Confluence Schedule

August 2020

Speaker Session | Workshop | Social Event | AAS Jr.

Sun	Mon	Tue	Wed	Thu	Fri	Sat
2	3 **Mapping Your Watershed Online** Dr. Chris Kodani 5:00-6:00pm	4 **Freshwater Turtles of Georgia** Dr. Ken Fahey 5:00-6:00pm	5 **Explore and Analyze Data** Jon Becker 12:00-1:00pm	6 **AAS Introduction to Monitoring Virtual Workshop** AAS Staff 5:00-7:00pm	7 **Adopt-A-Stream Social** 5:30-6:30pm	8
9	10 **Birds of Prey** Kathy Church 12:00-1:00pm	11 **Ocean Acidification** Dr. Daniel Gleason 5:00-6:00pm	12 **AAS Chemical QA/QC Virtual Workshop** AAS Staff 5:00-7:00pm	13 **Legislative Update** Kevin Jeselnik 12:00-1:00pm **AAS Jr. Virtual Pond Exploration*** Jerry Hightower 5:00-6:00pm	14 **Student Poster Session** 12:00-1:00pm **Water Trivia** 6:45-8:30pm	15
16	17 **Clean Water Act 101** Lisa Perras Gordon 5:00-6:00pm	18 **AAS Bacterial QA/QC Virtual Workshop** AAS Staff 5:00-7:00pm	19 **Coastal Topics** Luke Roberson 12:00-1:00pm **AAS Jr. Activity: Georgia Frogs*** Linda May 5:00-6:00pm	20 **Protecting Georgia's Waters** Dr. Ania Truszczynski 12:00-1:00pm	21 **Student Poster Session** 5:00-6:00pm **Adopt-A-Stream Social** 7:00-8:30pm	22
23	24 **AAS Macroinvertebrate QA/QC Virtual Workshop** AAS Staff 5:00-7:00pm	25 **Water Trails** Gwyneth Moody 12:00-1:00pm **AAS Jr. Activity: Let's Get WET!** Monica Kilpatrick 5:00-6:00pm	26 **Heavy Metal Soil Contamination in West Atlanta** Dr. Eri Saikawa 12:00-1:00pm **Streams of Plastic** Multiple Speakers 5:00-7:00pm	27 **Aquatic Habitat Connectivity** Sara Gottlieb 5:00-6:00pm	28 **Hidden Rivers Screening** 5:00-7:00pm	29 **Keynote Speech & Awards Ceremony** Joe Cook & AAS Staff 10:00am-12:00pm

All session titles are linked to their corresponding registration pages

*Session Full

KEYNOTE SPEAKER: JOE COOK

GEORGIA RIVER NETWORK
Paddle Georgia Coordinator and River User's Guide Author

Malcolm X, Eugene Talmadge and Naked Yankees in Georgia Rivers: Tall tales from the shoals, sandbars and sloughs of our state.

Joe Cook has traveled thousands of miles on Georgia's rivers and along the way has dug up some interesting, unusual and unexpected stories about those rivers and our relationship to them. He believes that if everyone digs around long enough in the rocks, sand and mud of Georgia's rivers, they will find some personal connection to them. He even traces his own conception to Morgan Falls Dam and the South River...you can find out how--and more--including semi-useful yarns about Georgia's rivers. For example, you'll learn the answers to questions like: what's Malcolm X's connection to the Flint River? What prompted a crowd of 20,000 to gather on the banks of the Oconee in rural Johnson County in 1939? And, how in the world did a swarm of American eels shut down a textile plant in northwest Georgia in the late 1800s? Cook will provide the answers and show us how our rivers have risen and fallen with our culture. Cook promises a wildly entertaining voyage...but not one that can actually match the thrill of being on a real river.

CONFLUENCE 2020 SESSION DESCRIPTIONS

(All session titles are linked to their corresponding registration pages)

Mapping Your Watershed Online

Join Dr. Christopher Kodani, Associate Professor of Biology at Clayton State University, to learn what a watershed is and how it can be easily and quickly mapped using ArcGIS Online. Participants can create a basic map showing their sampling site, and then we can combine these maps into a large, interactive watershed map that will contain everybody's watershed.

Freshwater Turtles of Georgia

Join Dr. Ken Fahey, retired teacher and herpetologist, as he discusses the identification, life history and conservation of the 20 freshwater turtles found in Georgia's fresh-water ecosystems. Learn how to identify these native turtles, where they are found, and what their habitat requirements are. Also learn about their dependence on clean water, what problems they face, and the importance of monitoring their populations.

