



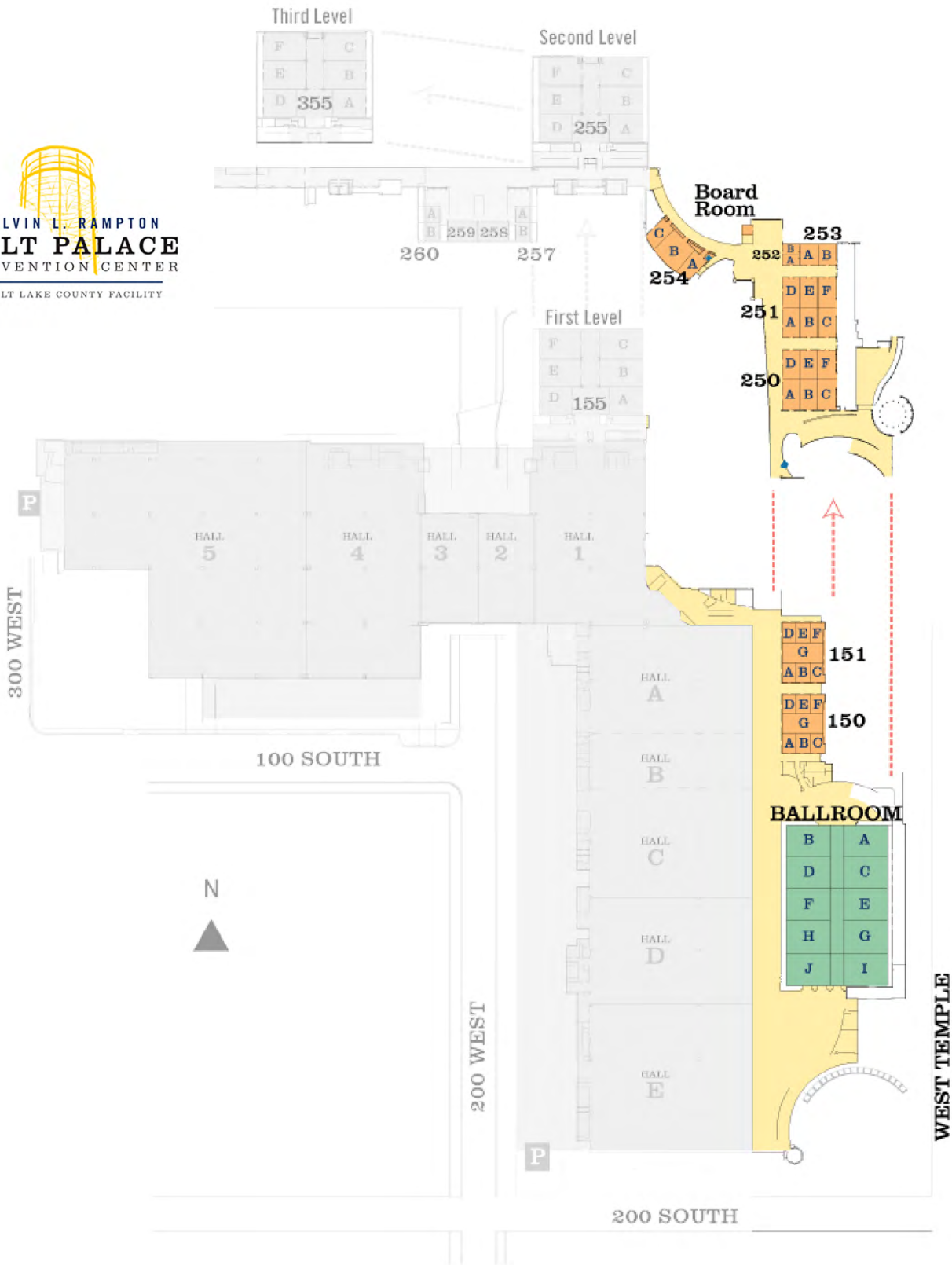
2019 Annual Meeting



Society for Freshwater Science

Salt Palace Convention Center

Floor Plans for the SFS 2019 Annual Meeting



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Institute for Great Lakes Research

Complex Issues, Multidisciplinary Approach

*Central Michigan University's Institute
for Great Lakes Research conducts
collaborative research and offers
educational opportunities on the ecology
of the Great Lakes. Find out more at
se.cmich.edu/iglr*

Registration and Check-In Information

Registration and check in for the meeting will be available all week in the North Foyer of the Salt Palace. Please check in upon your arrival at the meeting in order to receive your name badge and other important materials and information.

REGISTRATION HOURS

Sunday, May 19—4:00pm to 10:00pm

Monday, May 20—8:00am to 11:00pm

Tuesday, May 21—8:00am to 7:00pm

Wednesday, May 22—8:00am to 4:00pm

Thursday, May 23—8:00am to 5:00pm

MEETING UPDATES

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

RECEIPTS AND LETTERS 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.

MESSAGES

Message boards will be located near registration. Feel free to post messages, CV's, and job opportunities 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.

WIFI

Connect to **SFS2019**, no password needed.



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 <https://freshwater-science.org/>.

For more information visit freshwater-science.org or

[sfsAnnualMeeting.org](https://freshwater-science.org)

Translational Ecology in Freshwater Science

Freshwater resources critically support ecosystem and human health. Future projections include widespread scarcity in some areas, and excess in others. Human impacts on freshwater influence both quantity (e.g., dams, groundwater, withdrawal) and quality (e.g., land use change, contaminant delivery). Climate change exacerbates these influences by altering temperatures, land cover, precipitation and runoff patterns, and the abundance, distribution, and diversity of aquatic organisms.

In the face of continuing environmental change and the magnitude of its complex and interacting effects on global freshwater, Translation Ecology (TE) provides a potential roadmap for freshwater science to inform real world decision-making. The foundational principles of TE include interdisciplinary collaboration, multidirectional engagement, long-term commitment, iterative communication, transparent and representative process, and a decision context that leads to actionable outcomes. Freshwater science is ideally suited for TE, and while we may have called it by other names, our community has a track record of providing some of the most compelling examples of TE success.

Find Us On Twitter

<https://twitter.com/benthosnews>

#2019SFS

Meeting Organizers

2019 Annual Meeting

President

Jennifer Tank

Annual Meeting Committee

Nick Aumen (*Chair*)

Jennifer Tank (*Plenary*)

Todd Royer (*Plenary*)

Michelle Baker (*Plenary*)

Laura Johnson (*Special Sessions*)

Denise Bruesewitz (*Special Sessions*)

Geoff Poole (*Abstract Czar*)

Jeff Ostermiller (*Field Trips*)

Andy Leidolf (*Sponsorship*)

AJ Reisinger

Local Arrangements Subcommittee

Juliana D'Andrilli (*Chair*)

Benjamin W. Abbott (*5K Run*)

Sophia Bonjour

Rebecca J. Frei

Peter Levi (*5K Run*)

Angie Merritt

Deni Murray

Student Resource

Committee (SRC) Officers

Courtney Larson (*Chair*)

Andrew Sanders (*Past Chair, BoD Rep*)

Anna Vincent (*Silent Book Auction Chair*)

Bizzy Berg (*Live Auction Chair*)

Lienne Sethna (*SRC Workshop Chair*)

Carolyn Cummins (*Student-Mentor Mixer Co-Chair*)

Catelin Conn (*Student-Mentor Mixer Co-Chair*)

Andrea (Andi) Fitzgibbon (*Merchandise Co-Chair*)

Raissa Mendonca (*Merchandise Co-Chair*)

Steven Plont (*Undergrad Awards Chair*)

Lisa Kim (*Social Media Chair*)

Jose Sanchez (*Education and Diversity Chair*)

Jack McLaren (*Local Coordinator*)

Early Career Development

Zacchaeus Compson (*Chair*)

Natalie Griffiths

Erin Hotchkiss

Meryl Mims

PJ Torres

Ashley Helton

Michael Hassett

Marc Peipoch

Pablo E. Gutiérrez Fonseca

Allison Veach

Erin Larson

Society Officers & Information

Executive Committee

Jennifer Tank (*President*)

Todd Royer (*Vice President*)

Colden Baxter (*Past President*)

Amy Rosemond (*President Elect*)

Bob Hall (*Vice President Elect*)

Mike Swift (*Treasurer*)

Sally Entrekin (*Secretary*)

Betsy Colburn (*Chair Finance Com*)

Eric Moody (*PIP Rep*)

Andy Leidolf (*Executive Director*)

Board of Directors

Jennifer Tank (*President*)

Colden Baxter (*Past President*)

Amy Rosemond (*President Elect*)

Bob Hall (*Vice President Elect*)

Amy Marcarelli (*Past Vice President*)

Todd Royer (*Vice President*)

Mike Swift (*Treasurer*)

Sally Entrekin (*Secretary*)

Elizabeth Sudduth (*Academic Rep*)

PJ Torres (*Early Career*)

Stuart Findlay (*Non-Academic Rep*)

Angus Webb (*International Delegate*)

Eric Moody (*PIP Rep*)

Michelle Baker (*Chair Pub Com*)

Betsy Colburn (*Chair Finance Com*)

Patina Mendez (*Past Chair of Ed & Diversity Com*)

Andrew Sanders (*SRC Rep*)

Andy Leidolf (*SFS Exec Director*)

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

<https://sfsannualmeeting.org>

Society Website

<https://freshwater-science.org>

Mobile App/Guidebook

<https://guidebook.com/g/sfs2019/>

Facebook

<https://facebook.com/FreshwaterScience>

Twitter

<https://twitter.com/benthosnews>
#2019SFS

Conference Planner/ Meeting Management

USU Event Services

Jordyn Jensen

435-797-7902

jordyn.jensen@usu.edu

Hannah Paxton

435-797-0178

hannah.paxton@usu.edu

Seth Tarver

435-797-0526

seth.tarver@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.



SFS Diversity Statement

The Society for Freshwater Science is dedicated to promoting diversity among its members and welcomes and encourages participation from all, regardless of ethnicity, sexual orientation, gender identity, socioeconomic status, physical or mental difference, religion, age, or national origin. The SFS is inclusive and accepting of all people and built on tolerance, respect, and a welcoming spirit at all of our activities. We strive to actively promote diversity across all levels of our society including members, leaders, committees, and staff. We value a diverse community and believe it fosters a richer understanding of freshwater ecosystems and conservation of global freshwater resources. Members with questions, comments or concerns about SFS diversity issues are encouraged to raise them with a member of the SFS Education and Diversity Committee.

This statement was approved by SFS Membership at 2016 SFS Business Meeting

SFS Annual Meeting Code of Conduct

All members registering for the Society for Freshwater Science Annual Meeting must agree to abide by the following Code of Conduct:

The Society for Freshwater Science is an international scientific organization whose purpose is to promote further understanding of freshwater ecosystems and ecosystems at the interface between aquatic and terrestrial habitats. SFS members and authors of SFS publications are expected to adhere to the SFS Science-Based Policy and the SFS Statement of Ethics.

SFS meetings, open to SFS members and those interested in freshwater sciences, are among the most respected meetings in the freshwater science community. SFS is committed to providing a safe, productive and welcoming environment for all meeting participants and staff. All participants including, but not limited to, attendees, speakers, volunteers, exhibitors, SFS staff, service providers and others are expected to abide by this SFS Meetings Code of Conduct. This Code of Conduct applies to all SFS meeting-related events including those sponsored by organizations other than SFS but held in conjunction with SFS events, in public or private facilities.

Expected Behavior

- Communicate openly with respect and consideration for others, valuing a diversity of views and opinions.
- Avoid personal attacks directed toward other attendees, participants, SFS staff and suppliers/vendors.
- Be mindful of your surroundings and of your fellow participants. Alert SFS staff if you notice a dangerous situation or someone in distress.
- Respect the rules and policies of the meeting venue, hotels, SFS contracted facility, or any other venue.

- Request permission from speakers before recording or taking photographs during their presentation. Turn off any ringers or otherwise disrupting devices during oral or poster sessions.
- All members should feel empowered to speak up or intervene if they observe discriminatory behavior directed at others.

Unacceptable Behavior

It is important that our meeting be a place where no attendee or staff is ever belittled, criticized or made to feel unsafe. The following behavior will not be tolerated:

- Harassment, intimidation or discrimination in any form.
- Physical, written, or verbal abuse of any attendee, speaker, volunteer, exhibitor, SFS staff member, service provider or other meeting guest.
- Examples of unacceptable behavior include, but are not limited to, verbal comments related to gender, sexual orientation, disability, physical appearance, body size, race, religion, national origin, inappropriate use of nudity and/or sexual images in public spaces or in presentations, threatening or stalking any attendee, speaker, volunteer, exhibitor, SFS staff member, service provider or other meeting guest.

Reporting Unacceptable Behavior & Consequences

- All attendees and staff are expected to abide by the SFS code of ethics.
- Anyone experiencing or witnessing behavior that constitutes an immediate or serious threat to public safety is advised to contact 911 and locate a house phone and ask for security.
- Anyone requested to stop unacceptable behavior is expected to comply immediately.
- If you are the subject of unacceptable behavior or have witnessed any such behavior, please immediately notify the SFS Executive Director (Andy Leidolf), any SFS officer, or our conference services representative (Jordyn Jensen).
- Notification can also occur by emailing your concern to the SFS Executive Director or our conference services representative (exec.director@freshwater-science.org or jordyn.jensen@usu.edu, respectively).
- After receiving a report of inappropriate behavior, our conference services representative will assess the report and work with the complainant to determine the most appropriate response. SFS is committed to protecting the privacy of all individuals involved in the incident to the greatest extent possible. When necessary, the SFS leadership will be notified that a complaint has been received so it can consider appropriate actions.
- The SFS leadership reserves the right to take any lawful action we deem necessary in response to a violation of this code. This includes, but is not limited to, the immediate removal from the meeting without warning or refund.

Ensuring Inclusion & Diversity in the Future

The SFS leadership and the SFS Education and Diversity Committee also encourage anyone to contact SFS officers or members of the SFS Education and Diversity Committee (<https://freshwater-science.org/my-sfs/diversity-inclusivity>) regarding ways in which the society can improve inclusion & diversity and encourage both a stimulating and supporting atmosphere.

Version 2. Approved by SFS Board of Directors 11 April 2018
Version 1. (Including text through Unacceptable Behavior)
approved by SFS Board of Directors 14 Dec 2016

About Salt Lake

From the SFS 2019 Local Arrangements Committee

Food & Drink:

*Locations near the Salt Palace Convention Center
(from close by to a 20-minute walk)*

Beerhive Pub

128 Main St, Salt Lake City, UT 84101

A two block walk from the Salt Palace, this pub and restaurant has a fun atmosphere with a fantastic selection of beers.

City Creek Center

50 Main St, Salt Lake City, UT 84101

Just a short walk from the convention center is a large mall area of food, shopping, and an indoor ecosystem!

The Green Pig

31 E 400 S, Salt Lake City, UT 84111

The Green Pig has two separate bar/restaurant rooms within this establishment, the main floor sports bar/restaurant and the rooftop bar.

The Copper Common

111 Broadway #190, Salt Lake City, UT 84111

This cocktail bar offers a well-lit outdoor patio that wraps around the corner, and the indoor restaurant is dark and flirty with great music playing throughout the night.

Squatters Pub and Beers

147 Broadway, Salt Lake City, UT 84101

Large restaurant with plenty of indoor bar seating, table seating, and outdoor patio seating. Squatters has plenty of televisions to watch sports and a fantastic list of craft and bottled beers.

The Red Iguana

736 W North Temple, Salt Lake City, UT 84116

The Red Iguana has been known to be a bustling restaurant of vibrant Mexican food, and everything from the décor to menu items lived up to its reputation.

Gracie's Gastro Pub

326 S W Temple, Salt Lake City, UT 84101

Four separate atmospheres depending on where you sit from casual to classic—two patios and two indoor seating areas, with bars—and live music every night of the week.

The Beer Bar

161 E 200 S, Salt Lake City, UT 84111

This is a classic spot for drinks, games, and fun. The bar area also features a few food options that can be grilled to order. Great spot for social drinking, networking, and fun!

Quarters Arcade Bar

5 E 400 S, Salt Lake City, UT 84111

This is a great spot to find your favorite childhood game and play until the sun comes up. Cocktails and beer available.

The Bayou

645 State St, Salt Lake City, UT 84111

The Bayou is a gem off the beaten path—cool, fun, and has the largest beer selection in town. With a very New Orleans atmosphere, the Bayou offers casual dining, good food, and can accommodate any cocktail drinker at the bar.

Parks, Museums, and Other Attractions

City Creek Park

Memory Grove Park

Washington Square Park

Pioneer Park

Salt Palace Japanese Garden

Church History Museum

Discovery Gateway Children's Museum

Utah Museum of Contemporary Art

The Leonardo*

Salt Lake City Public Library

Capitol Theater

*Location of offsite social on Wednesday, May 22, 2019

Local Music Events

May 19th

- Omni @ Kilby Court

May 20th

- Catbamboo / Mannequin Mishap @ Kilby Court
- Seeking Tragedy and Silence The Voices @ The Loading Dock

May 21st

- Luke Redfield @ Kilby Court
- Foxing @ The Complex
- The Faint @ Metro Music Hall
- Xiu Xiu @ The Urban Lounge
- Grease @ Pioneer Theatre Company

May 22nd

- Sego, Uncle Reno, Super Yung Adult @ Kilby Court (I personally recommend this)
- Needtobreathe @ Eccles Theatre
- The Elovators @ Soundwell
- The Twilight Sad @ The Urban Lounge
- Grease @ Pioneer Theatre Company

May 23rd

- Sincerely, The Universe @ Kilby Court
- Dark Funeral @ Metro Music Hall
- Grease @ Pioneer Theatre Company

May 24th

- Combo Chimbita, Prince of Queens, Musor @ Kilby Court
- Xavier Wulf @ In the Venue
- Utah Symphony - Mahler @ Abravanel Hall
- Grease @ Pioneer Theatre Company



Meeting Site & Transportation

Salt Palace Convention Center

The first Salt Palace in Utah was built in 1899 but was destroyed by fire in 1910. An indoor arena with the same name was completed in 1969 and was home to several professional sports teams while hosting concerts and other events. The arena was demolished, and a brand new convention center opened its doors in 1996. Major expansions in 2000 and 2005 increased the building's size to nearly one million square feet. Adjoined to the facility are the Utah Museum of Contemporary Art and Abravanel Hall, home of the Utah Symphony.

Many of the convention center's most striking visual features were obtained through the creative use of hollow structural steel in exposed applications. The entrance towers, delicate snowflake chandeliers, and grand five-story main concourse make the Salt Palace part architectural showpiece, part modern art sculpture, and ready to be all business.

SMG manages the facility on behalf of Salt Lake County, owner of the building. SMG employees take pride in maintaining an attractive, safe, secure, technologically advanced, welcoming and well-run facility. We strive to exceed our clients' expectations regardless of the size of the event. We embrace the idea that our purpose reaches beyond our doors and into the greater Salt Lake community. Our S.O.A.R. program personifies our values as an important part of the hospitality industry in Utah.

The convention facility also houses the Visit Salt Lake executive offices, the Visit Salt Lake Visitors' Center, Simply Salt Lake gift shop and the SMG administrative offices.



Steve Greenwood/Visit Salt Lake

Transportation

Parking Resources

The Salt Palace Convention Center offers two convenient underground garages that are open 7 days a week:

- South Lot – Enter off of 200 South between West Temple and 200 West (600 stalls)
- West Lot – Enter off of 300 West between 100 South and South Temple (400 stalls)
- Handicap parking available in both lots
- Sorry, no in/out privileges or overnight parking; height/length restrictions
- Bicycles racks are located in the garages and in various places outside the facility
- Continuous security surveillance

TRAX Light Rail & UTA Bus

Visit this site to learn more about the free ride zone in downtown Salt Lake:

<http://www.rideuta.com/mc/?page=RidingUTA-PayingYourFare-FreeFareZone>

Lyft & Uber

<https://www.lyft.com/fare-estimate/>

<https://www.uber.com/fare-estimate/>

Green Bike Program

Salt Lake is now part of the nation-wide Green Bike program.

For rates and information, visit the following web address:

<https://www.greenbikeslc.org/default.aspx>

Parent Resources

SFS Parent Place:

254 C is an unstaffed room that has been made available for parent and family use during the SFS Annual Meeting.

Child Care Options:

<https://www.care.com/day-care/salt-lake-city-ut>

Accessibility

The Salt Palace provides visitors with ADA accessibility. Parking spaces for the disabled using both regular vehicles and vans are available in the south and west parking lots. Wheelchairs may be requested at the Guest Services Office (upon availability.)

Gender Neutral/Family Restrooms

Gender neutral/family restrooms are located in various areas throughout the Salt Palace. Visit the Information Desk for more information.

Society for Freshwater Science 2019 has gone mobile!

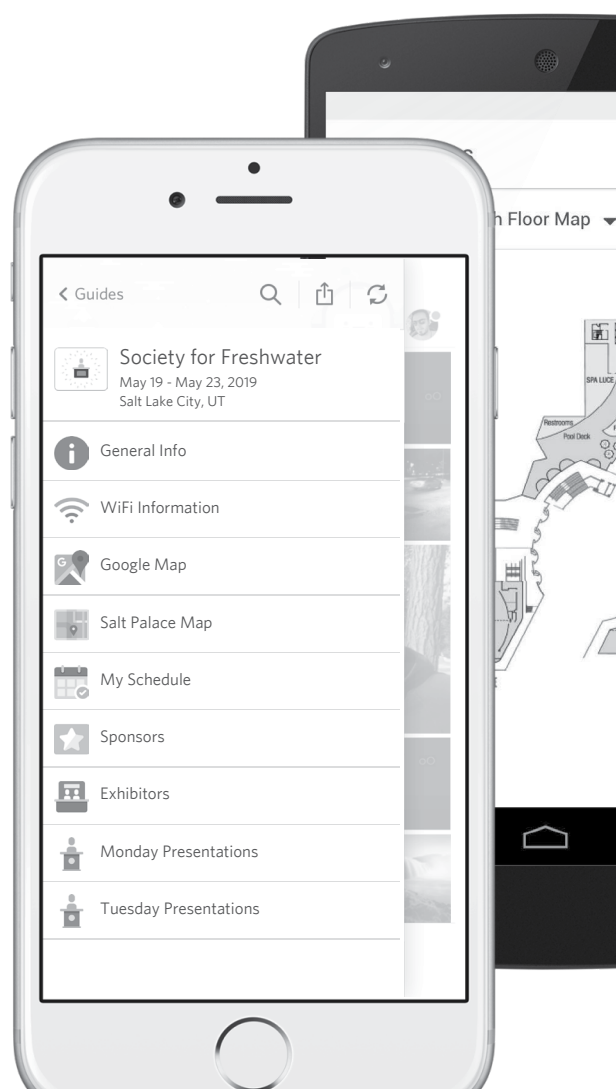
Get the app on your mobile device now, for free.

<https://guidebook.com/g/sfs2019/>

- 1 Visit the above URL on your device
- 2 Tap the “download” button to get the free Guidebook app
- 3 Open Guidebook and look for the guide:

Society for Freshwater Science 2019

Or, scan this code inside the Guidebook App to access SFS 2019.



Meeting Schedule

Sunday, May 19

7:00 AM - 6:00 PM	Parent Place	254 C
7:00 AM - 9:00 AM	SFS Finance Committee Meeting	Boardroom
8:00 AM - 12:00 PM	Workshop: Enhancing Confidence and Effective Communication Skills Through Improvisation	151 ABC
8:00 AM - 4:00 PM	Field Trips	
9:00 AM - 5:00 PM	SFS Board of Directors Meeting	Boardroom
9:00 AM - 5:00 PM	Workshop: Preparation for Diatom Taxonomic Certification	150 G
9:00 AM - 5:00 PM	Workshop: Metabarcoding Workshop	254 B
9:00 AM - 6:00 PM	INSTARS Orientation	254 A
11:00 AM- 6:00 PM	Exhibitor Set Up	Ballroom ABCD
1:00 PM	SRC Workshop: City Creek Nature Walk & Stream Clean-Up	Offsite
2:00 PM - 4:30 PM	Workshop: Curating Free-Information on the Aquatic Sciences via Wikipedia	151 ABC
4:00 PM - 10:00 PM	Registration Open	North Foyer
4:30 PM - 6:00 PM	SFS-SRC Student Orientation & Mixer	Ballroom/Foyer
5:00 PM - 7:00 PM	Dinner on Your Own	Offsite
6:00 PM - 8:00 PM	Exhibits Open	Ballroom ABCD
7:00 PM - 9:00 PM	Opening Session: Award of Excellence and Hynes Award	Ballroom EFGHIJ
9:00 PM - 11:00 PM	Welcome Mixer	Ballroom ABCD

Monday, May 20

6:30 AM - 8:30 AM	FWS Editorial Board Committee Breakfast	Hilton
8:00 AM - 7:00 PM	Parent Place	254 C
8:00 AM - 11:00 PM	Registration	North Foyer
8:00 AM - 9:00 AM	Morning Coffee	Ballroom ABCD
9:00 AM - 10:30 AM	Concurrent Sessions	Various
9:00 AM - 12:00 PM	Taxonomic Certification Program (TCP) Test Session 1	252 AB
10:30 AM - 11:00 AM	Coffee Break	Ballroom ABCD
11:00 AM - 12:30 PM	Concurrent Sessions	Various
12:30 PM - 2:00 PM	Lunch on Your Own	Offsite
12:30 PM - 2:00 PM	SFS Committees Lunch Meeting	251 CF
1:00 PM - 4:00 PM	Taxonomic Certification Program (TCP) Test Session 2	252 AB
2:00 PM - 3:30 PM	Concurrent Sessions	Various
3:30 PM - 4:00 PM	Coffee Break	Ballroom ABCD
4:00 PM - 5:00 PM	Taxonomic Certification Committee (TCC) Meeting	252 AB
4:00 PM - 5:00 PM	Plenary Session I: 2019 Class of SFS Fellows Keynote: Dr. Sunshine Menezes (University of Rhode Island)	Ballroom EFGHIJ
5:00 PM - 7:30 PM	Dinner on Your Own	Offsite
5:15 PM - 7:00 PM	SRC Student/Mentor Mixer	South Foyer
7:30 PM - 9:00 PM	Film: "Hidden Rivers of Southern Appalachia"—SFS Premiere!	151 G
7:30 PM - 9:30 PM	Diversity & Inclusivity Mixer	Offsite—Beerhive

Tuesday, May 21

8:00 AM - 7:00 PM	Parent Place	254 C
8:00 AM - 7:00 PM	Registration	North Foyer
8:00 AM - 9:00 AM	Morning Coffee	Ballroom ABCD
9:00 AM - 10:30 AM	Concurrent Sessions	Various
10:30 AM - 11:00 AM	Coffee Break	Ballroom ABCD
11:00 AM - 12:30 PM	Concurrent Sessions	Various
12:30 PM - 2:00 PM	SFS Membership Business Lunch	Ballroom EFGHIJ
2:00 PM - 3:30 PM	Concurrent Sessions	Various
3:30 PM - 4:00 PM	Coffee Break	Ballroom ABCD
4:00 PM - 5:00 PM	Plenary Session II: Environmental Stewardship & 2018 Student Awards Keynote: Dr. Nancy Grimm (Arizona State University)	Ballroom EFGHIJ
5:00 PM - 7:30 PM	PUI Mixer	Offsite—Beer Bar
5:00 PM - 7:30 PM	Dinner on Your Own	Offsite
6:30 PM - 7:30 PM	SFS Endowment Reception	Hilton
7:30 PM - 10:30 PM	SFS Mixer - Live Auction/Karaoke	Ballroom EFGHIJ

Wednesday, May 22

8:00 AM - 1:00 PM	Taxonomy Fair Set Up	South Foyer
8:00 AM - 4:00 PM	Parent Place	254 C
8:00 AM - 4:00 PM	Registration	North Foyer
8:00 AM - 9:00 AM	Morning Coffee	Ballroom ABCD
9:00 AM - 10:30 AM	Concurrent Sessions	Various
10:30 AM - 11:00 AM	Coffee Break	Ballroom ABCD
11:00 AM - 12:00 PM	Plenary Session III: Distinguished Service Award Keynote: Dean Robert Adler (University of Utah College of Law)	Ballroom EFGHIJ
12:00 PM - 1:30 PM	Lunch on Your Own	Offsite
12:00 PM - 1:30 PM	SFS 2020 Planning Committee Meeting	150 AB
1:30 PM	Silent Auction Closes	Onsite
1:30 PM - 4:00 PM	Poster Session	Ballroom ABCD
1:30 PM - 4:00 PM	Taxonomy Fair	South Foyer
1:30 PM - 4:00 PM	Mixer for Poster/Taxonomy	North Foyer / Ballroom ABCD
4:00 PM - 5:00 PM	Chapter Information Session	252 AB
4:30 PM - 6:00 PM	Fun Run	Memory Grove
4:30 PM - 7:30 PM	Early Career Mixer	Offsite—Green Pig Pub
7:30 PM - 10:00 PM	Offsite Social Event	Offsite—The Leonardo
7:30 PM - 10:00 PM	Jam Session in the Auditorium	Offsite—The Leonardo



Thursday, May 23

7:30 AM - 9:00 AM	New Board of Directors Breakfast	150 AB
8:00 AM - 5:00 PM	Parent Place	254 C
8:00 AM - 5:00 PM	Registration	North Foyer
8:00 AM - 5:00 PM	Silent Auction Pickup	Ballroom ABCD
8:00 AM - 5:00 PM	Poster Tear Down By Presenters	Onsite
8:00 AM - 9:00 AM	Morning Coffee	Ballroom ABCD
9:00 AM - 10:30 AM	Concurrent Sessions	Various
10:30 AM - 11:00 AM	Coffee Break	North Foyer
11:00 AM - 5:00 PM	Exhibit Tear Down	Ballroom ABCD
11:00 AM - 12:30 PM	Concurrent Sessions	Various
12:30 PM - 2:00 PM	Lunch on Your Own	Offsite
12:30 PM - 2:00 PM	Early Career Lunch Workshop	252 AB
2:00 PM - 3:30 PM	Concurrent Sessions	Various
3:30 PM - 5:30 PM	Closing Mixer	South Foyer
5:30 PM	Dinner on Your Own	Offsite

advice from a river

go with the flow • slow down and meander • be thoughtful of those downstream • the beauty is in the journey

~ Ilan Shamir



Notre Dame
ENVIRONMENTAL
CHANGE Initiative

Supporting interdisciplinary research.
Committed to "Science Serving Society".
Visit @ environmentalchange.nd.edu

Plenary Speakers Ballroom EFGHIJ



OPENING SESSION—SUN, MAY 19, 7PM
TERRITORIAL ACKNOWLEDGMENT

Chairman Darren Parry
Northwestern Shoshone Nation

"Voice from the Dust: A Shoshone Perspective"

Darren Parry is the Chairman of the Northwestern Band of the Shoshone Nation. Chairman Parry serves on the Board of Directors for the American West Heritage Center, in Wellsville, Utah, the Utah State Museum board and serves on the Advisory Board of the Huntsman Cancer Institute. In 2017 he received the Esto Perpetua Award, given to the person who preserves and promotes history in the State of Idaho. He is the only person from Utah to receive that award. He attended the University of Utah and Weber State University and received his Bachelor's degree in Secondary Education, with an emphasis on history. His passions in life are his family including his Tribal family. The story of the Bear River Massacre and the outcomes of that horrific event need to be remembered. He is currently working hard to raise money and awareness so an Interpretive Center can be built at the massacre site. It is important that the Shoshone perspective is heard.



PLENARY I: MON, MAY 20, 4:00–5:00 PM

Sunshine Menezes
University of Rhode Island

"Effective and Inclusive Public Engagement for Freshwater Science: A Call to Action"

Global change presents a massive suite of challenges for freshwater science and management that spans temporal and spatial scales. Each of these challenges, as well as their potential solutions or adaptation measures, shares a fundamental consideration for freshwater scientists: how can we effectively engage communities, stakeholders, and policy makers in productive conversations about our most precious shared resource to inspire sustainable policies? The slow, iterative nature of science can complicate effective communication of the uncertainty and urgency that simultaneously describe the state of water resources. Our public engagement efforts require clarity on communication objectives, a prioritization of equitable and inclusive outcomes, and the knowledge, skills, and language needed to advance these objectives and outcomes. Featuring examples of translational ecology at work, this plenary talk will set the stage for the 2019 conference by outlining the communication strategies, partnerships, and tools needed to successfully engage diverse audiences in difficult conversations about freshwater ecosystems.



PLENARY II: TUES, MAY 21, 4:00–5:00 PM

Nancy Grimm
Arizona State University

"Rivers of Our Dreams: Water Futures in Urban Central Arizona"

Phoenix gets its name from the re-emergence of an urban center five hundred years after the disappearance of an ancient one. Its location at the confluence of two large, desert rivers enabled the conversion of desert land and river floodplains to farm fields that for many years supported developing cities, only to ultimately be swallowed by those very cities during post-WWII rapid urbanization. Water has always been the defining factor of the central Arizona–Phoenix (CAP) social-ecological system. Water also features prominently in future scenarios co-developed with local practitioners for the metropolitan area (regional scale) and South Mountain Village of Phoenix (local scale). Using these transdisciplinary projects as a case study, this talk will explore translational ecology in an urban setting, particularly as applied to envisioning a future that is resilient in the face of extreme events like drought, flooding, and extreme heat.



PLENARY III: WED, MAY 22, 11:00 AM – 12:00 PM

Robert (Bob) Adler
University of Utah

"Dormant Opportunities: Translational Ecology and the Clean Water Act"

In the 1972 Clean Water Act (CWA), Congress articulated an ambitious objective to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." This holistic ecosystem restoration and protection goal, which goes far beyond the narrow chemical water quality focus suggested by the name of the statute, remains only partially fulfilled nearly a half century later. A number of factors have impeded full implementation of the statutory objective, including a mismatch between statutory goals and statutory tools, and ongoing legal and scientific uncertainty about the exact meaning of the objective and the scope of water bodies covered. Translational ecology provides a methodology through which aquatic ecologists and other freshwater scientists can work with other stakeholders to contribute to further progress in defining and achieving the statutory objective. At the same time, the CWA contains a number of untapped or partially implemented programs and provisions that provide opportunities for the development and implementation of translational ecology. This talk will explore some of those bidirectional opportunities.



2019 Award Recipients



2019 Award of Excellence



N. LEROY POFF

Congratulations to N. LeRoy Poff, the 2019 recipient of the SFS Award of Excellence. LeRoy's contribution to our understanding of the inter-connections among river hydrology, ecological processes and human society is unparalleled. LeRoy is likely best known for his innovative research revealing the complex associations linking flow regimes to ecological

responses. His influential 1997 publication "The natural flow regime" laid out, in highly accessible writing, the fundamental concept that an unaltered stream exhibits variability in flows across different time scales that is critical to ecosystem function. It was a forward-thinking paper that was pivotal in advancing river management beyond a narrow focus on minimum flows. LeRoy has also advanced the use of trait-based studies in stream ecology and the understanding of the impacts of impoundments and climate change on freshwater ecosystems.

LeRoy is in the vanguard of scientists who strive to synthesize scientific findings into knowledge and then translate that knowledge into practice. This includes the development of ecologically meaningful flow metrics, sophisticated yet feasible decision-support tools, and frameworks for balancing ecological and societal needs for freshwater. LeRoy has helped implement these concepts by working directly with cities (Seattle, Fort Collins), state agencies (in Massachusetts, Florida, California) and federal agencies (U.S. Geological Survey, U.S. Forest Service). Today, many U.S. states and countless countries across the world have regulatory language that protects instream flows that were built on the scientific foundations developed by LeRoy. Finally, LeRoy's creativity and passion are renowned. He challenges all around him to think broadly and creatively about how to solve problems, whether they are how to plan a research study, run an effective interdisciplinary graduate program in ecology, or how to conserve and manage water in the world's rivers.

2019 Hynes Award for New Investigators



DANIEL NELSON

Congratulations to Dr. Daniel Nelson, who is the 2019 recipient of the Hynes Award for New Investigators. Dr. Nelson is a community and ecosystem ecologist who is broadly interested in the effects of climate change on freshwater ecosystems. He uses a combination of observational and experimental approaches to answer both applied and theoretical

questions related to this subject. Daniel first completed his MS at the University of Idaho and then his PhD at the University of Alabama, where he worked with Dr. Jonathan Benstead on a whole-stream warming experiment in southwest Iceland investigating the effects of warming on stream invertebrate communities and food webs. He was selected for the Hynes award based on his publication resulting from this work, which showed that although warming may reassemble invertebrate communities and lower total invertebrate density, it may have a neutral effect on standing biomass due to changes in the size structure of the community: Nelson et al. 2017. Experimental whole-stream warming alters community size structure. *Global Change Biology* 23: 2618-2628, doi: 10.1111/gcb.13574. Daniel is currently a Postdoctoral Researcher in Dr. Dan Allen's lab at the University of Oklahoma, where he is continuing his studies on the effects of climate change on freshwater ecosystems.

2019 Environmental Stewardship Award



MATT WHILES

Congratulations to Matt Whiles, who is the 2019 recipient of the Society for Freshwater Science Environmental Stewardship Award. Matt is a Professor of Zoology at Southern Illinois University-Carbondale (SIU) and serves as the current Director of the SIU Center for Ecology. Within his many roles including researcher, educator, director, and ex-SFS president, Matt

demonstrates exceptional service in developing and implementing strategies to conserve, rehabilitate, and ecologically manage aquatic ecosystems. For example, Matt led a 13-year NSF funded project that documented the ecosystem impacts of catastrophic amphibian declines in Neotropical streams. Under Matt's leadership this work went beyond population impacts and expanded the field of disease ecology by considering the of ecosystem impacts of disease outbreaks and biodiversity losses. Additionally, Matt was instrumental in a large team project investigating the effects of genetically modified crop residues on freshwater ecosystems in Indiana. This work quantified the extent to which streams can transport GMO genes and how transgenic plants can alter food webs and organic matter cycling in rivers. As a result, companies are now required to measure the effects of crop residues on freshwater ecosystems. A third component of Matt's research that directly impacts environmental stewardship is his work examining the response of aquatic ecosystems to management actions including restoration of the Cache River, nutrient criteria development in Illinois, and long-term regional projects throughout the Midwest, including wetland restoration on the Platte River in Nebraska and prairie streams in Kansas. Finally, Matt continues to train the next generation of freshwater ecologists as an educator. Matt has mentored 20 Masters students, 10 PhD students, and 5 Postdoctoral scholars and guided many to successful careers dedicated to ecology and environmental stewardship.

2019 Distinguished Service Award



RANDY FULLER

Congratulations to Randy Fuller, the recipient of the 2019 Distinguished Service Award. Randy has had a profound influence the management and culture of the Society for Freshwater Science spanning more than three decades. Randy's impact on the management side of the Society is exemplified by his work as chair of the Executive Committee during the

presidency of Lucinda Johnson. During this period the Society undertook three major initiatives: (1) change the name of the society (and journal), (2) restructure the society's governance system from one based on appointed positions to one focused on elected positions representing discrete sectors, and (3) rewrite the Constitution and Bylaws to clarify the roles and responsibilities of committees and elected officials and bring the Society into compliance with US tax laws. These initiatives required endless hours of patient negotiations and hard work to iron out the myriad of details underpinning these important documents. In addition, during his own presidency, Randy was instrumental in updating the strategic plan for the Society, and also almost single-handedly produced two RFPs for a new membership services provider and professional meeting planner.

Randy's trademark mix of humor, encouragement, and warmth has made a lasting contribution to the culture of SFS. From his early days on the North American Benthological Society (NABS) Human Resources and Diversity Committee with Judy Li. Randy has worked tirelessly to support and cultivate support for undergraduate and minority introduction to and participation in SFS. His efforts are evident in the INSTARS program and the workshops on freshwater science pedagogy for undergraduates. Randy's influence is also evident in the large network of former students whom he has mentored to become freshwater scientists, and active members and leaders of SFS, ensuring that his legacy will last for years to come.



2019 Class of SFS Fellows

The Fellows of the Society for Freshwater Science are selected based on sustained excellence in contributions to freshwater science research, policy, or management. These are the leaders, at national and international levels, of their areas of freshwater science. More information on the program and previous SFS Fellows can be found at <https://freshwater-science.org/awards-programs/sfs-fellows>.



ALAN COVICH

Alan Covich grew up in Missouri and encountered his first crayfish in several Ozark Mountain streams. After traveling to Darien, Panama, as an undergraduate at Washington University-St. Louis, he saw his first freshwater shrimp (*Macrobrachium*). He spent the last few decades studying

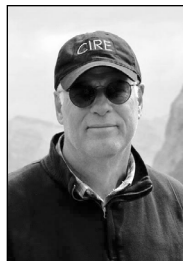
freshwater shrimps and crabs as part of the Long Term Ecological Research Program in the Luquillo Mountains of Puerto Rico, while also teaching ecology at Washington University, the University of Oklahoma, Colorado State University and the University of Georgia. As a past president of NABS (1996), Alan has enjoyed watching SFS grow into an amazing family of freshwater ecologists from all over the world.



NANCY GRIMM

Nancy Grimm studies urban and stream ecosystems. She has spent almost her entire career at Arizona State University where she received her M.S. and Ph.D. degrees, save for a stint as an undergraduate researcher with the Stream Team in Oregon. Initially working on stream nitrogen dynamics, she expanded

out and down to riparian and hyporheic zones and then abruptly became an urban ecologist. Grimm is currently the Virginia M. Ullman Professor of Ecology in the School of Life Sciences and Senior Sustainability Scientist in the Julie Ann Wrigley Global Institute of Sustainability at Arizona State University.



RICHARD HAUER

F. Richard Hauer is a Distinguished Scholar at the University of Montana and Professor Emeritus at Flathead Lake Biological Station (FLBS), where he taught stream ecology for over 30 years and held the FLBS Stream Ecology endowed chair. He received his BS and MS degrees from Michigan State

University and PhD in stream ecology from the University of North Texas. He was founding Director of both UM's Systems Ecology graduate program and the statewide, inter-university Institute on Ecosystems. His research has encompassed the broad interdisciplinary field of systems ecology with emphasis on stream invertebrate distributions along biophysical gradients, stream responses to climate change in mountain landscapes, and the ecological relationships and hydrogeomorphic processes of gravel-bed river floodplains and wetlands. He has over 100 publications in international journals such as *Science*, *Science Advances*, *BioScience* and of course, SFS's *Freshwater Science*. He is co-Editor of the book *Methods in Stream Ecology*, now in its third edition.



JEREMY MONROE

Jeremy Monroe has dedicated his career to taking the public below the water's surface – either with mask and snorkel or through the power of his documentary storytelling and stunning imagery. He is the founder and executive director of Freshwaters Illustrated, a non-profit organization that educates

a diverse public audience about the beauty and conservation of freshwater ecosystems through illustrative science-based resources including films, photographs and workshops.

As director of Freshwaters Illustrated, Jeremy has created a number of award-winning films and videos about freshwater biodiversity, science, and conservation. His first film, *RiverWebs*, tells the story of collaboration between Japanese and American stream ecologists. This award-winning documentary has been broadcast to more than 100,000,000 homes on Public Broadcasting System, shown at the largest film festivals in the US and Canada, and continues to educate students throughout the world in classrooms ranging from middle school to graduate school. His moving story of Native Americans and Pacific lamprey, his Hidden Rivers project, his work in southeastern rivers, and his new project in the Great Basin and Colorado River continue to expand his influence on citizens and inform decision makers across a diverse aquatic landscape.



N. LEROY POFF

N. LeRoy Poff is a Professor of Biology at Colorado State University and holds a partial appointment as Distinguished Professor at the University of Canberra. Since receiving his PhD in 1989, LeRoy's research has focused on understanding how natural and human-caused hydrologic variability

regulates the interactions among species and the structure and function of riverine ecosystems. By developing techniques to quantify streamflow variability in ecologically meaningful terms and using species (functional) traits as generalized, mechanistic response variables, he has been a leader in advancing the field of hydro-ecology. Through his interdisciplinary and collaborative work, LeRoy has contributed fundamentally to the development of the field of "environmental flows," which aims to support sustainable management of streams and rivers at local to regional to global scales in the face of growing human water demands. His current interests are on developing better conceptual frameworks and decision support tools for science-based management of streams and rivers in our current period of rapid climate and ecological change.



MARY POWER

Mary E. Power is Professor in the Department of Integrative Biology at the University of California, Berkeley, and Faculty Director of the Angelo Coast Range Reserve, a 3500 ha field reserve in Mendocino Co, California protected for university teaching and research.

She studies algal-based food webs in temperate and tropical rivers, as well as trophic linkages of river, uplands and coastal environments. By studying how ecological interactions change in different hydrologic and landscape contexts, she hopes to learn how river-structured food webs will respond to changes in climate, land use, or biota. She was awarded an honorary doctorate and the Kempe Medal for distinguished ecologists by Umea University, and the Hutchinson Award from the American Society of Limnology and Oceanography. She is a member of the California Academy of Science, the American Academy of Arts and Sciences, and the National Academy of Sciences USA. She serves on the Editorial Board of PNAS (2014 to present), Annual Reviews of Ecology and Systematics (2013-present) and was an editor for Science (2006-2009). Mary Power has also served as President of the American Society of Naturalists, and of the Ecological Society of America.



MATT WHILES

Matt Whiles is currently Chair of the Soil and Water Sciences Department at the University of Florida. Before moving to UF, he was a Professor at Southern Illinois University (SIU), where he directed the Center for Ecology and the Cooperative Wildlife Research Laboratory. Matt began his career as an

undergraduate "bug picker" with the Konza Prairie Long-Term Ecological Research (LTER) program. He received his graduate degrees from the University of Georgia, working on headwater streams at the Coweeta LTER site. At SIU, he built a freshwater ecology research program that has produced 33 graduate students and over 130 scientific papers. Matt is also co-author of one of the leading textbooks on freshwater ecology. Matt's research focuses on quantifying the roles of animals in freshwater ecosystem function. He has led numerous large, collaborative projects, including the Tropical Amphibian Declines in Streams (TADS) project examining the ecological consequences of amphibian declines. He has worked closely with agencies and NGOs on stream and wetland management and restoration, and served on numerous panels guiding management of freshwater habitats.

