S09 Conservation of Freshwater Mussels
- SOUSA, Jake C04 Climate Change
- SOUTH, Eric C05 Conservation and Restoration, P112
- SPANGLER, Margaret S24 Scale and Ecosystem Functions
- SPAUDLING, Sarah C03 Biogeochemistry
- SPAUDLING, Taylor C07 Ecology of Fish and Other Aquatic Vertebrates
- SPEIR, Shannon C03 Biogeochemistry
- SPENCER, John S12 Urban Stream Syndrome , P43
- SPINDLER, Patrice S05 Eco-hydrology of IRES in a Changing Climate
- SPONSELLER, Ryan S17 Stressed Forested Watersheds
- SPORN, Lee Ann S06 Molecular Methods in Biomonitoring
- SPREYER, Kurt S01 Future Freshwater Scientists – Undergrads
- SRAYKO, Stephen C12 Invertebrate Ecology
- ST. AMAND, Ann S16 Algal Data as a Component of Bioassessment
- STAMP, Jennifer S23 Traits-Based Vulnerability Assessment, S08 Hydroclimatic Extremes, P31
- STANCHEVA, Rosalina S16 Algal Data as a Component of Bioassessment
- STANFORD, Bronwen C05 Conservation and Restoration
- STANFORD, Jack A C09 Food Webs
- STANISH, Lee S19 Session for Cliff Dahm
- STANKUS, Paul C08 Ecotoxicology, P135
- STANLEY, Emily S12 Urban Stream Syndrome , S24 Scale and Ecosystem Functions
- STAUFFER-OLSEN, Natalie S13 Session for Vince Resh, C18 Population and Community Ecology
- STEADMAN, Casey S17 Stressed Forested Watersheds, P55
- STECHSCHULTE, Jonathan S01 Future Freshwater Scientists - Undergrads, P5
- STEEL, Anna C10 Hydroecology, P142
- STEEL, Ashley C06 Disturbance
- STEEN, Paul J. S18 Community Engagement in Science
- STEIN, Eric S03 Global Perspectives on Environmental Flows, S05 Eco-hydrology of IRES in a Changing Climate, S06 Molecular Methods in Biomonitoring C10 Hydroecology, P141
- STEINHART, Geoffrey C13 Land-use and Non-Point Source Impacts, P176, S18 Community Engagement in Science, P57
- STELLA, John C. S13 Session for Vince Resh
- STELZER, Robert C03 Biogeochemistry, P102
- STEPRO, Jordan S03 Global Perspectives on Environmental Flows, P18
- STETS, Edward S24 Scale and Ecosystem Functions
- STEVENSON, R. Jan S16 Algal Data as a Component of Bioassessment
- STEWART, Alisha S05 Eco-hydrology of IRES in a Changing Climate
- STEWART, Rob S24 Scale and Ecosystem Functions
- STICKNEY, Emily C03 Biogeochemistry
- STODDARD, John S14 Multiple Stressors in River Ecosystems
- STODOLA, Alison S09 Conservation of Freshwater Mussels
- STOECKEL, Jim C12 Invertebrate Ecology
- STOLL, Stefan S25 Modeling Environmental Change in Freshwater Ecosystems
- STONE, Mark S07 Challenges in Freshwater Conservation
- STOUGHTON, Stephanie C12 Invertebrate Ecology, C20 Gas and Oil, C02 Bioassessment, P85 C13 Land-use and Non-Point Source Impacts, P171
- STRAUSS, Eric C03 Biogeochemistry, P102, P90
- STRAYER, David S10 Rivers at Risk
- STRECKER, Angela C02 Bioassessment, C07 Ecology of Fish and Other Aquatic Vertebrates
- STRIBLING, James C02 Bioassessment C02 Bioassessment
- STRICKER, Craig C09 Food Webs, P138
- STRICKLER, Katherine S06 Molecular Methods in Biomonitoring
- STROMBERG, Juliet C09 Food Webs, P139
- STRYCHAR, Kevin C12 Invertebrate Ecology, P162
- STUBBINGTON, Rachel S05 Eco-hydrology of IRES in a Changing Climate, S01 Future Freshwater Scientists – Undergrads
- STUDINSKI, Jered S17 Stressed Forested Watersheds
- SUDDUTH, Elizabeth C05 Conservation and Restoration, S01 Future Freshwater Scientists – Undergrads
- SUEHRING, Aaron C13 Land-use and Non-Point Source Impacts, P175
- SUH, Daniel S01 Future Freshwater Scientists - Undergrads, P8
- SULLIVAN, S. Mazeika P. C09 Food Webs, S14 Multiple Stressors in River Ecosystems, S20 Ecological Subsidies to Stream and Riparian Ecosystems
- SULLIVAN, Sean C18 Population and Community Ecology, S16 Algal Data as a Component of Bioassessment
- SUMMERFIELD, Tina S14 Multiple Stressors in River Ecosystems
- SUN, Ge S03 Global Perspectives on Environmental Flows
- SURES, Bernd S12 Urban Stream Syndrome
- SUSKA, Katarzyna S03 Global Perspectives on Environmental Flows
- SUTHERLAND, Erika C07 Ecology of Fish and Other Aquatic Vertebrates
- SWANNACK, Todd C11 Invasive Species, P150
- SWEENEY, Bernard C02 Bioassessment, C04 Climate Change
- SWIFT, Benjamin C18 Population and Community Ecology
- SWINK, Aaron C03 Biogeochemistry
- SZAFRANIEC, Mary S14 Multiple Stressors in River Ecosystems
- TABIBZADEH NURI, Arianna S10 Rivers at Risk, P37
- TANIWAKI, Ricardo S07 Challenges in Freshwater Conservation

TANK, Jennifer	S10 Rivers at Risk, C03 Biogeochemistry, C13 Land-use and Non-Point Source Impacts, C17 Organic Matter Processing, S20 Ecological Subsidies to Stream and Riparian Ecosystems, C03 Biogeochemistry, P91	VAESSEN, Timothy	C03 Biogeochemistry, C05 Conservation and Restoration, C03 Biogeochemistry, P98
TAPOLCZAI, Kalman	S06 Molecular Methods in Biomonitoring	VALETT, H. Maurice	S19 Session for Cliff Dahm, C03 Biogeochemistry, C05 Conservation and Restoration, P113, P116, S14 Multiple Stressors in River Ecosystems, P48
TAYLOR, Brad	C04 Climate Change, P107, C12 Invertebrate Ecology, P160	VAN ALST, Andrew	S11 Next-Generation Sequencing in Freshwater Science
TAYLOR, Jason	C03 Biogeochemistry, C17 Organic Matter Processing	VAN DE BUND, Wouter	S03 Global Perspectives on Environmental Flows
TAYLOR, Ryland	S24 Scale and Ecosystem Functions	VAN DRIESCHE, Richard	C06 Disturbance, P119
TEH, Swee	C04 Climate Change	VAN EE, Brian	S09 Conservation of Freshwater Mussels, P36
TEICHERT, Sonja	S13 Session for Vince Resh	VAN OOSBREE, Annika	S01 Future Freshwater Scientists - Undergrads, P2
TEMPLAR, Hayley	C05 Conservation and Restoration	VANCE, Jesse	C03 Biogeochemistry S24 Scale and Ecosystem Functions
THEOBALD, Dave	C02 Bioassessment	VANDER MEER, Dennis	S16 Algal Data as a Component of Bioassessment
THOMAS, Dave	S09 Conservation of Freshwater Mussels	VANDER VORSTE, Ross	S05 Eco-hydrology of IRES in a Changing Climate
THOMAS, Steven	C04 Climate Change, C13 Land-use and Non-Point Source Impacts, P177, S02 Climate and Drought Effects on Mountain Stream Ecosystems, P16	VANDRIESCHE, Richard	S22 Biotic Responses to Food Web Alterations
THOMAS, Worthington	S03 Global Perspectives on Environmental Flows	VASQUEZ, Francisco	C10 Hydroecology, P145
THOMPSON, Ross	S03 Global Perspectives on Environmental Flows, S27 Contaminants as Agents of Ecological Change	VASSELON, Valentin	S06 Molecular Methods in Biomonitoring , S11 Next-Generation Sequencing in Freshwater Science, P42
THORNBRUGH, Darren	S14 Multiple Stressors in River Ecosystems, S25 Modeling Environmental Change in Freshwater Ecosystems	VAUGHAN, Matthew	S24 Scale and Ecosystem Functions, P67
THUM, Ryan	C11 Invasive Species	VAUGHN, Caryn	S14 Multiple Stressors in River Ecosystems, S09 Conservation of Freshwater Mussels, P33, P34
TIBBETS, Teresa	S19 Session for Cliff Dahm	VAZQUEZ, Bethany	C02 Bioassessment, P89
TIBBY, John	S08 Hydroclimatic Extremes	VÁZQUEZ, Raúl	S02 Climate and Drought Effects on Mountain Stream Ecosystems