2017 Inaugural Class of SFS Fellows:

Dave Allan	Bob Hughes	Bobbi Peckarsky
Michael Barbour	Jim Karr	Dave Penrose
Art Benke	Susan Jackson	Vince Resh
Ken Cummins	Jerry Jacobi	Jack Stanford
Cliff Dahm	Sam Lake	Ben Stout
Walter Dodds	Rich Merritt	Colin Townsend
Stuart Fisher	Judy Meyer	Bruce Wallace
Stephen Hamilton	Wayne Minshall	James Ward
Jim Harrington	Margaret Palmer	Jack Webster

2018 Class of SFS Fellows:

Chuck Hawkins
Gary Lamberti
Denis Newbold
Emily Stanley

2019 Class of SFS Fellows:

Alan Covich	N. LeRoy Poff
Nancy Grimm	Mary Power
Richard Hauer	Matt Whiles
Jeremy Monroe	



2019 SFS Exhibitors



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Amy McMahon Illustrations

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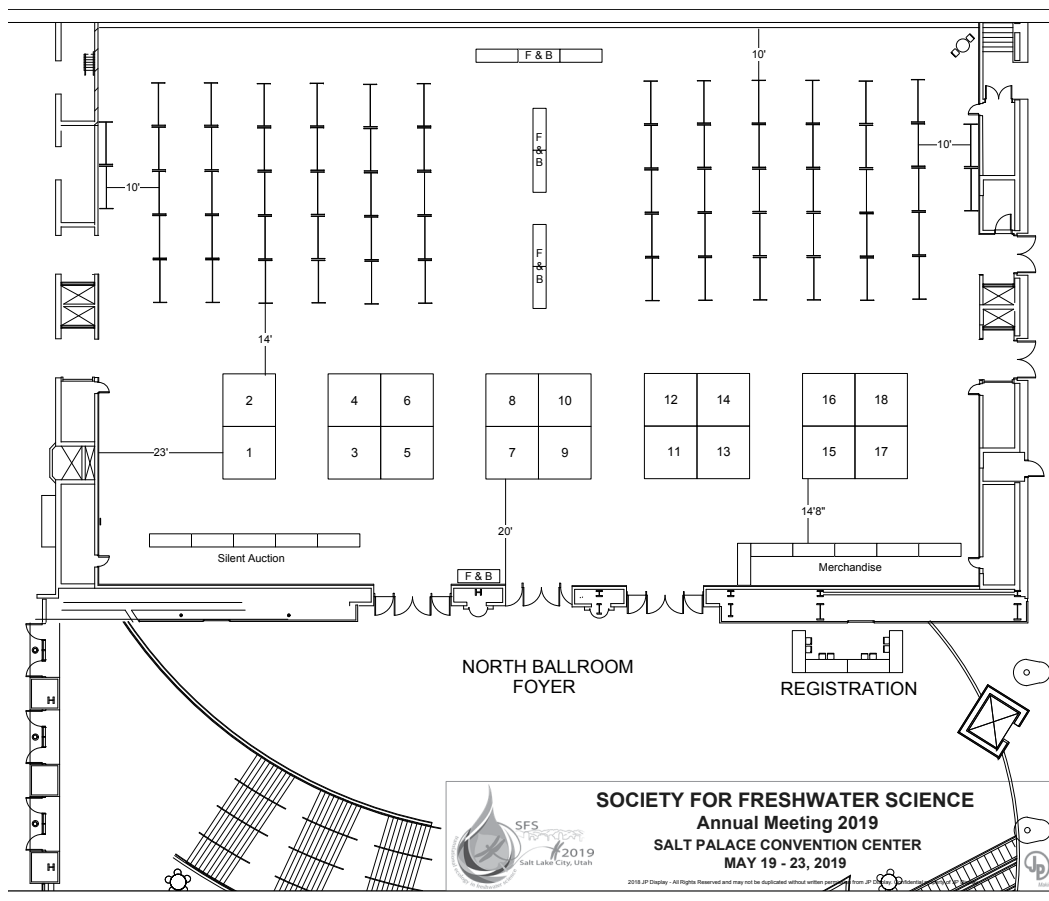
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16	Freshwater Science Journal
17	SFS 2019 Fun Run
18	SFS Public Engagement Station



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info@freshwatersillustrated.org
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PAUL H. O'NEILL SCHOOL OF PUBLIC AND ENVIRONMENTAL AFFAIRS

Indiana University is proud to announce the recent naming of the O'Neill School of Public and Environmental Affairs in honor of former Secretary of the U.S. Treasury and IU alumnus Paul H. O'Neill.

O'Neill School programs of interest to SFS:
M.S. Environmental Science – Water Resources
Master of Public Affairs - M.S. Environmental Science – Water Management

#1 ranked MPA, #1 ranked program in Environmental Policy and Management – *U.S. News & World Report*

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Workshops

Prepaid, pre-registration is required.

Enhancing Confidence and Effective Communication Skills through Improvisation

Sunday, May 19, 8:00 am – 12:00 pm

Location—151 ABC

This workshop is focused on the effective use of improvisation techniques to advance communication and confidence in the scientific community, to foster professional development for individuals to network and communicate successfully. It's designed specifically to allow time for both education and improvisation exercises in a group setting because communication success improves with practice. Workshop agenda items will include a brief introduction of experiences communicating with people, a discussion of common networking challenges, and the improvisation techniques for success. Following the introduction, all attendees will participate in a plethora of progressive exercises designed to strengthen communication skills and confidence in public settings. The exercises will require vocal projections and physical movement, therefore, plan to bring your healthiest self. Attendees will be both participants and audience members to maximize education and reflection. The workshop will conclude with discussion and feedback, self-reflection/evaluation, and closing remarks. Juliana D'Andrilli and Kaleb Heinrich will facilitate the workshop. No prior improvisation, public speaking, or theatrical experience is necessary, just the willingness to participate and be open to learning new techniques.

Preparation for Diatom Taxonomic Certification

Sunday, May 19, 9:00 am – 5:00 pm

Location—150 G

Participants that wish to take the Diatom level I test must register separately on the SFS TCP website. Although periphyton has been integral to river and lake assessment for many decades, resources to dramatically improve diatom taxonomic consistency are now available. Instructors Sylvia Lee (US EPA), Meredith Tyree (University of Colorado), and Sarah Spaulding (USGS) will lead the workshop that will include a combination of discussion and microscopic lab practical sessions. We will explore several new tools and their application to small- and large-scale surveys to obtain consistent, transparent species data. First, Diatoms of North America (diatoms.org) is a peer-reviewed web flora that guides users to identification of 160 genera and over 900 species. After an introduction to the diatom genera, participants will use the website to practice their genus level identifications with samples from North American rivers. Second, several regional "voucher floras" have been developed and are publicly available. We will discuss voucher floras and we will practice using them to produce transparent, verifiable records of species data. Third, through the USGS NAWQA program, QA/QC protocols have been refined to eliminate analyst bias. We will explore the steps necessary to design survey analyses so that analyst bias, if present, can be corrected. Finally, a diatom taxonomic certification program is being developed, and is planned to be administered through the Society for Freshwater Science (SFS).

Metabarcoding Workshop

Sunday, May 19, 9:00 am – 5:00 pm

Location—254 B

DNA based species identification is revolutionizing biodiversity research. DNA metabarcoding allows rapid and reliable identification of bulk samples, such as macroinvertebrates and diatoms. Taxa can even be detected by passive sampling methods, such as filtering of environmental DNA (eDNA) from water samples to detect e.g. fish species in lakes and streams. Although these new techniques will substantially improve our ability to assess and monitor aquatic communities, it is also critical to understand their shortcomings and limitations.

This workshop will provide an overview of DNA-friendly sample collection and processing, laboratory workflows, DNA sequencing technologies, and bioinformatic processing of sequence data. We also will discuss current methodological challenges such as the estimation of taxa biomass or abundance, uncertainties in relation to eDNA, and the completion of reference databases. After completion of this course you will have a good understanding how different DNA based techniques can be useful for your research, and also a basic understanding on how to plan and execute metabarcoding projects in your own laboratory. The course will be instructed by Vasco Elbrecht a post-doctoral fellow at the Center for Biodiversity and Genomics (University of Guelph) and Lead Bioinformatician at Jonah Ventures (Boulder, Colorado). No prior knowledge of DNA based techniques is required. Since we are using a web based bioinformatics platform (mBRAVE.net) no bioinformatics or programming skills are necessary. However, please bring a laptop to follow along with the practical part of the course, and R/Rstudio, Excel or other statistics software installed for data exploration.

Curating Free-Information on the Aquatic Sciences via Wikipedia

Sunday, May 19, 2:00 – 4:30 pm

Location—151 ABC

Are you interested in curating scientific information available in the public domain? Do you want to improve your writing and citation skills? Are you looking for a new and fun outreach activity? This workshop will show participants how to edit Wikipedia articles and utilize Wikipedia as a free and easy-to-use education, communication, and outreach tool. The workshop will include a short tutorial on how to contribute to Wikipedia, a discussion of how to incorporate Wikipedia editing into classrooms and outreach activities, and a hands-on "edit-a-thon" where participants will improve Wikipedia articles related to the aquatic sciences. This workshop aims to introduce aquatic scientists at any career stage and disciplinary expertise to editing Wikipedia in order to expand the diversity and expertise of the Wikipedia editor base, with the goal of training and encouraging participants to bring their disciplinary expertise into the public sphere at the workshop and beyond. This workshop will be led by members of the WikiProject: Limnology and Oceanography, a working group started at the 2018 Ecological Dissertations in the Aquatic Sciences (Eco-DAS) Symposium. We welcome participants at any career stage and disciplinary expertise.



Special Events

Note: Wear your SFS 2019 name badge and bring your picture ID for any of the SFS mixers and social events. A ticket will be issued and provided at registration.

Film: “Hidden Rivers of Southern Appalachia” SFS Premiere!

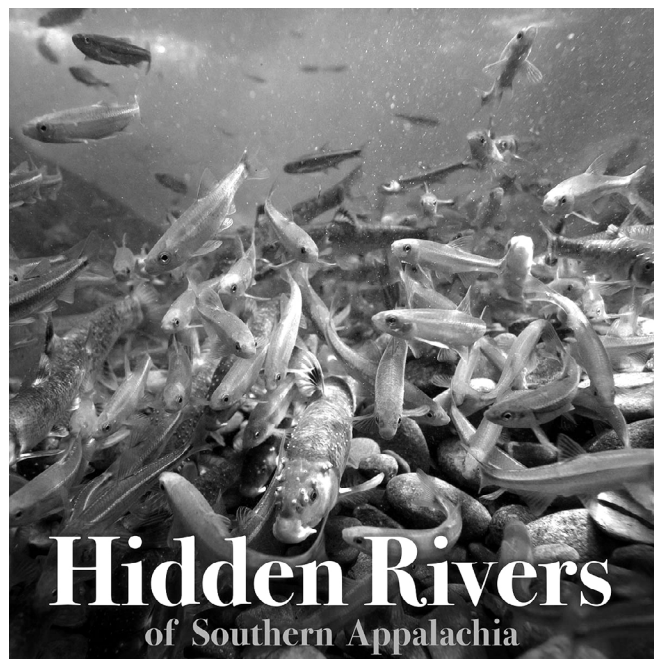
Monday, May 20, 7:30 – 9:00 pm

Location—151G

Presented by Freshwaters Illustrated

With filmmaker introduction and Q&A

Ten years in the making, Hidden Rivers is a 1-hour film that explores the rivers and streams of the Southern Appalachian region, North America’s most biologically rich waters. The film follows the work of conservation biologists and explorers throughout the region, and reveals both the beauty and vulnerability of this aquatic life, and how many people are finding ways to protect it. Hidden Rivers is an immersive educational tool for anyone working to immerse academic and other audiences in the brilliant worlds of river ecosystems. www.hiddenrivers.org



Hidden Rivers of Southern Appalachia

Diversity & Inclusivity Mixer

Monday, May 19, 7:30 pm

Location—Beerhive Pub

What better way for SFS to celebrate its diversity than with a party. We welcome you to the second Inclusivity Mixer on Monday May 19, 2019 around 7:30 pm at the Beerhive (10min walk from the convention center). Several food items (including vegetarian options) will be available; for now, drinks are on you. This is mainly a crowdfunded event with support from the society

Primarily Undergraduate Institution (PUI) Mixer

Tuesday, May 21, 5:00 – 7:30 pm

Location—Beer Bar

The PUI Mixer provides a casual opportunity to meet and network for faculty and undergraduate students from colleges and universities that primarily focus on teaching under-graduates. Appetizers are included and cash/credit bar will be available.

5k Fun Run

Wednesday, May 22, 4:30 – 6:30 pm

Location—Memory Grove

The annual SFS 5k run will start and finish outside. A lead cyclist will guide runners and volunteers will be stationed at turns throughout the course. All participants will receive a Conference meeting hat. There will be a brief awards ceremony at the immediate conclusion of the event. A portion of the proceeds from the 5k event will go to. Thank you for your support of urban green spaces!

SFS Offsite Social

Wednesday, May 22, 7:30 – 10:00 pm

Location—The Leonardo, 209 E 500 S, Salt Lake City

The SFS offsite social on Wednesday, May 22nd, will be hosted at The Leonardo Museum, located right in downtown Salt Lake City, just a mile from the Salt Palace Convention Center (20 minute walk). A shuttle service is provided for meeting attendees that would prefer not to walk to the museum for this social event. At The Leonardo, guests will enjoy a delicious dinner, live music, and the beauty of science and art installations on three floors while socializing with SFS colleagues and friends. Guests will be entertained through dinner by the relaxing and creative sounds of HUSH, starring their lead singer, Joslyn. After dinner, stick around to explore the intriguing exhibits and experience the sounds of the Metro Music Club, performing in The Leonardo Atrium. Stay close and dance to the music on the atrium’s first floor, hang near the atrium’s second floor balcony just above the performance area for more space, or find a quiet spot on the third floor to reconnect with friends and colleagues. Metro Music Club specializes in music for all ages with a range of covers in funk, retro, oldies, disco, rock, blues, and new hits—so there will be something for everyone. Come explore all the ways that science, technology, art, music, and creativity connect at this special location!

Taxonomy

Taxonomic Certification Genus Level Testing—2019

Image Tests are on USB sticks for this event and you will need your own laptop computer (may be provided if requested):

EPT—East or West

Chironomidae—North America

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

General Arthropods—East or West

Oligochaeta—North America

Test Sessions:

All testing will take place on Monday, May 20, 2019 in room 252 AB of the Salt Palace Convention Center. The tests are three hours long with a half hour setup time:

Morning Session: 9:00 am – 12:00 pm

Afternoon Session: 1:00 pm – 4:00 pm

Please contact Mike Broomall at tcp@stroudcenter.org directly if you wish to sign up for any tests in Salt Lake City. Additional information about the exams can be found at:

www.stroudcenter.org/sfstcp

Taxonomic Certification Committee Meeting—2019

The TCC meeting will follow the test sessions from 4-5pm in room 252 AB in the Convention Center. All are welcome. Please RSVP at tcp@stroudcenter.org to let us know if you would like to attend the meeting.

Technical Issues Committee

Participating Taxonomic Experts:

Participant	Taxonomic Group	Affiliation
Mark Wetzel	Oligochaeta	Illinois Natural History Survey
Jason Robinson	Trichoptera	Illinois Natural History Survey
Julianne Heinlein	Soft Algae	GLEC
Bohdan Bilyj	Chironomidae	BIOTAX Consulting
Jeff Webb	Ephemeroptera	Rhithron Associates
Fredric Govedich	Hirudinea	Southern Utah University
Sarah Spaulding	Diatoms	USGS
Cheri Cameron	Odonata	Missouri State
Samuel Wells	Coleoptera	Southern Utah University

Annual SFS Taxonomy Fair

Wednesday, May 22, 1:30 pm – 4:00 pm

South Foyer during Poster Session

The Technical Issues Committee would like to invite you to the Annual SFS Taxonomy Fair at the 2019 Annual meeting. Taxonomic experts will be gathered during the poster session Wednesday afternoon to discuss any and all taxonomic issues and help with identifications. This year there will be prizes for those attendees that bring the 'most interesting specimens' to the Taxonomy Fair. Are you flying to SFS? Please be aware that the FAA has recently changed their guidelines for flying with biological specimens, a description of how to package specimens can be found here:

https://www.faa.gov/about/initiatives/hazmat_safety/

Do you not have any specimens to examine but have questions about taxonomy or systematics? Be sure to stop by and chat with the invited experts and hear the latest news about the taxonomy of your favorite invertebrate or algal taxon. We look forward to seeing you at this year's fair.

INTERNATIONAL JOINT COMMISSION

More than 100 years of cooperation protecting the shared waters of the United States and Canada

Through the 1909 Boundary Waters Treaty and the Great Lakes Water Quality Agreement, the IJC helps Canada and the United States protect the Great Lakes and other boundary waters for present and future generations.

IJC findings and recommendations are based on sound science through collaboration with leading experts from both countries, who serve on our advisory boards and task forces.

From our ongoing research on several issues that impact particular boundary waters to our continual assessment of progress to restore the Great Lakes and our newest reference for Lake Champlain, the IJC is a vital source of information on Great Lakes and other boundary waters quality and quantity issues.

Learn more about our current projects and how to get involved on our website ijc.org, where you can subscribe to our newsletters, the monthly *Great Lakes Connection* and quarterly *Water Matters*, and follow us on social media:

International Joint Commission
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 @IJCsharedwaters

"Imagine two countries sharing hundreds of lakes and rivers along their border without conflict."



2019 Optional Tours

Experience Great Salt Lake: A Translational Ecology-Themed Tour

Sunday, May 19, 8:00 am – 4:00 pm

Lunch and Transportation Included

Great Salt Lake is the largest saline lake in North America (4th largest on Earth) and is a unique and important ecosystem that is of hemispheric importance to migratory birds. Much of the surrounding landscape has been described as “stark,” but it possesses an otherworldly beauty that continues to fascinate visitors from around the world. In striking contrast, the many wetlands surrounding the lake are lush and diverse, hosting about 7.5 million birds annually. The lake’s unique ecosystem has also generated unique industries, ranging from mineral extraction to a multi-million commercial fishery for brine shrimp. The lake also lies at the bottom of two watersheds where over 80% of Utah citizens resides.

Competing interests over the relative importance of Great Salt Lake’s economic and ecological values have resulted in stakeholder conflict and resource management challenges, and many scientific investigations aimed at finding solutions. This makes the lake an ideal setting for exploring the application of translational ecology.

This day-long tour along the shores of Great Salt Lake will allow participants to explore the beauty of Great Salt Lake and learn about this unique ecosystem. At stops along the tour, local scientists and resource managers will discuss how principles of translational ecology have been applied to protect the lake from increasing threats its important resources.



© Visit Utah

An Unforgettable Bird Watching Tour at the Bear River Migratory Bird Refuge

Sunday, May 19, 8:00 am – 4:00 pm

Lunch and Transportation Included

The Great Salt Lake lies on the eastern edge of the Pacific flyway and the western edge of the central migratory flyway, which makes its freshwater marshes and surrounding habitats critical resting and feeding habitat for migratory birds. The Bear River Migratory bird refuge is the largest marsh complex around the lake and among the most important wildlife sanctuaries for migratory birds in the United States. Over 200 species of birds visit the refuge annually, numbering in the millions.

Chris Luecke (Dean, Quinney College of Natural Resources, Utah State University) will host a bird watching tour along a 12-mile loop through the heart of the refuge. Plenty of stops along the way will provide participants ample opportunity to observe and photograph birds using a mosaic of habitats, including: upland, mudflat, river delta, brackish and freshwater marshes, temporary ponds, and uplands. This ideal location, combined with the fact that this field trip takes place during spring migration means that it will be easy to see many species of birds along the way.

Explore the Ecology of Great Salt Lake and Antelope Island State Park

Friday, May 24, 8:00 am – 4:00 pm

Lunch and Transportation Included

Wrap up your visit to Utah with a day exploring the unique ecosystem of Great Salt Lake from its largest island, Antelope Island State Park. We'll introduce you to the chemistry, geology, and ecology of the lake, with opportunities to sample water that is three times saltier than the ocean and see its star inhabitant, the brine shrimp. Migratory birds visit Great Salt Lake by the millions each year, so there will be opportunities to do a little birdwatching. Here's your chance to literally “get your feet wet” in one of the most interesting aquatic ecosystems in North America.

We'll also spend time on land enjoying the stark beauty of Antelope Island. As one of Utah's most visited State Parks, Antelope Island offers exceptional wildlife viewing. You'll have an opportunity to learn about how the herds of bison, pronghorn, and bighorn sheep are managed, and we just might find a few different species of owls while we're there.

This day-long tour will be led by Mark Larese-Casanova, Director of the Utah Master Naturalist program with Utah State University Extension. Bring your binoculars, long pants and shirt, and water shoes or sandals. Head nets will be available to borrow.

Meetings

**Asterisk denotes events that are for specific committee members and/or by invitation only.*

SFS Committees Lunch Meeting*

Monday, May 20, 12:30 – 2:00 pm

Room 251 CF

Members from various SFS committees gather for our annual planning meetings. Committees include: Executive, Board of Directors, Finance, Board of Trustees of the Endowment, Elections and Place, Awards Selection, Long-Range Planning, Annual Meeting, Publications, Public Information and Publicity, Constitution Revision, Student Resources, Taxonomic Certification, Technical Issues, Science and Policy, International Coordination, Conservation and Environmental Issues, Education and Diversity, Sponsorship and Development, Journal Endowment, Special Offices, and Early Career Development.

SFS Endowment Reception*

Tuesday, May 21, 6:30 – 7:30 pm

Hilton

For donors and recipients, by invitation.

SFS Membership Business Luncheon

Tuesday, May 21, 12:30 – 2:00 pm

Ballroom EFGHIJ

This is the Society's annual business meeting where reports are presented, and voting is conducted. Pre-registration required.

Annual SFS Taxonomy Fair

Wednesday, May 22, 1:30 – 4:00 pm

South Foyer (during Poster Session)

The Technical Issues Committee would like to invite you to the Annual SFS Taxonomy Fair at the 2019 Annual meeting. Taxonomic experts will be gathered during the poster session Wednesday afternoon to discuss any and all taxonomic issues and help with identifications. This year there will be prizes for those attendees that bring the 'most interesting specimens' to the Taxonomy Fair. Are you flying to SFS? Please be aware that the FAA has recently changed their guidelines for flying with biological specimens, a description of how to package specimens can be found here: <https://www.faa.gov/hazmat/packsafe>. Do you not have any specimens to examine but have questions about taxonomy or systematics? Be sure to stop by and chat with the invited experts and hear the latest news about the taxonomy of your favorite invertebrate or algal taxon. We look forward to seeing you at this year's fair.

Student Events

Undergraduates play an important role at SFS 2019! This year, the Student Resources Committee (SRC) was thrilled to make fifteen SRC Travel Awards (\$500 each) to help a great cohort of talented undergraduates attend SFS 2019 in Salt Lake City. Also, stay tuned for SFS 2020 opportunities—we encourage faculty and graduate students to share this opportunity with their mentees (online application opens Dec 2019). Finally, please say hello to our new undergraduate attendees, and help them take advantage of all that the SRC has to offer them in Salt Lake City and beyond!

SRC Workshop

Sunday, May 19, 1:00 PM

Location—Offsite

The Society for Freshwater Science Student Resource Committee is partnering with the Utah Conservation Corps to lead a nature walk and river cleanup on Sunday, May 19. Leaving from the Salt Palace Convention Center, we will walk by the Utah State Capitol Building, along Canyon Road, and through City Creek Natural Area. The Utah Conservation Corps works on environmental and sustainability projects throughout the state and will be giving us a tour about the history of the city, drinking water supply, and natural features of the park. Lunch is included with the price of the workshop.

SFS–SRC Student Orientation

Sunday, May 19, 4:30 – 6:00 pm

Location—Ballroom/Foyer

Students, please join the Student Resource Committee (SRC) for our first ever student orientation (replacing the SRC luncheon). Learn about the SRC's activities (e.g. live auction, silent auction, student-mentor mixer), opportunities to get involved in the society, and how to have a rewarding meeting experience. We will also seek nominations for leadership and committee positions. Light refreshments provided.

SFS–SRC Student/Mentor Mixer

Monday, May 20, 5:15 – 7:00 pm

Location—South Foyer

The student-mentor mixer is designed to facilitate interactions between students and experienced professionals. Mentors may include aquatic science professors, research associates, post-doctoral researchers, government employees, and private consultants. This mixer provides students a great opportunity to network and engage in lively conversation with mentors and peers in a relaxed environment. Each student will be assigned to a group, and all students over 21 will receive a complimentary drink ticket!

Silent Book Auction

Opens: Sun May 19 at 6:00 pm; **Closes:** Wed May 22, at 1:30 PM

Location: Ballroom ABCD

Merchandise

Opens: Sun May 19 at 4:00 pm; **Closes:** Thu May 23, at 3:30 PM

Location: Ballroom ABCD

Live Auction

Tue May 21 at 7:30 pm in Ballroom EFGHIJ



2018 Outstanding Student Presentation Awards

Three hundred and sixty (360) student presentations were evaluated by judges at the 2018 SFS conference in Detroit, Michigan. Two hundred and seventy seven (277) were presented by graduate students. Of these, one hundred and eighty three (183) were oral presentations and ninety four (94) were posters. Eighty three (83) were given by undergraduate students. Of these, nine (9) were oral and seventy four (74) were posters. There were many fine presentations and all the students are congratulated for their participation.

2018 Award Winners

Arial Shogren

Best Oral Presentation in Basic Research

"Biofilm Accumulation Mediates the Transport of Genetically-Engineered Protein (Cry1Ab) in Experimental Streams"

Lisa Kim

Runner Up Oral Presentation in Basic Research

"Anthropogenic Litter in Urban Streams: Spatial Distribution of Plastic and its Role in Leaf Litter Breakdown"

Dalal Hanna

Best Oral Presentation in Applied Research

"Assessing the Relationship Between Water Quality and Watershed Protection: A Case Study in Québec, Canada"

Zanethia Barnett

Runner Up Oral Presentation in Applied Research

"Environmental Impacts to Crayfish and Fish Population in Impounded and Unimpounded Streams in Alabama"

Lillian McGill

Best Presentation Emphasizing Methodology

"Comparing Spatial Patterns of River Water Isotopes Across Networks"

Hana Moidu

Best Poster Presentation in Basic Research

"Linking Landscape-Level Processes and Aquatic Refugia in Intermittent Streams of Central California"

Rachel Egly

Best Poster Presentation in Applied Research

"Distributional Declines of Two Crayfishes Endemic to the Western United States Documented by Comparing Species Distribution Modeling to Field Sampling"

Anna-Sophie Hoppe

Best Oral or Poster Presentation by an Undergraduate Student

"Comparing Species Richness and Taxonomic Diversity of Aquatic Invertebrates in Restored and Naturalized Agricultural Ditches"

Thank You

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

SFS also thanks to Anna Vincent 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

Anonymous Donors

Peggy Morgan, 2018 SFS Student Awards Coordinator

Moving Forward: 2019 SFS Student Awards Subcommittee

Matthew Troia

Amanda DeVecchia

Angela De Palma-Dow

If you or anyone you know wants to be involved in the student award selection subcommittee please email us here:

sass@freshwater-science.org

2019 Undergraduate Awards and Judging

The SRC Undergraduate Awards and Judging Committee would like to congratulate the 2019 winners of the Undergraduate Travel Awards! With the support of the SFS Endowment Committee and SRC leadership, our committee had the pleasure of reviewing applications covering a wide breadth of topics across the freshwater science domain. From stoichiometry to invasive species, applications showed real promise and originality for future freshwater science research. We'd also like to thank the SRC for their assistance in securing judges for undergraduate presentations, and graduate student attendees for their willingness to serve as judges in Salt Lake City.

Undergraduate Travel Awards

Amanda Popovich

Lake Superior State University

"The Response of Fish Communities to an Experimental Addition of Large Woody Debris in Three Northern Michigan Streams"

Bonnie R Turek

University of New Hampshire

"Greenhouse Gas Ebullition in Streams of Varying Watershed Land Use and Sediment Composition"

Cody Pope

University of Southern Mississippi

"Effects of Light and Nutrient Availability on Algal Stimulation of Microbial Heterotrophs Associated with Decomposing Wood"

Courtney Carmack

Loyola University Chicago

"Experimentally Testing the Quality of Golf Course Lentic Ecosystems"

Jacob Helmann

Virginia Tech

"Exploring Dispersal and Genetic Connectivity through a Newly Discovered Arizona Treefrog Population"

Kayla Lavan

North Carolina Wesleyan College

"The Effects of Acetaminophen on Carassius auratus Feeding and Movement"

Madeline Crossley

Southern Utah University

"Endosymbiotic Bacteria of Helobdella modesta"

Madison Foster

University of Kansas

"Nutrient Export Patterns to Groundwater Across Land Use and Precipitation Gradients"

Maia Crews-Erjavec

Augsburg University

"Phenology of Canada Darner (Aeshna canadensis) Dragonflies in Minnesota"

Marisa D. Macchia

Millersville University

"A Temporal Comparison of Land Use Effects on the Presence and Abundance of Microplastics in Riverine Systems"

Melissa Ann Castillo

Salt Lake Community College

"Source-Specific Dissolved Organic Carbon Uptake by Stream Microbes"

Nicholas Bielski

University of Wisconsin—Parkside

"A Damsel in Distress: Characterizing the Effects of Thermal Stress on Metabolites in Damselflies"

Raul Lazcano

Loyola University Chicago

"Anthropogenic Litter on Chicago Beaches"

Ruric O. Bowman

Lycoming College

"Vertical Migration of Adult Plecoptera (Stoneflies) above Forested Headwater Streams"

Tori Hebert

The University of Southern Mississippi

"A Test of Algal Priming Effects during Typha latifolia Decomposition under Contrasting Dissolved Nutrient Levels"

Susan B. Norton Award for Undergraduate Research in Freshwater Science

Jacob Helmann

Virginia Tech

"Exploring Dispersal and Genetic Connectivity through a Newly Discovered Arizona Treefrog Population"

Melissa Ann Castillo

Salt Lake Community College

"Source-Specific Dissolved Organic Carbon Uptake by Stream Microbes"

Nicholas Bielski

University of Wisconsin—Parkside

"A Damsel In Distress: Characterizing the Effects of Thermal Stress on Metabolites in Damselflies"



9th Annual Instars Program



The Instars Mentoring Program is sponsored by the Society for Freshwater Science. The program is primarily 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 2019 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 eighth 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 Sunday, 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.

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SFS Instars Mentoring Workshop Orientation

(Invitation Only)

Sunday, 19 May 2019, 9:00 am – 6:00 pm

Salt Palace Convention Center—Room 254A

This is the ninth 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 student mentors, faculty and professionals will be promoted as we strive to encourage diversity in our discipline.

At this orientation workshop, new Instars fellows will meet peers who have similar interests in the study of freshwaters, graduate student mentors, and faculty who will guide them through the meeting. We will introduce the themes of the meeting program, and explore topics of common interest to participants. Instars participants will be encouraged to present results of undergraduate research during the week of the meeting (deadline for abstract submission was February 18, 2019). Following the meeting they will work as teams to develop summary papers based on chosen themes explored at the meeting.

Interested undergraduate students, graduate students and faculty are encouraged to contact members of the committee for developing pre-meeting discussions and networking. The deadline for applications to participate in the program as Instars Fellows are typically due the first week of February, and for Instars Graduate Mentors typically the third week of February each year.

SFS Early Career Committee

Early Career Members are any members of SFS who have completed their terminal degree within the last 10 years. If you are an Early Career member, you are welcome at early career events, which provide the opportunity for young professional members of the society to learn from each other's experience.

Early Career Events:

Early Career Mixer

Wednesday, May 22, 4:30 – 6:30 pm; No charge

Location—The Green Pig Pub (31 East 400 South)

A casual networking opportunity for SFS members who have finished their terminal degree within the last 10 years. Meet at the Green Pig Pub, 31 East 400 South (convenient to Salt Palace). Cash/credit bar available.

Early Career Workshop

Thursday, May 23, 12:30 – 2:00 pm; Cost: \$15

Location—Room 252 AB


Immediately following the preceding NSF special session, "Advancing Freshwater Science: A Discussion with the National Science Foundation," NSF panelists will continue with a Q&A-style discussion workshop focused on tips and advice for early career scientists wanting to learn how to apply for NSF funding and interact with program officers. Open to SFS members who have finished their terminal degree within the last 10 years. Lunch is included.

EC Opportunities:

The Early Career Development (ECD) and Public Information and Publicity (PIP) committees are pleased to announce they were awarded a grant through a joint Synergizing Activities Among Committees (SAAC) proposal submitted to the Society for Freshwater Science (SFS) Board of Directors. The grant money these committees were awarded established a fund for Travel Engagement Awards, which support early career members by providing a travel stipend to the SFS annual meeting, where award winners will work to develop a project meant to enhance communication, outreach, and advocacy for society and early career needs. Thanks to SFS president Jennifer Tank and the Board of Directors for supporting these awards through the creation of the SAAC program. Interested in getting involved with the ECD or PIP committees? Have ideas for how SFS can better support our early career members and promote communication and outreach about society issues? Please contact our current ECD (Zacchaeus Compson: Zacchaeus.greg.compson@gmail.com; Natalie Griffiths: Griffithsna@ornl.gov) and PIP (Ayesha Burdett and Eric Moody: pip@freshwater-science.org) co-chairs or other active committee members (listed below) for more information.


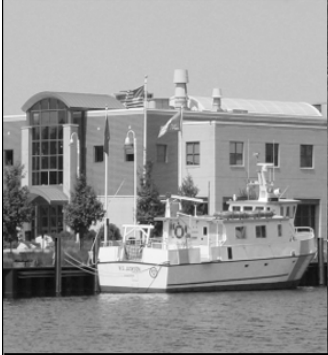
EC on Twitter:

Follow and share Early Career-related events and discussions during #2019SFS using the twitter hashtag **#SFS_EC**



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Presenter Information

Concurrent Sessions

Twelve concurrent sessions will be held in the Convention Center in the 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). If you need assistance or have questions, visit the presenter management team located near the registration area in the North Foyer.

Link for Uploading

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

IMPORTANT:

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

The speaker management team is available any time conference registration is open. 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 at the room ~30 minutes early to 1) familiarize yourself with the meeting room and AV equipment and 2) greet the speakers in your session. For some, this may be their first talk and it would be helpful to familiarize all with the ground rules. The presentation files for each session will be pre-loaded on the laptop in the room in a folder identified by date and time for your session. Once the presentation is launched, the presenter will control the program from the podium using the provided handheld slide advancer/laser pointer (the presenter may use the mouse or up/down/right/left keys for navigation as well).

Always 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. Please briefly introduce the speaker by giving

their name, their affiliation, and the title of their talk – no need to announce all co-authors nor to add any biographical information. The session chair will serve as a timer and indicate reminder times. We must keep on time! Do not allow speakers or Q&A to run over time because it affects all other concurrent sessions.

Time slots for talks are 15 minutes in total, including Q&A. Suggest ahead of time that speakers leave 2-3 minutes at end for questions, but note that this won't always happen. Please be prepared to stop a talk if they run out of time. Don't forget to allow for the ~1 min it takes to change presentations, which you can do during last question. (Note: Some special session talks are scheduled for 30 minutes. Please prepare accordingly).

To help keep talks on schedule, you can use the provided timecards to help the speaker keep track of their time. We will use the following timing conventions:

	15 MIN PRESENTATION	30 MIN PRESENTATION
Yellow Card indicating that 5 min remain in timeslot	10 min past start of talk	25 min past start of talk
Green Card indicating that 3 min remain in timeslot, time for Q&A	12 min past start of talk	27 min past start of talk
Red Card indicating the speaker has reached 1 min warning; wrap up & then speaker will be asked to sit down	14 min past start of talk	29 min past start of talk

Poster Session

The Poster Session will officially take place on Wednesday, May 22 from 1:30 to 4:00 pm in Ballroom ABCD. Posters can be set up any time between 8:00 am and 11:00 am on Sunday, May 19. To optimize viewing and interaction opportunities we encourage presenters to leave their posters in place until Thursday when they need to be removed by 5:00 pm.

Posters will be mounted on poster boards located in Ballroom ABCD. Posters must be no larger than 45 inches high by 41 inches wide. If your poster exceeds these specifications, it may be subject to removal. Posters will adhere to the boards using push pins that will be provided.

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SESSION	S26: Scholarship of Teaching and Learning in Freshwater Science <i>Moderator: Petra Kranzfelder</i>	C20: Climate Change <i>Moderator: Megan Fork</i>	S08: Advancing thermal restoration of Rivers and Streams <i>Moderator: Valerie Ouellet</i>	S06: The River Continuum Concept: Perspectives for the future in translational stream ecology <i>Moderator: Courtney Larson</i>	C09: Wetland Ecology <i>Moderator: Amanda Delvecchia</i>	C10: Biogeochemistry <i>Moderator: Dustin Kincaid</i>
9:00 AM - 9:15 AM	DIVERSIFYING DISCUSSIONS: HOW DO WE FACILITATE TALKING ABOUT FRESHWATER SCIENCE IN OUR CLASSES? Kranzfelder, Petra; Bankers-Fulbright, Jennifer L.; García-Ojeda, Marcos E.; Melloy, Marín P.; Mohammed, Sagal; Warfa, Abdi-Rizak M.	SURFACE TEMPERATURE OF ALPINE LAKES OF WASATCH AND UINTA Yousef, Foad	THE IMPORTANCE OF NATURAL FLUVIAL PROCESSES TO DESIGN SUCCESSFUL RESTORATION PROJECTS Biron, Pascale	REACH-SCALE FACTORS AND RIVER NETWORK ATTRIBUTES AFFECT THE LONGITUDINAL DISTRIBUTION OF MACROINVERTEBRATES Doretto, Alberto; Piano, Elena; Falasco, Elisa; Fenoglio, Stefano; Bona, Francesca	WHEN AND WHERE DOES THE STREAM PARADIGM FOR THE ROLE OF DETRITIVORES IN LITTER BREAKDOWN APPLY TO SHALLOW STANDING WATERS? Wissinger, Scott; O'Malley, Grace; Klemmer, Amanda	DETECTING DIFFERENCES IN NITROGEN FLOW IN ECOSYSTEM-SCALE EXPERIMENTS: A NEW APPROACH TO MODELING ISOTOPE TRACER ADDITIONS IN STREAM ECOSYSTEMS Thomas, Steven; Bruneaux, Mattieu; Collins, Sarah; Flecker, Alexander; El-Sabaawi, Rana; Lopez-Sepulcre, Andres
9:15 AM - 9:30 AM	ASSESSING AND ADDRESSING ACTIVE TEACHING STRATEGIES IN INTRODUCTORY STEM COURSES MacNeille, Ruth; Lohse, Kathleen; Smith, Rosemary	THE NET EFFECTS OF STRATIFICATION AND MIXING ON CYANOBACTERIA ACROSS THE COMPLETE LIFE CYCLE Cottingham, Kathryn; Carey, Cayelan; Greer, Meredith; Ewing, Holly; Weathers, Kathleen	RELATIVE CONTROLS ON STREAM TEMPERATURE FROM SHADE, LAND USE, AND WATER MANAGEMENT IN BASINS OF THE PACIFIC NORTHWEST, USA Fuller, Matthew; Detenbeck, Naomi; Leinenbach, Peter; Labiosa, Rochelle; Isaak, Daniel	ANTHROPOGENIC FOOD WEB SUBSIDIES IN FRESHWATER SYSTEMS: INTEGRATING WATER INFRASTRUCTURE INTO OUR UNDERSTANDING OF THE RIVER CONTINUUM Capps, Krista	WETLAND RESTORATION AND FISHERIES OUTPUT: THE NIGERIAN EXPERIENCE Wilfred-Ekprikpo, Peace Chidinma	HOW TO THINK ABOUT HYPORHEIC EXCHANGE IN GRAVEL BEDDED RIVERS (WITH ATTENTION TO IMPLICATIONS FOR BIOGEOCHEMISTRY) Poole, Geoffrey; O'Daniel, Scott; Fogg, Katie; Amerson, Byron; Reinhold, Ann Marie; Carlson, Sam
9:30 AM - 9:45 AM	A WORKSHOP MODEL FOR UNDERGRADUATE RESEARCH: DESIGN OF STATISTICS CURRICULUM SUPPORTS Mendez, Patina	INTERACTIVE EFFECTS OF TEMPERATURE AND NUTRIENT SUPPLY ON STREAM ECOSYSTEM METABOLISM Cross, Wyatt; Hood, James; Benstead, Jonathan; Huryn, Alexander D.; Henderson, Kate; Welter, Jill; Johnson, Philip; Olafsson, Jon; Gislason, Gisli	IS SHADING FLOODPLAIN SEDIMENTS IMPORTANT FOR STREAM CHANNEL TEMPERATURES? Fogg, Katie; Poole, Geoffrey; Reinhold, Ann Marie; O'Daniel, Scott; Amerson, Byron	MICROBES RUN THROUGH IT: THE ROLE OF ALLOCHTHONOUS ORGANIC MATTER IN STRUCTURING STREAM AND RIVER MICROBIAL COMMUNITIES Benbow, M. Eric; Larson, Courtney; Fenoglio, Stefano; Receveur, Joseph	EPHEMERAL WETLAND INVERTEBRATES IN A NATURALLY DISAPPEARING HABITAT: EMERGENT PATTERNS OF COMMUNITY DISASSEMBLY O'Neill, Brian; Thorp, James H.	DO US STREAM NITROGEN CONCENTRATIONS REFLECT CHANGING INPUTS OVER TIME? RESULTS FROM THE U.S. EPA NATIONAL RIVERS AND STREAMS ASSESSMENTS (2000-2014) Lin, Jiajia; Hill, Ryan; Sabo, Robert; Herlihy, Alan; Weber, Marc; Brooks, J. Renee; Clark, Christopher; Leibowitz, Scott; Stoddard, John; Compton, Jana
9:45 AM - 10:00 AM	A SEMESTER OF IMMERSION COURSES IN FIELD BIOLOGY EMPHASIZES EXPERIENTIAL EDUCATION IN AQUATIC SCIENCE Riley, Leslie; Verb, Robert	SHIFTING SNOWPACKS AND FOREST PHENOLOGY ALTER THE WINDOWS OF METABOLIC OPPORTUNITY FOR HUBBARD BROOK STREAM ECOSYSTEMS Thellman, Audrey; Savoy, Philip; Marinos, Richard; Rosi, Emma; Bernhardt, Emily	IMPACTS OF SMALL, LOW-HEAD DAMS ON STREAM MACROINVERTEBRATE ASSEMBLAGES Roy, Allison; Abbott, Katherine; Cole, Michael; Houle, Kristopher; Nislow, Keith	IMPACTS OF CLIMATE CHANGE AND DROUGHT OCCURRENCE ON CPOM DEGRADATION IN PREVIOUSLY PERENNIAL ALPINE STREAMS (NW ITALY) Gruppuso, Laura; Doretto, Alberto; Rappocciolo, Michela; Receveur, Joseph; Benbow, M. Eric; Bona, Francesca; Fenoglio, Stefano	ECOTOXICOLOGY EFFECTS OF MICROPLASTIC CONTAMINATION IN FRESHWATER WETLANDS Stoler, Aaron	LOADING AND BIOACCUMULATION OF SELENIUM AND MERCURY FROM MOUNTAINTOP COAL MINING INTO STREAMS AND RIPARIAN FOOD WEBS Gerson, Jacqueline; Naslund, Laura; Walters, David; Eagles-Smith, Collin; Bernhardt, Emily
10:00 AM - 10:15 AM	INNOVATIVE WAYS TO INCREASE DIVERSITY IN RECRUITMENT OF FRESHWATER SCIENTISTS Colon-Gaud, Checo; McGarvey, Daniel; Mendez, Patina; Torres, PJ; Macias, Nicholas	RAPID SHIFTS IN ICE-OUT DATES IN NEW ENGLAND LAKES: CONSEQUENCES FOR OXYGEN AND TROPHIC STATE McDowell, William G.; Kullberg, Alyssa	ADVANCING STREAM TEMPERATURE MODELING USING TOPO-BATHYMETRY LIDAR AND THERMAL INFRARED DATA Diabat, Mousa; Kasper, Brian; Meigs, Cassie	ABIOTIC CONDITIONS ALTER DRIFTING MACROINVERTEBRATE COMMUNITIES FOLLOWING LAKE STURGEON SPAWNING EVENTS Receveur, Joseph; Doretto, Alberto; Baker, Edward; Benbow, M. Eric; Scribner, Kim	EFFECTS OF DRAWDOWN HISTORY AND VEGETATION TYPE ON AQUATIC INVERTEBRATE DIVERSITY AND BIOMASS IN A MANAGED WILDLIFE AREA Kamke, Kaira	EVENT-SCALE RIVERINE LOADING OF NITROGEN AND PHOSPHORUS: IMPACTS OF LAND USE AND SEASONALITY ON N:P EXPORT RATIOS Kincaid, Dustin; Seybold, Erin; Adair, E. Carol; Bowden, William Breck; Perdrial, Julia; Vaughan, Matthew; Schroth, Andrew
10:15 AM - 10:30 AM	I-NATURE: PILOTING A CULTURALLY INCLUSIVE APPROACH TO STEM EDUCATION FOR UNDERREPRESENTED MINORITY UNDERGRADUATES. Alexiades, Alexander	EXPERIMENTAL EVIDENCE FOR STRONGER COMPETITION AT HIGHER ELEVATIONS: A MECHANISM FOR UPSLOPE RANGE MARGINS? Shepard, Isaac; Wissinger, Scott; Taylor, Brad; Greig, Hamish	BUILDING A SPATIAL STATISTICAL NETWORK MODEL OF STREAM TEMPERATURE TO GUIDE RESTORATION DECISIONS IN AN INTERNATIONAL WATERSHED Figary, Stephanie; Detenbeck, Naomi; O'Donnell, Cara	RIVERINE MICROPLASTIC: LAND-USE EFFECTS AND INTERACTIONS WITH FISH McNeish, Rae; Kim, Lisa; Mason, Sherri; Kelly, John; Hoellein, Timothy		RELATIONSHIPS BETWEEN TRACE METAL-NUTRIENT COLIMITATION IN STREAM BIOFILMS AND SURFACE WATER CHEMISTRY Fitzgibbon, Andrea; Costello, David

250 CF	250 DE	254 B	253 AB	251 AB	251 DE	SESSION
S21: Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving <i>Moderator: Michael Paul</i>	S16: Energy-flow food webs: new perspectives, common ground, and knowledge gaps <i>Moderator: Eric Scholl</i>	C01: Algae <i>Moderator: Paul Furey</i>	S05: Accidental ecosystems: Physical, chemical, biological, and social processes <i>Moderator: Mariana Lauck</i>	C18: Biodiversity <i>Moderator: Laura Twardochled</i>	C26: Invasive Species <i>Moderator: Dave Strayer</i>	9:00 AM - 9:15 AM
THE EPITOME OF TRANSLATIONAL ECOLOGY – FEEDBACKS BETWEEN BIOASSESSMENT PROGRAMS, SCIENTIFIC DISCOVERY, AND ECOLOGICAL ASSESSMENT Hawkins, Charles	DEVELOPMENT AND APPLICATION OF THE TROPHIC BASIS OF PRODUCTION METHODOLOGY IN QUANTIFYING FOOD WEBS Benke, Arthur	SPATIAL VARIATIONS IN THE BENTHIC DIATOM FLORA AND ITS DIVERSITY IN THE HIGHLAND-PLATEAU RIVERS (CENTRAL INDIA) Verma, Jyoti		ANTHROPOGENIC CHANGE INFLUENCES WETLAND FOOD WEBS AND ECOSYSTEM FUNCTION: EVIDENCE FOR TROPHIC DOWNGRADING? Compson, Zacchaeus; Monk, Wendy; Rideout, Natalie; Stefani, Sonja; Hajibabaei, Mehrdad; Porter, Terrisita; Baird, Donald	BUSH TUCKER AND BIODIVERSITY: WEED MANAGEMENT ON THE FLOODPLAINS OF KAKADU NATIONAL PARK Douglas, Michael; Setterfield, Samantha; Jackson, Sue; Adams, Vanessa; Scheepers, Kelly; Kool, Johnathan	9:15 AM - 9:30 AM
A FRAMEWORK TO SET GOALS AND INFORM MANAGEMENT DECISIONS Jackson, Susan	DEVELOPMENT AND APPLICATION OF THE TROPHIC BASIS OF PRODUCTION METHODOLOGY IN QUANTIFYING FOOD WEBS Benke, Arthur	IDENTIFICATION OF THE NEUROTOXIN BETA-METHYLAMINO-L-ALANINE (BMAA) IN AUSTRALIAN FRESHWATER DIATOMS. Facey, Jordan	IRRIGATION CANALS ARE NEWLY CREATED STREAMS OF SEMI-ARID AGRICULTURAL REGIONS Carlson, Erick	USING TRAITS TO DECONSTRUCT LINKAGES BETWEEN MACROINVERTEBRATE DIVERSITY AND WETLAND ECOSYSTEM FUNCTION ACROSS A FLOODPLAIN DISTURBANCE GRADIENT Rideout, Natalie; Compson, Zacchaeus; Monk, Wendy; Hajibabaei, Mehrdad; Baird, Donald	OPTIMIZING INVASIVE CRAYFISH TRAPPING METHODS, CASE STUDY OF PROCAMBARUS CLARKII Copic, Colette; Egly, Rachel; O'Shaughnessey, Erin; Keller, Reuben	9:30 AM - 9:45 AM
TRANSLATING HISTORICAL AND ONGOING MONITORING DATA INTO GOALS AND ACTIONS IN WATERSHEDS Smucker, Nathan; Netch, Christopher; Pilgrim, Erik; Heberling, Matthew; Safwat, Amr; McManus, John; McClatchey, Rebecca; Lubbers, Hannah; Lenhart, Lori	WHEN FLOW FOOD WEBS GET FISHY: SOME CHALLENGES AND OPPORTUNITIES Baxter, Colder; Bellmore, J. Ryan; Cross, Wyatt; Hall, Robert; Kennedy, Ted; Marcarelli, Amy; Paris, James; Rosi, Emma	PATTERNS AND IMPLICATIONS OF MOTILITY IN <i>EUNOTIA</i> EHR., A DIATOM GENUS WITH A REDUCED RAPHE SYSTEM Furey, Paula	VARIABLE INUNDATION PATTERNS, WETLAND PLANT COMMUNITIES, AND NITROGEN UPTAKE IN THE SALT RIVER WETLANDS Lauck, Marina; Grimm, Nancy	A FRESHWATER INSECT OCCURRENCE AND TRAIT DATASET FOR THE CONTINENTAL UNITED STATES Twardochleb, Laura; Hiltner, Ethan; Pyne, Matthew; Zarnetske, Phoebe	DO RESOURCE SUBSIDIES FROM INVASIVE RIPARIAN TREES FACILITATE NON-NATIVE FISH IN THE UPPER COLORADO RIVER BASIN? Cheek, Christopher; Peoples, Brandon K.; Goforth, Reuben	9:45 AM - 10:00 AM
DESIGNATING AQUATIC LIFE USES ACROSS THE FLOW REGIME SPECTRUM IN ARIZONA STREAMS, USING BENTHIC MACROINVERTEBRATE DATA Spindler, Patrice	SCALING FROM THE LANDSCAPE TO RIVERINE FOOD WEBS Scholl, Eric; Cross, Wyatt; Dutton, Addie; Guy, Christopher	FACTORS INFLUENCING POLYPHOSPHATE STORAGE IN STREAM BIOFILMS ACROSS A PHOSPHORUS GRADIENT Rier, Steven; Gordon-Weaver, Aaron; Soohy, Jennifer; Ashberry, Emily	DEVELOPMENT OF A MACROINVERTEBRATE MULTI-METRIC INDEX TO ASSESS IMPACTS TO WETLANDS IN THE IRRIGATED FLOODPLAINS OF WYOMING Tibbets, Teresa; Tronstad, Lusha; Washkoviak, Lindsey	LOCAL AND REGIONAL DRIVERS OF TAXONOMIC HOMOGENIZATION IN STREAM DIATOMS, INSECTS, AND FISH ALONG A LAND USE GRADIENT Budnick, William; Leboucher, Thibault; Belliard, Jerome; Soininen, Janne; Lavoie, Isabelle; Pound, Katrina; Jamoneau, Aurelien; Roseberry, Juliette; Tales, Evelyn; Pajunen, Virpi; Campeau, Stephane; Passy, Sophia	USING EDNA TO DETECT AND MONITOR AQUATIC INVASIVE PLANTS Kuehne, Lauren; Ostberg, Carl; Chase, Dorothy; Olden, Julian	10:00 AM - 10:15 AM
BIOLOGICAL INFORMATION SUPPORTS RAPID DETERMINATION OF STREAMFLOW PERMANENCE OF HEADWATER, INTERMITTENT, AND EPHEMERAL STREAMS Nadeau, Tracie	SPATIAL HETEROGENEITY IN BIOMASS TURNOVER AND ENERGY-FLOW ACROSS A FLOODPLAIN FOODWEB MOSAIC Paris, James; Baxter, Colder; Bellmore, J. Ryan	COMPOSITION OF ALGAL ASSEMBLAGES DIFFERS WITH THE TEMPORAL PATTERN OF PHOSPHORUS LOADING Pearce, Nolan J.T.; Thomas, Kathryn E.; Lavoie, Isabelle; Chambers, Patricia A.; Yates, Adam G.	INTEGRATING ECOSYSTEM SERVICES AND SOCIETAL BENEFITS WITH THE DPSIR FRAMEWORK IN THE MANAGEMENT OF THE NIGER DELTA ECOSYSTEM Ndimele, Prince Emeka; Chukwuka, Kanayo Stephen; Kushoro, Hijrah Yetunde; Ewenla, Lois Oyindamola	TOP DOWN AND BOTTOM UP DRIVERS OF COMMUNITY ASSEMBLY IN ALPINE LAKES Boyle, Lindsey; Krist, Amy; Walters, Annika; Wagner, Katie	LONG-TERM POPULATION DYNAMICS OF DREISSENID MUSSELS IN THE HUDSON RIVER ESTUARY Strayer, David; Hamilton, Stephen; Malcom, Heather; Solomon, Christopher	10:15 AM - 10:30 AM
THE USE OF BIOLOGICAL DATA IN CLIMATE ASSESSMENTS AND BEYOND Stamp, Jennifer; Hamilton, Anna; Bierwagen, Britta	QUANTIFYING THE EFFECTS OF ALTERED HYDROLOGY AND FOOD-WEB STRUCTURE ON ECOSYSTEM CARRYING CAPACITY IN A FLOODPLAIN RIVER Bond, Nick; Yen, Jian; Thomson, James; Kopf, Keller; Nielsen, Daryl; McCasker, Nicole; Humphries, Paul; Morrongiello, John; Crook, David; Reich, Paul; Kennard, Mark; Butler, Gavin		MICROBIAL COMMUNITY DIVERSITY IN URBAN STREAMS RECEIVING WASTEWATER EFFLUENT Clinton, PhD, Sandra; Johnson, James; Lambirth, Kevin; Fodor, Anthony; Gibas, Cynthia	COLONIZATION AND DISPERSAL RATE OF TRICHOPTERA SPECIES IN ICELAND AND THE CONSEQUENT DISAPPEARANCE OF A CADDISFLY SPECIES Gislason, Gisli Mar; Olafsson, Erling		



Monday — Late Morning Oral Presentation

	150 G	150 DEF	151 ABC	151 G	151 DEF	250 AB
SESSION	S26: Scholarship of Teaching and Learning in Freshwater Science <i>Moderator: Alyssa Anderson</i>	C20: Climate Change <i>Moderator: Audrey Thellman</i>	S08: Advancing thermal restoration of Rivers and Stream <i>Moderator: Vallerie Ouellet</i>	S06: The River Continuum Concept: Perspectives for the future in translational stream ecology <i>Moderator: Alberto Doretto</i>	C09: Wetland Ecology <i>Moderator: Scott Wissinger</i>	C10: Biogeochemistry <i>Moderator: Shannon Speir</i>
11:00 AM - 11:15 AM	WHEN STUDENTS ARE THE TEACHERS: ENGAGING UNDERGRADUATES IN WATER QUALITY-THEMED OUTREACH EVENTS Anderson, Alyssa	CURRENT DISTRIBUTIONS AND FUTURE CLIMATE-DRIVEN CHANGES IN DIATOMS, INSECTS, AND FISH IN U.S. STREAMS Pound, Katrina; Larson, Chad; Passy, Sophia	REDEFINING AQUATIC HABITAT CONNECTIVITY FOR URBAN CATCHMENTS Timm, Anne L.; Ouellet, Valerie	THE RIVER CONTINUUM CONCEPT PREDICTS FISH PREY ASSEMBLAGE STRUCTURE FOR AN INSECTIVOROUS FISH ALONG A TEMPERATE RIVERSCAPE Perkin, Joshua; Curtis, William; Gebhard, Amy	MACROINVERTEBRATE AND FISH COMMUNITY RESPONSE TO WETLAND RESTORATION IN WESTERN KENTUCKY Soldo, Christy; Zuklic, Luke; Flinn, Michael	EXPLORING PLANKTONIC RESPIRATION USING SHORT-TERM IN SITU MEASUREMENTS Bogard, Matthew; Collins, James; Boysen, Angie; Wickland, Kimberly; Sadro, Steve; Johnston, Sarah Ellen; Ingalls, Anitra; Windham-Myers, Lisamarie; Bergamaschi, Brian; Striegl, Robert; Dornblaser, Mark; Spencer, Robert; Butman, David
11:15 AM - 11:30 AM	PROMOTING WATER QUALITY STEWARDSHIP THROUGH STUDENT MONITORING AND RIVER MONITORING Deaver, Emily	HOW DO WE RESPOND TO ECOLOGICAL TRANSFORMATIONS: RESIST, ACCEPT, OR DIRECT? Lawrence, David	THERMAL RESTORATION IN A FRAGMENTED LANDSCAPE. Ouellet, Valerie; Daniels, Melinda	TROPHIC STRUCTURE OF FISH ASSEMBLAGES ACROSS RIVER CONTINUA: CHALLENGES AND OPPORTUNITIES FOR BIOASSESSMENT Pease, Allison	AN INVESTIGATION OF INTRASPECIFIC GENOTYPIC VARIATION OF BOLBOSSCHOENUS MARITIMUS (ALKALI BULRUSH) Provard, Audree	DENITRIFICATION IN A LARGE RIVER NETWORK OF MIXED LAND USE—A STRUCTURAL EQUATION MODELING ANALYSIS Bartsch, Lynn; Kreiling, Rebecca; Christensen, Victoria
11:30 AM - 11:45 AM	ENGAGING HIGH SCHOOL STUDENTS AS COLLABORATORS IN ECOLOGICAL INVESTIGATION OF THE LOWER COLUMBIA RIVER: LESSONS FROM A UNIVERSITY-HIGH SCHOOL PARTNERSHIP Rollwagen-Bollens, Gretchen; Holmlund, Tamara; Bollens, Stephen M.; Wait, Jude; Zimmerman, Julie; Connelly, Kristin; Bargmann, Lucas	EFFECTS OF WATER TEMPERATURE UNDER PROJECTED CLIMATE CHANGE ON THE DEVELOPMENT AND SURVIVAL OF THE FAMILIAR BLUET DAMSELFLY (ENALLAGMA CIVILE) Starr, Scott; McIntyre, Nancy	THERMAL RESPONSES TO RIPARIAN THINNING IN REDWOOD HEADWATER STREAMS AT MULTIPLE SPATIAL SCALES Roon, David; Dunham, Jason; Harvey, Bret; Bellmore, J. Ryan; Olson, Dede	ARE FISH EXPOSED TO PARASITE INFECTION GRADIENTS ALONG THE RIVER CONTINUUM? Bauer, Eric; Helms, Brian; Feminella, Jack	IDENTIFYING MACROINVERTEBRATE METRICS TO INDICATE ENVIRONMENTAL CONDITION OF MICHIGAN'S PALUSTRINE WETLANDS Mattingly, Alexandra; Uzarski, Donald	SPATIAL HETEROGENEITY OF NITROGEN FIXATION AND DENITRIFICATION ACROSS A WETLAND-STREAM-LAKE INTERFACE Eberhard, Erin; Marcarelli, Amy
11:45 AM - 12:00 PM	SERVICE LEARNING TO ACHIEVE MULTIPLE OBJECTIVES: INTEGRATING CAMPUS WATER SUSTAINABILITY INITIATIVES INTO ENVIRONMENTAL STUDIES COURSES Schilling, Emily; Chamberlain, Kristen; Kunz, Joan; Green, Allyson	HETEROGENEOUS FISH RECOLONIZATION ALONG A CLIMATE GRADIENT FOLLOWING HURRICANE HARVEY Kinard, Sean; Carvalho, Fernando; Gonzalez, Darcia; Solis, Alexander; Reese, Brandi K.; Hogan, Derek; Patrick, Christopher	A PROCESS-BASED FRAMEWORK FOR RESTORING THERMAL HETEROGENEITY IN REGULATED RIVERS Mejia, Francine; Torgersen, Christian; Berntsen, Eric; Andersen, Todd; Maroney, Joseph; Kurylyk, Barret; Fullerton, Aimee; Ebersole, Joe; Johnson, Zacchary	DECADAL DIFFERENCES IN RIPARIAN LEAF LITTER SUBSIDIES AND DECOMPOSITION AT AUGUSTA CREEK Larson, Courtney; Benbow, M. Eric	CARBON DIOXIDE EFFLUX FROM ALPINE POND SOILS VARIES WITH SOIL NUTRIENT CONTENT AND HYDROLOGY DelVecchia, Amanda; Gougherty, Steven; Taylor, Brad	QUANTIFYING THE RECOVERY OF DENITRIFICATION FOLLOWING RESTORATION-RELATED CONSTRUCTION IN AN AGRICULTURAL WATERSHED Speir, Shannon; Tank, Jennifer L.; Mahl, Ursula H.
12:00 PM - 12:15 PM	PRACTICING BENTHIC SCIENCE IN THE UNDERGRADUATE LABORATORY: ANALYZING A LARGE DATA SET GENERATED BY FRESHWATER BIOLOGY STUDENTS Anderson, Tracey	LIGHT VS. NUTRIENT EFFECTS OF DOM ON BENTHIC PRODUCTION IN NORTHERN LAKES Fork, Megan; Karlsson, Jan; Sponseller, Ryan	STRATEGIC MANAGEMENT OF ATLANTIC SALMON THERMAL REFUGES IN THE RESTIGOUCHE RIVER WATERSHED Gillis, Carole-Anne; Gosselin, Pascale; Leblanc, David; Dugdale, Stephen J		DEVELOPMENT OF A VEGETATION-BASED PREDICTIVE MODEL OF DENITRIFICATION POTENTIAL FOR INLAND WETLANDS OF MICHIGAN Dybiec, Jacob; Learman, Deric; Uzarski, Donald	AN INVESTIGATION OF LINKED ELEMENTAL CYCLES USING DUAL ISOTOPE EXPERIMENTS AND CONSTRAINT-BASED OPTIMIZATION MODELING Mohr, Elizabeth; Reinhold, Ann Marie; Payn, Robert; Hall, Robert; Blaszcak, Joanna; Poole, Geoffrey
12:15 PM - 12:30 PM	FRESHWATER BASED COMMUNITY ENGAGEMENT AT THE DEPARTMENTAL LEVEL: ECOREACH AT THE ODUM SCHOOL OF ECOLOGY Solomon, Kelsey; Tomczyk, Nathan; Cummins, Carolyn; LaVere, Ashley; Arnold, Kaylee		MORE THAN COLD: TOWARD A COMPREHENSIVE IDENTIFICATION OF COLD-WATER REFUGES AND CLIMATE REFUGIA FOR AQUATIC LIFE Ebersole, Joe; Snyder, Marcia; Torgersen, Christian; Keefer, Matthew; Fullerton, Aimee; Gregory, Stan; Armstrong, Jonathan; Palmer, John; Keenan, Dru		COMPARATIVE GENOMICS AND PROTEOMICS OF SILK ACROSS CADDISFLY SUBORDERS Frandsen, Paul; Stewart, Russell	WHOLE RIVER ESTIMATES OF DENITRIFICATION IN RESPONSE TO A LARGE-SCALE NITROGEN ENRICHMENT OF THE KANSAS RIVER (USA) Burgin, Amy J.; Zeglin, Lydia; Nieland, Matthew; Kelly, Michelle Catherine; Hanschu, Janaye

250 CF	250 DE	254 B	253 AB	251 AB	251 DE	SESSION
S21: Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving <i>Moderator: Michael Paul</i>	S16: Energy-flow food webs: new perspectives, common ground, and knowledge gaps <i>Moderator: James Paris</i>	C01: Algae <i>Moderator: Steven Rier</i>	C15: Population Ecology <i>Moderator: Katherine Strickler</i>	S04: Novel stressors and novel ecosystems: Ecological processes in freshwaters of the built environment <i>Moderator: Donna Kashian</i>	C11: Community Ecology <i>Moderator: Stacey Lance</i>	
BOREAL STREAM BIODIVERSITY UNDER PRESENT AND FUTURE FOREST LAND USE Muotka, Timo; Aroviita, Jukka; Rajakallio, Maria; Jyväsjärvi, Jussi	STREAM FOOD WEB RESPONSE TO THE BENTHIC ALGAE DIDYMOSPHEINIA GEMINATA IN AN INLAND TEMPERATE RAINFOREST Clancy, Niall; Brahney, Janice; Budy, Phaedra	DEVELOPMENT OF QPCR METHODS TO ASSESS THE SPATIAL AND TEMPORAL VARIABILITY OF HARMFUL ALGAL BLOOMS Pyman, Andrew	MORE THAN THAT FOR WHICH YOU BARGAINED: WHY SAMPLING MATTERS IN POPULATION GENETICS Heilveil, Jeffrey; Berezowski, Emily; Thompson, Emma	ARE ECOLOGICAL THREATS POSED BY PHARMACEUTICAL POLLUTION CONTEXT DEPENDANT? Richmond, Erinn; Lee, Sylvia; Reisinger, Alexander; Rosi, Emma	HOW MUCH TOTAL VARIATION IN COMMUNITY COMPOSITION CAN WE REALLY ACCOUNT FOR? A CASE FOR FURTHER INVESTIGATION OF STOCHASTIC EFFECTS Lamb, Kevin	11:00 AM - 11:15 AM
IMPROVING ESTIMATES OF RICHNESS, HABITAT ASSOCIATIONS, AND ASSEMBLAGE CHARACTERISTICS OF FRESHWATER GASTROPODS Narr, Charlotte; Krist, Amy	USE OF TROPHIC BASIS OF PRODUCTION ANALYSES AND STABLE ISOTOPE TRACER ADDITIONS TO QUANTIFY ENERGY FLOW AND NUTRIENT CYCLING IN TROPICAL STREAM FOOD WEBS Whiles, Matt; Colon-Gaud, Checo; Frauendorf, Therese; Rugenski, Amanda; Hall, Robert; Dodds, Walter; Hury, Alexander D	NUTRIENT RATIO EFFECTS ON PHYTOPLANKTON ASSEMBLAGES IN A POTABLE SOURCE-WATER RESERVOIR OF THE SOUTHEASTERN U.S. Lindor, Nicole; Burkholder, JoAnn	FLEXIBLE LIFE HISTORY ESSENTIAL FOR THE MAYFLY, HEXAGENIA LIMBATA, TO SURVIVE IN WESTERN LAKE ERIE Griffiths, Ronald	A BITTER PILL TO SWALLOW: EFFECTS OF CIPROFLOXACIN ON URBAN STREAM BIOFILMS Reisinger, Alexander; Gallagher, Morgan	STREAM CO-OCCURRENCE NETWORKS VARY IN COMPLEXITY AND STRUCTURE ALONG LATITUDINAL GRADIENTS Mruzek, Joseph; Budnick, William; Larson, Chad; Passy, Sophia	11:15 AM - 11:30 AM
TRANSLATING MULTIMETRIC INDEX SCORES INTO TAXA-SPECIFIC BIODIVERSITY LOSSES King, Ryan S.; Bernhardt, Emily; Baker, Matthew	ENERGY FLOW PATTERNS THROUGH FOOD WEBS IN NEOTROPICAL HEADWATER STREAMS OF THE BRAZILIAN SAVANNA Mello, José; Abrahão, Daniel; Saltarelli, Wesley; Whiles, Matt; Dodds, Walter; Cunha, Davi; Corbi, Julianio	QUANTIFICATION OF MICROCYSTIS IN MUSKEGON AND BEAR LAKES TO EVALUATE THE RELATIONSHIP BETWEEN ABUNDANCE, TOXICITY, AND ENVIRONMENTAL CONDITIONS Pyman, Andrew; Partridge, Charlyn	GENETIC DIVERSITY OF A VAGILE AQUATIC INSECT VARIES WITH RIVER NETWORK STRUCTURE Metcalfe, Anya; Kennedy, Ted; Marks, Jane; Muehlbauer, Jeffrey	BIOLOGICAL INTERFERENCE IN WASTEWATER TOXICITY TESTS AND POTENTIAL INFLUENCE OF HIGHER AMBIENT TEMPERATURES AND EXTENDED WARM PERIODS Pillard, David; Naddy, Rami; Gagnon, Rebecca	UNRAVELLING THE IMPACTS OF DROUGHT, NUTRIENT ENRICHMENT AND RIPARIAN CANOPY REMOVAL ON STREAM ECOSYSTEMS –A MESOCOSM APPROACH Jyväsjärvi, Jussi; Göthe, Emma; Lehosmaa, Kaisa; Teittinen, Anette; Soininen, Janne; Huusko, Ari; Muotka, Timo; McKie, Brendan	11:30 AM - 11:45 AM
USING BIOASSESSMENT TO PRIORITIZE PUGET SOUND BASINS FOR RESTORATION AND PROTECTION, IDENTIFY STRESSORS AND MONITOR RESTORATION EFFECTIVENESS Macneale, Kate	AMINO ACID STABLE ISOTOPES AND HETEROTROPHIC BIOFILMS IN RIVER FOOD WEBS Besser, Alexi; Elliott Smith, Emma; Blevins, Christina; Patel, Vishwa; Barkalow, Adam; Turner, Thomas; Newsome, Seth	HYPOLIMNETIC TAILWATERS AS REFUGES FOR NUISANCE AND INVASIVE SPECIES: A CASE STUDY OF DIDYMOSPHEINIA GEMINATA EFFECTS ON AQUATIC MACROINVERTEBRATES Green, Matthew; Tuberty, Shea; Blum, Peter; Sellers, Stephanie; Gangloff, Michael; Jacobus, Luke	USING BIOENERGETICS AND POPULATION DYNAMICS MODELLING TO INFORM FISHERIES MANAGEMENT AT JOE'S VALLEY RESERVOIR, UTAH. Dudding, Jack	COLLOIDAL AND TRULY-DISSOLVED METALS AND METALLOIDS IN WASTEWATER LAGOONS AND THEIR REMOVAL WITH FLOATING TREATMENT WETLANDS Colman, Benjamin; Sullivan, Lauren	RELATIONSHIP BETWEEN BIODIVERSITY AND NUTRIENT CYCLING BY SUBTERRANEAN INVERTEBRATE COMMUNITIES IN THE EDWARDS AQUIFER, USA Nowlin, Weston; Krupka, Nathan; Schwartz, Benjamin; Diaz, Pete	11:45 AM - 12:00 PM
	LEAF TYPE AFFECTS ASSIMILATION OF C AND N BY MACROINVERTEBRATES Schrik, Meghan; Koch, Benjamin; Roush, Courtney; Cusick, Daniel; Marks, Jane	THIAMINE INFLUENCES THE GROWTH OF ALGAE IN STREAMS Wang, Binbin	SPECIES DISPERSAL MEDIATES OPPOSING INFLUENCES OF A BRANCHING NETWORK ON GENETIC VARIATION IN A METAPOPULATION Chiu, Ming-Chih; Li, Bin; Nukazawa, Kei; Carvajal, Thaddeus; Watanabe, Kozo	DISSOLVED INORGANIC CARBON LIMITATION IN FILAMENTOUS ALGAL WASTEWATER TREATMENT FLOWAYS IN NEW ZEALAND Keller, Troy; Craggs, Rupert	AQUATIC MACROINVERTEBRATE COMMUNITY OF A WILD AND SCENIC RIVER IN THE SOUTHWESTERN UNITED STATES Kortenhoeven, Eric; Hockett, Justin; Lytle, David	12:00 PM - 12:15 PM
	REVISITING THE FATE OF DEAD LEAVES IN STREAMS Marks, Jane; Compson, Zacchaeus; Siders, Adam; Roush, Courtney; Schrik, Meghan; Koch, Benjamin; Wymore, Adam; Thomas, Steven; Flecker, Alexander		ON THE VALUE OF DECAPOD DIVERSITY IN COMPARING WATER QUALITY IN TROPICAL HEADWATER STREAMS Covich, Alan; Yang, Carol; Perez-Reyes, Omar; Crowl, Todd	ENGINEERED NANOPARTICLES ALTER INSECT EMERGENCE AND RESULT IN FLUX OF METALS FROM AQUATIC TO TERRESTRIAL FOOD WEBS Perrotta, Brittany; Simonin, Marie; Castellon, Benjamin; Anderson, Steve; Baruch, Ethan; Matson, Cole; Bernhardt, Emily; King, Ryan S.		12:15 PM - 12:30 PM



Monday — Afternoon Oral Presentation

	150 G	150 DEF	151 ABC	151 G	151 DEF	250 AB
SESSION	C16: Restoration Ecology <i>Moderator: Stafanie Kröll</i>	S07: What makes the fever rise: investigations of variables responsible for riverine algal blooms <i>Moderator: Billy Justus</i>	C04: Microbial Ecology <i>Moderator: Jinjun Kan</i>	S06: The River Continuum Concept: Perspectives for the future in translational stream ecology <i>Moderator: Courtney Larson</i>	S25: Biocultural Approaches in Freshwater Conservation <i>Moderator: Brenna Kays</i>	C10: Biogeochemistry <i>Moderator: Soren Brothers</i>
2:00 PM - 2:15 PM	EFFICACY OF RESTORATION EFFORTS IN THE PROVO RIVER, UTAH WITH RESPECT TO AQUATIC INSECT DIVERSITY AND ABUNDANCE Meek, Jared; Birrell, Jackson; Mulford, Teagan; Andrus, Jeff; Shiozawa, Dennis; Nelson, Riley	A QUICK TOUR THROUGH THE NATION'S FINE-SCALE NITRATE DYNAMICS; QUANTIFYING NUTRIENT VARIABILITY OVER THE COURSE OF 24 HOURS Chamberlin, Catherine; Heffernan, Jim	NUTRIENTS (N, P, FE) AND PHARMACEUTICALS (CAF- FEINE, DIPHENHYDRAMINE) STRUCTURE THE CORE BACTERIAL COMMUNITY IN URBAN AND MONTANE STREAM BIOFILMS Ogata, Elizabeth; Baker, Michelle; Rosi, Emma; Smart, Trevor; Long, Donald; Aanderud, Zachary	GOING WITH THE FLOW: SPATIAL AND TEMPORAL TRENDS IN STREAM MICROBIAL COMMUNITY STRUCTURE AND FUNCTION Ottesen, Elizabeth	RETHINKING HUMAN DIMENSIONS OF FRESHWATER CONSERVATION: A BIOCULTURAL APPROACH Kays, Brenna; Anderson, Elizabeth P	HIGH SUPPLY, HIGH DEMAND: A UNIQUE NUTRIENT ADDITION DECOUPLES NITRATE UPTAKE AND METABOLISM IN A LARGE RIVER Kelly, Michelle Catherine; Zeglin, Lydia; Burgin, Amy
2:15 PM - 2:30 PM	BIOTIC RESPONSES TO BEAVER DAM ANALOG INSTALLATION IN A LOW-GRADIENT, INCISED STREAM Reinert, Holden; Albertson, Lindsey	CHARACTERIZING NUISANCE ALGAL RESPONSES TO ENVIRONMENTAL STRESSORS USING HIGH-THROUGHPUT SEQUENCING Schulte, Nicholas; Carlisle, Daren; Spaulding, Sarah	TRACING THE SOURCES, FATES, AND ACTIVITIES OF LEAF-ASSOCIATED MICROBES INTO THE STREAM FOOD WEB Koch, Benjamin; Fritz, Rebecca; Hayer, Michaela; Hungate, Bruce; Schwartz, Egbert; Marks, Jane	RIPARIAN DEFOLIATION BY THE INVASIVE GREEN ALDER SAWFLY ALTERS TERRESTRIAL PREY SUBSIDIES TO SALMON STREAMS Roon, David; Wipfli, Mark; Kruse, Jim	THE CITIZEN SCIENCE FOR THE AMAZON PROJECT: TRACKING FISH MIGRATIONS TO IMPROVE SUSTAINABLE MANAGEMENT AND EMPOWER CITIZENS ACROSS THE AMAZON BASIN Varese, Mariana; Heilpern, Sebastian; Leite, Gina; Wood, Chris; Hanks, Cullen	WHEN BUDGETS DON'T BALANCE: INDICATORS OF SHIFTING CARBON BALANCES AND LESSONS TO LEARN FROM THEM Brothers, Soren
2:30 PM - 2:45 PM	RESTORATION EFFECTS OF SEDIMENT SLUICING WITH DAM OPERATION ON MACROINVERTEBRATES IN THE MIMI RIVER, JAPAN Nakano, Daisuke; Suzuki, Junpei; Yamamoto, Ryosuke; Imamura, Masahiro	DETECTING WATER QUALITY THRESHOLDS FOR ALGAL BLOOMS USING A SHORT-TERM, MULTI-SPECIES ASSAY Murdock, Justin; Day, Samuel	IS IT ALL ABOUT THE SLIME? UNDERSTANDING DENITRIFICATION AND PHARMACEUTICAL DYNAMICS IN WATER CHESTNUT (TRAPA) BEDS Plum, Cami; Henry, Rebekah; Hamilton, Stephen; Rosi, Emma; McCarthy, David; Grace, Michael	ENHANCED CARBON METABOLISM DOWNSTREAM OF A STREAM CONFLUENCE MIXING ZONE Plont, Stephen; Miller, Caitlin; Hotchkiss, Erin	COMMUNITY-BASED CONSERVATION EFFORTS TO PROTECT THE LARGEST AMAZONIAN FISH ENDEMIC TO GUYANA, ARAPAIMA ARAPAIMA de Souza, Lesley	A PROMISING APPROACH TO SOLVE LIGHT-ASSOCIATED MISSPECIFICATIONS IN RIVER METABOLISM MODELS Arroita, Maite; Yackulic, Charles; Appling, Alison; Hall, Robert; Elozegi, Arturo
2:45 PM - 3:00 PM	SANTA FE RIVER REHABILITATION, SANTA FE COUNTY, NEW MEXICO, USA; GERALD Z. JACOBI, SANTA FE, NEW MEXICO Jacobi, Gerald	DIDYMOSPHEA GEMINATA DISTRIBUTION IN SOUTHERN APPALACHIAN WATERSHEDS Womble, Spencer; Murdock, Justin	OXYGEN, PH, AND LABILE ORGANIC CARBON AS POSSIBLE MECHANISMS FOR ALGAL STIMULATION OF BACTERIAL AND FUNGAL PRODUCTION IN PERIPHYTON Harper, Jennifer; Kuehn, Kevin; Halvorson, Halvor; Findlay, Robert; Francoeur, Steven	VARIATION OF FUNCTIONAL REDUNDANCY BETWEEN FUNCTIONAL PROCESS ZONES IN WESTERN NORTH AMERICAN STREAMS Hayford, Barbara; Dougherty, Kaitlyn; Erdenee, Bolortsetseg; Maasri, Alain; Gelhaus, Jon	DO RACE, GENDER, AND EDUCATION INFLUENCE PUBLIC PARTICIPATION IN STORMWATER MANAGEMENT? Scarlett, Rachel; Subramaniam, Mangala; McMillan, Sara	RECOGNIZING BOTH DENITRIFICATION AND CONSUMPTIVE PROCESSES IMPROVES WHOLE SYSTEM DIEL N ₂ FLUX MODELS IN DISCRETE REACHES OF AGROECOSYSTEMS Nifong, Rachel; Taylor, Jason M.; Moore, Matt; Farris, Jerry
3:00 PM - 3:15 PM	SEDIMENT REMOVAL IN RESTORED AGRICULTURAL WETLANDS IMPROVES WATER QUALITY Winikoff, Sarah; Finlay, Jacques	DOWNSTREAM DYNAMICS OF RESERVOIR-BORN CYANOBACTERIAL BLOOMS IN THE KLAMATH RIVER, CA Genzoli, Laurel; Kann, Jacob; Fricke, Susan; Hanington, Matthew; Robinson, Crystal	CONTRASTING EFFECTS OF TWO MACROINVERTEBRATE CONSUMERS ON STREAM DETRITAL MICROBIAL BIOFILMS UNDER LIGHT MANIPULATION Brady, Cheyenne; Francoeur, Steve; Halvorson, Halvor; Kuehn, Kevin	ORGANIC MATTER IN NESTED CATCHMENTS: DECREASING VARIABILITY WITH INCREASING STREAM ORDER Gabor, Rachel; McKnight, Diane	FOOD FOR THOUGHT: ECOLOGICAL AND SOCIO-CULTURAL REQUIREMENTS FOR WATER RESOURCE DEVELOPMENT AND FOOD PRODUCTION IN NORTHERN AUSTRALIA Douglas, Michael; Jackson, Sue	WETLAND BIOGEOCHEMICAL RESPONSES TO CLIMATE CHANGE PREDICTED SCENARIOS Shaffer, Angela; Colon-Gaud, Checo
3:15 PM - 3:30 PM	RESILIENCE AND REGIME SHIFTS: NOVEL BENTHIC COMMUNITIES IMPEDE ECOLOGICAL RECOVERY IN A HISTORICALLY METAL-CONTAMINATED STREAM Clements, William; Wolff, Brian	ECOHYDROLOGY OF LARGE RIVERS AND IMPLICATIONS FOR MANAGEMENT OF HARMFUL ALGAL BLOOMS Sluss, Tamara	MORE BIOLOGICALLY AVAILABLE PHOSPHOROUS, LESS EUKARYOTIC GRAZER POPULATIONS, AND WARMER TEMPERATURES MAY INTENSIFY HABITS ON UTAH LAKE Collins, Scott; Jones, Erin; Hansen, Neil; Abbott, Benjamin; Carling, Greg; Baker, Michelle; Aanderud, Zachary		USING TRADITIONAL ECOLOGICAL KNOWLEDGE TO PROTECT WETLANDS: THE SWINOMISH TRIBE'S WETLANDS CULTURAL ASSESSMENT PROJECT Mitchell, Todd; Casper, Nicole	EXPERIMENTAL NUTRIENT ENRICHMENT STIMULATES MULTIPLE TROPHIC LEVELS THROUGH ALGAL AND DETRITAL FOOD WEB PATHWAYS: A GLOBAL META-ANALYSIS FROM STREAMS AND RIVERS Ardon, Marcelo; Zeglin, Lydia; Utz, Ryan; Cooper, Scott; Dodds, Walter; Bixby, Rebecca; Burdett, Ayesha; Follstad Shah, Jennifer; Griffiths, Natalie; Harms, Tamara; Johnson, Laura; Johnson, Sherri; Jones, Jeremy; Kominoski, John; McDowell, William H.; Rosemond, Amy; Trentman, Matt T.; Van Horn, David; Ward, Amelia

250 CF	250 DE	254 B	253 AB	251 AB	251 DE	SESSION
S21: Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving <i>Moderator: Raphael Mazor</i>	S16: Energy-flow food webs: new perspectives, common ground, and knowledge gaps <i>Moderator: Jim Junker</i>	C22: Disturbance <i>Moderator: Angela De Palma-Dow</i>	C07: Lentic Ecology <i>Moderator: Betty Kreakie</i>	S04: Novel stressors and novel ecosystems: Ecological processes in freshwater of the built environment <i>Moderator: Tim Hoellein</i>	C11: Community Ecology <i>Moderator: Daniel McGarvey</i>	
A BIGGER BANG FOR THE BUG: USING ASSESSMENT DATA FOR STRESSOR IDENTIFICATION Paul, Michael	EXPERIMENTAL N AND P ADDITIONS RELIEVE STOICHIOMETRIC CONSTRAINTS ON ORGANIC-MATTER FLOWS THROUGH FIVE STREAM FOOD WEBS Demi, Lee; Benstead, Jonathan; Rosemond, Amy; Gulis, Vlad; Maerz, John	PREDICTING HYDROLOGIC DISTURBANCE OF STREAMS USING SPECIES OCCURRENCE DATA Magoulick, Daniel; Fox, J. Tyler	FISH AS DRIVERS OF ZOOPLANKTON SPATIAL VARIATION ACROSS MULTIPLE SPATIAL SCALES Detmer, Thomas; Parkos, Joseph; Wahl, David	POOLS AND FLUXES OF PLASTIC LITTER AT THE WATERSHED SCALE: AN ECOSYSTEM APPROACH Hoellein, Timothy; Rochman, Chelsea	TAXONOMIC AND FUNCTIONAL TRAIT STRUCTURE WITHIN THE SIZE SPECTRUM: COMMON BUILDING BLOCKS OR IDIOSYNCRASY? McGarvey, Daniel	2:00 PM - 2:15 PM
BEYOND BIOASSESSMENT: SETTING MANAGEMENT GOALS FOR FLOW AND EUTROPHICATION TO PROTECT BIOLOGICAL INTEGRITY IN CALIFORNIA WADEABLE STREAMS Mazor, Raphael; Sutula, Martha; Stein, Eric; Theroux, Susanna; Taniguchi-Quan, Kris; Beck, Marcus	FOOD WEB CONTROLS ON MERCURY FLUX AND FATE IN THE COLORADO RIVER, GRAND CANYON Walters, David; Rosi, Emma; Cross, Wyatt; Kennedy, Ted; Baxter, Colden; Hall, Robert	THE EFFECT OF EXTREME FLOOD EVENTS ON LARGE LAKES: ZOOPLANKTON COMMUNITY DYNAMICS IN LAKE CHAMPLAIN Mihuc, Timothy	LONG-TERM RESPONSE OF LAKE PHYTOPLANKTON TO CHANGES IN NUTRIENT AND DETRITUS SUBSIDIES FROM ITS WATERSHED AND NUTRIENT CYCLING BY FISH Vanni, Michael; Gonzalez, Maria; Renwick, William; Kelly, Patrick; Williamson, Tanner	ANTHROPOGENIC LITTER IN URBAN STREAMS: SPATIAL DISTRIBUTION OF PLASTIC AND ITS ROLE IN LEAF LITTER BREAKDOWN Kim, Lisa; Dunn, Samuel; McNeish, Rachel; Kelly, John; Berg, Martin; Hoellein, Timothy	AN ANALYSIS OF FUNCTIONAL DIVERSITY IN RIVERINE FISHES FROM THE GRASSLANDS TO THE GREAT BASIN Mathews, Gregory; Thorp, James H.	2:15 PM - 2:30 PM
	DIVERSITY AND BIOMASS OF SHREDDER INSECTS ALONG AN ALTITUDINAL GRADIENT IN CENTRAL AMERICA Garcia, Pavel; Hall, Robert	EFFECTS OF EXTENDED DROUGHT AND SUBSEQUENT FLOODING ON NUTRIENT DYNAMICS IN PRAIRE STREAMS Guinnip, James; Dodds, Walter	EFFECTS OF LAKE TROUT SUPPRESSION METHODS ON AMPHIPODS IN YELLOWSTONE LAKE Briggs, Michelle; Albertson, Lindsey; Glassic, Hayley; Guy, Christopher; Koel, Todd; Lujan, Dominique; Tronstad, Lusha	THE TRANSPORT AND RETENTION OF MICROPLASTIC FIBERS IN EXPERIMENTAL STREAMS WITH VARYING BENTHIC SUBSTRATE, DISCHARGE, AND BENTHIC BIOFILM COLONIZATION Berg, Elizabeth; Vincent, Anna; Shogren, Arian; Dee, Martha; Tank, Jennifer L.; Kelly, John; Hoellein, Timothy	NICHE DIMENSIONALITY AND HERBIVORY CONTROL STREAM ALGAL BIOMASS VIA SHIFTS IN GUILD COMPOSITION, RICHNESS, AND EVENNESS Passy, Sophia; Larson, Chad	2:30 PM - 2:45 PM
TAXONOMIC HARMONIZATION MAY REVEAL A STRONGER ASSOCIATION BETWEEN DIATOM ASSEMBLAGES AND TOTAL PHOSPHORUS IN LARGE DATASETS Lee, Sylvia; Bishop, Ian; Spaulding, Sarah; Mitchell, Richard; Yuan, Lester	SEASONALITY IN FLOW FOOD WEBS: THE IMPORTANCE OF WINTER BASEFLOW IN ALPINE STREAMS Rüegg, Janine; Battin, Tom	IMPLEMENTATION OF A MULTI-PARTNER, COLLABORATIVE EFFORT TO MANAGE AND MONITOR POST-FIRE WATER QUALITY IN A LARGE NORTHERN CALIFORNIA LAKE. De Palma-Dow, Angela; Ryan, Sarah; Muhl, Richard; Dills, Greg; Little, Amy	DETERMINANTS OF RESOURCE USE BY RAINBOW TROUT IN MOUNTAIN LAKES Stiling, Rebekah; Olden, Julian; Holtgrieve, Gordon	PLASTIC IN URBAN STREAMS: DISTRIBUTION, TRANSPORT, AND INFLUENCE ON BIOFILM COMMUNITY COMPOSITION Vincent, Anna; Lazcano, Raul; Dunn, Samuel; Kelly, John; Hoellein, Timothy	RESILIENCE ISN'T ALWAYS HEALTHY: DISTURBING DEGRADED COMMUNITIES TO REVERSE THE EFFECTS OF ENVIRONMENTAL FILTERING Barrett, Isabelle; Warburton, Helen; Febria, Catherine; Hogsdon, Kristy; Graham, Elizabeth; Harding, Jon; McIntosh, Angus	2:45 PM - 3:00 PM
WHEN COMMUNITY INDICES FAIL CAN WE FALL BACK ON SINGLE-SPECIES INFERENCES? A DIATOM-BASED EXAMPLE Reavie, Euan; Cai, Meijun	EFFECTS OF TEMPERATURE ON ENERGY FLUX THROUGH STREAM FOOD WEBS Junker, James; Cross, Wyatt; Benstead, Jonathan; Hood, James; Hury, Alexander D.; Gislason, Gisli; Nelson, Daniel; Olafsson, Jon	HURRICANE DISTURBANCE DRIVES TROPHIC CHANGES IN NEOTROPICAL MOUNTAIN STREAMS IN PUERTO RICO Gutiérrez-Fonseca, Pablo E.; Ramirez, Alonso; Pringle, Catherine	25 YEARS OF WATER QUALITY CHANGE IN RHODE ISLAND LAKES AND PONDS Kreakie, Betty; Hollister, Jeffrey; Kellogg, D.Q.; Shivers, Stephen; Herron, Elizabeth; Green, Linda	MICROPLASTIC IN AQUATIC FOOD WEBS: MUSEUM SPECIMENS AND INGESTION EXPERIMENTS REVEAL CONTROLS ON MICROPLASTIC INGESTION BY FRESHWATER FISH Hou, Loren; McNeish, Rae; Hoellein, Timothy	BASELINE ANALYSIS OF FRESHWATER LOTIC COMMUNITIES SURROUNDING A DECOMMISSIONED LOW HEAD DAM PRIOR TO REMOVAL Verb, Robert; Meredith, Everett; Bragg, Zachary; Duktig, Garrett; Tanto, Tyler; Riley, Leslie	3:00 PM - 3:15 PM
OPPORTUNITIES FOR ACTION: LEVERAGING PRINCIPLES OF AQUATIC ECOLOGY INTO THE CLEAN WATER ACT Duggan, Sam	THERMAL NICHE AND TROPHIC REDUNDANCY COMBINE TO DRIVE NEUTRAL EFFECTS OF EXPERIMENTAL WARMING ON ORGANIC MATTER FLUX THROUGH A STREAM FOOD WEB Nelson, Daniel; Benstead, Jonathan; Cross, Wyatt; Hury, Alexander D.; Hood, James; Johnson, Philip; Junker, James; Olafsson, Jon	THERMAL LIMITS AND RESILIENCE OF HYDROPSYCHIDAE IN FIRE-AFFECTED ARID SOUTHWESTERN STREAMS Kremer, Lauren	META-ANALYSIS ON INTERNAL PHOSPHORUS LOADING IN LAKES AND RESERVOIRS: RESULTS AND RECOMMENDATIONS Kindervater, Emily; Steinman, Alan	INGESTION OF MICROPLASTICS CAN INHIBIT FILTRATION RATES IN QUAGGA MUSSELS (DREISSENA BUGENSIS) Kashian, Donna; Boegehold, Anna; Gopalakrishnan, Kishore; Pedersen, Adam	RELATIVE IMPORTANCE OF ENVIRONMENTAL FACTORS AND COMMUNITY ECOLOGY IN RANAVIRUS TRANSMISSION Lance, Stacey; Coleman, Austin; Park, Andrew; Capps, Krista; Scott, David	3:15 PM - 3:30 PM