TIEGAS, Scott	S20 Ecological Subsidies to Stream and Riparian Ecosystems	VENARSKY, Michael	C03 Biogeochemistry
TIEMANN, Jeremy	S09 Conservation of Freshwater Mussels, C11 Invasive Species, P154	VERB, Robert	C18 Population and Community Ecology, P183, S01 Future Freshwater Scientists - Undergrads, P4, P3, P5, P9
TIERNO DE FIGUEROA, J. Manuel	S13 Session for Vince Resh	VERDONSCHOT, Piet F.M.	C04 Climate Change, S23 Traits-Based Vulnerability Assessment/Climate Change
TIMM, Ray	C10 Hydroecology	VERKAIK, Irima	S13 Session for Vince Resh, C18 Population and Community Ecology, P189
TIMONER, Xisca	S13 Session for Vince Resh	VESBACH, Cristina	S11 Next-Generation Sequencing in Freshwater Science
TODD, Aaron	C20 Gas and Oil	VIERS, Joshua	S03 Global Perspectives on Environmental Flows
TODD, Andrew S.	C04 Climate Change, S20 Ecological Subsidies to Stream and Riparian Ecosystems	VILA, Anna	S26 Exploring Trophic Relationships and Stream Food Webs
TONG, Tiezheng	S10 Rivers at Risk	VINYOLAS, Dolors	S05 Eco-hydrology of IRES in a Changing Climate
TONINA, Daniele	C03 Biogeochemistry, S10 Rivers at Risk	VOIGHT, Rachel	C10 Hydroecology, P143
TONKIN, Jonathan	C04 Climate Change, S08 Hydroclimatic Extremes	VON BITNER, Ted	C02 Bioassessment
TOPPING, Brian	S21 Balancing the Freshwater Budget	VON BRÖMSEN, Claudia	C06 Disturbance
TORNWALL, Brett	C18 Population and Community Ecology	VON SCHILLER, Daniel	S14 Multiple Stressors in River Ecosystems
TORRES, Pedro	C07 Ecology of Fish and Other Aquatic Vertebrates	VONDRAČEK, Bruce	C12 Invertebrate Ecology, P157
TOTH, Emma	C06 Disturbance	VOSS, Kristofor	S27 Contaminants as Agents of Ecological Change
TOWNSEND, Simon	C06 Disturbance	WADSWORTH, Zachary	C09 Food Webs, P137
TREBITZ, Anett	S06 Molecular Methods in Biomonitoring	WAITE, Ian	S14 Multiple Stressors in River Ecosystems
TRENTMAN, Matt	C13 Land-use and Non-Point Source Impacts, S24 Scale and Ecosystem Functions, C03 Biogeochemistry, P91	WALKER, Edward	S11 Next-Generation Sequencing in Freshwater Science
TRENTMAN, Matt	C13 Land-use and Non-Point Source Impacts	WALKER, Richard	S14 Multiple Stressors in River Ecosystems
TROELSTRUP, Nels	C12 Invertebrate Ecology, S09 Conservation of Freshwater Mussels, C13 Land-use and Non-Point Source Impacts, P175	WALTER, Todd	C10 Hydroecology, P144
TROMBONI, Flavia	C13 Land-use and Non-Point Source Impacts, P177	WALTERS, Annika	S14 Multiple Stressors in River Ecosystems, C06 Disturbance
TSENG, Chi-Yen	C17 Organic Matter Processing, P179	WALTERS, David	S20 Ecological Subsidies to Stream and Riparian Ecosystems, C03 Biogeochemistry, S10 Rivers at Risk, S27 Contaminants as Agents of Ecological Change
TSUI, Martin	C03 Biogeochemistry	WANG, Beixin	C02 Bioassessment
TSUTSUI, Yuka	S24 Scale and Ecosystem Functions	WANG, Jie	C01 Algae and Primary Production
TUCHMAN, Nancy	S11 Next-Generation Sequencing in Freshwater Science, P41	WANG, Ning	S09 Conservation of Freshwater Mussels
TUCKER, Fred	S01 Future Freshwater Scientists - Undergrads, P4	WANTY, Richard	S20 Ecological Subsidies to Stream and Riparian Ecosystems
TUMOLO, Ben	C07 Ecology of Fish and Other Aquatic Vertebrates, P130	WARBURTON, Helen	S26 Exploring Trophic Relationships and Stream Food Webs, C02 Bioassessment, C07 Ecology of Fish and Other Aquatic Vertebrates, S14 Multiple Stressors in River Ecosystems
TUNG, Alice	C04 Climate Change	WARD, Amelia	S19 Session for Cliff Dahm
TURETSKY, Merritt	C01 Algae and Primary Production, P81	WARD, David	C10 Hydroecology
TURNER, Andrew	S14 Multiple Stressors in River Ecosystems	WARD, Eric	S08 Hydroclimatic Extremes
TURNER, Brenainn	C18 Population and Community Ecology, P190	WARD, Milton	S19 Session for Cliff Dahm
TURNER, Dale	S05 Eco-hydrology of IRES in a Changing Climate	WARMBOLD, Jerry	C07 Ecology of Fish and Other Aquatic Vertebrates
TURNER, Thomas	S19 Session for Cliff Dahm	WARREN, Dana	S02 Climate and Drought Effects on Mountain Stream Ecosystems, S17 Stressed Forested Watersheds
TURUNEN, Jarno	S17 Stressed Forested Watersheds	WASHKO, Susan	C04 Climate Change, P107
TUULAIKHUU, Baigal-Amar	C08 Ecotoxicology. S26 Exploring Trophic Relationships and Stream Food Webs	WATANABE, Nozomi	C12 Invertebrate Ecology, P165
TWEEDY, Brent	S14 Multiple Stressors in River Ecosystems	WATANABE, Yuya	C06 Disturbance
UCHIDA, Kei	C10 Hydroecology	WATERS, Matthew	C17 Organic Matter Processing
UMEK, John	S06 Molecular Methods in Biomonitoring	WATSON, Grace	C01 Algae and Primary Production
UNDERWOOD, Dessie	C11 Invasive Species, C01 Algae and Primary Production, P77	WATTERS, G. Thomas	S09 Conservation of Freshwater Mussels
UNO, Hiromi	S20 Ecological Subsidies to Stream and Riparian Ecosystems	WEATHERS, Kathleen	S20 Ecological Subsidies to Stream and Riparian Ecosystems, P64
URBAN, Dean	S12 Urban Stream Syndrome	WEBB, J. Angus	S03 Global Perspectives on Environmental Flows, S15 Putting Your Publications to Work
USHER, Rachel	S12 Urban Stream Syndrome , P46	WEBB, Jeff	C18 Population and Community Ecology
VADHER, Atish N.	S05 Eco-hydrology of IRES in a Changing Climate		