Tuesday — Early Morning Oral Presentation

	150 G	150 DEF	151 ABC	151 G	151 DEF	250 AB
SESSION	C16: Restoration Ecology <i>Moderator: Martin Neale</i>	S07: What makes the fever rise: investigations of variables responsible for riverine algal blooms <i>Moderator: Billy Justus</i>	C04: Microbial Ecology <i>Moderator: Vlad Gulis</i>	S02: Advancing knowledge on intermittent rivers and ephemeral streams: across disciplines and dimensions <i>Moderator: Daniel Allen</i>	S20: Neglected African freshwater bodies: lessons on sustainable management and conservation of freshwater ecosystems <i>Moderator: Dave Penrose</i>	C10: Biogeochemistry <i>Moderator: Peter Levi</i>
9:00 AM - 9:15 AM	LACK OF LONG-TERM EFFECT OF COARSE WOODY DEBRIS DAM RESTORATION ON ECOSYSTEM FUNCTIONING AND WATER QUALITY IN COASTAL PLAIN STREAMS Bickley, Sam; Isenberg, Daniel; Griffiths, Natalie; Helms, Brian; Feminella, Jack	ESTABLISHING DIDYMOSPHEA GEMINATA CELLULAR RESPONSE THRESHOLDS TO WATER QUALITY CHANGES USING FOURIER-TRANSFORM INFRARED (FTIR) MICROSCOPY Day, Samuel; Murdock, Justin	STRUCTURAL AND FUNCTIONAL TRAJECTORIES OF BIOFILM COMMUNITY SUCCESSION Peipoch, Marc; Bier, Raven; Wang, Jing; Kan, Jinjun	THE RIVER DRYING CONCEPT: A NEW ECOHYDROLOGICAL PERSPECTIVE AND CONCEPTUAL MODEL FOR STREAM NETWORKS OF THE ANTHROPOCENE Allen, Daniel; Datry, Thibault; Boulton, Andrew; Costigan, Katie; Fritz, Ken; Pastor, Amandine; Ruddell, Benjamin; Bernhardt, Emily; Boersma, Kate; Busch, Michelle; Bogan, Michael; Bruno-Collados, Daniel; Dodds, Walter; Godsey, Sarah; Jones, Jeremy; Kaltova, Tatiana; Kampf, Stephanie; Mims, Mery; Neeson, Thomas; Mims, Mery; Olden, Julian; Poff, LeRoy; Ruhi, Albert; Singer, Gabriel; Uzan, Avi; Vezza, Paolo; Ward, Adam; Zimmer, Margaret	INTRODUCTORY SESSION Penrose, David	PATTERNS OF METABOLISM IN MATCHED TEMPERATE STEPPE ECOREGIONS OF THE US AND MONGOLIA Schechner, Anne; Tromboni, Flavia; Dodds, Walter
9:15 AM - 9:30 AM	STREAM DAYLIGHTING: LOOKS GOOD, FEELS GOOD, BUT IS IT DOING ANY GOOD? Neale, Martin; Moffett, Emma	FACTORS AFFECTING NUISANCE ALGAL BLOOMS IN AN AGRICULTURAL STREAM BAYOU Lizotte, Jr., Richard; Locke, Martin	MODELING AND PREDICTING THE OCCURRENCES OF ANTIBIOTIC RESISTANCE GENES IN US RIVERS AND STREAMS Hill, Ryan; Jahne, Michael; Keely, Scott; Brinkman, Nichole; Haugland, Richard; Leibowitz, Scott; Wheaton, Emily; Garland, Jay; Martin, Roy		BIOMONITORING OF LAKES USING MACROINVERTEBRATES: RECOMMENDED INDICES AND METRICS FOR USE IN WEST AFRICA AND DEVELOPING COUNTRIES Odountan, Olaniran Hamed	DOES LAND CONSERVATION IMPROVE STREAM ECOSYSTEM HEALTH? Levi, Peter S.; Schulz, Katlyn; Mikelson, Grace; Lang, Bret
9:30 AM - 9:45 AM	WHAT ARE THE LONG-TERM EFFECTS OF HABITAT AUGMENTATION ON BIOTIC COMPOSITION OF STREAMS DRAINING LONGLEAF PINE FORESTS? Isenberg, Daniel; Bickley, Samuel; Feminella, Jack; Griffiths, Natalie; Helms, Brian	FILAMENTOUS ALGAE RELATIONS TO SURFACE AND GROUNDWATER NUTRIENT PATHWAYS IN THE KARST WATERSHED OF THE FIRST NATIONAL RIVER (BUFFALO RIVER, ARKANSAS) Justus, Billy; Driver, Lucas; Wentz, Nathan; Hodges, Shawn; Rodman, Ashley	EFFECTS OF TEMPERATURE ON ACTIVITY OF STREAM MICROORGANISMS ASSOCIATED WITH DECAYING LEAF LITTER Gulis, Vlad; Pates, Hunter; Bautz, Nicholas; Rosemond, Amy; Benstead, Jonathan	BIOASSESSMENT OF EPHEMERAL STREAMS AND INTERMITTENT RIVERS AFFECTED BY OIL SPILLS Johnson, Savannah; Mazor, Raphael; Olson, John	DIS-ENTANGLING ECOLOGICAL NICHE PATTERNS OF NATIVE AND NON-NATIVE FISHES WITHIN AN INVADED AFRICAN RIVER SYSTEM Kadye, Wilbert; Booth, Tony	NITROGEN AND CARBON DYNAMICS ALONG A WETLAND-STREAM SEQUENCE Hurley, Patrick; Valett, H. Maurice; Peipoch, Marc
9:45 AM - 10:00 AM	PAST RESTORATION: SUCCESS OR FAILURE? AND WHAT ARE THE CRITERIA? Kroll, Stefanie; Oakland, Hayley; O'Donnell, Meghan; Aycock, Laura; Keller, David	RELATING INSTREAM NUTRIENT CONCENTRATIONS TO FILAMENTOUS ALGAE COVERAGE AND DOMINANT ALGAL TAXA DURING SUMMER BASEFLOW IN THE BUFFALO NATIONAL RIVER IN ARKANSAS Driver, Lucas; Burge, David; Justus, Billy	BACTERIAL SUCCESSION IN HEADWATER BIOFILMS Kan, Jinjun; Wang, Jing; Peipoch, Marc; Bier, Raven	BIOGEOCHEMICAL PATTERNS OF INTERMITTENT STREAMS IN SPACE AND TIME: IMPACTS OF DRYING AND WILDFIRE ON CARBON AND NUTRIENT DYNAMICS MacNeille, Ruth; Lohse, Kathleen; Godsey, Sarah; Perdrial, Julia; Derryberry, DeWayne; Baxter, Colden	FIGHTING WATER POLLUTION AND RESTORING OUR LAKES: A LESSON TO BE LEARNED FROM GHANA Nyameke, Isaac; Obeng, Daniel	HIGH-FREQUENCY DATA REVEALS SPATIOTEMPORAL VARIABILITY IN CARBON AND NITRGEN CONCENTRATION-DISCHARGE RELATIONSHIPS ACROSS A STREAM NETWORK Fazekas, Hannah; Wymore, Adam; McDowell, William H.
10:00 AM - 10:15 AM	DELAYED BIOLOGICAL RECOVERY AFTER RESTORATION – A RESULT OF NEGATIVE RESISTANCE AND RESILIENCE? Warburton, Helen; Hogsden, Kristy; Febria, Catherine; Graham, Elizabeth; Barrett, Isabelle; Harding, Jon; McIntosh, Angus	MACRO FILAMENTOUS ALGAE AS BIOINDICATORS IN THE LOWER OLIFANTS RIVERS Mthombeni, Tinyiko Salome		CHANNEL MORPHOLOGY, STREAMFLOW PATTERNS, AND SEDIMENT TRANSPORT OF TWO INTERMITTENT RIVERS ALONG THE BALCONES ESCARPMENT Costigan, Katie; Dorn, Taylor	FRESHWATER ENVIRONMENTS AS RESERVOIRS FOR ANTIBIOTIC RESISTANT BACTERIA AND GENES DISSEMINATION TO HUMAN PATHOGENS Nnadozie, Chika; Odume, Nelson	
10:15 AM - 10:30 AM	ASSESSING MACROINVERTEBRATE COMMUNITY RESPONSE TO RESTORATION OF BIG SPRING RUN: EXPANDED ANALYSIS OF BACI SAMPLING DESIGNS Smith, Robert; Neidiegh, Emily; Rittle, Alex; Wallace, John			CHARACTERIZING TERRESTRIAL ARTHROPOD ASSEMBLAGES IN DRY STREAMS: ASSOCIATIONS WITH NATURAL GRADIENTS AND ANTHROPOGENIC STRESSORS Robinson, Matthew; Mazor, Raphael; Olson, John	MACROINVERTEBRATE DIVERSITY, COMMUNITY AND TRAIT COMPOSITION OF SELECTED RAMSAR WETLANDS IN SUBTROPICAL SOUTHERN AFRICA Malherbe, Wynand; Lorenz, Armin; Ferreira, Martin; van Vuren, Johan HJ; Wepener, Victor; Sures, Bernd; Smit, Nico	CAN BEAVERS MITIGATE NON-POINT SOURCE POLLUTION? Murray, Deni; Neilson, Bethany; Brahney, Janice

250 CF	250 DE	254 B	253 AB	251 AB	251 DE	SESSION
C02: Fish and Other Aquatic Vertebrates <i>Moderator: Annika Walters</i>	C03: Invertebrates <i>Moderator: Susan Washko</i>	C22: Disturbance <i>Moderator: David Richards</i>	S27: Novel Tools for Scoping and Problem Formulation to the Further Translational Science <i>Moderator: Britta Bierwagen</i>	S04: Novel stressors and novel ecosystems: Ecological processes in freshwaters of the built environment <i>Moderator: AJ Reisinger</i>	S28: Strengthening Interdisciplinary Approaches in Freshwater Science <i>Moderator: Mitchell Owens</i>	9:00 AM - 9:15 AM
INFORMING LAND AND FISH MANAGEMENT IN REMOTE AREAS USING ENVIRONMENTAL DNA, LANDSAPE CHARACTERIZATIONS, AND SPECIES DISTRIBUTION MODELING Holder, Anna; Olson, John	GROWTH AND SURVIVAL JOINTLY PREDICT THE UPPER THERMAL LIMITS OF THE STONEFLY PTERONARCYS CALIFORNICA Benkendorf, Donald; Hawkins, Charles	STREAM COMMUNITY ASSEMBLY 36 YEARS AFTER THE CATASTROPHIC ERUPTION OF MOUNT ST. HELENS Claeson, Shannon; LeRoy, Carri; Stancheva, Rosalina; Wolfe, Emily	AN INTRODUCTION TO NOVEL TOOLS FOR SCOPING AND PROBLEM FORMULATION TO FURTHER TRANSLATIONAL SCIENCE Bierwagen, Britta; Hagerthey, Scot	STORM WATER RETENTION PONDS; AN IMPORTANT SOURCE OF AQUATIC MACROINVERTEBRATE DIVERSITY IN A SEMI-ARID URBAN LANDSCAPE Moore, Sabrina; Kennedy, James	A USER'S GUIDE TO CRITICAL PHYSICAL GEOGRAPHY IN FRESHWATER SCIENCE Owens, Mitchell; Lave, Rebecca	9:15 AM - 9:30 AM
	RESOURCES AND HABITAT INTERACT TO AFFECT MACROINVERTEBRATE COMMUNITIES ACROSS AGRICULTURAL GRADIENTS IN TWO BIOMES. Braund, Danielle; Trentman, Matt T.; Tank, Jennifer L.; Entrekin, Sally	RESPONSES OF STREAM INVERTEBRATE AND FISH ASSEMBLAGES TO AN EXTREME FLOOD EVENT IN A JAPANESE RIVER Miyake, Yo; Sumida, Kosuke; Watanabe, Yuya; Inoue, Mikio	BUILDING EFFICIENCIES INTO THE DEVELOPMENT OF THE OZONE INTEGRATED SCIENCE ASSESSMENT- ECOLOGICAL EFFECTS Nichols, Jennifer; Greaver, Tara; Herrick, Jeffrey D.; Lassiter, Meredith; Jones, Ryan; Felker-Quinn, Emmi	STORMWATER PONDS: PROLIFERATING VECTORS OF INVASIVE SPECIES IN URBAN WATERSHEDS Sinclair, James; Reisinger, Alexander; Bean, Eban; Adams, Carrie; Reisinger, Lindsey; Iannone, Basil	WORKING TO ACHIEVE A CONSENSUS STRATEGY FOR SEDIMENT REDUCTION IN THE MINNESOTA RIVER BASIN: INCORPORATING STAKEHOLDERS INTO THE MODELING PROCESS Gran, Karen; Cho, Se Jong; Wilcock, Peter; Hobbs, Ben; Belmont, Patrick	9:30 AM - 9:45 AM
DOES ECOMORPHOLOGICAL VARIATION EXPLAIN TROPHIC RESOURCE PARTITIONING BETWEEN SYMPATRIC LINEAGES OF AFROMONTANE STREAM CATFISHES? Matomela, Nonjabulo	POPULATION LEVEL VARIATION IN PESTICIDE TOLERANCE IN HELPTAGENIIDAE Rackliffe, D. Riley; Hoverman, Jason	MURPHY'S LAW AND THE ANALOG JORDAN RIVER, UT: INVASIVES RULE Richards, David; Miller, Theron	NOVEL METHODS FOR TARGETED LITERATURE SEARCHING FOR ENVIRONMENTAL ASSESSMENTS Jones, Ryan; Nichols, Jennifer; Moore, Danielle; Felker-Quinn, Emmi	MULTIPLE STRESSORS INTERACTING ON ECOLOGICAL PROCESSES IN DUTCH DRAINAGE DITCHES van der Lee, Gea; Wieringa, Nienke; de Baat, Milo; Verdonshot, Ralf C.M.; Kraak, Michiel; Verdonshot, Piet F.M.	INTERDISCIPLINARY METHODS SHED NEW LIGHT ON INVASIVE PLANT CONTROL ALONG SOUTHWEST U.S. RIVERS Clark, Lisa; Gonzalez, Eduardo; Lave, Rebecca; Sayre, Nathan; Henry, Anne; Sher, Anna	9:45 AM - 10:00 AM
MITIGATION OF COLD WATER POLLUTION USING A NOVEL THERMAL CURTAIN: POTENTIAL EFFECTS ON FISH POPULATIONS Michie, Laura	HOW DO BEAVERS INTERACT WITH FLOW HOMOGENIZATION TO CHANGE AQUATIC INVERTEBRATE COMMUNITIES? DuBose, David; McMullen, Laura; Tonkin, Jonathan; Lytle, David	HURRICANE DISTURBANCE AND BENTHIC MACROINVERTEBRATE ASSEMBLAGES IN EL YUNQUE NATIONAL FOREST, PUERTO RICO Ramirez, Alonso; Gutiérrez-Fonseca, Pablo E.	THE FRESHWATER HEALTH INDEX AS A TOOL FOR TRANSLATIONAL FRESHWATER SCIENCE: APPLICATIONS IN LATIN AMERICA AND ASIA Bezerra, Maira; Vollmer, Derek; Shaad, Kashif; Souter, Nick; Hauck, Sarah; Acero, Natalia; Coutinho, Bruno; Mendoza, Eddy; Encomenderos, Ivo; Marques, Maria Clara; Zuluaga, Lina; Rodriguez, Octavio	MICROBIAL COMMUNITY RESPONSE TO SHIFTING WATER QUALITY AND QUANTITY IN AN ARID URBAN ECOSYSTEM Follstad Shah, Jennifer; Weintraub, Samantha; Smith, Rose; Jameel, Yusuf; Gabor, Rachel	MOWERS VERSUS GROWERS: RIPARIAN BUFFER MANAGEMENT IN THE SOUTHERN BLUE RIDGE MOUNTAINS, U.S.A. Sanders, Jenny; Welch-Devine, Meredith; Jackson, C. Rhett	10:00 AM - 10:15 AM
REUNITED AT LAST: GENETIC RECOVERY OF STREAM FISH POPULATIONS AFTER THE REMOVAL OF PASSAGE BARRIERS Prasko, Lauren M.; Timm, Anne L.; Bartron, Meredith L.; Townsend, Josiah H.; Duchamp, Joseph E.; Janetski, David J.	A COMPARISON OF MACROINVERTEBRATE DRIFT IN A 4TH ORDER REACH OF THE AU SABLE RIVER, MI. Boyer, Barney	PERSISTENT LATERAL NITROGEN LOSS TEN YEARS AFTER TUNDRA WILDFIRE Bratsman, Samuel; Abbott, Benjamin; Bowden, William Breck; Carling, Greg; Frei, Rebecca; Iannucci, Frances; Ludwig, Ludda; Rocha, Adrian; Shogren, Arial; Watts, Rachel; Zarnetske, Jay	USING CONCEPTUAL MODEL DIAGRAMS AS LITERATURE SCREENING AND EVALUATION TOOLS Schofield, Kate; Bennett, Micah; Lee, Sylvia; Fry, Meridith; LeDuc, Stephen; Newcomer-Johnson, Tammy; Meehan, Emily	URBAN BASEFLOW: A BOON AND A CURSE FOR ACCIDENTAL WETLAND ECOSYSTEMS? Palta, Monica	CONSERVATION OF A CHARISMATIC AMAZONIAN FRESHWATER FISH (ARAPAIMA SPP.) HIGHLIGHTS THE IMPORTANCE OF TRANSLATIONAL ECOLOGY Rojas, Ana A; Anderson, Elizabeth P; Cordoba, Lis	10:15 AM - 10:30 AM
HYDRAULIC CONDITIONS INFLUENCE CAPTURE AND UPSTREAM PASSAGE OF WHITE SUCKER AND INVASIVE SEA LAMPREY IN A POOL-TYPE FISHWAY Lewandoski, Sean; Hrodey, Peter; Miehl, Scott; Piszczek, Paul; Zielinski, Daniel				FROM LAWNS TO THE STREAM: HOTSPOTS OF NITROGEN TRANSPORT IN RESIDENTIAL LAWNS IN BALTIMORE, MD Suchy, Amanda; Groffman, Peter; Band, Lawrence; Duncan, Jon; Gold, Arthur	A FRAMEWORK FOR EXPLORING AQUATIC AND RIPARIAN CONNECTIVITY - CASE STUDY OF THE CHIRICAHUA LEOPARD FROG IN THE CIENEGA CREEK BASIN Sharma, Akanksha; Fisher, Larry; Falk, Don; Bogan, Michael	



Tuesday — Late Morning Oral Presentation

	150 G	150 DEF	151 ABC	151 G	151 DEF	250 AB
SESSION	S17: Bridging the lotic-microbial gap: understanding drivers of microbial diversity in stream ecosystems <i>Moderator: Allison Veach</i>	S22: What do managers/regulators need to know from science to support protection/restoration/adaptation decisions? <i>Moderator: Britta Bierwagen</i>	C28: Land-Water Interfaces <i>Moderator: David Manning</i>	S02: Advancing knowledge on intermittent rivers and ephemeral streams: across disciplines and dimensions <i>Moderator: Katie Costigan</i>	S20: Neglected African freshwater bodies: lessons on sustainable management and conservation of freshwater ecosystems <i>Moderator: Nelson Odume</i>	C10: Biogeochemistry <i>Moderator: Erin Hotchkiss</i>
11:00 AM - 11:15 AM	ASSESSING DATA GAPS IN BACTERIAL DIVERSITY KNOWLEDGE: A GLOBAL SYNTHESIS OF FRESHWATERS Veach, Allison; Troia, Matthew	ISSUES IN MOVING FROM ADAPTATION SCIENCE TO APPLICATION AND DECISION MAKING Hamilton, Anna; Bierwagen, Britta; Stamp, Jennifer	PLANT SEX INFLUENCES LEAF LITTER CHEMISTRY, DECOMPOSITION, AND HERBIVORE-INDUCED SUMMER LITTER INPUTS TO STREAMS AT MOUNT ST. HELENS, WA, USA LeRoy, Carri; Claeson, Shannon; Ramstack Hobbs, Joy; Moffett, Jordan; Lancaster, Logan; Walker, Lauren; Fischer, Dylan	DEVELOPING METHODS FOR ASSESSING WATER QUALITY IN STREAMS WHEN THERE'S NO WATER Fritz, Ken; Nietch, Christopher; Burke, Roger	USING BIOLOGICAL CONDITION GRADIENT MODEL TO MONITOR ECOLOGICAL CONDITIONS AND SUPPORT ENVIRONMENTAL CONSERVATION IN THE UPPER TANA RIVER WATERSHED IN KENYA Ndiritu, George; Njoroge, Peter; Njagi, Edward M.; Terer, Taia; Njoroge, Laban; Kamau, Peris W.; Malonzo, Patrick K.; Muiruri, Vernoi M.; Courtemanch, David	A DAM SIGHT BETTER OR WORSE? HOW CHANGES IN HUMAN AND BEAVER IMPOUNDMENTS AFFECT RIVER NETWORK BIOGEOCHEMICAL PROCESSES Whitney, Christopher; Wollheim, Wilfred
11:15 AM - 11:30 AM	A MULTI-SCALE APPROACH TO ASSESSING THE EFFECTS OF EMERGING CONTAMINANTS ON MICROBIAL COMMUNITIES IN LOTIC ECOSYSTEMS Kelly, John; Rosi, Emma	SALT MARSH VULNERABILITIES TO SEA LEVEL RISE: LINKING ASSESSMENT TO ADAPTATION IN THE DELAWARE ESTUARY West, Jordan M.; Stamp, Jen	SEASONAL PULSES OF DISSOLVED ORGANIC MATTER ARE DECOUPLED FROM ECOSYSTEM RESPIRATION IN A RESTORED TALLGRASS PRAIRIE STREAM Manning, David; Dere, Ashlee; Miller, Andrew; Coleman, Tracy	DEVELOPMENT AND APPLICATION OF PREDICTIVE MODELS FOR SURFACE WATER EXTENT TO IDENTIFY AQUATIC REFUGIA IN EASTERN AUSTRALIA Yu, Songyan; Bond, Nick; Bunn, Stuart; Kennard, Mark	VARIATION IN THERMAL TOLERANCE OF NATIVE FRESHWATER FISHES IN SOUTH AFRICA'S CAPE FOLD ECOREGION: EXAMINING THE EAST-WEST CLINE IN SENSITIVITY TO CLIMATE WARMING Reizenberg, Jody-Lee	REDUCED FLOWS ALTER NUTRIENT EXPORT OVER MULTIPLE SEVERE DROUGHTS IN SOUTHWEST GEORGIA, USA Smith, Chelsea; Golladay, Stephen
11:30 AM - 11:45 AM	A NOVEL POINT INPUT TO A LARGE RIVER AFFECTS WATER AND SEDIMENT MICROBIAL COMPOSITION AND N-CYCLING FUNCTIONAL POTENTIAL Zeglin, Lydia; Burgin, Amy J.; Hanschu, Janaye; Kelly, Michelle Catherine; Overstreet, Emma	SAVING SALTMARSHES FROM SEA LEVEL RISE: A DIALOGUE ABOUT INTEGRATING SCIENCE WITH REGULATORY PERSPECTIVES Poeske, Regina	AQUATIC ECOSYSTEM RESPONSES TO RIPARIAN CANOPY GAPS IN FORESTED HEADWATER STREAMS Swartz, Allison; Warren, Dana	DIGGING DEEPER: HOW ALPHA AND BETA DIVERSITIES OF MULTIDIMENSIONAL COMMUNITIES RESPOND TO DRYING IN DYNAMIC RIVERS Stubbington, Rachel; Sarremejane, Romain; Datry, Thibault	SEDIMENTS AND WATER QUALITY OF TWO OIL SPILL IMPACTED COMMUNITIES, FORECASTING FUTURE STATUS AND ECOLOGICAL CONSEQUENCES IN THE NIGER DELTA WETLAND OF NIGERIA Uku, Jude; Arimoro, Francis; Odume, Oghenekaro Nelson	STREAM FLOW AND SOLUTE FLUX RESPONSES TO WARMING AND ELEVATED CO ₂ IN A BOREAL PEATLAND Griffiths, Natalie; Sebestyen, Stephen D.; Oleheiser, Keith; Hanson, Paul
11:45 AM - 12:00 PM	LEAF LITTER SPECIES AFFECTS ON MICROBIAL COMMUNITY COMPOSITION AND DIVERSITY Roush, Courtney; Schrik, Meghan; Purcell, Alicia; Koch, Benjamin; Schwartz, Egbert; Dijkstra, Paul; Marks, Jane	COMMUNICATING TRADE OFF OPTIONS TO MANAGEMENT AND THE PUBLIC AS A WAY OF INFORMING MANAGEMENT DECISIONS: INTEGRATING ENVIRONMENTAL, SOCIAL AND ECONOMIC DATA Pryor, Margerita; DiBona, Pamela; Velle, Prasede; Shumchenia, Emily; Jackson, Susan	NUTRIENT DYNAMICS IN AN URBAN FOREST FRAGMENT. Feijó de Lima, Rafael; Bernhardt, Emily; Thomas, Steven	DYNAMIC STREAM NETWORK INTERMITTENCE EXPLAINS EMERGENT DISSOLVED ORGANIC CARBON CHEMOSTASIS IN HEADWATERS Hale, Rebecca; Godsey, Sarah	STRENGTHENING CAPACITY IN RESEARCH AND TRAINING THROUGH COLLABORATIVE NETWORKS AND PARTNERSHIPS IN THE AFRICAN GREAT LAKES Obiero, Kevin; Lawrence, Ted; Ives, Jessica; Njaya, Friday; Smith, Stephanie; Kayanda, Robert; Hecky, Robert	SPATIAL AND TEMPORAL VARIABILITY OF NUTRIENT DYNAMICS AND ECOSYSTEM METABOLISM IN A HYPER-EUTROPHIC RESERVOIR DURING WET AND DRY YEARS Williamson, Tanner; Vanni, Michael; Renwick, William
12:00 PM - 12:15 PM	MERGING ECOLOGICAL THEORY WITH ENVIRONMENTAL METABOLOMICS Stegen, James; Graham, Emily; Danczak, Robert; Tfaily, Malak	ASSESSING CONDITION AND VULNERABILITY OF HEALTHY WATERSHEDS IN THE CHESAPEAKE BAY REGION Roth, Nancy; Thompson, Renee; Wharton, Christopher; Sarkar, Sam; Pickard, Brian	THE HIERARCHICAL EFFECTS OF RIPARIAN MANAGEMENT ON HEADWATER STREAM ECOSYSTEMS IN BRITISH COLUMBIA, CANADA Ruffing, Claire; Richardson, John	ARE NON-PERENNIAL STREAMS CONSIDERED EQUALLY VALUABLE AND WORTHY OF CONSERVATION AS PERENNIAL STREAMS? Rodríguez-Lozano, Pablo; Woelfle-Erskine, Cleo; Bogan, Michael; Carlson, Stephanie	THE SOCIO-ECONOMIC CHALLENGES RESULTING FROM REHABILITATION OF FRESHWATER ECOSYSTEMS USING EVIDENCE-BASED APPROACH Liphadzi, Stanley	CARBON AVAILABILITY ENHANCES NITRATE REMOVAL IN TROPICAL MONTANE STREAMS Rodríguez-Cardona, Bianca; Wymore, Adam; McDowell, William H.
12:15 PM - 12:30 PM	OPPORTUNITIES FOR AQUATIC MICROBIAL META-ANALYSES USING THE NEON NETWORK Stanish, Lee; Parker, Stephanie		ANTIBIOTICS IN RURAL STREAMS AND GROUNDWATER IN THE PIEDMONT OF NORTH CAROLINA Gray, Austin; Todd, Daniel; Hershey, Anne	EXTREME DROUGHT LIMITS SURVIVAL OF ENDANGERED COHO SALMON IN INTERMITTENT STREAMS Vander Vorste, Ross; Obedzinski, Mariska; Nossaman Pierce, Sarah; Grantham, Ted; Carlson, Stephanie	THE SOUTH AFRICAN NATIONAL WATER ACT, SUSTAINABLE MANAGEMENT OF WATER RESOURCES AND IMPLEMENTATION CHALLENGES. Odume, Oghenekaro Nelson	MEGAFIRES AND HURRICANES: MULTIPLE STRESSORS ALTER STREAM FORM AND FUNCTION IN SEMI-ARID WATERSHEDS Crandall, Trevor; Abbott, Benjamin; Jones, Erin; Maxwell, Jordan

250 CF	250 DE	254 B	253 AB	251 AB	251 DE	SESSION
C02: Fish and Other Aquatic Vertebrates Moderator: Lauren Stoczynski	C03: Invertebrates Moderator: Kara Cromwell	C22: Disturbance Moderator: Stephen Golladay	C05: Unionid Ecology Moderator: Caryn Vaughn	S04: Novel stressors and novel ecosystems: Ecological processes in freshwaters of the built environment Moderator: Rachel Gabor	S13: The Times they are a Changing - Linking Organismal Phenology and Metabolic Regimes in River Ecosystems Moderator: Emily Bernhardt	11:00 AM - 11:15 AM
A FRAMEWORK FOR UNDERSTANDING FISH COMMUNITY RESPONSE TO FLOW ALTERATION Wenger, Seth; Freeman, Mary	LIFE ON THE EDGE: EDGE EFFECTS OF A COASTAL NEOTROPICAL FOREST ON BENTHIC MACROINVERTEBRATES Dyer, Jared	SPLASH INTO PUBLIC ENGAGEMENT: INTEGRATING COMMUNITY INTO EXISTING TEACHING AND RESEARCH EFFORTS Hopfensperger, Kristy	RESPONSES OF STREAM FISHES AND MACROINVERTEBRATES TO CATCHMENT LANDUSE AND FINE SEDIMENT Geist, Juergen	EFFECTS OF URBANIZATION AND GREEN INFRASTRUCTURE ON STREAM HABITAT AND BENTHIC COMMUNITY COMPOSITION IN PIEDMONT HEADWATER STREAMS Fanelli, Rosemary; Hopkins, Kristina	CONSEQUENCES OF UNPREDICTABLE RIVER FLOW REGIMES FOR LINKED ORGANISMAL-ECOSYSTEM PHENOLOGY IN THE ANTHROPOCENE McIntosh, Angus; Tonkin, Jonathan; Galatowitsch, Mark; Warburton, Helen	11:15 AM - 11:30 AM
EXAMINING THE PHYSIOLOGICAL HEALTH OF RECENTLY- AND FORMERLY-RELEASED CAPTIVE-REARED JUVENILE BLANDING'S TURTLES (EMYDOIDEA BLANDINGII) Cann, Armand; Milanovich, Joseph; Harden, Leigh Anne	HYPERHEIC SECONDARY PRODUCTION AND LIFE HISTORY OF A COMMON STONEFLY IN AN OZARK STREAM Dorff, Nathan; Finn, Debra	FISHBOOK: ENGAGING AUDIENCES THROUGH THE USE OF SOCIAL MEDIA O'Reilly, Katherine	USING BAYESIAN DECISION NETWORKS TO GUIDE RESTORATION OF FRESHWATER MUSSELS IN ILLINOIS Andree, Sara; Stodola, Alison; Douglass, Sarah	DO URBAN MULTI-STRESSORS AND THEIR EFFECTS ON STREAM BIOTA SHIFT DURING DROUGHTS? Waite, Ian; Munn, Mark; Sheibley, Rich; Konrad, Christopher; Moran, Patrick; Morace, Jennifer	HOW DO YOU MEASURE A YEAR IN THE LIFE? EXAMINING ECOSYSTEM-WIDE RESPONSES TO ANNUAL SENESECE OF INVASIVE HYDRILLA IN UPLAND STREAMS OF THE CUMBERLAND PLATEAU Bojic, Sandra	11:30 AM - 11:45 AM
UNDERSTANDING THE ELEMENTS OF METACOMMUNITY STRUCTURE IN STREAM FISH COMMUNITIES OF THE EASTERN UNITED STATES Stoczynski, Lauren; Peoples, Brandon K.	METABOLIC RESPONSES TO LONG-TERM FOOD DEPRIVATION IN SUBTERRANEAN AND SURFACE AMPHIPODS Nair, Parvathi; Huertas, Mar; Nowlin, Weston	LEARNING TO LISTEN: TRANSLATIONAL WATER MANAGEMENT AND SCIENCE IN THE UPPER FLINT RIVER, GEORGIA Golladay, Stephen; Emanuel, Ben; Rogers, Gordon; Craig, Laura		QUANTIFYING CUMULATIVE STRESS EXPERIENCED BY MACROINVERTEBRATE ASSEMBLAGES IN LOWLAND STREAMS de Vries, Jip	INFLUENCE OF STREAM METABOLISM AND FLOW VARIABILITY ON FISH TROPHIC NICHE IN DESERT STREAMS Baruch, Ethan; Harms, Tamara; Ruhi, Albert; Lu, Mengdi; Sabo, John	11:45 AM - 12:00 PM
UNRAVELING THE IMPACTS OF COMPETITION AND WARMING ON JUVENILE ATLANTIC SALMON (SALMO SALAR) PERFORMANCE IN MAINE STREAMS Ramberg-Pihl, Nicole; Coghlan, Stephen; Zydlewski, Joseph; Greig, Hamish	PARASITES EXPERIENCING PREDATION RISK ACCELERATE CONSUMPTION OF THEIR HOST Cromwell, Kara; Peckarsky, Barbara	PUBLIC EXHIBITS HIGHLIGHT IMPORTANCE AND COOL FACTOR OF ALGAE: GETTING BEYOND THE PERCEPTION OF GREEN GOOP Bixby, Rebecca; Burdett, Ayesha; Connealy, Selena; Novak, Debra; Lang, Kathy		SURFACE DISTURBANCE INTENSIFIES THE EFFECT OF LOW FLOWS ON STREAM FISHES Walker, Richard; Girard, Carlin; Alford, Saman; Walters, Annika	INTRASPECIFIC VARIABILITY AND THE EFFECT OF AN INVASIVE SPECIES ON THE PHENOLOGY OF ECOSYSTEM FUNCTIONING Cucherousset, Julien; Lecerf, Antoine; Alp, Maria; Buoro, Mathieu; Evangelista, Charlotte; Raffard, Allan; Zavorka, Libor	12:00 PM - 12:15 PM
INFLUENCE OF INTERANNUAL AND SEASONAL WEATHER VARIABILITY ON YOUNG-OF-THE-YEAR BROOK TROUT ABUNDANCE Janetski, David J.; Prasko, Lauren; Argent, David; Chapman, Eric; Grant, Christopher; Kester, Rachel; Kimmel, William; Lavelle, Kathleen; Lutz, Allison; Niles, Jonathan; Rummel, Shawn; Seiler, Steven; Smith, Robert; Turner, Andrew; Wissinger, Scott; Zimmerman, Melvin	DEVELOPMENT OF MACROINVERTEBRATES MULTIMETRIC INDEX FOR ECOLOGICAL EVALUATION OF A RIVER IN NORTH CENTRAL NIGERIA Edegbene, Ovie; Elakhame, Luckey; Arimoro, Francis; Osimen, Eki; Odume, Nelson	MAKING WAVES OR JUST A RIPPLE? SUCCESSES AND OPPORTUNITIES FOR THE SFS PODCAST Larson, Erin; Moody, Eric; Elser, Stephen; Kelso, Julie; Washko, Susan		TRASH SPECIES OR EXPLOITATIONAL MARVEL? EMERGENCE PATTERNS OF PACHYDIPLAX LONGIPENNIS ON AN URBAN-RURAL LANDSCAPE GRADIENT IN SOUTHERN NEW ENGLAND Aliberti Lubertazzi, Maria	IS FRESHWATER MIGRATION A MECHANISM TO AVOID ENERGETIC LIMITATION IN AMAZONIAN FISHES? Herrera-R, Guido A; Farah, Aldo; Correa, Sandra; Anderson, Elizabeth P	12:15 PM - 12:30 PM
SOCIAL NETWORK STRUCTURE IS EXPLAINED BY ANIMAL BEHAVIOR Collins, Scott; Nannini, Michael	THE MICROBIOME OF A HELOBDELLA SPECIES Hardin, Lauren; Forbush, Micah; Crossley, Madeline			INVESTIGATIONS OF AQUATIC COMMUNITY RESPONSE TO VARIATION IN LAND-USE TYPE AND INTENSITY ACROSS URBANIZATION GRADIENTS Kirkwood, Andrea; Johnson, Alexandra; Strangway, Carrie; Thomas, Kathryn	NOVEL INSIGHTS INTO ECOSYSTEM DRIVERS FROM ANALYSIS OF METABOLIC REGIMES Yackulic, Charles; Deemer, Bridget; Yard, Michael; Kennedy, Ted; Hall, Robert	



Tuesday — Afternoon Oral Presentation

	150 G	150 DEF	151 ABC	151 G	151 DEF	250 AB
SESSION	S17: Bridging the lotic-microbial gap: understanding drivers of microbial diversity in stream ecosystems <i>Moderator: Allison Veach</i>	S22: What do managers/regulators need to know from science to support protection/restoration/adaptation decisions? <i>Moderator: Jen Stamp</i>	C28: Land-Water Interfaces <i>Moderator: Denise Bruesewitz</i>	S02: Advancing knowledge on intermittent rivers and ephemeral streams: across disciplines and dimensions <i>Moderator: Pablo Rodriguez-Lozano</i>	C14: Hydroecology <i>Moderator: Ann Marie Reinhold</i>	C10: Biogeochemistry <i>Moderator: Shannon Speir</i>
2:00 PM - 2:15 PM	SPATIOTEMPORAL MICROBIOME ASSEMBLY AND METABOLISM IN HYDROLOGICALLY-CONNECTED MICROBIOMES Graham, Emily; Crump, Alex; Resch, C. Tom; Fansler, Sarah; Arntzen, Evan; Stegen, James	LONG-TERM MONITORING AND RESEARCH ON THE UPPER MISSISSIPPI RIVER SYSTEM: HOW DOES IT INFORM RIVER RESTORATION AND MANAGEMENT? Houser, Jeffrey; Bouska, Kristen; De Jager, Nathan; Ickes, Brian; Jankowski, Kathijo; Rogala, James; Rohweder, Jason; Van Appledorn, Molly	BASIN FEATURES INFLUENCE THE QUANTITY OF AQUATIC INSECT SUBSIDIES REACHING TERRESTRIAL LANDSCAPES Kopp, Darin; Allen, Daniel	HOW DOES STREAM DRYING INFLUENCE MACROINVERTEBRATE COMMUNITIES ACROSS CLIMATE GRADIENTS? A COMPARATIVE STUDY IN DESERT, GRASSLAND, AND FORESTED STREAMS Busch, Michelle; Nelson, Daniel; Bittner, Steven; Kopp, Darin; Allen, Daniel	EFFECTS OF DIVERSIONS AND IMPOUNDMENTS ON CONTINUUM OF UPPER COLORADO RIVER BASIN PROCESSES Spangler, Margaret; Gooseff, Michael; Hensley, Robert; Cohen, Matthew; Hendrickson, Patrick	SEASONAL DYNAMICS AND CONTROLS ON STREAM DOC TRANSPORT IN THE HIGH-CARBON REGION OF THE PACIFIC COASTAL TEMPERATURE RAINFOREST Bishop, Anna
2:15 PM - 2:30 PM	THE MICROBIOME OF STREAM MACROINVERTEBRATES: CONNECTING COMMUNITY COMPOSITION TO ECOSYSTEM FUNCTION Bhattacharyya, Sohini; Ayayee, Paul; Leff, Laura	SCALE AND STREAM RESTORATIONS: DAM AND CHANNEL RESTORATION PROJECTS Griffith, Michael; McManus, Michael	THE IMPACT OF GENOTYPIC VS. ENVIRONMENTAL VARIATION IN LEAF LITTER ON AQUATIC COMMUNITY ASSEMBLY AND DECOMPOSITION Jeplaw, Joann; Marks, Jane; Whitham, Thomas; Allan, Gerard; Best, Rebecca	INTERMITTENT STREAM DYNAMICS AT THE CATCHMENT SCALE: CAPTURING STREAMBED INTERACTIONS FROM FIRST ORDER TRIBUTARIES TO THE MAINSTEM Shanafield, Margaret; Gutierrez-Jurado, Karina	FLOOD DYNAMICS DRIVE THE SPATIAL DISTRIBUTION OF RUSSIAN OLIVE INVASIONS ON A RIVERINE FLOODPLAIN Reinhold, Ann Marie; West, Natalie M.; Espeland, Erin K.; Poole, Geoffrey	BENTHIC MICROBIAL COMMUNITIES RAPIDLY UTILIZE METHANE WHEN EXPOSED TO NATURAL GAS MACRO-SEEPS IN AN INLAND RIVER Burrows, Ryan; Venarsky, Michael; Rees, Gavin; Kennard, Mark
2:30 PM - 2:45 PM	FRESHWATER MUSSELS INFLUENCE SEDIMENT MICROBIAL COMMUNITY COMPOSITION AND FUNCTION Higgins, Edward; Parr, Thomas; Vaughn, Caryn	RIPARIAN AND GROUNDWATER-DEPENDENT ECOSYSTEMS OF THE USDA FOREST SERVICE INTERMOUNTAIN REGION: ASSESSMENT OF MANAGEMENT ISSUES AND CURRENT CONDITIONS Driscoll, Katelyn	HYDROPOWER AND AQUATIC-TERRESTRIAL LINKAGES IN THE COLORADO RIVER Lupoli, Christina; Kennedy, Ted; Muehlbauer, Jeffrey; Sabo, John; Yackulic, Charles	LONG-TERM COMMUNITY RESPONSES TO AND RECOVERY FROM DRYING VARY ACROSS TEMPERATE-CLIMATE STREAMS WITH DIFFERENT FLOW PERMANENCE REGIMES Sarremejane, Romain; Stubbington, Rachel; England, Judy	GOING WITH THE FLOW: THE ECOLOGICAL LINKAGES OF NEOTROPICAL FISHES TO HYDROLOGY Farah-Pérez, Aldo; Herrera-R, Guido A.; Anderson, Elizabeth P	HIGH-RESOLUTION SPATIO-TEMPORAL DOM DYNAMICS IN WHITE CLAY CREEK, PENNSYLVANIA Oviedo Vargas, Diana
2:45 PM - 3:00 PM	BIOGEOGRAPHY OF BACTERIA IN HEADWATER STREAMS ACROSS BIOMES AND SEASONS Bier, Raven; Mosher, Jennifer; Kaplan, Louis; Kan, Jinjun	ROCK, PAPER, SCISS... OOPS! VEGETATION: THE VULNERABILITY OF LITTORAL STRUCTURE LOSS UNDER DROUGHT Keeton, Jenna; Gaeta, Jerome	EFFECTS OF HYDROLOGICAL ALTERATIONS TO A MIDWESTERN STREAM ON INSECT EMERGENCE PRODUCTION AND RIPARIAN SPIDER DIETS Heiden, Katie	PREDICTING THE SPATIAL AND TEMPORAL DISTRIBUTION OF WETTED HABITATS IN INTERMITTENT STREAMS AND ITS IMPLICATIONS FOR LONG-TERM DROUGHT IMPACTS Moidu, Hana; Vander Vorste, Ross; Rodriguez-Lozano, Pablo; Obedzinski, Mariska; Grantham, Ted; Carlson, Stephanie		USING HIGH-FREQUENCY SENSORS TO QUANTIFY RIVERINE CARBON AND NUTRIENT BUDGETS ACROSS ARCTIC LANDSCAPES Shogren, Arian; Zarnetske, Jay; Abbott, Benjamin; Iannucci, Frances; Bowden, William Breck
3:00 PM - 3:15 PM	WIDESPREAD CRYPTIC VIRAL INFECTIONS IN BENTHIC BIOFILM COMMUNITIES Williamson, Kurt; Payne, Alexandra; Davidson, Abigail; Kan, Jinjun; Bier, Raven; Wang, Jing; Peipoch, Marc	PRIORITIZATION OF MANAGEMENT ACTIONS FOR A THREATENED TROUT USING MULTIPLE POPULATION VIABILITY ANALYSIS Wenger, Seth; Neville, Helen; Leasure, Doug; Dauwalter, Daniel; Dunham, Jason; Peacock, Mary; Fesenmyer, Kurt; Bjork, Robin; Chelgren, Nathan; Luce, Charlie; Isaak, Daniel; Carranza, Lee Ann; Sjoberg, Jon	UPSCALING BIODIVERSITY EXPERIMENTS TO FUNCTIONING OF RIVERINE CATCHMENTS Little, Chelsea; Altermatt, Florian	BIOMASS LOSS AND SPECIES TURNOVER DURING DROUGHT SHIFT COMMUNITY EXCRETION STOICHIOMETRY IN A PRAIRIE STREAM Hopper, Garrett; Gido, Keith; Pennock, Casey; Hedden, Skyler; Tobler, Courtney; Hedden, Crosby; Bruckerhoff, Lindsey		FLOODS INCREASE CARBON DIOXIDE AND METHANE FLUXES AND CONCENTRATIONS IN SOUTHERN WISCONSIN AGRICULTURAL STREAMS Blackburn, Sam; Stanley, Emily
3:15 PM - 3:30 PM	A TALE OF TWO TAXONOMIES: COMPARING MORPHO- AND MOLECULAR TAXONOMY FOR STREAM ALGAL BIOASSESSMENT Theroux, Susanna; Steele, Joshua; Griffith, John; Stein, Eric	THE INTERPLAY OF FLOW PROCESSES SHAPES AQUATIC INVERTEBRATE DIVERSITY ALONG TEMPORAL SUCCESSIONS IN FLOODPLAIN CHANNELS - A MODELLING APPROACH Pierre, Marle	IMPACTS OF SHORELINE RESTORATION AND SOURCE OF NUTRIENT ENRICHMENT ON MACROPHYTE AND EPIPHYTIC ALGAL COMMUNITIES Kleindl, Paige; Steinman, Alan	VALIDATING RAPID ASSESSMENT FOR EPISODIC STREAMS Clark, Cara		RESOURCE LIMITATION OF AUTOTROPHS AND HETEROTROPHS IN BOREAL FOREST HEADWATER STREAMS Weaver, Sophie; Jones, Jeremy