WEBER, Marc	S14 Multiple Stressors in River Ecosystems, S25 Modeling Environmental Change in Freshwater Ecosystems	WOLOCK, David	S02 Climate and Drought Effects on Mountain Stream Ecosystems, S03 Global Perspectives on Environmental Flows
WEBER, Matt	S15 Putting Your Publications to Work	WOLVERTON, Steve	S09 Conservation of Freshwater Mussels
WEBSTER, Alex	C13 Land-use and Non-Point Source Impacts	WONDZELL, Mark	S03 Global Perspectives on Environmental Flows
WEEKS, Alicia	C11 Invasive Species, P149	WOOD, James	S26 Exploring Trophic Relationships and Stream Food Webs, S12 Urban Stream Syndrome , P46, S18 Community Engagement in Science, P56
WEGNER, Justin	C07 Ecology of Fish and Other Aquatic Vertebrates	WOOD, John	S13 Session for Vince Resh
WEHR, John	S12 Urban Stream Syndrome , P45	WOOD, Paul	S14 Multiple Stressors in River Ecosystems
WEI, Adam	S17 Stressed Forested Watersheds	WOOD, Paul J.	S05 Eco-hydrology of IRES in a Changing Climate
WEIBY, Meghan	C12 Invertebrate Ecology, P156	WOOD, Susie	C01 Algae and Primary Production
WEISROCK, David	S11 Next-Generation Sequencing in Freshwater Science	WOODWARD, Guy	S26 Exploring Trophic Relationships and Stream Food Webs
WEITERE, Markus	C10 Hydroecology	WOOTEN, Matthew	S10 Rivers at Risk
WELTER, Jill	C01 Algae and Primary Production, S14 Multiple Stressors in River Ecosystems	WRIGHT, Michael	S26 Exploring Trophic Relationships and Stream Food Webs
WENGER, Seth	S12 Urban Stream Syndrome , P43	WYATT, Kevin	S01 Future Freshwater Scientists - Undergrads, C01 Algae and Primary Production, P81
WERNEKE, David	C02 Bioassessment	WYMORE, Adam	C03 Biogeochemistry
WESNER, Jeff	C07 Ecology of Fish and Other Aquatic Vertebrates C12 Invertebrate Ecology, S20 Ecological Subsidies to Stream and Riparian Ecosystems, C07 Ecology of Fish and Other Aquatic Vertebrates, P127	XENOPOULOS, Marguerite	S08 Hydroclimatic Extremes
WEST, Amie	S10 Rivers at Risk	XIAO, Xiangming	C01 Algae and Primary Production
WESTVEER, Judith	C18 Population and Community Ecology	XIE, Yuwei	S14 Multiple Stressors in River Ecosystems
WEYAND, Courtney	C07 Ecology of Fish and Other Aquatic Vertebrates	XIONG, Hou Mai	C12 Invertebrate Ecology, P170
WHALEN, Steven	C03 Biogeochemistry	YACKULIC, Charles	C03 Biogeochemistry, S10 Rivers at Risk, S24 Scale and Ecosystem Functions
WHILES, Matt	C05 Conservation and Restoration, C06 Disturbance, C07 Ecology of Fish and Other Aquatic Vertebrates, C10 Hydroecology, C18 Population and Community Ecology, S04 Temporary Wetlands, S08 Hydroclimatic Extremes, S24 Scale and Ecosystem Functions, S26 Exploring Trophic Relationships and Stream Food Webs, S20 Ecological Subsidies to Stream and Riparian Ecosystems, P61	YANG, Jianghua	S06 Molecular Methods in Biomonitoring
WHIPPLE, Alison	S03 Global Perspectives on Environmental Flows	YARNELL, Sarah	C10 Hydroecology, S03 Global Perspectives on Environmental Flows, C10 Hydroecology, P142
WHITE, James	S03 Global Perspectives on Environmental Flows	YARRA, Allyson	S05 Eco-hydrology of IRES in a Changing Climate
WHITELEY, Andrew	C07 Ecology of Fish and Other Aquatic Vertebrates	YATES, Adam	C02 Bioassessment, C13 Land-use and Non-Point Source Impacts
WHITEMAN, Howard	S20 Ecological Subsidies to Stream and Riparian Ecosystems, P65	YATES, Adam G.	C10 Hydroecology
WHITLEDGE, Gregory	C10 Hydroecology	YEUNG, Alex	S17 Stressed Forested Watersheds
WHORLEY, Sarah	S12 Urban Stream Syndrome , P45	YLLA, Irene	S13 Session for Vince Resh
WIECZOREK, Mike	S02 Climate and Drought Effects on Mountain Stream Ecosystems	YOSHIMURA, Kento	C06 Disturbance
WIEWIORA, Evan	S24 Scale and Ecosystem Functions, C03 Biogeochemistry, P97, P94	YOUNG, Taylor	C12 Invertebrate Ecology, P155
WIGHT, Aneth	S03 Global Perspectives on Environmental Flows	YUAN, Lester	C02 Bioassessment, S06 Molecular Methods in Biomonitoring
WIITALA, Megan	C05 Conservation and Restoration, P117, C10 Hydroecology, P145	ZAIDEL, Peter	S10 Rivers at Risk, P38
WILLIAMS, Edward	S27 Contaminants as Agents of Ecological Change	ZAMOR, Richard M.	C11 Invasive Species
WILLIAMSON, Jacob	S27 Contaminants as Agents of Ecological Change	ZAMORA, Lluís	S26 Exploring Trophic Relationships and Stream Food Webs
WILLINK, Philip	C07 Ecology of Fish and Other Aquatic Vertebrates	ZANDONÀ, Eugenia	C13 Land-use and Non-Point Source Impacts, P177
WILSON, Henry	S08 Hydroclimatic Extremes	ZAPARZYNSKI, Graeme	C07 Ecology of Fish and Other Aquatic Vertebrates
WILSON, Matthew	C12 Invertebrate Ecology	ZAPATA, Martha J.	S20 Ecological Subsidies to Stream and Riparian Ecosystems
WILSON, Rebecca	C12 Invertebrate Ecology	ZARNETSKE, Jay	C03 Biogeochemistry, C10 Hydroecology, S24 Scale and Ecosystem Functions, C03 Biogeochemistry, P97, P94
WILSON, Tamara	S25 Modeling Environmental Change in Freshwater Ecosystems	ZAVALETA, Erika	C05 Conservation and Restoration
WILZBACH, Peggy	S20 Ecological Subsidies to Stream and Riparian Ecosystems, P62	ZAWALSKI, Rebecca	C12 Invertebrate Ecology, P169
WINDSOR, Fredric	C10 Hydroecology	ZEGLIN, Lydia	S11 Next-Generation Sequencing in Freshwater Science, S19 Session for Cliff Dahm
WINGERTER, Natasha	C07 Ecology of Fish and Other Aquatic Vertebrates, C18 Population and Community Ecology, P184	ZEIGLER, Matthew P.	C04 Climate Change
WINTERRINGER, Rebecca	S09 Conservation of Freshwater Mussels, P35	ZEPP, Kornelia	C10 Hydroecology, P145
WINTERS, Kirsten	S15 Putting Your Publications to Work	ZERMENO, Joe	S01 Future Freshwater Scientists - Undergrads, C12 Invertebrate Ecology, P155
WIPFLI, Mark	S22 Biotic Responses to Food Web Alterations	ZHANG, Xiaowei	S06 Molecular Methods in Biomonitoring , S11 Next-Generation Sequencing in Freshwater Science, S14 Multiple Stressors in River Ecosystems
WISEMAN, Chad	C10 Hydroecology	ZHENG, Lei	S23 Traits-Based Vulnerability Assessment, C08 Ecotoxicology, P131
WISEMAN, Sheila	S02 Climate and Drought Effects on Mountain Stream Ecosystems	ZIMMERMAN, Christian	S22 Biotic Responses to Food Web Alterations
WISNIEWSKI, Jason	S09 Conservation of Freshwater Mussels	ZINK, Jason	C02 Bioassessment
WISSINGER, Scott	C04 Climate Change, C12 Invertebrate Ecology, C04 Climate Change, P107	ZLATANOVIC, Sanja	S05 Eco-hydrology of IRES in a Changing Climate
WITT, Jonathan	S23 Traits-Based Vulnerability Assessment	ZOMER, Frank	C10 Hydroecology, P141
WITTMANN, Amanda	C05 Conservation and Restoration, P114	ZOPPINI, Annamaria	S13 Session for Vince Resh
WITTY, Lynne	S06 Molecular Methods in Biomonitoring	ZUBIETA, Jose	S05 Eco-hydrology of IRES in a Changing Climate
WOHL, Ellen	C03 Biogeochemistry	ZUCKERMAN, Adrienne	C01 Algae and Primary Production
WOLFE, Barbara	S09 Conservation of Freshwater Mussels	ZUIDEMA, Shan	C03 Biogeochemistry
WOLFE, Emily	C06 Disturbance, P122		
WOLFENDEN, Ben	C18 Population and Community Ecology		
WOLFF, Brian	S27 Contaminants as Agents of Ecological Change		
WOLLER-SKAR, Megan	C01 Algae and Primary Production		
WOLLHEIM, Wil	S24 Scale and Ecosystem Functions		
WOLLHEIM, Wilfred	C03 Biogeochemistry		