250 CF	250 DE	254 B	253 AB	251 AB	251 DE	SESSION
C02: Fish and Other Aquatic Vertebrates <i>Moderator: Marcia Snyder</i>	C03: Invertebrates <i>Moderator: Karen Gaines</i>	S23: Enhance your work through incorporation of public engagement <i>Moderator: Kristy Hopfensperger</i>	C32: Primary and Secondary Production <i>Moderator: Laura Koenig</i>	S04: Novel stressors and novel ecosystems: Ecological processes in freshwaters of the built environment <i>Moderator: Andrea Kirkwood</i>	S13: The Times they are a Changing - Linking Organismal Phenology and Metabolic Regimes in River Ecosystems <i>Moderator: David Lytle</i>	2:00 PM - 2:15 PM
METALHEADS: WHAT CAN OTOLITHS REVEAL ABOUT SPORT FISH EXPOSURE TO ENVIRONMENTAL CONTAMINATION OVER TIME? O'Reilly, Katherine; Gerig, Brandon; Lamberti, Gary	THE ECOLOGICAL ROLE AND DISTRIBUTION OF FRESHWATER CRABS (DECAPODA: PSEUDOTHELPHUSIDAE) IN NEOTROPICAL HEADWATER STREAMS: A CASE STUDY FROM COSTA RICA Yang, Carol; Wenger, Seth; Connelly, Scott; Rugenski, Amanda; Wehrtmann, Ingo; Freeman, Mary	PREVENTION, DETECTION, AND MANAGEMENT OF AQUATIC INVASIVE SPECIES THROUGH PUBLIC ENGAGEMENT AND CITIZEN SCIENCE Latimore, Jo A.; De Palma-Dow, Angela; Elgin, Erick; Filice, Paige; Walters, Kevin	AQUATIC PRIMARY PRODUCTIVITY AND ITS DRIVERS IN A TROPICAL RIVER FLOODPLAIN Molinari, Bianca; Stewart-Koster, Ben; Bunn, Stuart; Burford, Michele; Adame, Fernanda	THE LANDSCAPE LAB: A DESIGNED EXPERIMENT TESTING ECOSYSTEM FUNCTION OF GREEN INFRASTRUCTURE IN ARID CITIES Smith, Rose; Hinners, Sarah; Pataki, Diane; Bowen, Brenda; Follstad Shah, Jennifer; Guffin, Emily; Kahn, Owen	SIMPLE TWIST OF RATES—COMMUNITY MODELS FOR SEASONAL ECOSYSTEMS Lytle, David	2:15 PM - 2:30 PM
QUANTIFYING STREAM HABITAT VARIABLES TO IMPROVE SITE SELECTION FOR ENDANGERED DESERT FISH REINTRODUCTIONS Torresdal, Jack	COMMUNITIES ASSOCIATED WITH THE FUNCTIONAL PROCESS ZONE SCALE: A CASE STUDY OF STREAM MACROINVERTEBRATES Maasri, Alain; Erdenee, Bolortsetseg; Thorp, James H.; Hayford, Barbara; Gelhaus, Jon K.	BUILDING NEW MARKETS FOR SCIENTIFIC DATASETS ACROSS THE GREAT LAKES Verhamme, Edward	INTERACTIVE EFFECTS OF TEMPERATURE AND NITROGEN AVAILABILITY ON PRIMARY AND SECONDARY PRODUCERS Henderson, Kate; Cross, Wyatt; Benstead, Jonathan; Gislason, Gisli; Hood, James; Huryn, Alexander D.; Johnson, Philip; Olafsson, Jon; Welter, Jill	URBAN AND AGRICULTURAL DEVELOPMENT OF RIPARIAN CORRIDORS AIDS SUCCESS OF ROUND GOBY INVASION Krabbenhof, Corey; Kashian, Donna	THE CHANGING PULSE OF RIVERS: DAM-INDUCED ALTERATION OF FLOW PERIODICITY AND SYNCHRONY Olden, Julian; Ruhi, Albert	2:30 PM - 2:45 PM
FITNESS CONSEQUENCES OF LIFE-HISTORY VARIATION IN SPAWNING MIGRATIONS OF TWO INLAND SALMONIDS Walters, Annika; Ciepiela, Lindsay	GLOBAL TRENDS OF MACROINVERTEBRATE FUNCTIONAL GROUP DOMINANCE IN ARID ROCK POOLS AND FUTURE PROJECTIONS Washko, Susan; Bogan, Michael	THE ESSENTIAL ROLE OF PUBLIC ENGAGEMENT FOR WATERSHED MONITORING AND MANAGEMENT IN THE WESTERN LAKE ERIE BASIN Johnson, Laura; Baker, David	ABIOTIC DRIVERS OF SPATIAL AND TEMPORAL PATTERNS OF PRIMARY PRODUCERS IN A MID-SIZED RIVER Conn, Caitlin; Rosemond, Amy; Bumpers, Phillip; Freeman, Mary; McKay, Kyle; Rasmussen, Todd; Wenger, Seth	FROM GOLF GREEN TO GREEN STREAM: DOES TYPICAL RESTORATION HIT A HOLE IN ONE? Given, EmmaLeigh	THE TIMES THEY ARE A CHANGING - CAN WE CONSERVE OR DESIGN METABOLIC REGIMES TO PROTECT RIVER SPECIES AND ECOSYSTEMS? Bernhardt, Emily	2:45 PM - 3:00 PM
INDIVIDUAL BASED MODELLING OF FISH MIGRATION IN A 2-D RIVER SYSTEM: MODEL DEVELOPMENT AND CASE STUDY Snyder, Marcia; Schumaker, Nathan; Ebersole, Joe; Dunham, Jason; Comeleo, Randy; Keefer, Matthew; Leinenbach, Peter; Brookes, Allen; Palmer, John; Keenan, Dru	MACROINVERTEBRATES.ORG: AN INTERDISCIPLINARY COLLABORATION TO BUILD A DIGITAL TEACHING COLLECTION FOR AQUATIC MACROINVERTEBRATE IDENTIFICATION Muenz, Tara; Roberts, Jessica; Morse, John C.; Wenzel, John; Kautz, Andrea; Louw, Marti	IDENTIFYING POLLUTANT SOURCES AND CULTIVATING AQUATIC STEWARDSHIP WITH LARGE-SCALE PARTICIPATORY SCIENCE Jones, Erin; Crandall, Trevor; Aanderud, Zachary; Abbott, Benjamin	RIVER MANAGEMENT ALTERS ECOSYSTEM METABOLISM IN THE LARGE OLIGOTROPHIC KOOTENAI RIVER Kunza, Lisa; Chowanski, Kurt; Stickney, Emily; Genzoli, Laurel; Hoffman, Gregory	RESPONSE OF FISH AND MACROINVERTEBRATE COMMUNITIES TO A NOVEL STREAM RESTORATION IN CENTRAL KENTUCKY Flinn, Michael; Vrablik, Patrick	TIMING IS EVERYTHING: EXPLORING INTERANNUAL VARIABILITY IN STREAM METABOLISM Savoy, Philip; Bernhardt, Emily; Heffernan, Jim; Thellman, Audrey	3:00 PM - 3:15 PM
DO DRIER CONDITIONS INFLUENCE STATE TRANSITIONS IN STREAM FISHES? A CASE STUDY WITH MINNOWS IN A SOUTHEASTERN US RIVER BASIN Wheeler, Kit; Freeman, Mary; Wenger, Seth; Davis, Jessica; LaFontaine, Jacob		SCIENCE TO STORYTELLING: CONNECTING WITH YOUR COMMUNITY Denton, Marianne	DETERMINING THE KEY DRIVERS OF STREAM FISH PRODUCTIVITY Richter, Ian; Jackson, Donald; Jones, Nicholas	LARVAL DEVELOPMENT IN WASTEWATER CONFERS AN ADVANTAGE IN THE TERRESTRIAL ENVIRONMENT Cecala, Kristen; Zeitler, Emma; McGrath, Deborah	USING DIEL VARIATION IN DISSOLVED METABOLITES TO EXPLORE THE INFLUENCE OF NUTRIENT LOADING ON STREAM METABOLIC REGIMES Storb, Meryl; Payn, Robert; D'Andrilli, Juliana	3:15 PM - 3:30 PM
INTERACTIONS BETWEEN PREDATOR TRAITS AND PRODUCER STRUCTURE: THE ECOLOGY AND EVOLUTION OF FINDING FOOD IN COMPLEX AQUATIC HABITATS Best, Rebecca; Leal, Miguel; Lürig, Moritz; Svitok, Marek; Feulner, Philine; Seehausen, Ole; Matthews, Blake			HOW THE SPATIAL STRUCTURE OF LIGHT SHAPES METABOLIC REGIMES WITHIN AND ACROSS RIVER NETWORKS Koenig, Lauren; Helton, Ashley; Savoy, Philip; Carter, Alice; Moore, Eric; Heffernan, Jim; Bernhardt, Emily			



Wednesday — Early Morning Oral Presentation

	150 G	150 DEF	151 ABC	151 G	151 DEF	250 AB
SESSION	S19: The Alliance for Freshwater Life - fostering multidisciplinary freshwater research on local to global scales <i>Moderator: Sami Domisch</i>	C08: Urban Ecology <i>Moderator: Anika Bratt</i>	C06: Large River Ecology <i>Moderator: Jeff Wesner</i>	S02: Advancing knowledge on intermittent rivers and ephemeral streams: across disciplines and dimensions <i>Moderator: Hana Moidu</i>	S11: The good, the bad, and the ugly news about acidification in the 21st Century <i>Moderator: Barry Baldigo</i>	S12: Climate change in high-gradient mountain streams <i>Moderator: Deb Finn</i>
9:00 AM - 9:15 AM	THE ALLIANCE FOR FRESHWATER LIFE: INTRODUCING THE INITIATIVE AND IDEAS FOR FRESHWATER BIODIVERSITY RESEARCH FROM LOCAL TO GLOBAL SCALES Jähnig, Sonja C.; Darwall, William; Harrison, Ian; Monaghan, Michael T.	IGNORANCE IS BLISS: THE CURRENT STATE OF SEPTIC SYSTEMS IN THE U.S. AND THE RISKS THEY POSE TO FRESHWATER SYSTEMS Parsons, Rebecca; McDonald, Jacob M.; Bumpers, Phillip; Gaur, Nandita; Capps, Krista	MONTANA CONSORTIUM FOR RESEARCH ON ENVIRONMENTAL WATER SYSTEMS (CREWS): APPLICATION TO WATER QUALITY ISSUES IN THE UPPER CLARK FORK RIVER Valett, H. Maurice; Colman, Benjamin; Cross, Wyatt; D'Andrilli, Juliana; DeGrandpre, Michael; Downey, Jerry; Hall, Robert; Metcalf, Elizabeth; Payn, Robert; Peipoch, Marc	DO ATTRIBUTES OF DRYING MATTER? SHORT-TERM RECOVERY OF SEDIMENT METABOLISM FROM VARIOUS DRYING Schreckinger, Jose; Mendoza-Lera, Clara; Mutz, Michael	A CLEAN AIR ACT SUCCESS STORY: RECOVERING FISH ASSEMBLAGES AND WATER QUALITY IN ACIDIFIED STREAMS OF NEW YORK Baldigo, Barry; George, Scott; Lawrence, Greg; McHale, Michael	CLIMATE CHANGE IN HIGH-GRADIENT MOUNTAIN STREAMS: SEARCHING FOR REFUGIA IN A HETEROGENEOUS LANDSCAPE Finn, Debra; Hotaling, Scott
9:15 AM - 9:30 AM	TOOLS OF ENGAGEMENT IN RESEARCH, EDUCATION AND OUTREACH: THE MULTIPLIER EFFECT OF BOUNDARY SPANNING, NETWORKS AND COMMUNICATION IN THE LAND OF PRIVATE PROPERTY Arsuffi, Tom	CAN TREATED WASTEWATER SERVE AS HABITAT FOR DESERT FISHES? Eppehimer, Drew; Hollien, Kelsey; Hamdhani, Hamdhani; Nemec, Zach; Quanrud, David; Bogan, Michael	MACROPHYTES AND NUTRIENTS IN A STREAM SYSTEM: UTILIZING AND EVALUATING THE QUAL2K MODEL IN THE HENRY'S FORK OF THE SNAKE RIVER McLaren, John; Budy, Phaedra; Brothers, Soren; Van Kirk, Rob	EFFECTS OF SIMULATED DROUGHT ON AQUATIC INSECT COMMUNITIES IN THE EASTERN SIERRA NEVADA Saffarinia, Parsa; Herbst, Dave; Medhurst, Bruce; Anderson, Kurt	REDUCTION IN EMISSIONS AND DEPOSITION, IMPROVEMENTS IN WATER QUALITY, AND AQUATIC CRITICAL LOADS RESEARCH IN THE U.S. SINCE THE 1990 CAAA Lynch, Jason	ICY SEEPS MAY ACT AS A REFUGE FOR ALPINE STREAM INVERTEBRATES: EVIDENCE FROM THE CENTRAL ROCKY MOUNTAINS Tronstad, Lusha
9:30 AM - 9:45 AM	COMMUNITY CONSEQUENCES OF INDISCRIMINATE OVERFISHING IN LARGE TROPICAL RIVERS Heilpern, Sebastian; Sethi, Suresh; Flecker, Alexander; Duponchelle, Fabrice; Doria, Carolina; Batista, Vandick; Isaac, Victoria	UNDERSTANDING THE PHYSIOLOGICAL MECHANISMS UNDERLYING SEASONAL MOVEMENTS OF COMMON MUDPUPIPIES (NECTURUS MACULOSUS) IN AN URBAN, LAKE. Bilak, Jared; Whiles, Matt; Warne, Robin	LOSS OF POTENTIAL AQUATIC-TERRESTRIAL SUBSIDIES ALONG THE MISSOURI RIVER FLOODPLAIN Wesner, Jeff; Swanson, David; Dixon, Mark; Quist, Danielle; Soluk, Daniel; Yager, Lisa; Warmbold, Jerry; Oddy, Erika; Seidel, Tyler	INPUTS FROM WASTEWATER TREATMENT PLANT EFFLUENTS INFLUENCE THE TEMPORAL VARIATION OF NUTRIENT UPTAKE IN A TEMPORARY STREAM Marti, Eugenia; Castelar, Sara; Ribot, Miquel; Merbt, Stephanie N.; Tobella, Marta; Sabater, Francesc; Gacia, Esperança; Drummond, Jennifer; Bernal, Susana	REGIONAL STREAM ACIDIFICATION AND CRITICAL LOADS IN THE ADIRONDACK AND SOUTHERN APPALACHIAN MOUNTAINS INCLUDING INTERACTIONS WITH CLIMATE CHANGE McDonnell, Todd; Sullivan, Timothy; Driscoll, Charles; Cosby, Bernard J.; Jackson, William; Lawrence, Greg; Burns, Doug; Dolloff, Andy; Beier, Colin	HIGH-RESOLUTION SPATIOTEMPORAL RESOLUTION OF MACROINVERTEBRATE DIVERSITY IMPERILED BY CLIMATE CHANGE IN NORTHWESTERN MONTANA Giersch, J. Joseph; Hotaling, Scott; Jones, Leslie; Muhlfeld, Clint
9:45 AM - 10:00 AM	COUPLING A PURPOSE BUILT IMAGING SYSTEM WITH COMPUTER VISION TO ESTIMATE INVERTEBRATE DRIFT WITHIN LOTIC ECOSYSTEMS Macias, Nicholas; Palkovacs, Eric; Danner, Eric	EFFECTS OF TREATED EFFLUENT ADDITION IN STREAMS: WATER QUALITY, ECOLOGY, AND FUTURE DIRECTIONS Hamdhani, Hamdhani; Eppehimer, Drew; Bogan, Michael	ASSESSING BIOTIC VERSUS ABIOTIC FACTORS IN SHAPING COMMUNITY STRUCTURE IN LARGE RIVERS: RESPONSE OF ZOOPLANKTON TO ASIAN CARP IN THE ILLINOIS RIVER Casper, Andrew; Chara-Serna, Ana	DROUGHT-INDUCED MASS MORTALITY OF FRESHWATER MUSSELS ALTERS ECOSYSTEM FUNCTION: A MESOCOSM EXPERIMENT DuBose, Traci; Atkinson, Carla; Vaughn, Caryn; Golladay, Stephen W.	STREAMS ON ACID AND THEIR CALCIUM CARBONATE ANTIDOTE! Fuller, Randy	HYDROCLIMATIC DROUGHT EFFECTS ON PHYSICAL HABITAT FEATURES OF HEADWATER STREAMS IN THE SIERRA NEVADA OF CALIFORNIA Herbst, David B.; Medhurst, R. Bruce; Karapetrova, Aleksandra
10:00 AM - 10:15 AM		PROJECTED VARIATION IN URBAN STREAM LENGTH BASED ON CLIMATE AND LAND USE SCENARIOS Bratt, Anika; Heffernan, Jim		UNTANGLING EFFECTS OF PREDATORS AND LANDSCAPE FACTORS AS DRIVERS OF STREAM FISH COMMUNITY STRUCTURE Bruckerhoff, Lindsey; Gido, Keith; Estey, Michael; Moore, Pamela	TRAJECTORIES OF RECOVERY FROM ACID RAIN OVER 31 YEARS (AMBIENT) AND 2 YEARS (EXPERIMENTAL) AT THE BEAR BROOK WATERSHED IN MAINE (BBWM), USA Norton, Stephen; Fernandez, Ivan	DECLINE IN HABITAT SUITABILITY LIMITS EFFICACY OF STREAM REFUGIA UNDER CLIMATE CHANGE Troia, Matthew; Kaz, Anna; Niemeyer, Cameron; Giam, Xingli
10:15 AM - 10:30 AM		FLOOD PROTECTION ECOSYSTEM SERVICES IN THE COAST OF PUERTO RICO: ASSOCIATIONS BETWEEN EXTREME WEATHER, FLOOD HAZARD MITIGATION AND GASTROINTESTINAL ILLNESS de Jesus Crespo, Rebeca			USING CRITICAL LOADS OF AQUATIC SYSTEMS TO GUIDE FEDERAL LAND MANAGEMENT Bell, Michael; Stacy, Andrea; Renfro, Jim; Cummings, Jayln	GLACIERIZED CATCHMENTS IN THE TROPICAL ANDES: POSSIBLE IMPLICATIONS OF CLIMATE CHANGE Crespo-Pérez, Verónica; Andino, Patricio; Cauvy-Fraunié, Sophie; Dangles, Olivier; Espinosa, Rodrigo; Jacobsen, Dean

250 CF	250 DE	254 B	253 AB	251 AB	251 DE	SESSION
C02: Fish and Other Aquatic Vertebrates <i>Moderator: Patricia Nease</i>	S03: To learn your water, study your soils: the role of soil health in freshwaters <i>Moderator: Raven Bier</i>	C30: Molecular Ecology <i>Moderator: Kara Andres</i>	C37: Stoichiometry <i>Moderator: Scott Tiegs</i>	C21: Communicating Science <i>Moderator: Ariel Shogren</i>	S29: Advancing Freshwater Science: A Discussion with the National Science Foundation <i>Moderator: Kathy Cottingham</i>	9:00 AM - 9:15 AM
HELLBENDER SALAMANDERS AND FOUR FISH; SCIENCE, LITERATURE REVIEWS AND PERCEPTIONS Nickerson, Max	CARBON EXPORT AND STORAGE ACROSS CHARRED COLORADO LANDSCAPES: FROM SOILS TO STREAMS Barnes, Rebecca; Wolf, Kyra; Gilbertson, Asheton	COMPARATIVE GENOMICS AND PROTEOMICS OF SILK ACROSS CADDISFLY SUBORDERS Frandsen, Paul; Stewart, Russell	A GLOBAL STUDY OF NUTRIENT CONTROLS ON ORGANIC MATTER PROCESSING Costello, David; Mathie, Devan; Tiegs, Scott	RIVER BREATHING: CONNECTING RESEARCH TO EDUCATION THROUGH AN ELEMENTARY SCHOOL SCIENCE CURRICULUM Vallor, Rose; Storb, Meryl	ADVANCING FRESHWATER SCIENCE: A DISCUSSION WITH THE NATIONAL SCIENCE FOUNDATION Cottingham, Kathryn; Blood, Elizabeth; Binford, Michael; Schade, John	9:15 AM - 9:30 AM
LOCALIZED RESOURCE RELIANCE OF YOUNG-OF-YEAR LARGEMOUTH BASS IN GLACIAL LAKES: IMPLICATIONS FOR NEARSHORE HABITAT MANAGEMENT Nease, Patricia; Hook, Tomas		NOVEL ENVIRONMENTAL DNA METHODS FOR MONITORING POPULATION GENETICS OF AN INVASIVE SPECIES Andres, Kara; Sethi, Suresh; Lodge, David; Andres, Jose	WIDESPREAD INTRASPECIFIC VARIATION IN RESPONSE TO PHOSPHORUS LIMITATION IN A NEW ZEALAND SNAIL Krist, Amy; Neiman, Maurine	STRIVING TOWARDS A MORE DIVERSE AND INCLUSIVE SCIENTIFIC SOCIETY: PROGRESS MADE IN THE SOCIETY FOR FRESHWATER SCIENCE AND OPPORTUNITIES FOR IMPROVEMENT Abernethy, Erin; Arismendi, Ivan; Boegehold, Anna; Colon-Gaud, Checo; Cover, Matthew; Larson, Erin; Moody, Eric; Penaluna, Brooke; Shogren, Ariel; Webster, Alex; Woller-Skar, Megan		9:30 AM - 9:45 AM
EFFECTS OF CARCASS ADDITIONS ON STREAM FOOD WEBS ALONG A FISH ASSEMBLAGE GRADIENT IN AN INTERIOR COLUMBIA RIVER BASIN TRIBUTARY Kaylor, Matthew; White, Seth; Sedell, Edwin; Sanders, Ashley; Warren, Dana	SEASONAL AND LONGITUDINAL NUTRIENT LIMITATION PATTERNS IN A WATERSHED INFLUENCE BY IRRIGATION DELIVERY AND RETURN FLOW Arango, Clay; Roley, Sarah; Alexiades, Alexander	PHYLOGEOGRAPHY AND POPULATION GENETICS OF A HEADWATER SPECIALIST, CAMBARUS PRISTINUS (DECAPODA: CAMBARIDAE) FROM THE CUMBERLAND PLATEAU IN TENNESSEE Grubb, Brooke; Johansen, John; Blanton Johansen, Rebecca	EFFECTS OF A DIVERSE SET OF PARASITES ON NUTRIENT RECYCLING BY THEIR HOSTS Sanders, Andrew; Taylor, Brad; Cromwell, Kara	IN SITU TURBIDITY SENSORS: THE PROBLEM, THE SOLUTION, AND BEYOND Oudsema, Maggie; Hassett, Michael; Steinman, Alan; Callam, Dan; Truer, Ryan		9:45 AM - 10:00 AM
THE ENVIRONMENTAL NICHE OF TWO IMPERILED STREAM ECOSYSTEM ENGINEERS: HORNHEAD CHUB (NOCOMIS BIGUTTATUS) AND REDSPOT CHUB (NOCOMIS ASPER) Whitney, James; Holloway, Joshua	THE INFLUENCE OF IRRIGATION FLOWS ON MICROBIAL AND ALGAL NUTRIENT LIMITATION Roley, Sarah S.; Arango, Clay; Alexiades, Alexander	BENTHIC MACROINVERTEBRATE COMMUNITIES ACROSS THE NEON OBSERVATORY: USING METABARCODE AND MORPHOLOGICAL TAXONOMY DATA TO ASSESS TRENDS Parker, Stephanie	NITROGEN FIXATION EFFICIENCY DECREASES WITH BOTH INCREASING N:P STOICHIOMETRIC IMBALANCE AND POPULATION ACCLIMATION TO NITROGEN SUFFICIENT CONDITIONS Osburn, Felicia; Scott, Thad	EXPLORING LEECH MICROBIOMES IN A COURSE-BASED UNDERGRADUATE RESEARCH EXPERIENCE Gold, Roger		10:00 AM - 10:15 AM
SUPPLY AND DEMAND: EVALUATING THE EFFECTS OF TEMPERATURE AND FOOD AVAILABILITY ON THE PERFORMANCE OF A MID-LEVEL CONSUMER WITHIN ARCTIC LAKES Barrett, Nicholas; Budy, Phaedra	KNOW YOUR WATER, KNOW YOUR SOIL, KNOW YOUR WORMS? – EARTHWORMS AND BIOGEOCHEMISTRY AT THE MARGINS OF NORTH AMERICAN FRESHWATER Callahan, Mac; Carrera-Martinez, Roberto; Taylor, Melanie	ONE FISH, TWO FISH: EDNA AS A QUANTITATIVE TOOL Spear, Michael; Embke, Holly; Krysan, Patrick; Vander Zanden, Jake M.	STOICHIOMETRY OF ALGAL-MEDIATED PRIMING EFFECTS DURING LEAF LITTER DECOMPOSITION: A META-ANALYSIS Halvorson, Halvor; Francoeur, Steve; Findlay, Robert; Kuehn, Kevin	SOUTHERN STREAM FISH: COMMUNICATING SCIENCE VIA AUDIO AND WEB MEDIA Bozeman, Bryan		10:15 AM - 10:30 AM
EFFECTS OF ENVIRONMENTAL VARIATION ON DISPERSAL DISTANCE IN A STREAM SALAMANDER Addis, Brett; Lowe, Winsor		HIGHLY ACCURATE FRESHWATER MACROZOOBENTHOS METABARCODING WITH NANOPORE MINION Baloglu, Bilgenur; Elbrecht, Vasco; Braukmann, Thomas; MacDonald, Shanna; Steinke, Dirk	PATTERNS IN N, P, AND SI STOICHIOMETRY FROM AGRICULTURAL RIVERS IN EAST-CENTRAL ILLINOIS Sethna, Lienne; Royer, Todd V.			



Thursday — Early Morning Oral Presentation

	150 G	150 DEF	151 ABC	151 G	151 DEF	250 AB
SESSION	S24: Supporting freshwater policy and decision making in the modern/digital age <i>Moderator: Kathijo Jankowski</i>	C17: Bioassessment <i>Moderator: Cameron Cheri</i>	S09: Freshwater Salinization: Science for Solutions <i>Moderator: Tony Timpano</i>	S15: Towards a predictive understanding of metacommunity dynamics in freshwater ecosystems <i>Moderator: Albert Ruhi</i>	C36: Water Resource Management <i>Moderator: Krista Capps</i>	S12: Climate change in high-gradient mountain streams <i>Moderator: Deb Finn</i>
9:00 AM - 9:15 AM	A DIGITAL PERSPECTIVE: WHAT SMARTPHONE APPS ARE REVEALING ABOUT ANGLER RESPONSE TO FISHING REGULATIONS Weir, Jessica; Venturelli, Paul	A PRELIMINARY LOOK AT DNA METABARCODING STREAM AND RIVER DIATOMS IN A NATIONAL SURVEY Pilgrim, Erik; Smucker, Nathan; Darling, John; Johnson, Brent	REMEMBERING A CHAMPION: DR. BEN STOUT Pond, Gregory	USING MODELING AND TRAIT DATA TO UNDERSTAND METACOMMUNITY CONNECTIVITY Anderson, Kurt; Conway, Ryan; Pancaldi, Francesco; Collister, Daniel	INTEGRATING CITIZEN SCIENCE HYDROLOGIC OBSERVATIONS INTO A HYDROLOGIC MODEL FOR STREAMFLOW AND STREAM TEMPERATURE FORECASTING Ficklin, Darren; Avellaneda, Pedro; Lowry, Christopher; Knouft, Jason; Hall, Damon	HABITAT STABILITY DIFFERENTIALLY DRIVES MASS-LENGTH RELATIONSHIPS AND TROPHIC TRAITS ACROSS FUNCTIONAL FEEDING GROUPS IN THE ECUADORIAN ANDES Larson, Erin; Encalada, Andrea C.; Hudson, Nicholas; Flecker, Alexander
9:15 AM - 9:30 AM	ANURAN TRAITS OF THE UNITED STATES (ATRAIU) DATABASE - A MULTI-USE TOOL FOR TRAITS-BASED CONSERVATION, MANAGEMENT, AND RESEARCH Moore, Chloe; Helmann, Jacob; Chen, Ye; Hughes, London; Wax, Noah; St. Amour, Sabine; Mims, Meryl; Mims, Meryl	BIOMONITORING IN NORTHEASTERN BRITISH COLUMBIA: INCREASING KNOWLEDGE OF BASELINE CONDITIONS IN AREAS OF OIL AND GAS INTEREST Strachan, Stephanie; Pappas, Sheena; Raggett, Jolene	REMEMBERING A CHAMPION: DR. BEN STOUT Pond, Gregory	DORMANCY IN METACOMMUNITIES: WHEN CAN TEMPORAL DISPERSAL MAINTAIN DIVERSITY IN VARIABLE LANDSCAPES? Wisnoski, Nathan; Leibold, Mathew; Lennon, Jay	ECOREST: AN R PACKAGE FOR RAPID ASSESSMENT HABITAT MODELING TO INFORM WATER RESOURCE MANAGEMENT Hernandez Abrams, Darixa; McKay, Kyle; Carrillo, Carra; Swannack, Todd M.	WHERE TO GO FROM HERE? AQUATIC INSECT FUNCTIONAL AND TAXONOMIC DIVERSITY RESPOND TO CHANGES IN CANOPY, ELEVATION AND WATER TEMPERATURE IN ROCKY MOUNTAIN STREAMS Gutierrez, Carolina; Harrington, Rachel; Kondratieff, Boris; Webb, Colleen; Ghalambor, Cameron; Poff, LeRoy
9:30 AM - 9:45 AM	THE POWER, POTENTIAL, AND PITFALLS OF OPPORTUNISTIC DATA FOR VULNERABILITY ASSESSMENTS: LESSONS FROM THE FISHES Mims, Meryl; Mims, Meryl; Silknetter, Samuel; Smith, Jennifer; Benson, Abigail	DEVELOPMENT OF A MACROINVERTEBRATE BIOLOGICAL CONDITION GRADIENT (BCG) MODEL FOR LARGE RIVERS USING HESTER-DENDY SAMPLES Bouchard, Jr., R. William; Chirhart, Joel; Lundeen, Benjamin; Dimick, Jeffrey	ASSESSING THE RELATIVE IMPACTS OF DIFFERENT HUMAN ACTIVITIES ON STREAM AND RIVER SALINITY Olson, John	SIMULATIONS SHOW METACOMMUNITY, STREAM NETWORK, AND DISTURBANCE CHARACTERISTICS INTERACT TO MAINTAIN BIODIVERSITY, AND HAVE CONSEQUENCES FOR REGIONAL STABILITY Sokol, Eric; Conway, Ryan; Anderson, Kurt; Swan, Christopher; Brown, Bryan	KNOWLEDGE, PERCEPTIONS, AND BEHAVIORS OF RETAILERS REGARDING AQUATIC INVASIVE SPECIES FROM THE PET AND WATER GARDEN TRADE Latimore, Jo A.; Filice, Paige	ICY SEEPS: A POTENTIAL STRONGHOLD FOR ALGAL STENOTHERM BIODIVERSITY Bixby, Rebecca; Hobbs, Monika; Finn, Debra; Tronstad, Lusha
9:45 AM - 10:00 AM	THE IMPORTANCE OF OPEN SCIENCE FOR BIOLOGICAL ASSESSMENT Beck, Marcus; O'Hara, Casey; Stewart Lowndes, Julia; Mazor, Raphael; Theroux, Susanna; Gillett, David; Lane, Belize; Gearheart, Greg	A 10 MINUTE GUIDE TO DNA METABARCODING MACROINVERTEBRATES Elbrecht, Vasco; Baloglu, Bilgenur; Braukmann, Thomas; Steinke, Dirk	INTRODUCING THE FRESHWATER EXPLORER: A NATIONAL VIEW OF BACKGROUND AND MEASURED CONDUCTIVITY Cormier, Susan; Wharton, Christopher; Bertani, Isabella; Olson, John	INVESTIGATING THE EFFECTS OF NETWORK POSITION ON STREAMFISH AND MACROINVERTEBRATE COMMUNITY STABILITY AND STRUCTURE IN DIFFERENT LANDSCAPES Bittner, Steven; Allen, Daniel		AN EXPERIMENTAL TEST OF CLIMATE DRIVEN CHANGES IN STREAM TEMPERATURE, LIGHT, AND NUTRIENT AVAILABILITY ON BIOFILMS AND NUTRIENT DYNAMICS Balik, Jared; Taylor, Brad
10:00 AM - 10:15 AM	USING SYSTEMATIC REVIEW AND EVIDENCE BANKING TO INCREASE UPTAKE AND USE OF AQUATIC SCIENCE IN DECISION-MAKING Lee, Sylvia; Bennett, Micah; Schofield, Kate; Ridley, Caroline; Norton, Susan; Webb, J. Angus; Nichols, Susan; Ogden, Ralph; Collins, Alexandra		STREAM MESOCOSM SALT ECOTOXICOLOGY STUDIES HELP INFORM AQUATIC LIFE CRITERIA Nietch, Christopher; Lazorchak, Jim; Smucker, Nathan	USING METACOMMUNITY THEORY TO PREDICT THE OUTCOMES OF HOST AND SYMBIONT CO-INVASION Brown, Bryan; Bell, Spencer; Creed, Robert		BENTHIC PRIMARY PRODUCTION IN MOUNTAIN LAKES: GRADIENTS VERSUS LOCAL FACTORS Strecker, Angela; Chiapella, Ariana; Fradkin, Steven
10:15 AM - 10:30 AM			A TRANSDISCIPLINARY RESEARCH APPROACH FOR THE MANAGEMENT OF A DRY, SALINIZED RIVER-BASIN IN MOROCCO Berger, Elisabeth; Frör, Oliver; Naimi, Mohamed; Ghamizi, Mohamed; Schäfer, Ralf; Schilling, Janpeter; Znari, Mohammed	THE ROLE OF MULTI-SCALE BIODIVERSITY IN METACOMMUNITY TEMPORAL STABILITY Patrick, Christopher; McCluney, Kevin; Ruhi, Albert		

250 CF	250 DE	254 B	253 AB	251 AB	251 DE	SESSION
S01: The environmental flow and water management nexus: implementation challenges, strategies, and outcomes of environmental flow programs <i>Moderator: Belize Lane</i>	C25: Food Webs <i>Moderator: Leslie Rieck</i>	C31: Organic Matter Processing <i>Moderator: Kenneth Fortino</i>	S18: Conservation and management of crayfish in western North America <i>Moderator: Eric Larson</i>	S14: Heterotrophic Regimes in Rivers: Technical and conceptual advances <i>Moderator: Joanna Blaszczyk</i>	S10: Biogeomorphic agents: Role of organisms in propagating change in fluvial ecosystems <i>Moderator: Brandon Samsom</i>	9:00 AM - 9:15 AM
A CALIFORNIA ENVIRONMENTAL FLOWS FRAMEWORK Grantham, Ted; Lane, Belize; Lusardi, Rob; Howard, Jeanette; Stein, Eric; Sandoval, Sam; Yarnell, Sarah; Zimmerman, Julie	BOTTOM-UP EFFECTS OF LAKE TROUT SUPPRESSION IN YELLOWSTONE LAKE Lujan, Dominique; Tronstad, Lusha; Koel, Todd; Briggs, Michelle; Albertson, Lindsey; Glassic, Hayley; Guy, Christopher	A FIELD BASED EXPERIMENT ON THE RESPONSES OF DIFFERENT MICROBIAL COMMUNITIES AND RELATED ECOSYSTEM FUNCTIONS TO FUNGICIDES Schreiner, Verena; Link, Moritz; Amelung, Gesa; Schäfer, Ralf	INTRODUCTION TO THE SPECIAL SESSION: CONSERVATION AND MANAGEMENT OF CRAYFISH IN WESTERN NORTH AMERICA Olden, Julian; Larson, Eric	WHAT IS WHOLE STREAM RESPIRATION? Hall, Robert	MUSSELS AS BIOGEOMORPHIC AGENTS IN STREAMS: PHYSICAL AND BIOGEOCHEMICAL ROLES Atkinson, Carla L.; Nickerson, Zachary L.; Mortazavi, Behzad; Koerner, Matt; Davis, Lisa	9:15 AM - 9:30 AM
AN ECOSYSTEM-BASED APPROACH FOR SELECTING FLOW METRICS FOR ENVIRONMENTAL FLOW APPLICATIONS Yarnell, Sarah; Stein, Eric; Lusardi, Robert; Zimmerman, Julie; Peek, Ryan; Grantham, Ted; Lane, Belize; Howard, Jeanette; Sandoval, Sam	DO OMNIVORES MEDIATE THE EFFECTS OF DEGRADATION? Moore, Hannah	TEMPERATURE VARIANCE LEADS TO UNDERESTIMATION OF THE TEMPERATURE SENSITIVITY OF PLANT LITTER DECOMPOSITION Tomczyk, Nathan; Rosemond, Amy; Cummins, Carolyn; Bumpers, Phillip; Benstead, Jonathan; Wenger, Seth	DISTRIBUTION, HABITAT ASSOCIATIONS, AND CONSERVATION STATUS UPDATES FOR TWO CRAYFISHES ENDEMIC TO THE WESTERN UNITED STATES Egly, Rachel; Larson, Eric	WHAT IS WHOLE STREAM RESPIRATION? Hall, Robert	ECOHYDROLOGIC FEEDBACKS ON WEATHERING DRIVE KARST SELF-ORGANIZATION Heffernan, Jim; Cohen, Matthew; McLaughlin, Daniel; Murray, A Brad; Martin, Jon; Bianchi, Thomas; Osborne, Todd; Dong, Xiaoli; Chamberlin, Catherine; Ward, Nicholas; Zhang, Xiaowen; Brown, Amy; Flint, Madison; Pain, Andrea; Quintero, Carlos	9:30 AM - 9:45 AM
CALIFORNIA ENVIRONMENTAL FLOWS FRAMEWORK (CEFF) DECISION SUPPORT TOOLS I Lane, Belize; Sandoval, Sam; Stein, Eric; Yarnell, Sarah; Grantham, Ted; Zimmerman, Julie; Howard, Jeanette; Lusardi, Robert	CHARACTERIZING LIMNOLOGICAL PARAMETERS IN KANSAS SMALL IMPOUNDMENTS ACROSS A GRADIENT OF GIZZARD SHAD DENSITIES Renner, Elizabeth; Gido, Keith; Neely, Ben; Koch, Jeff; Chance-Ossowski, Connor	UNDERSTANDING THE ENVIRONMENTAL CONTEXT OF ALGAL PRIMING OF COARSE PARTICULATE ORGANIC MATTER DECOMPOSITION IN STREAMS Ashberry, Emily; Rier, Steven; Soohy, Jennifer	MORPHOLOGICAL AND MOLECULAR COMPARISONS OF ENDEMIC WESTERN CRAYFISHES TO INFORM CONSERVATION PRIORITIES Larson, Eric; Principe, Nicole; Ash, Kurt; Egly, Rachel; Taylor, Chris	HETEROTROPHIC REGIMES IN RIVERS: PARTITIONING SOURCES OF ECOSYSTEM RESPIRATION THROUGH A TIME-SERIES ANALYSIS Bertuzzo, Enrico; Hotchkiss, Erin; Argerich, Alba; kominoski, John; Oviedo Vargas, Diana; Savoy, Philip; Scarlett, Rachel; von Schiller, Daniel; Heffernan, Jim	RIPARIAN FOREST RESTORATION TRANSFORMS STREAM CHANNEL GEOMORPHOLOGY: TIMESCALES AND MECHANISMS OF BIOGEOMORPHIC CHANGE Daniels, Melinda	9:45 AM - 10:00 AM
CALIFORNIA ENVIRONMENTAL FLOWS FRAMEWORK (CEFF) DECISION SUPPORT TOOLS II: PREDICTING FUNCTIONAL FLOW METRICS AT UNGAGED LOCATIONS Carlisle, Daren; Grantham, Ted; Lane, Belize	FISHERIES FOOD WEB EFFECTS OF ZEBRA MUSSELS AND SPINY WATER FLEA IN LARGE NORTH TEMPERATE LAKES Bethke, Bethany; Hansen, Gretchen; Ahrenstorff, Tyler; Rantala, Heidi; Brady, Valerie; Dumke, Josh; French, Will; Hirsch, Jodie; Kovalenko, Katya; Maki, Ryan; Wellard Kelly, Holly	FRESHWATER INVERTEBRATE ASSIMILATION OF MICROBIAL NUTRIENTS FROM DETRITUS UNDER LIGHT AND PHOSPHORUS MANIPULATION Price, Taylor; Halvorson, Halvor; Francoeur, Steve; Kuehn, Kevin	INVASION OF NON-NATIVE CRAYFISH FAXONIUS VIRILIS IN THE LOWER HENRY'S FORK DRAINAGE, IDAHO Shaw, Peyton; Larson, Eric; Billman, Eric	STREAM METABOLISM IN ENVIRONMENTAL FLOW MANAGEMENT: THE LONG TERM INTERVENTION MONITORING PROJECT IN AUSTRALIA Grace, Michael; Tsoi, Iris; Ryder, Darren; Wolfenden, Ben; Thompson, Ross; Dyer, Fiona; Kobayashi, Yoshi; Oliver, Rod; Lorenz, Zygmunt; McCasker, Nicole; Bond, Nick	THE INFLUENCE OF SPAWNING FISH ON RIVER PROFILES AND POTENTIAL SPECIATION OVER GEOLOGIC TIMESCALES Fremier, Alexander; Yanites, Brian; Yager, Elowyn	10:00 AM - 10:15 AM
APPLICATION OF THE CALIFORNIA ENVIRONMENTAL FLOWS FRAMEWORK ACROSS A RANGE OF FLOW MANAGEMENT NEEDS Stein, Eric; Grantham, Ted; Yarnell, Sarah; Sandoval, Sam; Lane, Belize; Zimmerman, Julie; Howard, Jeanette; Lusardi, Robert	USING PROXY DATA TO INFER PREDATOR PREY INTERACTIONS IN STREAM Pomeranz, Justin; Thompson, Ross; Poisot, Timothée; Harding, Jon	THE EFFECTS OF NUTRIENT AND LABILE CARBON ADDITIONS ON THE PRIMING OF LEAF LITTER DECOMPOSITION BY POND SEDIMENTS Oppedisano, Alyssa; Huerta, Gabrielle; Fortino, Kenneth; Waters, Matthew	ONTOGENETIC AND SEX-SPECIFIC TROPHIC PLASTICITY OF FAXONIUS VIRILIS IN THE SASKATCHEWAN RIVER SYSTEM Phillips, Iain; Houston, Joel; Kreitals, Natasha; Chivers, Douglas; Wissel, Bjoern; Pollock, Michael; Jardine, Tim	MIRROR MIRROR: THE ROLE OF HETEROTROPHY IN RUNNING WATERS IS INFORMED BY THE STRENGTH AND VARIATION IN THE RELATIONSHIP BETWEEN ER AND GPP Marcarelli, Amy; Sponseller, Ryan; Kirk, Lily; Arroita, Maite; Armon, Shai; Grace, Michael; Martí, Eugènia; McDowell, William H.; Segura, Catalina; Subalusky, Amanda; Tank, Jennifer L.; Tromboni, Flavia; Ulseth, Amber	THE ROLE OF NESTING MINNOWS FOR MODIFYING THE BENTHOSCAPE Peoples, Brandon K.	10:15 AM - 10:30 AM
TRANSLATING ENVIRONMENTAL FLOWS SCIENCE INTO MANAGEMENT PROGRAMS: THE MURRAY-DARLING BASIN, AUSTRALIA Webb, Angus; Casanella, Simon; Vietz, Geoff; Koster, Wayne		EFFECTS OF CLIMATE VARIABILITY IN A LONG-TERM CONTEXT ON LEAF LITTER PROCESSING IN THE OGEECHEE RIVER Sanchez-Ruiz, Jose; Colon-Gaud, Checo	THE RIVER MILE NETWORK CRAYFISH PROJECT Elvidge, Janice; Reynolds, Rick; Berg, Deborah	FLUORESCENCE SENSORS REVEAL IN-STREAM PROCESSING OF DISSOLVED ORGANIC MATTER IN RIVER NETWORKS Hosen, Jacob; Decker, Paul; Hensley, Robert; Kirk, Lily; Koenig, Lauren; Raymond, Peter; Savoy, Philip; Stubbins, Aron; Cohen, Matthew		