SAVE THE DATE



SOCIETY FOR
FRESHWATER SCIENCE

2017 ANNUAL MEETING



sfs2017

DESIGNING OUR FRESHWATER FUTURES

RALEIGH, NORTH CAROLINA, USA

JUNE 4–8, 2017

For more information visit freshwater-science.org or

sfsAnnualMeeting.org

Designing our Freshwater Futures:

Human civilization relies on a sustainable supply of fresh water to satisfy our thirst, water our crops, support fisheries, provide energy, and enrich our experience of nature. We are equally reliant on freshwater ecosystems to dispose of our wastes and to transport our commodities. These needs are often in conflict with one another, and unless carefully managed may both conflict with our desire to maintain the beauty and biodiversity of rivers. Much freshwater science has focused on documenting the identity and distribution of freshwater species and their loss; how our farms, cities, dams and mines degrade the physical, chemical and biological integrity of receiving streams. As a result, we are adept at documenting the decline – research designed to identify solutions has proved more elusive.

In our Raleigh 2017 meeting, we want to challenge the SFS community to shift their focus to how freshwater science can help imagine and implement solutions to the complex set of problems that plague freshwaters. Advancing our understanding of ecological processes will continue to be important, but is insufficient to meet future challenges. At SFS 2017 we will discuss and debate compelling ideas about how freshwater scientists can individually and collectively contribute to solution pathways that improve the trajectory of freshwater ecosystems. Our goal is to encourage all members of SFS to use their science to Inspire the public by sharing stories about the wonders of freshwater ecosystems; Inform stakeholders about the threats to and possibilities for future freshwater management and Insert our knowledge into real-time policy decisions, management actions, and technological innovations that will ultimately determine our freshwater future.

Please visit the Greater Raleigh Convention and Visitor's Bureau booth for further details concerning the meeting; or visit the SFS website, www.sfsannualmeeting.org.



sfs2017

DESIGNING OUR FRESHWATER FUTURES

RALEIGH, NORTH CAROLINA, USA



PHOTO CREDIT

The photos on our front and back cover contrast pre-drought vs. during-drought conditions in California, and are courtesy of Dave Herbst (shown), Sierra Nevada Aquatic Research Laboratory, University of California.