Thursday — Late Morning Oral Presentation

	150 G	150 DEF	151 ABC	151 G	151 DEF	250 AB
SESSION	S24: Supporting freshwater policy and decision making in the modern/digital age <i>Moderator: Emily Howe</i>	C17: Bioassessment <i>Moderator: Michael Shupryt</i>	S09: Freshwater Salinization: Science for Solutions <i>Moderator: Sally Entreklin</i>	S15: Towards a predictive understanding of metacommunity dynamics in freshwater ecosystems <i>Moderator: Guillermo De Mendoza</i>	C27: Landuse and Non-Point Source Impacts <i>Moderator: Lenka Kugierova</i>	S12: Climate change in high-gradient mountain streams <i>Moderator: Scott Hotaling</i>
11:00 AM - 11:15 AM	APPLYING CONCEPTS OF GENERAL RESILIENCE TO LARGE RIVER ECOSYSTEMS: A CASE STUDY FROM THE UPPER MISSISSIPPI AND ILLINOIS RIVERS Bouska, Kristen; Houser, Jeffrey; De Jager, Nathan; Van Appledorn, Molly; Rogala, James		PHYSIOLOGICAL PERSPECTIVES IN FRESHWATER SALINIZATION RESEARCH Buchwalter, David	DISTANCE DECAY OF SIMILARITY IN STREAM INVERTEBRATE COMMUNITIES: CLIMATIC INFLUENCES OVER SPACE AND TIME de Mendoza, Guillermo; Herbst, David B.; Ruhi, Albert	CUTTING EDGE: CONTEMPORARY PRACTICES OF RIPARIAN BUFFER MANAGEMENT AROUND HEADWATERS IN CANADA, FINLAND AND SWEDEN Kuglerová, Lenka; Jyväskylä, Jussi; Ruffing, Claire; Muotka, Timo; Richardson, John	THE FUTURE OF GLACIAL-FED STREAMFLOW IN THE AMERICAN WEST Fountain, Andrew G.; Trcka, Allison; Glenn, Bryce
11:15 AM - 11:30 AM	PUTTING SCIENCE ON THE MAP: A SURVEY OF DATA VISUALIZATION TECHNIQUES FOR SCIENTISTS, COMMUNICATORS, AND DECISION-MAKERS. Fiske, Gregory; Castanho, Andrea; Macedo, Marcia; Holmes, Robert	TRAIT-BASED RESPONSE IN AN EFFLUENT-IMPACTED RIVER, EASTERN CAPE, SOUTH AFRICA Odume, Oghenekaro Nelson	DOES TEMPERATURE INFLUENCE ION TRANSPORT IN AQUATIC INSECTS? Orr, Sarah; Buchwalter, David	ACROSS ECOSYSTEM INFLUENCES ON AQUATIC BIODIVERSITY IN HIGH ELEVATION LAKE STREAM NETWORKS Green, Matthew; Anderson, Kurt	LANDSCAPE AND LAKE INFLUENCES ON GREAT LAKES COASTAL WETLAND WATER QUALITY Harrison, Anna; Cooper, Matthew; Uzarski, Donald	DO ROCK GLACIERS PROVIDE REFUGIA FOR COLDWATER AND WETLAND-ADAPTED SPECIES UNDER WARMING CLIMATES? INSIGHTS FROM THE GREAT BASIN, USA Millar, Constance
11:30 AM - 11:45 AM	HOW CAN A TOOLBOX SYSTEMATICALLY BUILD CAPACITY BUILDING FOR FRESHWATER MANAGEMENT? Bezerra, Maira; Shaad, Kashif; Vollmer, Derek; Souter, Nick; Hauck, Sarah	DEVELOPMENT AND CRITICAL EVALUATION OF A FISH COMMUNITY-BASED INDEX OF BIOTIC INTEGRITY FOR BOREAL PLAINS STREAMS Prestie, Kate; Phillips, Iain; Janz, Dave; Jardine, Tim	EFFECTS OF SALINITY AND TEMPERATURE ON GROWTH, SURVIVAL, AND ADULT EMERGENCE IN THE DESERT CADDISFLY LIMNephilus ASSIMILIS BANKS Colburn, Betsy	SPATIAL HOMOGENIZATION OF MAYFLY, STONEFLY AND CADDISFLY ASSEMBLAGES IN SWISS RUNNING WATERS IN THE FACE OF GLOBAL WARMING Timoner, Pablo	HIGH CONTAMINANT FLOWS BETWEEN STREAM AND RIPARIAN FOOD WEBS IN MOUNTAIN-TOPOGRAPHY MINED LANDSCAPES OF CENTRAL APPALACHIA Naslund, Laura; Gerson, Jacqueline; Bernhardt, Emily	IMPLICATIONS OF CLIMATE CHANGE FOR PHYSICOCHEMISTRY AND RESOURCE AVAILABILITY IN MOUNTAIN STREAMS OF SOUTHEAST ALASKA Hood, Eran; Fellman, Jason; Bellmore, J. Ryan; Johnson, Connor; Dwyer, Mollie
11:45 AM - 12:00 PM	TRACKING THE LIFE AND TIMES OF A MISSISSIPPI RIVER DATASET: WHAT TOOLS ARE MOST EFFECTIVE IN PROVIDING DATA TO PARTNERS? Jankowski, Kathijo; Schlifer, Benjamin; Van Appledorn, Molly; Houser, Jeffrey; Sauer, Jennifer	DETECTING UNCONVENTIONAL OIL AND GAS PRODUCED WATERS IN HEADWATER STREAMS: A CHEMISTRY AND ORGANISMAL APPROACH Eliason, Kevin; Ankeny, Josh; Merriam, Eric; Petty, Todd	TEMPORAL AND SPATIAL EXTENT OF SURFACE COAL MINING INFLUENCES ON CENTRAL APPALACHIAN HEADWATER STREAMS Cianciolo, Thomas	METACOMMUNITY STRUCTURING OF STREAM MACROINVERTEBRATES IN THE HENGDUAN MOUNTAINS (CHINA) Kurthen, Angelika; He, Fengzhi; Cai, Qinghua; Jähni, Sonja	A DAY IN THE LIFE OF LAKE MICHIGAN: A COMPREHENSIVE ESTIMATE OF TRIBUTARY NUTRIENT LOADS Mooney, Robert J.; Esselman, Peter; Rosenthal, Will; Stanley, Emily; McIntyre, Peter B.	FROM GLACIAL, TO SNOW, TO RAIN: EFFECTS OF HYDROLOGIC HOMOGENIZATION ON AQUATIC FOOD WEBS IN SOUTHEAST ALASKA Bellmore, J. Ryan; Fellman, Jason; Hood, Eran; Dunkle, Matthew R.
12:00 PM - 12:15 PM	ADVANCING URBAN STORMWATER PLANNING THROUGH DESIGN THINKING, POLLUTION LOADING, AND SOCIAL EQUITY METRICS Howe, Emily; Nilsen, Christian; Robertson, Jamie; Pankani, Dan; Hobson, Paul; Koryto, Kevin; Strecker, Eric	RIPARIAN EFFECTS ON ODONATE ASSEMBLAGES IN OZARK SPRING STREAMS Cheri, Cameron; Finn, Debra	CAPTURING BENTHIC MACROINVERTEBRATE TAXA RICHNESS ACROSS A SALINITY GRADIENT IN CENTRAL APPALACHIAN HEADWATER STREAMS James, Aryanna; Pence, Rachel; Entreklin, Sally; Zipper, Carl; Timpano, Tony; Schoenholtz, Stephen; McLaughlin, Daniel			ANALYSIS OF FOOD WEB TOPOLOGY ALONG A HEADWATER STREAM GRADIENT AND IMPLICATIONS FOR COMMUNITY RESILIENCE Zatkos, Lauren
12:15 PM - 12:30 PM	GREENPLAN-IT: PLANNING FOR OPTIMAL SELECTION AND PLACEMENT OF GREEN INFRASTRUCTURE IN URBAN WATERSHEDS Wu, Jing; Kauhainen, Pete; Hale, Tony; Hunt, Jen; McKee, Lester	SYNTHESIS OF A NATIONAL MULTI-METRIC DIATOM INDEX Tyree, Meredith; Schulte, Nicholas; Lee, Sylvia; Carlisle, Daren; Mitchell, Richard; Pollard, Amina; Spaulding, Sarah	DOES SAMPLE TIMING MATTER? INVESTIGATING WHEN TO SAMPLE FORESTED HEADWATER STREAMS FOR ASSESSING FRESHWATER SALINIZATION IMPACTS TO BENTHIC MACROINVERTEBRATES. Timpano, Tony; Zipper, Carl; Soucek, David; Schoenholtz, Stephen	THE ECOLOGY OF ENDANGERED BRANCHIOPODA IN ROCK POOL METACOMMUNITIES Kneitel, Jamie	CONSERVATION PRACTICE EFFECTIVENESS AND APPLICATION FOR WATER QUALITY IMPROVEMENTS IN AGRICULTURAL SUBWATERSHEDS OF THE MACKINAW RIVER, ILLINOIS, USA Lemke, Maria; Kirkham, Krista; Kovacic, David; Wallace, Michael; Perry, William; Kraft, Jackie; Noto, Terry; Maybanks, Ashley; Marino, Adrienne	

250 CF	250 DE	254 B	253 AB	251 AB	251 DE	SESSION
S01: The environmental flow and water management nexus: implementation challenges, strategies, and outcomes of environmental flow programs <i>Moderator: Theodore Grantham</i>	C25: Food Webs <i>Moderator: Gregor Hamilton</i>	C31: Organic Matter Processing <i>Moderator: Jason Taylor</i>	C13: Ecotoxicology <i>Moderator: William Clements</i>	S14: Heterotrophic Regimes in Rivers: Technical and conceptual advances <i>Moderator: Joanna Blaszczak</i>	S10: Biogeomorphic agents: Role of organisms in propagating change in fluvial ecosystems <i>Moderator: Lindsey Albertson</i>	11:00 AM - 11:15 AM
CHALLENGES TO IMPLEMENTING ENVIRONMENTAL FLOWS IN OKLAHOMA Elkin, Kimberly	LINKING ARTEMIA TO THE BENTHOS: DO MICROBIALITES SUPPORT BRINE SHRIMP PRODUCTION IN THE GREAT SALT LAKE Barrett, Katherine L.; Belovsky, Gary E.	AN IN SITU TEST SUPPORTS STRONG NEGATIVE ALGAL PRIMING OF LEAF DECOMPOSITION IN A LENTIC ECOSYSTEM Kuehn, Kevin; Halvorson, Halvor; Findlay, Robert; Francoeur, Steven	SPATIOTEMPORAL ENDOCRINE DISRUPTION ACTIVITY IN AN EFFLUENT-IMPACTED RIVER UNDER LOW INSTREAM FLOW: INTEGRATING FIELD AND LABORATORY ASSESSMENTS Franco, Marco; Burket, S. Rebekah; Sims, Jaylen; Lovin, Lea; Ashcroft, Craig; Luers, Michael; Brooks, Bryan; Lavado, Ramon	DEVELOPMENT OF EXTENSIBLE SOFTWARE TO INFER ECOSYSTEM METABOLIC RATES FROM MULTIVARIATE METABOLITE SIGNALS IN STREAMS Payn, Robert; Mohr, Elizabeth; Isaksen-Swensen, Elfrida; Schlotfeldt, Todd; Poole, Geoffrey; Reinhold, Ann Marie; DeGrandpre, Michael; Blaszczak, Joanna; Hall, Robert; Izurieta, Clemente; Valett, H. Maurice	NET-SPINNING CADDISFLIES REDUCE STREAMBED HYDRAULIC CONDUCTIVITY MacDonald, Michael; Poole, Geoffrey; Albertson, Lindsey	11:15 AM - 11:30 AM
FLOW-ECOLOGY RELATIONSHIPS ACROSS THE GREAT PLAINS Brewer, Shannon; Mollenhauer, Robert; Wedgeworth, Maeghen; Swedberg, Dusty; Perkin, Joshua; Hart, Rheannon	FISH INVADERS INVOKE TROPHIC NICHE SHIFTS IN NATIVE SPECIES Rogosch, Jane; Olden, Julian	SOY-BASED DENITRIFICATION POTENTIAL: CROP LITTER TRANSPORT, BREAKDOWN AND ASSOCIATED BIOGEOCHEMICAL PROCESSES IN MISSISSIPPI DELTA FRESHWATER AGROECOSYSTEMS Taylor, Jason M.; Lizotte, Richard; Testa, Sam; Halvorson, Halvor; Kuehn, Kevin	TADPOLE SHRIMP IN AN ANTIBIOTIC SOUP: ARE WE CREATING MONSTERS? Streit, McKayla; O'Neill, Brian	THE PREVALENCE OF HYPOXIA IN RIVER NETWORKS AND THE ROLE OF NOT SO DEAD ZONES IN ELEMENT CYCLING Carter, Alice; Blaszczak, Joanna; Doyle, Martin; Helton, Ashley; Heffernan, Jim; Bernhardt, Emily	FACILITATION BY ECOSYSTEM ENGINEERS DIFFERENTIALLY INFLUENCES INVERTEBRATE SIZE STRUCTURE ACROSS A STRESS GRADIENT Tumolo, Benjamin; Albertson, Lindsey; Daniels, Melinda	11:30 AM - 11:45 AM
THE NATIONAL WATER RESERVE PROGRAM: A MEXICAN EXPERIENCE IN IMPLEMENTING ENVIRONMENTAL FLOWS Nava-López, Mariana Z.; Barrios, Eugenio; Escobar, Ninel; Salinas-Rodríguez, Sergio; Domínguez, Ricardo; González, Ignacio	DIETARY COMPARISONS OF FISHES IN THE U.S AND MONGOLIAN MOUNTAIN STEPPE Minder, Mario; Pyron, Mark; Arsenault, Emily; Artz, Caleb; Shields, Robert; Mathews, Gregory	TEMPERATURE EFFECTS ON SHREDDER AND MICROBIAL PROCESSING OF LEAF LITTER IN STREAMS DEPEND ON SEASON AND LITTER TYPE Cummins, Carolyn; Rosemond, Amy; Bumpers, Phillip; Tomczyk, Nathan; Benstead, Jonathan; Gulis, Vlad; Wenger, Seth	TADPOLE SHRIMP IN AN ANTIBIOTIC SOUP: ARE WE CREATING MONSTERS? Streit, McKayla; O'Neill, Brian	THE ROLE OF DENITRIFICATION IN CARBON REMOVAL FROM STREAM ECOSYSTEMS Nevorski, Kevin; Marcarelli, Amy	THERE'S NO DIVOT LIKE HOME: BENTHIC FORAGING FISH CREATE NOVEL HABITATS IN SOFT SEDIMENTS Booth, Michael; Hairston, Nelson; Flecker, Alexander	11:45 AM - 12:00 PM
TOWARDS EXPERIMENTALLY-BASED ENVIRONMENTAL FLOWS FOR INFRASTRUCTURE MANAGEMENT IN HIGH-ALTITUDE TROPICAL STREAMS Rosero-López, Daniela; Walter, Todd; Flecker, Alexander; De Brieve, Bert; González-Zeas, Dunia; Lloret, Pablo; Dangles, Olivier	STAGE-STRUCTURED PREDATION BY FISH IN LINKED AQUATIC-TERRESTRIAL FOOD WEBS: A MESOCOSM EXPERIMENT Kanz, Abraham; Wesner, Jeff	DIVING INTO MURKY WATERS - EFFECTS OF BROWNIFICATION ON STREAM BIOFILM QUALITY, FUNCTIONING AND STRUCTURE Rajakallio, Maria; Jyväsjärvi, Jussi; Taipale, Sami; Louhi, Pauliina; Muotka, Timo	FLOOD-PULSE CONTROLS ON HETEROTOPIC PROCESSES AND FOOD-WEB PRODUCTIVITY IN THE MEKONG RIVER BASIN Holtgrieve, Gordon; Miller, Benjamin; Sabo, John	EMERGENT HYDRODYNAMICS, SKIMMING FLOW, AND THE OPTIMAL DENSITIES FOR MUSSEL COVERED BEDS IN LABILE RIVERS Sansom, Brandon; Bennett, Sean; Atkinson, Joseph; Vaughn, Caryn	DENSITY-DEPENDENT EFFECTS OF FRESHWATER MUSSELS ON GROWTH OF EMERGENT MACROPHYTES Lopez, Jonathan; Parr, Thomas; Allen, Daniel; Vaughn, Caryn	12:00 PM - 12:15 PM
IMPACTS OF RIVER MODIFICATIONS ON FOOD WEBS – LESSONS FROM COLLECTIONS IN AUSTRALIA AND THE AMERICAN SOUTHWEST Hamilton, Gregor; Turner, Thomas	AMONG AND WITHIN-SPECIES FUNCTIONAL VARIABILITY OF AQUATIC AND TERRESTRIAL MACRO-DETRITIVORES Rota, Thibaut; Pey, Benjamin; Chauvet, Eric; Lecerf, Antoine	LIPID PEROXIDATION AND MICRONUCLEI INDUCTION IN METHYLMERCURY EXPOSED ANABAS TESTUDINEUS (BLOCH, 1792). Seethalekshmi, Swetha	THE INFLUENCE OF LIFE STAGE ON THE SENSITIVITY OF AQUATIC INSECTS TO METALS IN STREAMS Kotalik, Christopher; Clements, William	INTERNAL FEEDBACKS BETWEEN VEGETATION AND COASTAL MARSH PERSISTENCE: WHAT HAPPENS WHEN THE SYSTEM IS ALTERED? Braswell, Anna		12:15 PM - 12:30 PM



Thursday — Afternoon Oral Presentation

	150 G	150 DEF	151 ABC	151 G	151 DEF	250 AB
SESSION	S24: Supporting freshwater policy and decision making in the modern/digital age <i>Moderator: Kristen Bouska</i>	C17: Bioassessment <i>Moderator: Chad Larson</i>	S09: Freshwater Salinization: Science for Solutions <i>Moderator: Tony Timpano</i>	S15: Towards a predictive understanding of metacommunity dynamics in freshwater ecosystems <i>Moderator: Kurt Anderson</i>	C27: Landuse and Non-Point Source Impacts <i>Moderator: Kay Stefanik</i>	S12: Climate change in high-gradient mountain streams <i>Moderator: Scott Hotaling</i>
2:00 PM - 2:15 PM	INCREASING THE EFFICIENCY OF FRESHWATER CONSERVATION PLANNING Domisch, Sami; Friedrichs, Martin; Hein, Thomas; Borgwardt, Florian; Wetzig, Annett; Kakouei, Karan; Martinez-López, Javier; Bagstad, Kenneth; Magrath, Ainhoa; Balbi, Stefano; Villa, Ferdinando; Funk, Andrea; Hermoso, Virgilio; Langhans, Simone D.; Jähnig, Sonja C.	QUANTIFYING STREAM PERIPHYTON COMMUNITY RESPONSES TO NUTRIENT AMENDMENTS USING A MOLECULAR APPROACH Hagy, James; Houghton, Katelyn; Beddick, David; James, Joseph; Friedman, Stephanie; Devereux, Richard	FRESHWATER SALINIZATION: THE DIRECT AND INDIRECT IMPACTS ON INDIVIDUALS, POPULATIONS, AND FOOD WEBS Relyea, Rick; Mattes, Brian; Hintz, William; Schuler, Matt; Coldsnow, Kayla; Hurley, Jennifer; Lind, Lovisa; Jones, Devin; Stoler, Aaron	INTERACTIVE EFFECTS OF FLOW REGIME ALTERATION AND PROPAGULE PRESSURE IN DRIVING LARGE-SCALE PATTERNS OF FISH INVASION Ruhl, Albert; Comte, Lise; Grantham, Ted	TRACKING STREAMFLOW CHANGE FROM SUBURBAN DEVELOPMENT AND GREEN STORMWATER INFRASTRUCTURE Hopkins, Kristina; Bhaskar, Aditi; Woznicki, Sean	VARIATION IN OXYGEN, TEMPERATURE AND FLOW IN STREAMS AND HOW THEY INFLUENCE THE BEHAVIOR OF THE GIANT SALMONFLY, PTERONARCYS CALIFORNICA (INSECTA: PLECOPTERA) Birrell, Jackson H.; Frakes, Jameson; Woods, H. Arthur
2:15 PM - 2:30 PM	LONG-TERM ALGAE DYNAMICS THROUGH A LANDSAT LENS Tate, Shanae; Jackson, Mark; Hansen, Neil; Hansen, Carly	THE FIRST STATEWIDE STREAM MACROINVERTEBRATE BIOASSESSMENT IN WASHINGTON STATE WITH A RELATIVE RISK AND ATTRIBUTABLE RISK ANALYSIS FOR MULTIPLE STRESSORS Larson, Chad	THE MULTIPLE PATHWAYS THAT SALTS CAN MOVE ACROSS RIPARIAN-STREAM BOUNDARIES. Entrekin, Sally; Clay, Natalie; Gruntz, Connor; Mogilevski, Anastasia; Howard-Parker, Brooke; Evans-White, Michelle	SPECIES PAIRS ASSOCIATIONS, NULL MODLES, AND TESTS OF MECHANISMS STRUCTURING ECOLOGICAL COMMUNITIES Jackson, Donald; Coredero, Ruben	INFLUENCE OF LAND USE ON CONCENTRATIONS OF TOTAL DISSOLVED NITROGEN, NITRATE, AMMONIUM, AND NITRITE IN SOUTHEASTERN US PIEDMONT HEADWATER STREAMS Burke, Roger	AQUIFER STONEFLIES (PLECOPTERA) ARE TOLERANT OF ANOXIA AND HYPOXIA COMPARED TO BENTHIC SPECIES Malison, Rachel; Jacobson, Hailey; Hand, Brian; Luikart, Gordon; Stanford, Jack
2:30 PM - 2:45 PM	HUMAN DOMINATION OF THE GLOBAL WATER CYCLE EXCLUDED FROM DEPICTIONS AND PERCEPTIONS Abbott, Benjamin; Bishop, Kevin; Zarnetske, Jay; Minaudo, Camille; Chapin iii, F. S.; Krause, Stefan; Hannah, David; Godsey, Sarah; Plont, Stephen; Frei, Rebecca; Hampton, Tyler; Buhman, Madeline; Sayedi, Sayede; Pinay, Gilles	USING CONCEPTS FROM RIVPACS MODELS TO IMPROVE MULTI METRIC INDEX BIOASSESSMENTS Shupryt, Michael	EFFECTS OF LOW-LEVEL INCREASES IN CONCENTRATION OF TWO COMMON SODIUM SALTS ON LEAF LITTER DETRITUS AND ASSOCIATED AQUATIC MICROBIAL COMMUNITIES Howard-Parker, Brooke; Williams, Thomas; Clay, Natalie; Entrekin, Sally; Evans-White, Michelle	INCORPORATING NETWORK CONNECTIVITY INTO STREAM CLASSIFICATION FRAMEWORKS Denison, Colby; Scott, Mark C.; Peoples, Brandon K.	INVERTEBRATE COMMUNITY SHIFTS IN STREAMS EXPOSED TO NATURAL BITUMEN AND OIL SANDS SURFACE MINING IN THE ATHABASCA OIL SANDS AREA, ALBERTA, CANADA Ritcey, Allison	LINKING THERMAL TOLERANCE TO GENE EXPRESSION IN ALPINE STONEFLIES IMPERILED BY CLIMATE CHANGE Hotaling, Scott; Shah, Alisha; McGowan, Kerry; Tronstad, Lusha; Giersch, J. Joseph; Finn, Debra; Woods, H. Arthur; Dillon, Michael; Kelley, Joanna
2:45 PM - 3:00 PM	MANAGING FOR RESILIENCE OF COLDWATER FISH HABITAT IN GLACIAL LAKES USING LAKE-SPECIFIC WATERSHED LAND USE THRESHOLDS Hansen, Gretchen; Jacobson, Peter; Wehrly, Kevin	INCORPORATING TRAIT AND METACOMMUNITY THEORY INTO LAKE RESEARCH Wu, Naicheng	STREAM ALGAL RESPONSES TO NATURAL GAS ACTIVITY IN AN AGRICULTURAL LANDSCAPE IN ARKANSAS Evans-White, Michelle; Entrekin, Sally; Austin, Bradley; Baker, Lucy; Verkamp, Hannah; Dias, Samuel; Tipton, Zachary; Clay, Natalie; Mogilevski, Anastasia	AN INVESTIGATION OF SPATIAL COMPLEXITY AND DIVERSITY OF TERRESTRIAL INSECTIVORES IN A RIVER-FLOODPLAIN METACOMMUNITY Ortiz, Jade; Baxter, Colden	LOSS OF ALPINE GRASSLANDS AND PASTURES THREATENS TAXONOMIC AND FUNCTIONAL DIVERSITY OF STREAM BENTHIC MACROINVERTEBRATES Scotti, Alberto; Füreder, Leopold; Marsoner, Thomas; Tappeiner, Ulrike; Stawinoga, Agnieszka Elzbieta; Bottarin, Roberta	LANDSCAPE PHENOMICS: PREDICTING VULNERABILITY TO CLIMATE CHANGE BY LINKING ENVIRONMENTAL HETEROGENEITY TO GENETIC AND PHENOTYPIC VARIATION IN MTN STREAM FROGS Funk, W. Chris; Forester, Brenna; Cicchino, Amanda; Shah, Alisha; Trumbo, Daryl; Ghalambor, Cameron; Dunham, Jason; Landguth, Erin
3:00 PM - 3:15 PM	CHALLENGES IN FRESHWATER BIODIVERSITY: JOINING FORCES TO FACILITATE MONITORING, DATA COMPILATION AND PUBLISHING Schmidt-Kloiber, Astrid; De Wever, Aaike; Bremerich, Vanessa; Strackbein, Joerg; Hering, Daniel; Jähnig, Sonja; Martens, Koen; Tockner, Klement	MICROBIAL COMMUNITY AS A BIOMARKER TO REFLECT THE ANTHROPOGENIC LEVEL ON RIVER ECOSYSTEM Bai, Yaohui	SALTS CAN SUBSIDIZE OR IMPAIR SHREDDER PERFORMANCE: SALT ION TYPE AND PATHWAY OF EXPOSURE MATTER Mogilevski, Anastasia; Howard-Parker, Brooke; Clay, Natalie; Evans-White, Michelle; Entrekin, Sally		EFFECTS OF INTERACTIONS BETWEEN LAND USE AND STREAM GEOMORPHIC FEATURES ON NUTRIENT LOADINGS Stefanik, Kay C.; Sullivan, S. Mažeika P.	RAPIDLY SHIFTING WATERSCAPES IN THE TROPICAL HIGH ANDES OF SOUTHERN PERU Reider, Kelsey; Caine, Allison; Donnelly, Maureen
3:15 PM - 3:30 PM	LANDSCAPE-SCALE HYDROSPATIAL ANALYSIS OF FLOODPLAIN INUNDATION FOR ECOLOGICAL AND MANAGEMENT APPLICATIONS: A CASE STUDY OF THE UPPER MISSISSIPPI RIVER SYSTEM Van Appledorn, Molly; De Jager, Nathan; Rohweder, Jason	BENTHIC ALGAL COMMUNITIES AS BIOLOGICAL MONITORS OF FUNCTIONAL NUTRIENT THRESHOLDS: A CASE STUDY OF AGRICULTURAL STREAMS IN ALBERTA, CANADA van Klaveren, Nikki; Kobryn, Madison; Piorkowski, Gregory; Tank, Suzanne; Vinebrooke, Rolf			THRESHOLD RESPONSES OF TEMPERATE FISH COMMUNITIES TO WATERSHED LAND USE ACROSS THE WORLD Chen, Kai; Olden, Julian	

250 CF	250 DE	254 B	253 AB	251 AB	251 DE	SESSION
S01: The environmental flow and water management nexus: implementation challenges, strategies, and outcomes of environmental flow programs <i>Moderator: Eric Stein</i>	C12: Conservation Ecology <i>Moderator: Casey Pennock</i>	C24: Eutrophication <i>Moderator: Michael Hassett</i>		S14: Heterotrophic Regimes in Rivers: Technical and conceptual advances <i>Moderator: Lauren Koenig</i>	C38: Hyporheic Processes <i>Moderator: Jay Zarnetske</i>	2:00 PM - 2:15 PM
TRANSLATING COMMUNITY DYNAMICS INTO METRICS USEFUL FOR WATER MANAGERS Freeman, Mary; Wheeler, Kit; Rack, Laura; Emanuel, Ben; Craig, Laura S.; Wenger, Seth	PERSISTENCE AND ACCUMULATION OF ENVIRONMENTAL DNA FROM AN ENDANGERED DRAGONFLY: PRELIMINARY RESULTS Schmidt, Kristie; Maestas, Sarah; Soluk, Daniel; Britten, Hugh	A PALEOLIMNOLOGICAL HISTORY OF EUTROPHICATION IN UTAH LAKE King, Leighton; Brothers, Soren; Brahney, Janice		CARBON CYCLING IN STREAMS Demars, Benoit; Friberg, Nikolai; Thornton, Barry	ABUNDANCE AND DISTRIBUTION OF LAKES ACROSS CALIFORNIA'S SIERRA NEVADA Parisek, Christine; Sadro, Steve; Rypel, Andrew	2:15 PM - 2:30 PM
A TOOL TO EVALUATE INSTREAM FLOW NEEDS AT COARSE BED CHANNELS IN THE STATE OF COLORADO Oikonomou, Panagiotis; Sidhu, Rumpal; Wible, Tyler; Morrison, Ryan	SOCIAL MEDIA DATA REVEALS ANGLER MOVEMENT NETWORKS AND RISK OF SPECIES INVASIONS Fricke, Rachel; Wood, Spencer; Olden, Julian	WILDFIRE AND WATER QUALITY: USING FLUORESCENCE SPECTROSCOPY TO PREDICT THE BIODEGRADABILITY OF DISSOLVED ORGANIC MATTER Patch, Leika		INFLUENCE OF CATCHMENT MORPHOLOGY ON BIO-PHYSICAL DRIVERS OF CARBON FLUXES IN HEADWATER STREAMS Seybold, Erin; McGlynn, Brian	QUANTIFYING HYPORHEIC FLOW IN BEAVER PONDS OF VARYING SIZE AND STREAM MORPHOLOGY Sanders, Colton	2:30 PM - 2:45 PM
UNDERSTANDING RIVERS AND THEIR SOCIAL RELATIONS: A CRITICAL STEP FOR ADVANCING ENVIRONMENTAL WATER MANAGEMENT Anderson, Elizabeth P; Jackson, Sue	BARTRAM'S BASS THREAT ASSESSMENT AND CONSERVATION PLANNING IN THE UPPER SAVANNAH RIVER BASIN Brumm, Kyle; Vine, Josh; Peoples, Brandon	NUTRIENT AND TRACE METAL IMPACT ON GREAT LAKES ALGAL GROWTH AND COMMUNITY COMPOSITION Stoll, Jordyn; Fitzgibbon, Andrea; Costello, David; Larson, James		INTEGRATING DIEL PATTERNS IN DISSOLVED OXYGEN, CARBON DIOXIDE, AND METHANE FOR AN IMPROVED UNDERSTANDING OF RESPIRATION REGIMES IN STREAMS Hotchkiss, Erin R.; Plont, Stephen; ODonnell, Brynn; Gallagher, Morgan; Bretz, Kristen	ASSESSMENT OF THE FORMATION CRITERIA FOR HYPORHEIC ANOXIC MICROZONES WITH COMPUTATIONAL MODELING: INTERACTIONS OF HYDRAULICS, NUTRIENTS, AND BIOLOGGING Zarnetske, Jay; Roy Chowdhury, Sinchan; Phanikumar, Mantha; Briggs, Martin; Day-Lewis, Fred; Singha, Kamini	2:45 PM - 3:00 PM
USING STREAM FOOD WEB PRODUCTIVITY AND FISH BIOENERGETICS TO INFORM INSTREAM FLOW NEEDS Kelson, Suzanne; Caldwell, Timothy; Stauffer-Olsen, Natalie; McBain, Scott; Henery, Rene; Chandra, Sudeep	POTENTIAL FOR A MULTI-SPECIES REFUGE: INVESTIGATING COMPETITION BETWEEN HISTORICALLY CO-OCCURRING CYPRINIDS Kruse, Christi; Shurin, Jon; Holmquist, Jeff; Jones, Natalie; Parmenter, Steve; Buckmaster, Nick	NUTRIENT INPUTS MEASURABLY INCREASE SIZE AND DECREASE TIME TO METAMORPHOSIS OF TOADS: A MESOCOSM APPROACH Milanovich, Joseph; Vosburgh, Michael; Lentini, Isabella; Berg, Martin		DIEL VARIATION IN THE STABLE ISOTOPE SIGNATURE OF CO ₂ IN PRODUCTIVE STREAMS Blaszczak, Joanna; Hall, Robert	GROUNDWATER FLUXES AS A DRIVER OF SPATIAL PATTERNS OF ECOLOGICAL FUNCTION AND STRUCTURE IN A HEADWATER STREAM NETWORK Yates, Adam G.; Kroeze, Shayla; Gotkowski, Nicole; Boreux, Max; Roy, Jim; Robinson, Clare	3:00 PM - 3:15 PM
USING A MULTI-MODELING APPROACH TO DISENTANGLE THE EFFECTS OF HUMAN-DRIVEN FLOW ALTERATIONS ON BENTHIC COMMUNITIES IN RIVERS OF THE NORTH AND SOUTHEAST US Kennen, Jonathan; Cuffney, Thomas; Qian, Song; May, Jason	RIVERINE FRAGMENTATION BY SMALL HYDROPOWER DAMS THREATEN BRAZILIAN MIGRATORY FISHES Couto, Thiago; Messenger, Mathis L.; Olden, Julian	WHEN THE PROBLEM DOESN'T WASH AWAY: PHOSPHORUS BUDGET OF INTERNAL AND EXTERNAL LOADING STUDIES AND NUTRIENT BIOASSAY IDENTIFY WATERSHED RESTORATION GOALS Hassett, Michael; Oudsema, Maggie; Steinman, Alan		INTEGRATING CONTINUOUS SENSOR DATA WITH OBSERVATIONAL SAMPLING AT A CONTINENTAL SCALE TO ENABLE ESTIMATES OF CARBON FLUX, REAERATION AND METABOLISM IN STREAMS Cawley, Kaelin; Goodman, Keli		3:15 PM - 3:30 PM
COLORADO RIVER ECOSYSTEM RESPONSES TO THE 2018 BUG FLOW EXPERIMENT FROM GLEN CANYON DAM Muehlbauer, Jeffrey; Kennedy, Ted	RAZORBACK SUCKER MOVEMENTS IN NOVEL ECOSYSTEMS: RIVER-RESERVOIR EXCHANGES AND EXPERIMENTAL TRANSLOCATIONS Pennock, Casey; McKinstry, Mark; Gido, Keith; Cathcart, Nate; Cheek, Chris; Creighton, Katie; Elverud, Darek; Francis, Travis; Gilbert, Eliza; Hedden, Skyler; Hines, Brian; MacKinnon, Peter; Schleicher, Benjamin; Speas, David	ASSESSING TROPHIC STATUS OF A KARST GLACIER LAKE-GAHAR, IRAN Ghiyasabadi, Monir		EMISSIONS OF CARBON DIOXIDE FROM HEADWATER STREAMS ACROSS AN URBANIZATION GRADIENT Robison, Andrew; Wollheim, Wilfred		



Posters

The official Poster Session time will be Wednesday,
May 22, from 1:30 – 4:00 pm in Ballroom ABCD.

C01 Algae

- 1 **Kelsey Solomon**, Maura Dudley, Rebecca Bixby, Catherine Pringle
EFFECTS OF RIPARIAN RHODODENDRON REMOVAL AND TOP-DOWN CONTROL BY CRAYFISH ON DIATOM COMMUNITY STRUCTURE IN SOUTHERN APPALACHIAN STREAMS
- 2 **Willow Newman**, Matthew Cooper, Laura Moore, Donald Uzarski, Steven Francoeur
NITROGEN-FIXING DIATOMS AS INDICATORS OF HISTORICAL NITROGEN LIMITATION IN LAURENTIAN GREAT LAKES COASTAL WETLANDS
- 3 **Isabelle Andersen**, Tanner Williamson, Michael Vanni
SEASONAL NUTRIENT LIMITATION OF PHYTOPLANKTON IN A HYPER-EUTROPHIC RESERVOIR: THE ROLE OF PHOSPHORUS AND NITROGEN FORM

C02 Fish and Other Aquatic Vertebrates

- 4 **Alan Mock**, Carl R. Ruetz III, Dan Mays, Archie Martell
EVALUATING REMOTE SITE INCUBATORS TO SUPPORT ARCTIC GRAYLING RESTORATION IN MICHIGAN
- 5 **Meryl Mims**, Jacob Helmann, Meryl Mims
EXPLORING DISPERSAL AND GENETIC CONNECTIVITY THROUGH A NEWLY DISCOVERED ARIZONA TREEFROG POPULATION
- 6 **Greg Jacobs**, Phillip Bumpers, Seth Wenger
FISH COMMUNITY DIVERSITY AND ABUNDANCE ACROSS AN URBANIZATION GRADIENT
- 7 **Cancelled**
- 8 **Isabel Evelyn**, Caitlin Conn, Mary Freeman, Amy Rosemond
ONE FISH, TWO FISH, LOW STREAM... FULL FISH? AN EXPLORATION OF THE EFFECTS OF DROUGHT ON STREAM DARTERS AND THEIR PREY
- 9 **Amarbat Otgonganbat**
PLASTICS POLLUTION SURVEY OF FOUR RIVERS IN MONGOLIA AND THE UNITED STATES
- 10 **Amanda Popovich**, Ashley Moerke, Patrick Shirey, Gary Lamberti
RESPONSE OF FISH COMMUNITIES TO AN EXPERIMENTAL ADDITION OF LARGE WOOD IN THREE NORTHERN MICHIGAN STREAMS
- 11 **Spencer Phillips**, Christy Soldo, Nathan Tillotston, Benjamin Tumolo, Michael Flinn
RISE IN TEMPERATURES, DIMINISHING RETURNS: LAKE TEMPERATURE EFFECTS ON THE MASS OF LARVAL FISH CAUGHT WITHIN KENTUCKY LAKE.
- 12 **Paul DeRolf**
SPATIOTEMPORAL VARIATION IN LONG-TERM FISH ASSEMBLAGES OF BUCK CREEK, INDIANA
- 13 **Matthew Pyne**, Jami Brown
THE DISTRIBUTION OF THE AMERICAN ALLIGATOR IN A RIVERINE HABITAT IN TEXAS

C03 Invertebrates

- 14 **Daniel Edwards**
A SPACIAL ANALYSIS OF THE IMPACTS OF LOW-HEAD IMPOUNDMENTS ON MACROINVERTEBRATES COMMUNITIES
- 15 **Holly Kundel**, Katie DeGoosh, Cynthia Loftin, Emily Schilling
ARE CHAOBORUS MANDIBLES IN LAKE SEDIMENTS A RELIABLE INDICATOR OF HISTORICAL FISH ABSENCE IN POST-GLACIATED REGIONS OF MAINE AND MINNESOTA?
- 16 **Corrie Nyquist**, Gisli Mar Gislason, Sigrun Oddgeirsdottir, Leonard Ferrington, Jr.
ASSESSING CHIRONOMID LONGEVITY IN THERMALLY VARIABLE ICELANDIC STREAMS
- 17 **Khalil Carson**, Checo Colon-Gaud, Daniel McGarvey
BIOGEOGRAPHY OF BENTHIC INVERTEBRATE BIOMASS: DOES FAMILY-LEVEL BIOMASS TRACK REGIONAL VARIATION IN STREAM TEMPERATURE?
- 18 **Kaitlynn Davis**, Megann Harlow, James Kennedy
BIOMONITORING AT THE DALLAS-FORT WORTH INTERNATIONAL AIRPORT: THE USE OF CHIRONOMIDAE (DIPTERA) LARVAE IN DETECTING ENVIRONMENTAL CHANGES IN URBAN STREAMS
- 19 **Katherine Cline**, Tamara Contador, James Kennedy, Taylor Gillum, Sabrina Moore
CHIRONOMIDAE SURFACE-FLOATING PUPAL EXUVIAE ALONG A SUB ANTARCTIC ALTITUDINAL GRADIENT
- 20 **Chris Watson**, Carissa Ganong
DETERMINING THE IMPACT OF INCREASED PH ON CHIRONOMID GROWTH RATES IN NEOTROPICAL STREAMS
- 21 **Uttam Rai**, Jennifer Shanteau, Kimberly Gerlock, Grant DeJong, Jennifer Lynch
DIVERSITY AND DISTRIBUTION OF ELMIDAE (COLEOPTERA) IN TWO ADJACENT MOUNTAIN STREAMS
- 22 **Morgan Eytcheson**, Allison Crowell, Holly Travis, David Janetski
EPHEMERAL LIFE: A COMPARISON OF INVERTEBRATE COMMUNITIES FOUND IN SEVERAL TYPES OF POOLS
- 23 **Laura Bajurin**, Nicholas Macias, Eric Palkovacs
EXPLORING DRIFT-BENTHOS RELATIONSHIPS WITHIN A 3RD ORDER REDWOOD STREAM ON CALIFORNIA'S CENTRAL COAST
- 24 **Samuel Wells**, Makayla Oborn, Irania Hernandez, Courtney Webb, Michael Contente, Fredric Govedich
IMPACTS OF THE BRIAN HEAD FIRE ON THE FRESHWATER MACROINVERTEBRATES OF THE MARKAGUNT PLATEAU (2016-2019)
- 25 **Truman Sherk**
INSECT EMERGENCE FROM A SHALLOW POND IN A WET MEADOW IN THE CONIFEROUS FOREST OF THE CASCADE MOUNTAINS
- 26 **Marisa Macchia**, Austin Harrison, Rachel McNeish, John Jackson, John Wallace
LAND USE EFFECTS ON A TEMPORAL COMPARISON OF THE PRESENCE AND ABUNDANCE OF MICROPLASTICS IN RIVERINE SYSTEMS
- 27 **Adu Babasola**
MACROINVERTEBRATES AS BIOLOGICAL INDICATORS OF WATER QUALITY IN RIVERS OBA AND OSUN, SOUTH WEST, NIGERIA
- 28 **Nicole Pedisich**, Jeffrey Heilveil
POPULATION GENETICS OF NY POPULATIONS OF PTERONARCYS BILOBA AND ITS POSITION WITHIN THE GENUS.
- 29 **Leivur Janus Hansen**, Agnes-Katharina Kreiling, Gisli Mar Gislason
SEASONAL VARIATION IN CHIRONOMID COMMUNITIES IN TWO FAROESE STREAMS

- 30 **Agnes-Katharina Kreiling**, Eoin O’Gorman, Jón S. Ólafsson, Bjarni K. Kristjánsson, Snæbjörn Pálsson
SEASONAL VARIATION OF INVERTEBRATE ABUNDANCE AND DIET COMPOSITION OF ARCTIC CHARR IN AN ICELANDIC SPRING SYSTEM
- 31 **Sara Thompson**
STABLE ISOTOPE ANALYSIS OF CRAYFISH ORCONECTES VIRILIS DIET IN VARIABLE RIVERS
- 32 **Fredric Govedich**, Bonnie Bain
TENDER LOVING LEECHES
- 33 **Rebecca Black**, Sandra Clinton, PhD
THRESHOLD DISCHARGE EFFECTS ON MACROINVERTEBRATES ALONG AN URBANIZATION GRADIENT IN PIEDMONT HEADWATER STREAMS
- 34 **Rachel Orzechowski**, Alan Steinman
USING MACROINVERTEBRATES AS BIOINDICATORS: AN ASSESSMENT OF THE ECOLOGICAL RESTORATION OF MUSKEGON LAKE, MICHIGAN
- 35 **Ruric Bowman**, Brittany Lenze, Robert Smith
VERTICAL MIGRATION OF ADULT PLECOPTERA (STONEFLIES) ABOVE FORESTED HEADWATER STREAMS

C04 Microbial Ecology

- 36 **Tori Hebert**, Halvor Halvorson, Cody Pope, Robert Findlay, Steven Francoeur, Kevin Kuehn
A TEST OF ALGAL PRIMING EFFECTS DURING TYPHA LATIFOLIA DECOMPOSITION UNDER CONTRASTING DISSOLVED NUTRIENT LEVELS
- 37 **Cody Pope**, Halvor Halvorson, Tori Hebert, Robert Findlay, Steven Francoeur, Kevin Kuehn
EFFECTS OF LIGHT AND NUTRIENT AVAILABILITY ON ALGAL STIMULATION OF MICROBIAL HETEROTROPHS ASSOCIATED WITH DECOMPOSING WOOD
- 38 **Hanna Burgin**, Anne Bennion, Kate Thorpe, Jaron Hansen, Zachary Aanderud
PRETREATMENT OF WASTE ACTIVATED SLUDGE WITH CALDICELLULOSIRUPTOR BESCII INCREASES METHANE PRODUCTION DURING ANAEROBIC DIGESTION
- 39 **Stephanie Koury**, Halvor Halvorson, Joel Bonney, Robert Findlay, Steve Francoeur, Kevin Kuehn
THE EFFECTS OF LIGHT AND TEMPERATURE GRADIENT EXPOSURE ON ENZYME ACTIVITY OF LEAF LITTER-ASSOCIATED MICROBIAL DECOMPOSERS
- 40 **Joel Bonney**, Kevin Kuehn, Halvor Halvorson, Robert Findlay, Steven Francoeur
THE EFFECTS OF LIGHT AND TEMPERATURE ON FRESHWATER MICROBIAL BIOMASS, PRODUCTION, COMPOSITION AND INTERACTIONS
- 41 **Paul Risteca**, Kelli Rogers, Rachel McNeish, Lisa Kim, Timothy Hoellein, John Kelly
VARIATIONS IN RIVERINE MICROPLASTIC ABUNDANCE AND ASSOCIATED MICROBIOMES WITH WATERSHED LAND USE

C05 Unionid Ecology

- 42 **Adrian Moore**, Nika Galic, Richard Brain, Dan Hornbach, Valery Forbes
ASSESSING RISK TO IMPERILED SPECIES: MODELING FRESHWATER MUSSEL POPULATIONS
- 43 **Yong Cao**
MUSSEL-FISH DIVERSITY RELATIONSHIPS AT DIFFERENT SPATIAL SCALES

- 44 **Susanna LaGory**, Brant Fisher, Tomas Hook, Carolyn Foley
PREDICTING NATIVE UNIONID DISTRIBUTIONS ACROSS INDIANA, USA, USING AN ENSEMBLE MODELING APPROACH
- 45 **Vincent Butitta**, Emily Stanley, Andrew Rypel
UNDETECTABLE ENVIRONMENTAL DRIVERS OF UNIONID MUSSEL GROWTH IN TROUT LAKE, WI

C06 Large River Ecology

- 46 **Kaija Gahm**, Serenity Budd
EVALUATING THE DISTRIBUTION OF LARGE WOOD AND ITS IMPACT ON FISH COMMUNITY COMPOSITION IN THE UPPER MISSISSIPPI RIVER

C07 Lentic Ecology

- 47 **Lara Jansen**, Angela Strecker
DO INTRODUCED FISH AND NUTRIENTS AFFECT THE PREVALENCE OF CYANOBACTERIA BLOOMS IN MOUNTAIN LAKES?
- 48 **Dan Hornbach**, Emily Schilling, Holly Kundel
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BRADY, Cheyenne	C04 Microbial Ecology
BRADY, Valerie	C25 Food Webs
BRAGG, Zachary	C11 Community Ecology
BRAHNEY, Janice	C10 Biogeochemistry, C24 Eutrophication, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
BRASWELL, Anna	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
BRATSMAN, Samuel	C22 Disturbance
BRATT, Anika	C08 Urban Ecology
BRAUKMANN, Thomas	C17 Bioassessment, C30 Molecular Ecology
BRAUND, Danielle	C03 Invertebrates, C27 Landuse and Non-Point Source Impacts
BREMERICH, Vanessa	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
BRETZ, Kristen	S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
BREWER, Shannon	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
BRIGGS, Martin	C38 Hyporheic Processes
BRIGGS, Michelle	C07 Lentic Ecology, C25 Food Webs
BRINKMAN, Nichole	C04 Microbial Ecology
BRITTEN, Hugh	C12 Conservation Ecology
BROOKES, Allen	C02 Fish and Other Aquatic Vertebrates
BROOKS, Bryan	C13 Ecotoxicology
BROOKS, J. Renee	C10 Biogeochemistry
BROTHERS, Soren	C06 Large River Ecology, C10 Biogeochemistry, C24 Eutrophication
BROWN, Amy	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
BROWN, Bryan	S15 Towards a Predictive Understanding of Meta-community Dynamics in Freshwater Ecosystems
BRUCKERHOFF, Lindsey	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
BRUMM, Kyle	C12 Conservation Ecology
BRUNEAUX, Mattieu	C10 Biogeochemistry
BRUNO-COLLADOS, Daniel	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
BUCHWALTER, David	S09 Freshwater Salinization: Science for Solutions
BUCKMASTER, Nick	C12 Conservation Ecology
BUDNICK, William	C11 Community Ecology, C18 Biodiversity
BUDY, Phaedra	C02 Fish and Other Aquatic Vertebrates, C06 Large River Ecology, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
BUHMAN, Madeline	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
BUMPERS, Phillip	C08 Urban Ecology, C31 Organic Matter Processing, C32 Primary and Secondary Production
BUNN, Stuart	C32 Primary and Secondary Production, S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
BUORO, Mathieu	S13 The Times they are a Changing - Linking Organismal Phenology and Metabolic Regimes in River Ecosystems
BURDETT, Ayesha	C10 Biogeochemistry, S23 Enhance Your Work Through Incorporation of Public Engagement
BURFORD, Michele	C32 Primary and Secondary Production

BURGE, David	S07 What Makes the Fever Rise: Investigations of Variables Responsible for Riverine Algal Blooms
BURGIN, Amy	C10 Biogeochemistry
BURGIN, Amy J.	C10 Biogeochemistry, S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
BURKE, Roger	C27 Landuse and Non-Point Source Impacts, S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
BURKET, S. Rebekah	C13 Ecotoxicology
BURKHOLDER, JoAnn	C01 Algae
BURNS, Doug	S11 The Good, The Bad, and The Ugly News About Acidification in the 21st Century
BURROWS, Ryan	C10 Biogeochemistry
BUSCH, Michelle	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
BUTLER, Gavin	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
BUTMAN, David	C10 Biogeochemistry
CAI, Meijun	S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
CAI, Qinghua	S15 Towards a Predictive Understanding of Meta-community Dynamics in Freshwater Ecosystems
CAINE, Allison	S12 Climate Change in High-Gradient Mountain Streams
CALDWELL, Timothy	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
CALLAHAM, Mac	S03 To Learn Your Water, Study Your Soils: The Role of Soil Health in Freshwaters
CALLAM, Dan	C21 Communicating Science
CAMPEAU, Stephane	C18 Biodiversity
CANN, Armand	C02 Fish and Other Aquatic Vertebrates
CAPPS, Krista	C08 Urban Ecology, C11 Community Ecology, S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
CAREY, Cayelan	C20 Climate Change
CARLING, Greg	C04 Microbial Ecology, C22 Disturbance
CARLISLE, Daren	C17 Bioassessment, S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs, S07 What Makes the Fever Rise: Investigations of Variables Responsible for Riverine Algal Blooms, S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
CARLSON, Erick	S05 Damming the Amazon - Hydropower Proliferation in the World's Largest River System
CARLSON, Sam	C10 Biogeochemistry
CARLSON, Stephanie	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
CARRANZA, Lee Ann	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
CARRERA-MARTINEZ, Roberto	S03 To Learn Your Water, Study Your Soils: The Role of Soil Health in Freshwaters
CARRILLO, Carra	C36 Water Resource Management
CARTER, Alice	C32 Primary and Secondary Production, S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
CARVAJAL, Thaddeus	C15 Population Ecology
CARVALLO, Fernando	C20 Climate Change

CASANELIA, Simon	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
CASPER, Andrew	C06 Large River Ecology
CASPER, Nicole	S25 Biocultural Approaches in Freshwater Conservation
CASTANHO, Andrea	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
CASTELAR, Sara	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
CASTELLON, Benjamin	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
CATHCART, Nate	C12 Conservation Ecology
CAUVY-FRAUNIE, Sophie	S12 Climate Change in High-Gradient Mountain Streams
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CHAMBERLIN, Catherine	S07 What Makes the Fever Rise: Investigations of Variables Responsible for Riverine Algal Blooms, S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
CHAMBERS, Patricia A.	C01 Algae
CHANCE-OSSOWSKI, Connor	C25 Food Webs
CHANDRA, Sudeep	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
CHAPIN III, F. S.	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
CHAPMAN, Eric	C02 Fish and Other Aquatic Vertebrates
CHARA-SERNA, Ana	C06 Large River Ecology
CHASE, Dorothy	C26 Invasive Species
CHAUVET, Eric	C31 Organic Matter Processing
CHEEK, Chris	C12 Conservation Ecology
CHEEK, Christopher	C26 Invasive Species
CHELGREN, Nathan	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
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CLANCY, Niall	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
CLARK, Cara	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
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CLARK, Lisa	S28 Strengthening Interdisciplinary Approaches in Freshwater Science
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COLDENOW, Kayla	S09 Freshwater Salinization: Science for Solutions
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COLLINS, Sarah	C10 Biogeochemistry
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COLLINS, Scott	C04 Microbial Ecology
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COMPTON, Jana	C10 Biogeochemistry
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COREDERO, Ruben	S15 Towards a Predictive Understanding of Meta-community Dynamics in Freshwater Ecosystems
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CORY, Rose	C10 Biogeochemistry
COSBY, Bernard J.	S11 The Good, The Bad, and The Ugly News About Acidification in the 21st Century
COSTELLO, David	C10 Biogeochemistry, C24 Eutrophication, C37 Stoichiometry
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CRAIG, Laura S.	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
CRANDALL, Trevor	C10 Biogeochemistry, S23 Enhance Your Work Through Incorporation of Public Engagement
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CROMWELL, Kara	C03 Invertebrates, C37 Stoichiometry
CROOK, David	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
CROSS, Wyatt	C06 Large River Ecology, C20 Climate Change, C32 Primary and Secondary Production, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
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CROWL, Todd	C15 Population Ecology
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CUMMINGS, Jayln	S11 The Good, The Bad, and The Ugly News About Acidification in the 21st Century
CUMMINS, Carolyn	C31 Organic Matter Processing, S26 Scholarship of Teaching and Learning in Freshwater Science
CUNHA, Davi	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
CURTIS, William	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology

CUSICK, Daniel	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
D'ANDRILLI, Juliana	C06 Large River Ecology, S13 The Times they are a Changing - Linking Organismal Phenology and Metabolic Regimes in River Ecosystems
DANCZAK, Robert	S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
DANGLES, Olivier	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs, S12 Climate Change in High-Gradient Mountain Streams
DANIELS, Melinda	S08 Advancing Thermal Restoration of Rivers and Streams, S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
DANNER, Eric	S19 The Alliance for Freshwater Life ? Fostering Multidisciplinary Freshwater Research on Local to Global Scales
DARLING, John	C17 Bioassessment
DARWALL, William	S19 The Alliance for Freshwater Life ? Fostering Multidisciplinary Freshwater Research on Local to Global Scales
DATRY, Thibault	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
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DAVIDSON, Abigail	S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
DAVIS, Jessica	C02 Fish and Other Aquatic Vertebrates
DAVIS, Lisa	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
DAY, Samuel	S07 What Makes the Fever Rise: Investigations of Variables Responsible for Riverine Algal Blooms
DAY-LEWIS, Fred	C38 Hyporheic Processes
DE BAAT, Milo	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
DE BRIEVE, Bert	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
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DE JESUS CRESPO, Rebeca	C08 Urban Ecology
DE MENDOZA, Guillermo	S15 Towards a Predictive Understanding of Meta-community Dynamics in Freshwater Ecosystems
DE PALMA-DOW, Angela	C22 Disturbance, S23 Enhance Your Work Through Incorporation of Public Engagement
DE SOUZA, Lesley	S25 Biocultural Approaches in Freshwater Conservation
DE VRIES, Jip	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
DE WEVER, Aaike	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
DEAVER, Emily	S26 Scholarship of Teaching and Learning in Freshwater Science
DECKER, Paul	S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
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DEGRANDPRE, Michael	C06 Large River Ecology, S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
DELVECCHIA, Amanda	C09 Wetland Ecology
DEMARS, Benoit	S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
DEMI, Lee	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
DENISON, Colby	S15 Towards a Predictive Understanding of Meta-community Dynamics in Freshwater Ecosystems
DENTON, Marianne	S23 Enhance Your Work Through Incorporation of Public Engagement
DERE, Ashlee	C28 Land-Water Interfaces
DERRYBERRY, DeWayne	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
DETENBECK, Naomi	S08 Advancing Thermal Restoration of Rivers and Streams
DETMER, Thomas	C07 Lentic Ecology
DEVEREUX, Richard	C17 Bioassessment
DIABAT, Mousa	S08 Advancing Thermal Restoration of Rivers and Streams
DIAS, Samuel	S09 Freshwater Salinization: Science for Solutions
DIAZ, Pete	C11 Community Ecology
DIBONA, Pamela	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
DIJKSTRA, Paul	S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
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DIMICK, Jeffrey	C17 Bioassessment
DIXON, Mark	C06 Large River Ecology
DODDS, Walter	C10 Biogeochemistry, C22 Disturbance, S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions, S05 Damming the Amazon - Hydropower Proliferation in the World's Largest River System, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
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DOMÍNGUEZ, Ricardo	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
DOMISCH, Sami	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
DONG, Xiaoli	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
DONNELLY, Maureen	S12 Climate Change in High-Gradient Mountain Streams
DORETTO, Alberto	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
DORETTO, Alberto	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
DORFF, Nathan	C03 Invertebrates
DORIA, Carolina	S19 The Alliance for Freshwater Life ? Fostering Multidisciplinary Freshwater Research on Local to Global Scales
DORN, Taylor	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
DORNBLASER, Mark	C10 Biogeochemistry

DOUGHERTY, Kaitlyn	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
DOUGLAS, Michael	C26 Invasive Species, S25 Biocultural Approaches in Freshwater Conservation
DOUGLASS, Sarah	C05 Unionid Ecology
DOWNEY, Jerry	C06 Large River Ecology
DOYLE, Martin	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
DRISCOLL, Charles	S11 The Good, The Bad, and The Ugly News About Acidification in the 21st Century
DRISCOLL, Katelyn	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
DRIVER, Lucas	S07 What Makes the Fever Rise: Investigations of Variables Responsible for Riverine Algal Blooms
DRUMMOND, Jennifer	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
DUBOSE, David	C03 Invertebrates
DUBOSE, Traci	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
DUCHAMP, Joseph E.	C02 Fish and Other Aquatic Vertebrates
DUDDING, Jack	C15 Population Ecology
DUGDALE, Stephen J	S08 Advancing Thermal Restoration of Rivers and Streams
DUGGAN, Sam	S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
DUKTIG, Garrett	C11 Community Ecology
DUMKE, Josh	C25 Food Webs
DUNCAN, Emily	S03 To Learn Your Water, Study Your Soils: The Role of Soil Health in Freshwaters
DUNCAN, Jon	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
DUNHAM, Jason	C02 Fish and Other Aquatic Vertebrates, S08 Advancing Thermal Restoration of Rivers and Streams, S12 Climate Change in High-Gradient Mountain Streams, S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
DUNKLE, Matthew R.	S12 Climate Change in High-Gradient Mountain Streams
DUNN, Samuel	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
DUPONCHELLE, Fabrice	S19 The Alliance for Freshwater Life ? Fostering Multidisciplinary Freshwater Research on Local to Global Scales
DUTTON, Addie	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
DWYER, Mollie	S12 Climate Change in High-Gradient Mountain Streams
DYBIEC, Jacob	C09 Wetland Ecology
DYER, Fiona	S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
DYER, Jared	C03 Invertebrates
EAGLES-SMITH, Collin	C10 Biogeochemistry
EBERHARD, Erin	C10 Biogeochemistry
EBERSOLE, Joe	C02 Fish and Other Aquatic Vertebrates, S08 Advancing Thermal Restoration of Rivers and Streams
EDEGBENE, Ovie	C03 Invertebrates
EGLY, Rachel	C26 Invasive Species, S18 Conservation and Management of Crayfish in Western North America
EL-SABAAWI, Rana	C10 Biogeochemistry
ELAKHAME, Luckey	C03 Invertebrates
ELBRECHT, Vasco	C30 Molecular Ecology C17 Bioassessment

ELGIN, Erick	S23 Enhance Your Work Through Incorporation of Public Engagement
ELIASON, Kevin	C17 Bioassessment
ELKIN, Kimberly	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
ELLIOTT SMITH, Emma	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
ELOSEGI, Arturo	C10 Biogeochemistry
ELSER, Stephen	S23 Enhance Your Work Through Incorporation of Public Engagement
ELVERUD, Darek	C12 Conservation Ecology
ELVIDGE, Janice	S18 Conservation and Management of Crayfish in Western North America
EMANUEL, Ben	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs, S23 Enhance Your Work Through Incorporation of Public Engagement
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ENGLAND, Judy	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
ENTREKIN, Sally	C03 Invertebrates, C27 Landuse and Non-Point Source Impacts, S09 Freshwater Salinization: Science for Solutions, P200
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ERDENE, Bolortsetseg	C03 Invertebrates, S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
ESCOBAR, Ninel	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
ESPELAND, Erin K.	C14 Hydroecology
ESPINOSA, Rodrigo	S12 Climate Change in High-Gradient Mountain Streams
ESSELMAN, Peter	C27 Landuse and Non-Point Source Impacts
ESTEY, Michael	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
EVANGELISTA, Charlotte	S13 The Times they are a Changing - Linking Organismal Phenology and Metabolic Regimes in River Ecosystems
EVANS-WHITE, Michelle	S09 Freshwater Salinization: Science for Solutions
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EWING, Holly	C20 Climate Change
FACEY, Jordan	C01 Algae
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FARAH-PÉREZ, Aldo	C14 Hydroecology

FARRIS, Jerry	C10 Biogeochemistry
FAZEKAS, Hannah	C10 Biogeochemistry
FEBRIA, Catherine	C11 Community Ecology, C16 Restoration Ecology
FEIJÓ DE LIMA, Rafael	C28 Land-Water Interfaces
FELKER-QUINN, Emmi	S27 Novel Tools for Scoping and Problem Formulation to the Further Translational Science
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FICKLIN, Darren	C36 Water Resource Management
FIGARY, Stephanie	S08 Advancing Thermal Restoration of Rivers and Streams
FILICE, Paige	C36 Water Resource Management, S23 Enhance Your Work Through Incorporation of Public Engagement
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FINLAY, Jacques	C16 Restoration Ecology
FINN, Debra	C03 Invertebrates, C17 Bioassessment, S12 Climate Change in High-Gradient Mountain Streams
FISCHER, Dylan	C28 Land-Water Interfaces
FISHER, Larry	S28 Strengthening Interdisciplinary Approaches in Freshwater Science
FISKE, Gregory	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
FITZGIBBON, Andrea	C10 Biogeochemistry, C24 Eutrophication
FLECKER, Alexander	P202, C10 Biogeochemistry, S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs, S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps, S19 The Alliance for Freshwater Life ? Fostering Multidisciplinary Freshwater Research on Local to Global Scales
FLINN, Michael	C09 Wetland Ecology, S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
FLINT, Madison	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
FODOR, Anthony	S05 Damming the Amazon - Hydropower Proliferation in the World's Largest River System
FOGELMAN, Kaelyn	C05 Unionid Ecology
FOGG, Katie	C10 Biogeochemistry, S08 Advancing Thermal Restoration of Rivers and Streams
FOLLSTAD SHAH, Jennifer	C10 Biogeochemistry, S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
FORBUSH, Micah	C03 Invertebrates
FORESTER, Brenna	S12 Climate Change in High-Gradient Mountain Streams
FORK, Megan	C20 Climate Change
FORTINO, Kenneth	C31 Organic Matter Processing
FOUNTAIN, Andrew G.	S12 Climate Change in High-Gradient Mountain Streams

FOX, J. Tyler	C22 Disturbance
FRADKIN, Steven	S12 Climate Change in High-Gradient Mountain Streams
FRAKES, Jameson	S12 Climate Change in High-Gradient Mountain Streams
FRANCIS, Travis	C12 Conservation Ecology
FRANCO, Marco	C13 Ecotoxicology
FRANCOEUR, Steve	C04 Microbial Ecology, C31 Organic Matter Processing, C37 Stoichiometry
FRANCOEUR, Steven	C04 Microbial Ecology, C31 Organic Matter Processing
FRANDSEN, Paul	C30 Molecular Ecology
FRAUENDORF, Therese	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
FREEMAN, Mary	C02 Fish and Other Aquatic Vertebrates, C03 Invertebrates, C32 Primary and Secondary Production
FREEMAN, Mary	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
FREI, Rebecca	C22 Disturbance, S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
FREMIER, Alexander	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
FRENCH, Will	C25 Food Webs
FRIBERG, Nikolai	S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
FRICKE, Rachel	C12 Conservation Ecology
FRICKE, Susan	S07 What Makes the Fever Rise: Investigations of Variables Responsible for Riverine Algal Blooms
FRIEDMAN, Stephanie	C17 Bioassessment
FRIEDRICHS, Martin	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
FRITZ, Ken	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
FRITZ, Rebecca	C04 Microbial Ecology
FRÖR, Oliver	S09 Freshwater Salinization: Science for Solutions
FRY, Meridith	S27 Novel Tools for Scoping and Problem Formulation to the Further Translational Science
FULLER, Matthew	S08 Advancing Thermal Restoration of Rivers and Streams
FULLER, Randy	S11 The Good, The Bad, and The Ugly News About Acidification in the 21st Century
FULLERTON, Aimee	S08 Advancing Thermal Restoration of Rivers and Streams
FUNK, Andrea	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
FUNK, W. Chris	S12 Climate Change in High-Gradient Mountain Streams
FÜREDER, Leopold	C27 Landuse and Non-Point Source Impacts
FUREY, Paula	C01 Algae
GABOR, Rachel	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment, S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
GACIA, Esperança	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
GAETA, Jerome	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
GAGNON, Rebecca	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment

GALATOWITSCH, Mark	S13 The Times they are a Changing - Linking Organismal Phenology and Metabolic Regimes in River Ecosystems
GALLAGHER, Morgan	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment, S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
GANGLOFF, Michael	C01 Algae
GARCIA, Pavel	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
GARCÍA-OJEDA, Marcos E.	S26 Scholarship of Teaching and Learning in Freshwater Science
GARLAND, Jay	C04 Microbial Ecology
GAUR, Nandita	C08 Urban Ecology
GEARHEART, Greg	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
GEBHARD, Amy	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
GEIST, Juergen	C05 Unionid Ecology
GELHAUS, Jon	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
GELHAUS, Jon K.	C03 Invertebrates
GENZOLI, Laurel	C32 Primary and Secondary Production, S07 What Makes the Fever Rise: Investigations of Variables Responsible for Riverine Algal Blooms
GEORGE, Scott	S11 The Good, The Bad, and The Ugly News About Acidification in the 21st Century
GERIG, Brandon	C02 Fish and Other Aquatic Vertebrates
GERSON, Jacqueline	C10 Biogeochemistry, C27 Landuse and Non-Point Source Impacts
GHALAMBOR, Cameron	S12 Climate Change in High-Gradient Mountain Streams
GHAMIZI, Mohamed	S09 Freshwater Salinization: Science for Solutions
GHIYASABADI, Monir	C24 Eutrophication
GIAM, Xingli	S12 Climate Change in High-Gradient Mountain Streams
GIBAS, Cynthia	S05 Damming the Amazon - Hydropower Proliferation in the World's Largest River System
GIDO, Keith	C12 Conservation Ecology, C25 Food Webs, S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
GIERSCH, J. Joseph	S12 Climate Change in High-Gradient Mountain Streams
GILBERT, Eliza	C12 Conservation Ecology
GILBERTSON, Asheton	S03 To Learn Your Water, Study Your Soils: The Role of Soil Health in Freshwaters
GILLETT, David	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
GILLIS, Carole-Anne	S08 Advancing Thermal Restoration of Rivers and Streams
GIRARD, Carlin	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
GISLASON, Gisli	C20 Climate Change, C32 Primary and Secondary Production, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
GISLASON, Gisli Mar	C18 Biodiversity
GIVEN, EmmaLeigh	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
GLASSIC, Hayley	C07 Lentic Ecology, C25 Food Webs
GLENN, Bryce	S12 Climate Change in High-Gradient Mountain Streams
GODSEY, Sarah	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions, S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
GOFORTH, Reuben	C26 Invasive Species

GOLD, Arthur	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
GOLD, Roger	C21 Communicating Science
GOLLADAY, Stephen	C10 Biogeochemistry, S23 Enhance Your Work Through Incorporation of Public Engagement
GOLLADAY, Stephen W.	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
GONZALEZ, Darcia	C20 Climate Change
GONZALEZ, Eduardo	S28 Strengthening Interdisciplinary Approaches in Freshwater Science
GONZALEZ, Maria	C07 Lentic Ecology
GONZÁLEZ, Ignacio	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
GONZÁLEZ-ZEAS, Dunia	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
GOODMAN, Keli	S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
GOOSEFF, Michael	C14 Hydroecology
GOPALAKRISHNAN, Kishore	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
GORDON-WEAVER, Aaron	C01 Algae
GOSSELIN, Pascale	S08 Advancing Thermal Restoration of Rivers and Streams
GÖTHE, Emma	C11 Community Ecology
GOTKOWSKI, Nicole	C38 Hyporheic Processes
GOUGHERTY, Steven	C09 Wetland Ecology
GRACE, Michael	C04 Microbial Ecology, S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology, S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
GRAHAM, Elizabeth	C11 Community Ecology, C16 Restoration Ecology
GRAHAM, Emily	S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
GRAN, Karen	S28 Strengthening Interdisciplinary Approaches in Freshwater Science
GRANT, Christopher	C02 Fish and Other Aquatic Vertebrates
GRANTHAM, Ted	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
GRANTHAM, Ted	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs, S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions, S15 Towards a Predictive Understanding of Metacommunity Dynamics in Freshwater Ecosystems
GRAY, Austin	C28 Land-Water Interfaces
GREAVER, Tara	S27 Novel Tools for Scoping and Problem Formulation to the Further Translational Science
GREEN, Allyson	S26 Scholarship of Teaching and Learning in Freshwater Science
GREEN, Linda	C07 Lentic Ecology
GREEN, Matthew	C01 Algae
GREEN, Matthew	S15 Towards a predictive understanding of meta-community dynamics in freshwater ecosystems
GREER, Meredith	C20 Climate Change
GREGORY, Stan	S08 Advancing Thermal Restoration of Rivers and Streams

GREIG, Hamish	C02 Fish and Other Aquatic Vertebrates, C20 Climate Change
GRIFFITH, John	S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
GRIFFITH, Michael	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
GRIFFITHS, Natalie	C10 Biogeochemistry, C16 Restoration Ecology
GRIFFITHS, Ronald	C15 Population Ecology
GRIMM, Nancy	S05 Damming the Amazon - Hydropower Proliferation in the World's Largest River System
GROFFMAN, Peter	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
GRUBB, Brooke	C30 Molecular Ecology
GRUNTZ, Connor	S09 Freshwater Salinization: Science for Solutions
GRUPPUSO, Laura	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
GUFFIN, Emily	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
GUINNIP, James	C22 Disturbance
GULIS, Vlad	C04 Microbial Ecology, C31 Organic Matter Processing, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
GUTIERREZ, Carolina	S12 Climate Change in High-Gradient Mountain Streams
GUTIÉRREZ-FONSECA, Pablo E.	C22 Disturbance
GUTIERREZ-JURADO, Karina	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
GUY, Christopher	C07 Lentic Ecology, C25 Food Webs, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
HAGERTHEY, Scot	S27 Novel Tools for Scoping and Problem Formulation to the Further Translational Science
HAGY, James	C17 Bioassessment
HAIRSTON, Nelson	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
HAJIBABAEI, Mehrdad	C18 Biodiversity
HALE, Rebecca	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
HALE, Tony	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
HALL, Damon	C36 Water Resource Management
HALL, Robert	C06 Large River Ecology, C10 Biogeochemistry, S13 The Times they are a Changing - Linking Organismal Phenology and Metabolic Regimes in River Ecosystems, S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
HALVORSON, Halvor	C04 Microbial Ecology, C31 Organic Matter Processing, C04 Microbial Ecology, C31 Organic Matter Processing, C37 Stoichiometry
HAMDHANI, Hamdhani	C08 Urban Ecology
HAMILTON, Anna	S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving, S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
HAMILTON, Gregor	C25 Food Webs
HAMILTON, Stephen	C04 Microbial Ecology, C26 Invasive Species
HAMPTON, Tyler	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age

HAND, Brian	S12 Climate Change in High-Gradient Mountain Streams
HANINGTON, Matthew	S07 What Makes the Fever Rise: Investigations of Variables Responsible for Riverine Algal Blooms
HANKS, Cullen	S25 Biocultural Approaches in Freshwater Conservation
HANNAH, David	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
HANRAHAN, Brittany	S03 To Learn Your Water, Study Your Soils: The Role of Soil Health in Freshwaters
HANSCHU, Janaye	C10 Biogeochemistry, S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
HANSEN, Carly	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
HANSEN, Gretchen	C25 Food Webs, S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
HANSEN, Neil	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age C04 Microbial Ecology
HANSON, Paul	C10 Biogeochemistry
HARDEN, Leigh Anne	C02 Fish and Other Aquatic Vertebrates
HARDIN, Lauren	C03 Invertebrates
HARDING, Jon	C11 Community Ecology, C16 Restoration Ecology, C25 Food Webs
HARMS, Tamara	C10 Biogeochemistry, S13 The Times they are a Changing - Linking Organismal Phenology and Metabolic Regimes in River Ecosystems
HARPER, Jennifer	C04 Microbial Ecology
HARRINGTON, Rachel	S12 Climate Change in High-Gradient Mountain Streams
HARRISON, Anna	C27 Landuse and Non-Point Source Impacts
HARRISON, Ian	S19 The Alliance for Freshwater Life ? Fostering Multidisciplinary Freshwater Research on Local to Global Scales
HART, Rheannon	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
HARVEY, Bret	S08 Advancing Thermal Restoration of Rivers and Streams
HASSETT, Michael	C21 Communicating Science, C24 Eutrophication
HAUCK, Sarah	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age, S27 Novel Tools for Scoping and Problem Formulation to the Further Translational Science
HAUGLAND, Richard	C04 Microbial Ecology
HAWKINS, Charles	C03 Invertebrates, S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
HAYER, Michaela	C04 Microbial Ecology
HAYFORD, Barbara	C03 Invertebrates, S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
HE, Fengzhi	S15 Towards a Predictive Understanding of Metacommunity Dynamics in Freshwater Ecosystems
HEBERLING, Matthew	S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
HECKY, Robert	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
HEDDEN, Crosby	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
HEDDEN, Skyler	C12 Conservation Ecology, S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions

HEFFERNAN, Jim	C08 Urban Ecology, C32 Primary and Secondary Production, S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology, S07 What Makes the Fever Rise: Investigations of Variables Responsible for Riverine Algal Blooms, S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems, S13 The Times they are a Changing - Linking Organismal Phenology and Metabolic Regimes in River Ecosystems, S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
HEIDEN, Katie	C28 Land-Water Interfaces
HEILPERN, Sebastian	S19 The Alliance for Freshwater Life ? Fostering Multidisciplinary Freshwater Research on Local to Global Scales, S25 Biocultural Approaches in Freshwater Conservation
HEILVEIL, Jeffrey	C15 Population Ecology
HEIN, Thomas	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
HELMANN, Jacob	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
HELMS, Brian	C05 Unionid Ecology, C16 Restoration Ecology, S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
HELTON, Ashley	C32 Primary and Secondary Production, S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
HENDERSON, Kate	C20 Climate Change, C32 Primary and Secondary Production
HENDRICKSON, Patrick	C14 Hydroecology
HENERY, Rene	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
HENRY, Anne	S28 Strengthening Interdisciplinary Approaches in Freshwater Science
HENRY, Rebekah	C04 Microbial Ecology
HENSLEY, Robert	C14 Hydroecology, S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
HERBST, Dave	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
HERBST, David B.	S12 Climate Change in High-Gradient Mountain Streams, S15 Towards a Predictive Understanding of Metacommunity Dynamics in Freshwater Ecosystems
HERING, Daniel	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
HERLIHY, Alan	C10 Biogeochemistry
HERMOSO, Virgilio	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
HERNANDEZ ABRAMS, Darixa	C36 Water Resource Management
HERRERA-R, Guido A	S13 The Times they are a Changing - Linking Organismal Phenology and Metabolic Regimes in River Ecosystems
HERRERA-R, Guido A.	C14 Hydroecology
HERRICK, Jeffrey D.	S27 Novel Tools for Scoping and Problem Formulation to the Further Translational Science
HERRON, Elizabeth	C07 Lentic Ecology
HERSHEY, Anne	C28 Land-Water Interfaces
HIGGINS, Brendan	C05 Unionid Ecology
HIGGINS, Edward	S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
HILL, Ryan	C04 Microbial Ecology, C10 Biogeochemistry
HILTNER, Ethan	C18 Biodiversity
HINES, Brian	C12 Conservation Ecology

HINNERS, Sarah	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
HINTZ, William	S09 Freshwater Salinization: Science for Solutions
HIRSCH, Jodie	C25 Food Webs
HOBBS, Ben	S28 Strengthening Interdisciplinary Approaches in Freshwater Science
HOBBS, Monika	S12 Climate Change in High-Gradient Mountain Streams
HOBSON, Paul	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
HOCKETT, Justin	C11 Community Ecology
HODGES, Shawn	S07 What Makes the Fever Rise: Investigations of Variables Responsible for Riverine Algal Blooms
HOELLEIN, Timothy	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment, S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
HOFFMAN, Gregory	C32 Primary and Secondary Production
HOGAN, Derek	C20 Climate Change
HOGSDEN, Kristy	C11 Community Ecology, C16 Restoration Ecology
HOLDER, Anna	C02 Fish and Other Aquatic Vertebrates
HOLLIEN, Kelsey	C08 Urban Ecology
HOLLISTER, Jeffrey	C07 Lentic Ecology
HOLLOWAY, Joshua	C02 Fish and Other Aquatic Vertebrates
HOLMES, Robert	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
HOLMLUND, Tamara	S26 Scholarship of Teaching and Learning in Freshwater Science
HOLMQUIST, Jeff	C12 Conservation Ecology
HOLTGRIEVE, Gordon	C07 Lentic Ecology, S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
HOOD, Eran	S12 Climate Change in High-Gradient Mountain Streams
HOOD, James	C20 Climate Change, C32 Primary and Secondary Production, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
HOOK, Tomas	C02 Fish and Other Aquatic Vertebrates
HOPFENSBERGER, Kristy	S23 Enhance Your Work Through Incorporation of Public Engagement
HOPKINS, Kristina	C27 Landuse and Non-Point Source Impacts, S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
HOPPER, Garrett	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
HOSEN, Jacob	S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
HOTALING, Scott	S12 Climate Change in High-Gradient Mountain Streams
HOTCHKISS, Erin	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology, S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
HOTCHKISS, Erin R.	S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
HOU, Loren	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
HOUGHTON, Katelyn	C17 Bioassessment
HOULE, Kristopher	S08 Advancing Thermal Restoration of Rivers and Streams
HOUSER, Jeffrey	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?, S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age

HOUSTON, Joel	S18 Conservation and Management of Crayfish in Western North America
HOVERMAN, Jason	C03 Invertebrates
HOWARD, Jeanette	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
HOWARD-PARKER, Brooke	S09 Freshwater Salinization: Science for Solutions
HOWE, Emily	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
HRODEY, Peter	C02 Fish and Other Aquatic Vertebrates
HUDSON, Nicholas	P202
HUERTA, Gabrielle	C31 Organic Matter Processing
HUERTAS, Mar	C03 Invertebrates
HUGHES, London	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
HUMPHRIES, Paul	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
HUNGATE, Bruce	C04 Microbial Ecology
HUNT, Darrin	S05 Damming the Amazon - Hydropower Proliferation in the World's Largest River System
HUNT, Jen	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
HURLEY, Jennifer	S09 Freshwater Salinization: Science for Solutions
HURLEY, Patrick	C10 Biogeochemistry
HURYN, Alexander D	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
HURYN, Alexander D.	C20 Climate Change, C32 Primary and Secondary Production, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
HUUSKO, Ari	C11 Community Ecology
IANNONE, Basil	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
IANNUCCI, Frances	C10 Biogeochemistry, C22 Disturbance
ICKES, Brian	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
IMAMURA, Masahiro	C16 Restoration Ecology
INFANTE, Dana	C26 Invasive Species
INGALLS, Anitra	C10 Biogeochemistry
INOUE, Mikio	C22 Disturbance
ISAAC, Victoria	S19 The Alliance for Freshwater Life ? Fostering Multidisciplinary Freshwater Research on Local to Global Scales
ISAAK, Daniel	S08 Advancing Thermal Restoration of Rivers and Streams, S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
ISAKSEN-SWENSEN, Elfrida	S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
ISENBERG, Daniel	C16 Restoration Ecology
IVES, Jessica	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
IZURIETA, Clemente	S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
JACKSON, C. Rhett	S28 Strengthening Interdisciplinary Approaches in Freshwater Science
JACKSON, Donald	C32 Primary and Secondary Production, S15 Towards a Predictive Understanding of Metacomunity Dynamics in Freshwater Ecosystems
JACKSON, Mark	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age

JACKSON, Sue	C26 Invasive Species, S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs, S25 Biocultural Approaches in Freshwater Conservation
JACKSON, Susan	S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving, S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
JACKSON, William	S11 The Good, The Bad, and The Ugly News About Acidification in the 21st Century
JACOBI, Gerald	C16 Restoration Ecology
JACOBSEN, Dean	S12 Climate Change in High-Gradient Mountain Streams
JACOBSON, Hailey	S12 Climate Change in High-Gradient Mountain Streams
JACOBSON, Peter	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
JACOBUS, Luke	C01 Algae
JAHNE, Michael	C04 Microbial Ecology
JÄHNIG, Sonja	S15 Towards a Predictive Understanding of Meta-community Dynamics in Freshwater Ecosystems, S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
JÄHNIG, Sonja C.	S19 The Alliance for Freshwater Life ? Fostering Multidisciplinary Freshwater Research on Local to Global Scales, S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
JAMEEL, Yusuf	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
JAMES, Aryanna	S09 Freshwater Salinization: Science for Solutions
JAMES, Joseph	C17 Bioassessment
JAMONEAU, Aurelien	C18 Biodiversity
JANETSKI, David J.	C02 Fish and Other Aquatic Vertebrates
JANKOWSKI, Kathijo	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?, S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
JANZ, Dave	C17 Bioassessment
JARDINE, Tim	C17 Bioassessment, S18 Conservation and Management of Crayfish in Western North America
JEPLAWY, Joann	C28 Land-Water Interfaces
JOHANSEN, John	C30 Molecular Ecology
JOHNSON, Alexandra	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
JOHNSON, Brent	C17 Bioassessment
JOHNSON, Connor	S12 Climate Change in High-Gradient Mountain Streams
JOHNSON, James	S05 Damming the Amazon - Hydropower Proliferation in the World's Largest River System
JOHNSON, Laura	C10 Biogeochemistry, S23 Enhance Your Work Through Incorporation of Public Engagement
JOHNSON, Philip	C32 Primary and Secondary Production, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps C20 Climate Change
JOHNSON, Savannah	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
JOHNSON, Sherri	C10 Biogeochemistry
JOHNSON, Zacchary	S08 Advancing Thermal Restoration of Rivers and Streams
JOHNSTON, Sarah Ellen	C10 Biogeochemistry
JONES, Devin	S09 Freshwater Salinization: Science for Solutions

JONES, Erin	C04 Microbial Ecology, C10 Biogeochemistry, S23 Enhance Your Work Through Incorporation of Public Engagement
JONES, Jeremy	C10 Biogeochemistry, S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
JONES, Leslie	S12 Climate Change in High-Gradient Mountain Streams
JONES, Natalie	C12 Conservation Ecology
JONES, Nicholas	C32 Primary and Secondary Production
JONES, Ryan	S27 Novel Tools for Scoping and Problem Formulation to the Further Translational Science S27 Novel Tools for Scoping and Problem Formulation to the Further Translational Science
JUNKER, James	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
JUSTUS, Billy	S07 What Makes the Fever Rise: Investigations of Variables Responsible for Riverine Algal Blooms
JYVÄSJÄRVI, Jussi	C11 Community Ecology, C27 Landuse and Non-Point Source Impacts, C31 Organic Matter Processing, S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
KADYE, Wilbert	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
KAHN, Owen	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
KAKOUEI, Karan	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
KALTOVA, Tatiana	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
KAMAU, Peris W.	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
KAMBIKAMBI, Manda	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
KAMKE, Kaira	C09 Wetland Ecology
KAMPF, Stephanie	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
KAN, Jinjun	C04 Microbial Ecology, S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
KANN, Jacob	S07 What Makes the Fever Rise: Investigations of Variables Responsible for Riverine Algal Blooms
KANZ, Abraham	C25 Food Webs
KAPLAN, Louis	C10 Biogeochemistry, S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
KARAPETROVA, Aleksandra	S12 Climate Change in High-Gradient Mountain Streams
KARLSSON, Jan	C20 Climate Change
KASHIAN, Donna	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment, S05 Damming the Amazon - Hydropower Proliferation in the World's Largest River System
KASPER, Brian	S08 Advancing Thermal Restoration of Rivers and Streams
KAUHANEN, Pete	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
KAUTZ, Andrea	C03 Invertebrates
KAYANDA, Robert	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
KAYLOR, Matthew	C02 Fish and Other Aquatic Vertebrates

KAYS, Brenna	S25 Biocultural Approaches in Freshwater Conservation
KAZ, Anna	S12 Climate Change in High-Gradient Mountain Streams
KEEFER, Matthew	C02 Fish and Other Aquatic Vertebrates, S08 Advancing Thermal Restoration of Rivers and Streams
KEELY, Scott	C04 Microbial Ecology
KEENAN, Dru	C02 Fish and Other Aquatic Vertebrates, S08 Advancing Thermal Restoration of Rivers and Streams
KEETON, Jenna	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
KELLER, David	C16 Restoration Ecology
KELLER, Reuben	C26 Invasive Species
KELLER, Troy	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
KELLEY, Joanna	S12 Climate Change in High-Gradient Mountain Streams
KELLOGG, D.Q.	C07 Lentic Ecology
KELLY, John	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment, S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology, S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
KELLY, Michelle Catherine	C10 Biogeochemistry, S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
KELLY, Patrick	C07 Lentic Ecology
KELSO, Julie	S23 Enhance Your Work Through Incorporation of Public Engagement
KELSON, Suzanne	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
KENNARD, Mark	C10 Biogeochemistry, S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
KENNEDY, James	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
KENNEDY, Ted	C15 Population Ecology, C28 Land-Water Interfaces, S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs, S13 The Times they are a Changing - Linking Organismal Phenology and Metabolic Regimes in River Ecosystems, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
KENNEN, Jonathan	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
KESTER, Rachel	C02 Fish and Other Aquatic Vertebrates
KIM, Lisa	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment, S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
KIMMEL, William	C02 Fish and Other Aquatic Vertebrates
KINARD, Sean	C20 Climate Change
KINCAID, Dustin	C10 Biogeochemistry
KINDERVATER, Emily	C07 Lentic Ecology
KING, Kevin	S03 To Learn Your Water, Study Your Soils: The Role of Soil Health in Freshwaters
KING, Leighton	C24 Eutrophication

KING, Ryan S.	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment, S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
KIRK, Lily	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology, S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
KIRKHAM, Krista	C27 Landuse and Non-Point Source Impacts
KIRKWOOD, Andrea	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
KLEINDL, Paige	C28 Land-Water Interfaces
KLEMMER, Amanda	C09 Wetland Ecology
KNEITEL, Jamie	S15 Towards a Predictive Understanding of Meta-community Dynamics in Freshwater Ecosystems
KNOUFT, Jason	C36 Water Resource Management
KOBAYASHI, Yoshi	S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
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KOCH, Benjamin	C04 Microbial Ecology, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps, S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
KOCH, Jeff	C25 Food Webs
KOEL, Todd	C07 Lentic Ecology, C25 Food Webs
KOENIG, Lauren	C32 Primary and Secondary Production, S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
KOERNER, Matt	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
KOMINOSKI, John	C10 Biogeochemistry, S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
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KOVACIC, David	C27 Landuse and Non-Point Source Impacts
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KRABBENHOFT, Corey	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
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KREAKIE, Betty	C07 Lentic Ecology

KREILING, Rebecca	C10 Biogeochemistry
KREITALS, Natasha	S18 Conservation and Management of Crayfish in Western North America
KREMER, Lauren	C22 Disturbance
KRIST, Amy	C18 Biodiversity, C37 Stoichiometry, S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
KROEZE, Shayla	C38 Hyporheic Processes
KROLL, Stefanie	C16 Restoration Ecology
KRUPKA, Nathan	C11 Community Ecology
KRUSE, Christi	C12 Conservation Ecology
KRUSE, Jim	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
KRYSAN, Patrick	C30 Molecular Ecology
KUEHN, Kevin	C04 Microbial Ecology, C31 Organic Matter Processing, C37 Stoichiometry
KUEHNE, Lauren	C26 Invasive Species
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KURTHEN, Angelika	S15 Towards a Predictive Understanding of Meta-community Dynamics in Freshwater Ecosystems
KURLYK, Barret	S08 Advancing Thermal Restoration of Rivers and Streams
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LABARGE, Gregory	S03 To Learn Your Water, Study Your Soils: The Role of Soil Health in Freshwaters
LABIOSA, Rochelle	S08 Advancing Thermal Restoration of Rivers and Streams
LAFONTAINE, Jacob	C02 Fish and Other Aquatic Vertebrates
LAMB, Kevin	C11 Community Ecology
LAMBERTI, Gary	C02 Fish and Other Aquatic Vertebrates
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LANG, Kathy	S23 Enhance Your Work Through Incorporation of Public Engagement
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LASSITER, Meredith	S27 Novel Tools for Scoping and Problem Formulation to the Further Translational Science
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LAUCK, Marina	S05 Damming the Amazon - Hydropower Proliferation in the World's Largest River System
LAVADO, Ramon	C13 Ecotoxicology
LAVE, Rebecca	S28 Strengthening Interdisciplinary Approaches in Freshwater Science
LAVELLE, Kathleen	C02 Fish and Other Aquatic Vertebrates
LAVERE, Ashley	S26 Scholarship of Teaching and Learning in Freshwater Science
LAVOIE, Isabelle	C18 Biodiversity
LAVOIE, Isabelle	C01 Algae
LAWRENCE, David	C20 Climate Change
LAWRENCE, Greg	S11 The Good, The Bad, and The Ugly News About Acidification in the 21st Century
LAWRENCE, Ted	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
LAZCANO, Raul	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
LAZORCHAK, Jim	S09 Freshwater Salinization: Science for Solutions
LEAL, Miguel	C02 Fish and Other Aquatic Vertebrates
LEARMAN, Deric	C09 Wetland Ecology
LEASURE, Doug	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
LEBLANC, David	S08 Advancing Thermal Restoration of Rivers and Streams
LEBOUCHER, Thibault	C18 Biodiversity
LECERF, Antoine	C31 Organic Matter Processing, S13 The Times they are a Changing - Linking Organismal Phenology and Metabolic Regimes in River Ecosystems
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LEHOSMAA, Kaisa	C11 Community Ecology
LEIBOLD, Mathew	S15 Towards a Predictive Understanding of Meta-community Dynamics in Freshwater Ecosystems
LEIBOWITZ, Scott	C04 Microbial Ecology, C10 Biogeochemistry
LEINENBACH, Peter	C02 Fish and Other Aquatic Vertebrates, S08 Advancing Thermal Restoration of Rivers and Streams
LEITE, Gina	S25 Biocultural Approaches in Freshwater Conservation
LEMKE, Maria	C27 Landuse and Non-Point Source Impacts
LENHART, Lori	S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
LENNON, Jay	S15 Towards a Predictive Understanding of Meta-community Dynamics in Freshwater Ecosystems
LENTINI, Isabella	C24 Eutrophication
LEROY, Carri	C22 Disturbance, C28 Land-Water Interfaces
LEVI, Peter S.	C10 Biogeochemistry
LEWANDOSKI, Sean	C02 Fish and Other Aquatic Vertebrates
LI, Bin	C15 Population Ecology
LIN, Jiajia	C10 Biogeochemistry
LIND, Lovisa	S09 Freshwater Salinization: Science for Solutions
LINDOR, Nicole	C01 Algae
LINK, Moritz	C31 Organic Matter Processing

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LITTLE, Amy	C22 Disturbance
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LIZOTTE, JR., Richard	S07 What Makes the Fever Rise: Investigations of Variables Responsible for Riverine Algal Blooms
LLORET, Pablo	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
LOCKE, Martin	S07 What Makes the Fever Rise: Investigations of Variables Responsible for Riverine Algal Blooms
LODGE, David	C30 Molecular Ecology
LOHSE, Kathleen	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions, S26 Scholarship of Teaching and Learning in Freshwater Science
LONG, Donald	C04 Microbial Ecology
LOPEZ, Jonathan	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
LOPEZ-SEPULCRE, Andres	C10 Biogeochemistry
LORENZ, Armin	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
LORENZ, Zygmunt	S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
LOUHI, Pauliina	C31 Organic Matter Processing
LOUW, Marti	C03 Invertebrates
LOVIN, Lea	C13 Ecotoxicology
LOWE, Winsor	C02 Fish and Other Aquatic Vertebrates
LOWRY, Christopher	C36 Water Resource Management
LU, Mengdi	S13 The Times they are a Changing - Linking Organismal Phenology and Metabolic Regimes in River Ecosystems
LUBBERS, Hannah	S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
LUCE, Charlie	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
LUDWIG, Ludda	C22 Disturbance
LUERS, Michael	C13 Ecotoxicology
LUIKART, Gordon	S12 Climate Change in High-Gradient Mountain Streams
LUJAN, Dominique	C07 Lentic Ecology, C25 Food Webs
LUNDEEN, Benjamin	C17 Bioassessment
LUPOLI, Christina	C28 Land-Water Interfaces
LÜRIG, Moritz	C02 Fish and Other Aquatic Vertebrates
LUSARDI, Rob	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
LUSARDI, Robert	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
LUTZ, Allison	C02 Fish and Other Aquatic Vertebrates
LYNCH, Jason	S11 The Good, The Bad, and The Ugly News About Acidification in the 21st Century
LYTLE, David	C03 Invertebrates, C11 Community Ecology, S13 The Times they are a Changing - Linking Organismal Phenology and Metabolic Regimes in River Ecosystems
MAASRI, Alain	C03 Invertebrates, S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology

MACDONALD, Michael	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
MACDONALD, Shanna	C30 Molecular Ecology
MACEDO, Marcia	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
MACIAS, Nicholas	S19 The Alliance for Freshwater Life ? Fostering Multidisciplinary Freshwater Research on Local to Global Scales, S26 Scholarship of Teaching and Learning in Freshwater Science
MACKINNON, Peter	C12 Conservation Ecology
MACNEALE, Kate	S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
MACNEILLE, Ruth	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions, S26 Scholarship of Teaching and Learning in Freshwater Science
MAERZ, John	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
MAESTAS, Sarah	C12 Conservation Ecology
MAGOULICK, Daniel	C22 Disturbance
MAGRACH, Ainhoa	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
MAHL, Ursula H.	C10 Biogeochemistry
MAKI, Ryan	C25 Food Webs
MALCOM, Heather	C26 Invasive Species
MALHERBE, Wynand	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
MALISON, Rachel	S12 Climate Change in High-Gradient Mountain Streams
MALONZO, Patrick K.	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
MANNING, David	C28 Land-Water Interfaces
MARCARELLI, Amy	C10 Biogeochemistry, S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology, S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
MARINO, Adrienne	C27 Landuse and Non-Point Source Impacts
MARINOS, Richard	C20 Climate Change
MARKS, Jane	C04 Microbial Ecology, C15 Population Ecology, C28 Land-Water Interfaces, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps, S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
MARONEY, Joseph	S08 Advancing Thermal Restoration of Rivers and Streams
MARQUES, Maria Clara	S27 Novel Tools for Scoping and Problem Formulation to the Further Translational Science
MARSONER, Thomas	C27 Landuse and Non-Point Source Impacts
MARTENS, Koen	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
MARTÍ, Eugènia	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions, S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
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MARTIN, Jon	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
MARTIN, Roy	C04 Microbial Ecology
MARTINEZ-LÓPEZ, Javier	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
MASON, Sherri	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology

MATHEWS, Gregory	C11 Community Ecology, C25 Food Webs
MATHIE, Devan	C37 Stoichiometry
MATOMELA, Nonjabulo	C02 Fish and Other Aquatic Vertebrates
MATSON, Cole	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
MATTES, Brian	S09 Freshwater Salinization: Science for Solutions
MATTHEWS, Blake	C02 Fish and Other Aquatic Vertebrates
MATTINGLY, Alexandra	C09 Wetland Ecology
MAXWELL, Jordan	C10 Biogeochemistry
MAY, Jason	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
MAYBANKS, Ashley	C27 Landuse and Non-Point Source Impacts
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MCBAIN, Scott	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
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MCDONALD, Jacob M.	C08 Urban Ecology
MCDONNELL, Todd	S11 The Good, The Bad, and The Ugly News About Acidification in the 21st Century
MCDOWELL, William G.	C20 Climate Change
MCDOWELL, William H.	C10 Biogeochemistry, S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
MCGARVEY, Daniel	C11 Community Ecology, S26 Scholarship of Teaching and Learning in Freshwater Science
MCGLYNN, Brian	S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
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MCINTYRE, Peter B.	C27 Landuse and Non-Point Source Impacts
MCKAY, Kyle	C32 Primary and Secondary Production, C36 Water Resource Management
MCKEE, Lester	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
MCKIE, Brendan	C11 Community Ecology
MCKINSTRY, Mark	C12 Conservation Ecology

MCKNIGHT, Diane	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
MCLAREN, John	C06 Large River Ecology
MCLAUGHLIN, Daniel	S09 Freshwater Salinization: Science for Solutions, S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
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MCMULLEN, Laura	C03 Invertebrates
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MCNEISH, Rae	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment, S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
MEDHURST, Bruce	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
MEDHURST, R. Bruce	S12 Climate Change in High-Gradient Mountain Streams
MEEHAN, Emily	S27 Novel Tools for Scoping and Problem Formulation to the Further Translational Science
MEEK, Jared	C16 Restoration Ecology
MEIGS, Cassie	S08 Advancing Thermal Restoration of Rivers and Streams
MEJIA, Francine	S08 Advancing Thermal Restoration of Rivers and Streams
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MENDEZ, Patina	S26 Scholarship of Teaching and Learning in Freshwater Science
MENDOZA, Eddy	S27 Novel Tools for Scoping and Problem Formulation to the Further Translational Science
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MERBT, Stephanie N.	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
MEREDITH, Everett	C11 Community Ecology
MERRIAM, Eric	C17 Bioassessment
MESSAGER, Mathis L.	C12 Conservation Ecology
METCALF, Elizabeth	C06 Large River Ecology
METCALFE, Anya	C15 Population Ecology
MICHIE, Laura	C02 Fish and Other Aquatic Vertebrates
MIHLS, Scott	C02 Fish and Other Aquatic Vertebrates
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MIKELSONS, Grace	C10 Biogeochemistry
MILANOVICH, Joseph	C02 Fish and Other Aquatic Vertebrates, C24 Eutrophication
MILLAR, Constance	S12 Climate Change in High-Gradient Mountain Streams
MILLER, Andrew	C28 Land-Water Interfaces
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MOGILEVSKI, Anastasia	S09 Freshwater Salinization: Science for Solutions
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MOONEY, Robert J.	C27 Landuse and Non-Point Source Impacts
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MOORE, Danielle	S27 Novel Tools for Scoping and Problem Formulation to the Further Translational Science
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MOORE, Hannah	C25 Food Webs
MOORE, Matt	C10 Biogeochemistry
MOORE, Pamela	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
MOORE, Sabrina	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
MORACE, Jennifer	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
MORAN, Patrick	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
MORRISON, Ryan	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
MORRONGIELLO, John	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
MORSE, John C.	C03 Invertebrates
MORTAZAVI, Behzad	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems

MOSHER, Jennifer	S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
MRUZEK, Joseph	C11 Community Ecology
MTHOMBENI, Tinyiko Salome	S07 What Makes the Fever Rise: Investigations of Variables Responsible for Riverine Algal Blooms
MUEHLBAUER, Jeffrey	C15 Population Ecology, C28 Land-Water Interfaces, S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
MUENZ, Tara	C03 Invertebrates
MUHL, Richard	C22 Disturbance
MUHLFELD, Clint	S12 Climate Change in High-Gradient Mountain Streams
MUIRURI, Vernoich M.	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
MULFORD, Teagan	C16 Restoration Ecology
MUNN, Mark	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
MUOTKA, Timo	C11 Community Ecology, C27 Landuse and Non-Point Source Impacts, C31 Organic Matter Processing, S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
MURDOCK, Justin	S07 What Makes the Fever Rise: Investigations of Variables Responsible for Riverine Algal Blooms
MURRAY, A Brad	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
MURRAY, Deni	C10 Biogeochemistry
MUTZ, Michael	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
NADDY, Rami	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
NADEAU, Tracie	S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
NAIMI, Mohamed	S09 Freshwater Salinization: Science for Solutions
NAIR, Parvathi	C03 Invertebrates
NAKANO, Daisuke	C16 Restoration Ecology
NANNINI, Michael	C02 Fish and Other Aquatic Vertebrates
NARR, Charlotte	S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
NASLUND, Laura	C10 Biogeochemistry, C27 Landuse and Non-Point Source Impacts
NAVA-LÓPEZ, Mariana Z.	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
NDIMELE, Bright Uchenna	S05 Damming the Amazon - Hydropower Proliferation in the World's Largest River System
NDIMELE, Prince Emeka	S05 Damming the Amazon - Hydropower Proliferation in the World's Largest River System
NDIRITU, George	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
NEALE, Martin	C16 Restoration Ecology
NEASE, Patricia	C02 Fish and Other Aquatic Vertebrates
NEELY, Ben	C25 Food Webs
NEESON, Thomas	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
NEIDIEGH, Emily	C16 Restoration Ecology
NEILSON, Bethany	C10 Biogeochemistry
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NELSON, Daniel	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
NELSON, Riley	C16 Restoration Ecology
NEMEC, Zach	C08 Urban Ecology
NEVILLE, Helen	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
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NEWSOME, Seth	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
NICHOLS, Jennifer	S27 Novel Tools for Scoping and Problem Formulation to the Further Translational Science
NICHOLS, Susan	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
NICKERSON, Max	C02 Fish and Other Aquatic Vertebrates
NICKERSON, Zachary L.	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
NIELAND, Matthew	C10 Biogeochemistry
NIELSEN, Daryl	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
NIEMEYER, Cameron	S12 Climate Change in High-Gradient Mountain Streams
NIETCH, Christopher	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions, S09 Freshwater Salinization: Science for Solutions, S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
NIFONG, Rachel	C10 Biogeochemistry
NILES, Jonathan	C02 Fish and Other Aquatic Vertebrates
NILSEN, Christian	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
NISLOW, Keith	S08 Advancing Thermal Restoration of Rivers and Streams
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NJAYA, Friday	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
NJOROGE, Laban	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
NJOROGE, Peter	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
NNADOZIE, Chika	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
NORTON, Stephen	S11 The Good, The Bad, and The Ugly News About Acidification in the 21st Century
NORTON, Susan	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
NOSSAMAN PIERCE, Sarah	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
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NOVAK, Debra	S23 Enhance Your Work Through Incorporation of Public Engagement
NOWLIN, Weston	C03 Invertebrates, C11 Community Ecology
NUKAZAWA, Kei	C15 Population Ecology

NYAMEKE, Isaac	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
O'DANIEL, Scott	C10 Biogeochemistry, S08 Advancing Thermal Restoration of Rivers and Streams
O'DONNELL, Cara	S08 Advancing Thermal Restoration of Rivers and Streams
O'DONNELL, Meghan	C16 Restoration Ecology
O'HARA, Casey	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
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O'NEILL, Brian	C09 Wetland Ecology, C13 Ecotoxicology
O'REILLY, Katherine	C02 Fish and Other Aquatic Vertebrates, S23 Enhance Your Work Through Incorporation of Public Engagement
O'SHAUGHNESSEY, Erin	C26 Invasive Species
OAKLAND, Hayley	C16 Restoration Ecology
OBEDZINSKI, Mariska	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
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ODUME, Oghenekaro Nelson	C17 Bioassessment, S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
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OGDEN, Ralph	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
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OLAFSSON, Jon	C20 Climate Change, C32 Primary and Secondary Production, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
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OLIVER, Rod	S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
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OLSON, John	C02 Fish and Other Aquatic Vertebrates, S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions, S09 Freshwater Salinization: Science for Solutions
OPPDISANO, Alyssa	C31 Organic Matter Processing

ORR, Sarah	S09 Freshwater Salinization: Science for Solutions
ORTIZ, Jade	S15 Towards a Predictive Understanding of Meta-community Dynamics in Freshwater Ecosystems
OSBORNE, Todd	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
OSBURN, Felicia	C37 Stoichiometry
OSIMEN, Eki	C03 Invertebrates
OSTBERG, Carl	C26 Invasive Species
OTTESEN, Elizabeth	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
OUDESEMA, Maggie	C21 Communicating Science, C24 Eutrophication
OUELLET, Valerie	S08 Advancing Thermal Restoration of Rivers and Streams
OVERSTREET, Emma	S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
OVIEDO VARGAS, Diana	C10 Biogeochemistry, S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
OWENS, Mitchell	S28 Strengthening Interdisciplinary Approaches in Freshwater Science
OWODEINDE, Fatai Gbolahan	S05 Damming the Amazon - Hydropower Proliferation in the World's Largest River System
PAIN, Andrea	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
PAJUNEN, Virpi	C18 Biodiversity
PALKOVACS, Eric	S19 The Alliance for Freshwater Life ? Fostering Multidisciplinary Freshwater Research on Local to Global Scales
PALMER, John	C02 Fish and Other Aquatic Vertebrates, S08 Advancing Thermal Restoration of Rivers and Streams
PALTA, Monica	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
PANCALDI, Francesco	S15 Towards a Predictive Understanding of Meta-community Dynamics in Freshwater Ecosystems
PANKANI, Dan	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
PAPPAS, Sheena	C17 Bioassessment
PARIS, James	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
PARISEK, Christine	C38 Hyporheic Processes
PARK, Andrew	C11 Community Ecology
PARKER, Stephanie	C30 Molecular Ecology, S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
PARKOS, Joseph	C07 Lentic Ecology
PARMENTER, Steve	C12 Conservation Ecology
PARR, Thomas	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems, S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
PARSONS, Rebecca	C08 Urban Ecology
PARTRIDGE, Charlyn	C01 Algae
PASSY, Sophia	C11 Community Ecology, C18 Biodiversity, C20 Climate Change
PASTOR, Amandine	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
PATAKI, Diane	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
PATCH, Leika	C24 Eutrophication
PATEL, Vishwa	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
PATES, Hunter	C04 Microbial Ecology
PATRICK, Christopher	C20 Climate Change, S15 Towards a Predictive Understanding of Metacommunity Dynamics in Freshwater Ecosystems

PAUL, Michael	S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
PAYN, Robert	C06 Large River Ecology, C10 Biogeochemistry, S13 The Times they are a Changing - Linking Organismal Phenology and Metabolic Regimes in River Ecosystems, S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
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PEARCE, Nolan J.T.	C01 Algae
PEASE, Allison	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
PEASE, Lindsay	S03 To Learn Your Water, Study Your Soils: The Role of Soil Health in Freshwaters
PECKARSKY, Barbara	C03 Invertebrates
PEDERSEN, Adam	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
PEEK, Ryan	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
PEIPOCH, Marc	C04 Microbial Ecology, C06 Large River Ecology, C10 Biogeochemistry, S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
PENALUNA, Brooke	C21 Communicating Science
PENCE, Rachel	S09 Freshwater Salinization: Science for Solutions
PENG, Haixin	C05 Unionid Ecology
PENNOCK, Casey	C12 Conservation Ecology, S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
PEOPLES, Brandon	C12 Conservation Ecology
PEOPLES, Brandon K.	C02 Fish and Other Aquatic Vertebrates, C26 Invasive Species, S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems, S15 Towards a Predictive Understanding of Metacommunity Dynamics in Freshwater Ecosystems
PERDRIAL, Julia	C10 Biogeochemistry, S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
PEREZ-REYES, Omar	C15 Population Ecology
PERKIN, Joshua	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs, S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
PERROTTA, Brittany	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
PERRY, William	C27 Landuse and Non-Point Source Impacts
PETTY, Todd	C17 Bioassessment
PEY, Benjamin	C31 Organic Matter Processing
PHANIKUMAR, Mantha	C38 Hyporheic Processes
PHILLIPS, Iain	C17 Bioassessment, S18 Conservation and Management of Crayfish in Western North America
PIANO, Elena	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
PICKARD, Brian	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
PIERRE, Marle	S22 What Do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?

PILGRIM, Erik	C17 Bioassessment, S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
PILLARD, David	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
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PIORKOWSKI, Gregory	C17 Bioassessment
PISZCZEK, Paul	C02 Fish and Other Aquatic Vertebrates
PLONT, Stephen	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology, S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances, S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
PLUM, Cami	C04 Microbial Ecology
POESKE, Regina	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
POFF, LeRoy	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions, S12 Climate Change in High-Gradient Mountain Streams
POISOT, Timothée	C25 Food Webs
POLLARD, Amina	C17 Bioassessment
POLLOCK, Michael	S18 Conservation and Management of Crayfish in Western North America
POMERANZ, Justin	C25 Food Webs
POND, Gregory	S09 Freshwater Salinization: Science for Solutions
POOLE, Geoffrey	C10 Biogeochemistry, C14 Hydroecology, S08 Advancing Thermal Restoration of Rivers and Streams, S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems, S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
PORTER, Terrisita	C18 Biodiversity
POUND, Katrina	C18 Biodiversity, C20 Climate Change
PRASKO, Lauren	C02 Fish and Other Aquatic Vertebrates
PRASKO, Lauren M.	C02 Fish and Other Aquatic Vertebrates
PRESTIE, Kate	C17 Bioassessment
PRICE, Taylor	C31 Organic Matter Processing
PRINCIPE, Nicole	S18 Conservation and Management of Crayfish in Western North America
PRINGLE, Catherine	C22 Disturbance
PROVARD, Audree	C09 Wetland Ecology
PRYOR, Margerita	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
PURCELL, Alicia	S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
PYMAN, Andrew	C01 Algae
PYNE, Matthew	C18 Biodiversity
PYRON, Mark	C25 Food Webs
QIAN, Song	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
QUANRUD, David	C08 Urban Ecology
QUINTERO, Carlos	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
QUIST, Danielle	C06 Large River Ecology
RACK, Laura	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs

RACKLIFFE, D. Riley	C03 Invertebrates
RAFFARD, Allan	S13 The Times they are a Changing - Linking Organismal Phenology and Metabolic Regimes in River Ecosystems
RAGGETT, Jolene	C17 Bioassessment
RAJAKALLIO, Maria	C31 Organic Matter Processing, S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
RAMBERG-PIHL, Nicole	C02 Fish and Other Aquatic Vertebrates
RAMIREZ, Alonso	C22 Disturbance
RAMSTACK HOBBS, Joy	C28 Land-Water Interfaces
RANTALA, Heidi	C25 Food Webs
RAPPOCCIOLO, Michela	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
RASMUSSEN, Todd	C32 Primary and Secondary Production
RAYMOND, Peter	S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
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RECEUVER, Joseph	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
RECEVEUR, Joseph	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
REES, Gavin	C10 Biogeochemistry
REESE, Brandi K.	C20 Climate Change
REICH, Paul	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
REIDER, Kelsey	S12 Climate Change in High-Gradient Mountain Streams
REINERT, Holden	C16 Restoration Ecology
REINHOLD, Ann Marie	C10 Biogeochemistry, C14 Hydroecology, S08 Advancing Thermal Restoration of Rivers and Streams, S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
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REISINGER, Lindsey	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
REIZENBERG, Jody-Lee	C02 Fish and Other Aquatic Vertebrates
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RENFRO, Jim	S11 The Good, The Bad, and The Ugly News About Acidification in the 21st Century
RENNER, Elizabeth	C25 Food Webs
RENWICK, William	C07 Lentic Ecology, C10 Biogeochemistry
RESCH, C. Tom	S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
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RIBOT, Miquel	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
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RICHARDSON, John	C28 Land-Water Interfaces
RICHARDSON, John	C27 Landuse and Non-Point Source Impacts
RICHMOND, Erinn	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
RICHTER, Ian	C32 Primary and Secondary Production
RIDEOUT, Natalie	C18 Biodiversity
RIDLEY, Caroline	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age

RIECK, Leslie O.	C25 Food Webs
RIER, Steven	C01 Algae, C31 Organic Matter Processing
RILEY, Leslie	C11 Community Ecology, S26 Scholarship of Teaching and Learning in Freshwater Science
RITCEY, Allison	C27 Landuse and Non-Point Source Impacts
RITTLE, Alex	C16 Restoration Ecology
ROBERTS, Jessica	C03 Invertebrates
ROBERTSON, Jamie	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
ROBINSON, Clare	C38 Hyporheic Processes
ROBINSON, Crystal	S07 What Makes the Fever Rise: Investigations of Variables Responsible for Riverine Algal Blooms
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RODMAN, Ashley	S07 What Makes the Fever Rise: Investigations of Variables Responsible for Riverine Algal Blooms
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RODRIGUEZ-CARDONA, Bianca	C10 Biogeochemistry
RODRÍGUEZ-LOZANO, Pablo	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
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ROGERS, Gordon	S23 Enhance Your Work Through Incorporation of Public Engagement
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ROLEY, Sarah S.	S03 To Learn Your Water, Study Your Soils: The Role of Soil Health in Freshwaters
ROLLWAGEN-BOLLENS, Gretchen	S26 Scholarship of Teaching and Learning in Freshwater Science
ROON, David	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology, S08 Advancing Thermal Restoration of Rivers and Streams
ROSEBERRY, Juliette	C18 Biodiversity
ROSEMOND, Amy	C04 Microbial Ecology, C10 Biogeochemistry, C31 Organic Matter Processing, C32 Primary and Secondary Production, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
ROSENTHAL, Will	C27 Landuse and Non-Point Source Impacts
ROSERO-LÓPEZ, Daniela	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs

ROSI, Emma	C04 Microbial Ecology, C20 Climate Change, S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps, S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
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ROTH, Nancy	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
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ROY CHOWDHURY, Sinchan	C38 Hyporheic Processes
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RUDELL, Benjamin	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
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RUGENSKI, Amanda	C03 Invertebrates, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
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SADRO, Steve	C10 Biogeochemistry, C38 Hyporheic Processes
SAFFARINIA, Parsa	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
SAFWAT, Amr	S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
SALINAS-RODRÍGUEZ, Sergio	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
SALTARELLI, Wesley	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
SANCHEZ-RUIZ, Jose	C31 Organic Matter Processing
SANDERS, Andrew	C37 Stoichiometry
SANDERS, Ashley	C02 Fish and Other Aquatic Vertebrates
SANDERS, Colton	C38 Hyporheic Processes
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SANDOVAL, Sam	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
SANSOM, Brandon	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
SARKAR, Sam	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
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SCARLETT, Rachel	S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances, S25 Biocultural Approaches in Freshwater Conservation
SCHADE, John	S29 Advancing Freshwater Science: A Discussion with the National Science Foundation
SCHÄFER, Ralf	C31 Organic Matter Processing, S09 Freshwater Salinization: Science for Solutions
SCHECHNER, Anne	S05 Damming the Amazon - Hydropower Proliferation in the World's Largest River System
SCHEEPERS, Kelly	C26 Invasive Species
SCHILLING, Emily	S26 Scholarship of Teaching and Learning in Freshwater Science
SCHILLING, Janpeter	S09 Freshwater Salinization: Science for Solutions
SCHLEICHER, Benjamin	C12 Conservation Ecology
SCHLIFER, Benjamin	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
SCHLOTFELDT, Todd	S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
SCHMIDT, Kristie	C12 Conservation Ecology
SCHMIDT-KLOIBER, Astrid	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
SCHOENHOLTZ, Stephen	S09 Freshwater Salinization: Science for Solutions, P200
SCHOFIELD, Kate	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age, S27 Novel Tools for Scoping and Problem Formulation to the Further Translational Science
SCHOLL, Eric	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
SCHRECKINGER, Jose	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
SCHREINER, Verena	C31 Organic Matter Processing
SCHRIK, Meghan	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps, S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
SCHROTH, Andrew	C10 Biogeochemistry
SCHULER, Matt	S09 Freshwater Salinization: Science for Solutions
SCHULTE, Nicholas	C17 Bioassessment, S07 What Makes the Fever Rise: Investigations of Variables Responsible for Riverine Algal Blooms
SCHULZ, Katlyn	C10 Biogeochemistry
SCHUMAKER, Nathan	C02 Fish and Other Aquatic Vertebrates

SCHWARTZ, Benjamin	C11 Community Ecology
SCHWARTZ, Egbert	C04 Microbial Ecology, S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
SCOTT, David	C11 Community Ecology
SCOTT, Mark C.	S15 Towards a Predictive Understanding of Meta-community Dynamics in Freshwater Ecosystems
SCOTT, Thad	C37 Stoichiometry
SCOTTI, Alberto	C27 Landuse and Non-Point Source Impacts
SCRIBNER, Kim	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
SEBESTYEN, Stephen D.	C10 Biogeochemistry
SEDELL, Edwin	C02 Fish and Other Aquatic Vertebrates
SEEHAUSEN, Ole	C02 Fish and Other Aquatic Vertebrates
SEETHALEKSHMI, Swetha	C13 Ecotoxicology
SEGURA, Catalina	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
SEIDEL, Tyler	C06 Large River Ecology
SEILER, Steven	C02 Fish and Other Aquatic Vertebrates
SELLERS, Stephanie	C01 Algae
SETHI, Suresh	C30 Molecular Ecology, S19 The Alliance for Freshwater Life ? Fostering Multidisciplinary Freshwater Research on Local to Global Scales
SETHNA, Lienne	C37 Stoichiometry
SETTERFIELD, Samantha	C26 Invasive Species
SEYBOLD, Erin	C10 Biogeochemistry, S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
SHAAD, Kashif	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age, S27 Novel Tools for Scoping and Problem Formulation to the Further Translational Science
SHAFFER, Angela	C10 Biogeochemistry
SHAH, Alisha	S12 Climate Change in High-Gradient Mountain Streams
SHANAFIELD, Margaret	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
SHARMA, Akanksha	S28 Strengthening Interdisciplinary Approaches in Freshwater Science
SHAW, Peyton	S18 Conservation and Management of Crayfish in Western North America
SHEIBLEY, Rich	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
SHEPARD, Isaac	C20 Climate Change
SHER, Anna	S28 Strengthening Interdisciplinary Approaches in Freshwater Science
SHIELDS, Robert	C25 Food Webs
SHIOZAWA, Dennis	C16 Restoration Ecology
SHIVERS, Stephen	C07 Lentic Ecology
SHOGREN, Ariel	C10 Biogeochemistry, C21 Communicating Science, C22 Disturbance, S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
SHUMCHENIA, Emily	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
SHUPRYT, Michael	C17 Bioassessment
SHURIN, Jon	C12 Conservation Ecology
SIDERS, Adam	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps

SIDHU, Rumpal	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
SILKNETTER, Samuel	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
SIMONIN, Marie	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
SIMS, Jaylen	C13 Ecotoxicology
SINCLAIR, James	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
SINGER, Gabriel	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
SINGHA, Kamini	C38 Hyporheic Processes
SJOBERG, Jon	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
SLUSS, Tamara	S07 What Makes the Fever Rise: Investigations of Variables Responsible for Riverine Algal Blooms
SMART, Trevor	C04 Microbial Ecology
SMIT, Nico	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
SMITH, Chelsea	C10 Biogeochemistry
SMITH, Jennifer	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
SMITH, Robert	C02 Fish and Other Aquatic Vertebrates, C16 Restoration Ecology
SMITH, Rose	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
SMITH, Rosemary	S26 Scholarship of Teaching and Learning in Freshwater Science
SMITH, Stephanie	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
SMUCKER, Nathan	C17 Bioassessment, S09 Freshwater Salinization: Science for Solutions, S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
SNYDER, Marcia	C02 Fish and Other Aquatic Vertebrates, S08 Advancing Thermal Restoration of Rivers and Streams
SOININEN, Janne	C11 Community Ecology, C18 Biodiversity
SOKOL, Eric	S15 Towards a Predictive Understanding of Metacommunity Dynamics in Freshwater Ecosystems
SOLDO, Christy	C09 Wetland Ecology
SOLIS, Alexander	C20 Climate Change
SOLOMON, Christopher	C26 Invasive Species
SOLOMON, Kelsey	S26 Scholarship of Teaching and Learning in Freshwater Science
SOLUK, Daniel	C06 Large River Ecology, C12 Conservation Ecology
SOOHY, Jennifer	C01 Algae, C31 Organic Matter Processing
SOUCEK, David	S09 Freshwater Salinization: Science for Solutions
SOUTER, Nick	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age, S27 Novel Tools for Scoping and Problem Formulation to the Further Translational Science
SPANGLER, Margaret	C14 Hydroecology
SPAULDING, Sarah	C17 Bioassessment, S07 What Makes the Fever Rise: Investigations of Variables Responsible for Riverine Algal Blooms
SPAULDING, Sarah	S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
SPEAR, Michael	C30 Molecular Ecology
SPEAS, David	C12 Conservation Ecology

SPEIR, Shannon	C10 Biogeochemistry
SPENCER, Robert	C10 Biogeochemistry
SPINDLER, Patrice	S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
SPONSELLER, Ryan	C20 Climate Change, S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
ST. AMOUR, Sabine	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
STACY, Andrea	S11 The Good, The Bad, and The Ugly News About Acidification in the 21st Century
STAMP, Jen	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
STAMP, Jennifer	S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving, S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
STANCHEVA, Rosalina	C22 Disturbance
STANFORD, Jack	S12 Climate Change in High-Gradient Mountain Streams
STANISH, Lee	S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
STANLEY, Emily	C10 Biogeochemistry, C27 Landuse and Non-Point Source Impacts
STARR, Scott	C20 Climate Change
STAUFFER-OLSEN, Natalie	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
STAWINOJA, Agnieszka Elzbieta	C27 Landuse and Non-Point Source Impacts
STEELE, Joshua	S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
STEFANI, Sonja	C18 Biodiversity
STEFANIK, Kay C.	C27 Landuse and Non-Point Source Impacts
STEGEN, James	S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
STEIN, Eric	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs, S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems, S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
STEINKE, Dirk	C17 Bioassessment, C30 Molecular Ecology
STEINMAN, Alan	C07 Lentic Ecology, C21 Communicating Science, C24 Eutrophication, C28 Land-Water Interfaces
STEWART, Russell	C30 Molecular Ecology
STEWART LOWNDES, Julia	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
STEWART-KOSTER, Ben	C32 Primary and Secondary Production
STICKNEY, Emily	C32 Primary and Secondary Production
STILING, Rebekah	C07 Lentic Ecology
STOCZYNSKI, Lauren	C02 Fish and Other Aquatic Vertebrates
STODDARD, John	C10 Biogeochemistry
STODOLA, Alison	C05 Unionid Ecology
STOECKEL, Jim	C05 Unionid Ecology
STOLER, Aaron	C09 Wetland Ecology, S09 Freshwater Salinization: Science for Solutions
STOLL, Jordyn	C24 Eutrophication

STORB, Meryl	C21 Communicating Science, S13 The Times they are a Changing - Linking Organismal Phenology and Metabolic Regimes in River Ecosystems
STRACHAN, Stephanie	C17 Bioassessment
STRACKBEIN, Joerg	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
STRANGWAY, Carrie	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
STRAYER, David	C26 Invasive Species
STRECKER, Angela	S12 Climate Change in High-Gradient Mountain Streams
STRECKER, Eric	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
STREIT, McKayla	C13 Ecotoxicology
STRIEGL, Robert	C10 Biogeochemistry
STUBBINGTON, Rachel	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
STUBBINS, Aron	S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
SUBALUSKY, Amanda	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
SUBRAMANIAM, Mangala	S25 Biocultural Approaches in Freshwater Conservation
SUCHY, Amanda	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
SULLIVAN, Lauren	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
SULLIVAN, S. Mažeika P.	C25 Food Webs, C27 Landuse and Non-Point Source Impacts
SULLIVAN, Timothy	S11 The Good, The Bad, and The Ugly News About Acidification in the 21st Century
SUMIDA, Kosuke	C22 Disturbance
SURES, Bernd	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
SUTULA, Martha	S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
SUZUKI, Junpei	C16 Restoration Ecology
SVITOK, Marek	C02 Fish and Other Aquatic Vertebrates
SWAN, Christopher	S15 Towards a Predictive Understanding of Meta-community Dynamics in Freshwater Ecosystems
SWANNACK, Todd M.	C36 Water Resource Management
SWANSON, David	C06 Large River Ecology
SWARTZ, Allison	C28 Land-Water Interfaces
SWEDBERG, Dusty	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
TAIPALE, Sami	C31 Organic Matter Processing
TALES, Evelynne	C18 Biodiversity
TANIGUCHI-QUAN, Kris	S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
TANK, Jennifer L.	C03 Invertebrates, C10 Biogeochemistry, C27 Landuse and Non-Point Source Impacts, S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment, S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
TANK, Suzanne	C17 Bioassessment
TANTO, Tyler	C11 Community Ecology
TAPPEINER, Ulrike	C27 Landuse and Non-Point Source Impacts
TATE, Shanae	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age

TAYLOR, Brad	C09 Wetland Ecology, C20 Climate Change, C37 Stoichiometry, S12 Climate Change in High-Gradient Mountain Streams
TAYLOR, Chris	S18 Conservation and Management of Crayfish in Western North America
TAYLOR, Jason M.	C10 Biogeochemistry, C31 Organic Matter Processing
TAYLOR, Melanie	S03 To Learn Your Water, Study Your Soils: The Role of Soil Health in Freshwaters
TEITTINEN, Anette	C11 Community Ecology
TERER, Taita	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
TESTA, Sam	C31 Organic Matter Processing
TFAILY, Malak	S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
THELLMAN, Audrey	C20 Climate Change, S13 The Times they are a Changing - Linking Organismal Phenology and Metabolic Regimes in River Ecosystems
THEROUX, Susanna	S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems, S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving, S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
THOMAS, Kathryn	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
THOMAS, Kathryn E.	C01 Algae
THOMAS, Steven	C10 Biogeochemistry, C28 Land-Water Interfaces, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
THOMPSON, Emma	C15 Population Ecology
THOMPSON, Renee	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
THOMPSON, Ross	C25 Food Webs, S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
THOMSON, James	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
THORNTON, Barry	S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
THORP, James H.	C03 Invertebrates, C09 Wetland Ecology, C11 Community Ecology
TIBBETS, Teresa	S05 Damming the Amazon - Hydropower Proliferation in the World's Largest River System
TIEGS, Scott	C37 Stoichiometry
TIMM, Anne L.	C02 Fish and Other Aquatic Vertebrates, S08 Advancing Thermal Restoration of Rivers and Streams
TIMONER, Pablo	S15 Towards a Predictive Understanding of Meta-community Dynamics in Freshwater Ecosystems
TIMPANO, Tony	S09 Freshwater Salinization: Science for Solutions, P200
TINGLEY, Ralph	C26 Invasive Species
TIPTON, Zachary	S09 Freshwater Salinization: Science for Solutions
TOBELLA, Marta	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
TOBLER, Courtney	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
TOCKNER, Klement	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
TODD, Daniel	C28 Land-Water Interfaces
TOMCZYK, Nathan	C31 Organic Matter Processing, S26 Scholarship of Teaching and Learning in Freshwater Science
TONKIN, Jonathan	C03 Invertebrates, S13 The Times they are a Changing - Linking Organismal Phenology and Metabolic Regimes in River Ecosystems

TORGERSEN, Christian	S08 Advancing Thermal Restoration of Rivers and Streams
TORRES, PJ	S26 Scholarship of Teaching and Learning in Freshwater Science
TORRESDAL, Jack	C02 Fish and Other Aquatic Vertebrates
TOWNSEND, Josiah H.	C02 Fish and Other Aquatic Vertebrates
TRCKA, Allison	S12 Climate Change in High-Gradient Mountain Streams
TRENTMAN, Matt T.	C03 Invertebrates, C10 Biogeochemistry, C27 Landuse and Non-Point Source Impacts
TROIA, Matthew	S12 Climate Change in High-Gradient Mountain Streams, S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
TROMBONI, Flavia	S05 Damming the Amazon - Hydropower Proliferation in the World's Largest River System, S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
TRONSTAD, Lusha	C07 Lentic Ecology, C25 Food Webs, S05 Damming the Amazon - Hydropower Proliferation in the World's Largest River System, S12 Climate Change in High-Gradient Mountain Streams
TRUER, Ryan	C21 Communicating Science
TRUMBO, Daryl	S12 Climate Change in High-Gradient Mountain Streams
TSANG, Yin-Phan	C26 Invasive Species
TSOI, Iris	S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
TUBERTY, Shea	C01 Algae
TUMOLO, Benjamin	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
TURNER, Andrew	C02 Fish and Other Aquatic Vertebrates
TURNER, Thomas	C25 Food Webs, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
TWARDCHLEB, Laura	C18 Biodiversity
TYREE, Meredith	C17 Bioassessment
UKU, Jude	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
ULSETH, Amber	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
UTZ, Ryan	C10 Biogeochemistry
UZAN, Avi	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
UZARSKI, Donald	C09 Wetland Ecology, C27 Landuse and Non-Point Source Impacts
UZARSKI, Donald	C09 Wetland Ecology
VALETT, H. Maurice	C06 Large River Ecology, C10 Biogeochemistry, S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
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VAN APPELDORN, Molly	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?, S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
VAN DER LEE, Gea	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
VAN HORN, David	C10 Biogeochemistry
VAN KIRK, Rob	C06 Large River Ecology
VAN KLAVEREN, Nikki	C17 Bioassessment

VAN VUREN, Johan HJ	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
VANDER VORSTE, Ross	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
VANDER ZANDEN, Jake M.	C30 Molecular Ecology
VANNI, Michael	C07 Lentic Ecology, C10 Biogeochemistry
VARESE, Mariana	S25 Biocultural Approaches in Freshwater Conservation
VAUGHAN, Matthew	C10 Biogeochemistry
VAUGHN, Caryn	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions, S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems, S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
VEACH, Allison	S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
VELLE, Prassede	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
VENARSKY, Michael	C10 Biogeochemistry
VENTURELLI, Paul	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
VERB, Robert	C11 Community Ecology, S26 Scholarship of Teaching and Learning in Freshwater Science
VERDONSCHOT, Piet F.M.	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
VERDONSCHOT, Ralf C.M.	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
VERHAMME, Edward	S23 Enhance Your Work Through Incorporation of Public Engagement
VERKAMP, Hannah	S09 Freshwater Salinization: Science for Solutions
VERMA, Jyoti	C01 Algae
VEZZA, Paolo	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
VIETZ, Geoff	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
VILLA, Ferdinando	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
VINCENT, Anna	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
VINE, Josh	C12 Conservation Ecology
VINEBROOKE, Rolf	C17 Bioassessment
VOLLMER, Derek	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age, S27 Novel Tools for Scoping and Problem Formulation to the Further Translational Science
VON SCHILLER, Daniel	S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
VOSBURGH, Michael	C24 Eutrophication
VRABLIK, Patrick	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
WAGNER, Katie	C18 Biodiversity
WAHL, David	C07 Lentic Ecology
WAIT, Jude	S26 Scholarship of Teaching and Learning in Freshwater Science

WAITE, Ian	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
WALKER, Lauren	C28 Land-Water Interfaces
WALKER, Richard	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
WALLACE, John	C16 Restoration Ecology
WALLACE, Michael	C27 Landuse and Non-Point Source Impacts
WALTER, Todd	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
WALTERS, Annika	C02 Fish and Other Aquatic Vertebrates, C18 Biodiversity, S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
WALTERS, David	C10 Biogeochemistry, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
WALTERS, Kevin	S23 Enhance Your Work Through Incorporation of Public Engagement
WANG, Binbin	C01 Algae
WANG, Jing	C04 Microbial Ecology, S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
WARBURTON, Helen	C11 Community Ecology, C16 Restoration Ecology, S13 The Times they are a Changing - Linking Organismal Phenology and Metabolic Regimes in River Ecosystems
WARD, Adam	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
WARD, Amelia	C10 Biogeochemistry
WARD, Nicholas	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
WARFA, Abdi-Rizak M.	S26 Scholarship of Teaching and Learning in Freshwater Science
WARMBOLD, Jerry	C06 Large River Ecology
WARNE, Robin	C08 Urban Ecology
WARREN, Dana	C02 Fish and Other Aquatic Vertebrates, C28 Land-Water Interfaces
WASHKO, Susan	C03 Invertebrates, S23 Enhance Your Work Through Incorporation of Public Engagement
WASHKOVIK, Lindsey	S05 Damming the Amazon - Hydropower Proliferation in the World's Largest River System
WATANABE, Kozo	C15 Population Ecology
WATANABE, Yuya	C22 Disturbance
WATERS, Matthew	C31 Organic Matter Processing
WATTS, Rachel	C22 Disturbance
WAX, Noah	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
WEATHERS, Kathleen	C20 Climate Change
WEAVER, Sophie	C10 Biogeochemistry
WEBB, Angus	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
WEBB, Colleen	S12 Climate Change in High-Gradient Mountain Streams
WEBB, J. Angus	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
WEBER, Marc	C10 Biogeochemistry
WEBSTER, Alex	C21 Communicating Science
WEDGEWORTH, Maeghen	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs

WEHRLY, Kevin	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
WEHRTMANN, Ingo	C03 Invertebrates
WEINTRAUB, Samantha	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
WEIR, Jessica	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
WELCH-DEVINE, Meredith	S28 Strengthening Interdisciplinary Approaches in Freshwater Science
WELLARD KELLY, Holly	C25 Food Webs
WELTER, Jill	C20 Climate Change, C32 Primary and Secondary Production
WENGER, Seth	C02 Fish and Other Aquatic Vertebrates, C03 Invertebrates, C31 Organic Matter Processing, S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
WENGER, Seth	C02 Fish and Other Aquatic Vertebrates, C31 Organic Matter Processing, C32 Primary and Secondary Production, S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
WENTZ, Nathan	S07 What Makes the Fever Rise: Investigations of Variables Responsible for Riverine Algal Blooms
WENZEL, John	C03 Invertebrates
WEPENER, Victor	S20 Neglected African Freshwater Bodies: Lessons on Sustainable Management and Conservation of Freshwater Ecosystems
WESNER, Jeff	C06 Large River Ecology, C25 Food Webs
WEST, Jordan M.	S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
WEST, Natalie M.	C14 Hydroecology
WETZIG, Annett	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
WHARTON, Christopher	S09 Freshwater Salinization: Science for Solutions, S22 What do Managers/Regulators Need to Know from Science to Support Protection/Restoration/Adaptation Decisions?
WHEATON, Emily	C04 Microbial Ecology
WHEELER, Kit	C02 Fish and Other Aquatic Vertebrates, S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
WHILES, Matt	C08 Urban Ecology, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
WHITE, Seth	C02 Fish and Other Aquatic Vertebrates
WHITHAM, Thomas	C28 Land-Water Interfaces
WHITNEY, Christopher	C10 Biogeochemistry
WHITNEY, James	C02 Fish and Other Aquatic Vertebrates
WIBLE, Tyler	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
WICKLAND, Kimberly	C10 Biogeochemistry
WIERINGA, Nienke	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
WILCOCK, Peter	S28 Strengthening Interdisciplinary Approaches in Freshwater Science
WILFRED-EKPRIKPO, Peace Chidinma	C09 Wetland Ecology
WILLIAMS, Mark	S03 To Learn Your Water, Study Your Soils: The Role of Soil Health in Freshwaters
WILLIAMS, Thomas	S09 Freshwater Salinization: Science for Solutions

WILLIAMSON, Kurt	S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
WILLIAMSON, Tanner	C07 Lentic Ecology, C10 Biogeochemistry
WINDHAM-MYERS, Lisamarie	C10 Biogeochemistry
WINIKOFF, Sarah	C16 Restoration Ecology
WIPFLI, Mark	S06 The River Continuum Concept: Perspectives for the Future in Translational Stream Ecology
WISNOSKI, Nathan	S15 Towards a Predictive Understanding of Meta-community Dynamics in Freshwater Ecosystems
WISSEL, Bjoern	S18 Conservation and Management of Crayfish in Western North America
WISSINGER, Scott	C02 Fish and Other Aquatic Vertebrates, C09 Wetland Ecology, C20 Climate Change
WOELFLE-ERSKINE, Cleo	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
WOLF, Kyra	S03 To Learn Your Water, Study Your Soils: The Role of Soil Health in Freshwaters
WOLFE, Emily	C22 Disturbance
WOLFENDEN, Ben	S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
WOLFF, Brian	C16 Restoration Ecology
WOLLER-SKAR, Megan	C21 Communicating Science
WOLLHEIM, Wilfred	C10 Biogeochemistry, S14 Heterotrophic Regimes in Rivers: Technical and Conceptual Advances
WOMBLE, Spencer	S07 What Makes the Fever Rise: Investigations of Variables Responsible for Riverine Algal Blooms
WOOD, Chris	S25 Biocultural Approaches in Freshwater Conservation
WOOD, Spencer	C12 Conservation Ecology
WOODS, H. Arthur	S12 Climate Change in High-Gradient Mountain Streams
WOZNICKI, Sean	C27 Landuse and Non-Point Source Impacts
WU, Jing	S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
WU, Naicheng	C17 Bioassessment
WYMORE, Adam	C10 Biogeochemistry, S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
YACKULIC, Charles	C10 Biogeochemistry, C28 Land-Water Interfaces, S13 The Times they are a Changing - Linking Organismal Phenology and Metabolic Regimes in River Ecosystems
YAGER, Elowyn	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
YAGER, Lisa	C06 Large River Ecology
YAMAMOTO, Ryosuke	C16 Restoration Ecology
YANG, Carol	C03 Invertebrates, C15 Population Ecology
YANITES, Brian	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
YARD, Michael	S13 The Times they are a Changing - Linking Organismal Phenology and Metabolic Regimes in River Ecosystems
YARNELL, Sarah	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
YATES, Adam G.	C01 Algae, C38 Hyporheic Processes
YEN, Jian	S16 Energy-Flow Food Webs: New Perspectives, Common Ground, and Knowledge Gaps
YOUSEF, Foad	C20 Climate Change
YU, Songyan	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions

YUAN, Lester	S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
ZARNETSKY, Jay	C10 Biogeochemistry, C22 Disturbance, C38 Hyporheic Processes, S24 Supporting Freshwater Policy and Decision Making in the Modern/Digital Age
ZARNETSKY, Phoebe	C18 Biodiversity
ZATKOS, Lauren	S12 Climate Change in High-Gradient Mountain Streams
ZAVORKA, Libor	S13 The Times they are a Changing - Linking Organismal Phenology and Metabolic Regimes in River Ecosystems
ZEGLIN, Lydia	C10 Biogeochemistry, S17 Bridging the Lotic-Microbial Gap: Understanding Drivers of Microbial Diversity in Stream Ecosystems
ZEITLER, Emma	S04 Novel Stressors and Novel Ecosystems: Ecological Processes in Freshwaters of the Built Environment
ZHANG, Xiaowen	S10 Biogeomorphic Agents: Role of Organisms in Propagating Change in Fluvial Ecosystems
ZIELINSKI, Daniel	C02 Fish and Other Aquatic Vertebrates
ZIMMER, Margaret	S02 Advancing Knowledge on Intermittent Rivers and Ephemeral Streams: Across Disciplines and Dimensions
ZIMMERMAN, Julie	S01 The Environmental Flow and Water Management Nexus: Implementation Challenges, Strategies, and Outcomes of Environmental Flow Programs
ZIMMERMAN, Julie	S26 Scholarship of Teaching and Learning in Freshwater Science
ZIMMERMAN, Melvin	C02 Fish and Other Aquatic Vertebrates
ZIPPER, Carl	S09 Freshwater Salinization: Science for Solutions, P200
ZNARI, Mohammed	S09 Freshwater Salinization: Science for Solutions
ZUELLIG, Robert	S21 Beyond Bioassessment: Translating Biological Information for Environmental Problem Solving
ZUKLIC, Luke	C09 Wetland Ecology
ZULUAGA, Lina	S27 Novel Tools for Scoping and Problem Formulation to the Further Translational Science
ZYDLEWSKI, Joseph	C02 Fish and Other Aquatic Vertebrates



Public Engagement Station

#SFSEngage

(SFS Annual Meeting, Mon., May 20 – Thurs., May 23)

Stop by the evolving Public Engagement (PE) Station exhibit booth regularly to participate, learn, and discuss successes, challenges, and opportunities!

Monday: Online Engagement

- Learn how to engage via social media from an expert
- Complete your own online mission, vision and plan
- Leave with resources on how to move forward engaging online
- SciComm challenges board: What are your online strategies & challenges?
- Barriers to PE board: How do you find time for PE?

Tuesday: Messaging

- Practice honing your sci message with a message compass worksheet
- Learn how to craft your message into a story
- Convert your sci message for a mainstream audience
- SciComm challenges board: How do you discuss climate change with non-scientists?
- Barriers to PE board: How do you incorporate PE into your other responsibilities?

Wednesday: Audio/Visuals

- Rehearse and share your science via live audio or video podcasts
- Exercise your creativity by drawing your research
- SciComm challenges board: How do you discuss the CWA with non-freshwater scientists?
- Barriers to PE board: How do we build institutional support for PE?

Thursday: Moving Forward

- Learn about PE support opportunities and resources
- Additional podcasting opportunities
- SciComm challenges board: How do you incorporate PE into Broader Impacts?
- Barriers to PE board: What barriers do you face in doing PE?

MARK YOUR CALENDAR FOR NEXT YEAR'S MEETING

2020 Joint ASLO-SFS Summer Meeting

7–12 June 2020 · Madison, Wisconsin

Monona Terrace Community & Convention Center

The Joint ASLO-SFS Summer Meeting in June 2020 will draw attendance from the freshwater community at large. Make plans to participate in this world-class meeting for aquatic science professionals and students — to share ideas and to further interdisciplinary research and cooperation.

August 2019.....	Session proposal deadline
October 2019.....	Session organizers notified
January 2020.....	Call for abstracts issued/Registration opened
February 2020.....	Abstract submission deadline
March 2020.....	Program schedule posted
April 2020	Presentations scheduled
May 2020	Full program posted
7-12 June 2020	2020 ASLO-SFS Joint Meeting

Organizing Committee

Meeting Co-chairs

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