Explore and Analyze Your Watershed with Web Maps

Using web maps such as the EPA's WATERS GeoViewer and EnviroAtlas or the US Geological Survey's Stream Stats or National Map, you can learn a wealth of information related to a stream or watershed. Jon Becker of EPA will explain the features of these web maps and their map layers such as permitted dischargers, waters designated as impaired, land cover classifications and much more. They also provide analytical tools which can calculate the drainage area that flows to a given point and summarize numerous environmental databases for that area. These easy-to-use tools can help you better understand what may be impacting water quality at a monitoring site. If time allows, we'll also cover some other emerging EPA data sets and analytical tools related to water quality and watershed characterization.

AAS Introduction to Monitoring Workshop

If you are interested in learning more about water quality issues that pose a threat to our state's waterways and how you can get involved in preventing them, the Intro to Monitoring workshop is perfect for you. This workshop will provide an overview of the sources and impacts of non-point source pollution, the importance of water quality monitoring, and the different elements of the Adopt-A-Stream program. This workshop is great for school and community groups, as well as those looking to learn a little more about the program before getting certified.

Birds of Prey

Have you ever wondered how an owl can turn his head so far, or how an eagle can find fish under water? Join Kathy Church, of Georgia's Department of Natural Resources, in a high-flying discussion on Birds of Prey. Learn how these precision aerial hunters impact all of Georgia's ecosystems. Through a PowerPoint, informative discussion, and a smattering of humor you may be surprised to learn how perfectly these majestic animals are adapted for hunting superiority!

Ocean Acidification: What Is it and Why Should I Care?

Ask a roomful of people what impact burning fossil fuels is having on our planet and a large percentage of them will answer correctly that it is affecting climate and causing the Earth to warm up. In contrast very few, if any, will know that burning fossil fuels is also causing the world's oceans to become more acidic, a process known as ocean acidification. Danny Gleason, Director of the Institute for Coastal Plain Science at Georgia Southern University will provide a summary of the basic chemistry behind ocean acidification, outline some of the unusual and significant ways ocean acidification is affecting marine organisms, and provide some recommendations on what we can all do to decrease the rate at which the oceans are acidifying.

AAS Chemical QA/QC Workshop

The Chemical Monitoring Workshop is designed to teach volunteers about basic stream water chemistry and how to conduct various chemical tests using hand-held field equipment. The basic set of tests include dissolved oxygen, conductivity, pH, and temperature. The field portion of the workshop and testing will be conducted separately by an AAS local coordinator or AAS state staff.

Legislative Update

Join Kevin Jeselnik, General Counsel for Chattahoochee Riverkeeper, to learn about recently passed or currently proposed legislative updates that affect water quality protection in Georgia.

AAS Jr Activity: Virtual Pond Exploration (Session Full)

Join Ranger Jerry for a fun-filled exploration of a backyard pond all the critters it contains!

Water Science Student Poster Session Part 1 (Aug 14th)

This session provides a platform for students and volunteers to share water science research or monitoring projects, receive recognition throughout the water quality monitoring community, and interact with peers and professionals in the field. View participants' abstracts on the 2020 Water Science Poster Session page on the AAS website.

Clean Water Act 101

Lisa Perras Gordon will give an overview of how rivers, streams, lakes and estuaries are protected under the Clean Water Act and why it is her favorite environmental statute. Walk away with a better understanding of how your volunteer work fits into the bigger picture for protecting water in Georgia. As we celebrate EPA's 50th anniversary, she'll also briefly discuss the major accomplishments that have been achieved under the Act.

AAS Bacterial QA/QC Workshop

The Bacterial Monitoring Workshop teaches volunteers how to monitor E. coli levels in their streams and identify possible sources of pollution. E. coli is a type of bacteria that is often used to indicate the presence of other, harmful strains of bacteria in streams. This workshop will cover necessary background information for certification. The field portion of the workshop and testing will be conducted separately by an AAS local coordinator or AAS state staff.

Coastal Topics

Adopt-A-Wetland Coordinator Luke Roberson will lead a session on several issues pertaining to the 100-mile Georgia Coast. These valuable coastal wetlands filter pollutants from our waterways, stabilize sediments, protect properties from erosion and storm surge, and provide recreational opportunities for residents and visitors. Katie Higgins (UGA Marine Extension and GA Sea Grant) will talk about volunteer monitoring of marine phytoplankton and harmful algal blooms.

AAS Jr Activity: Georgia Frogs (Session Full)

Join Linda May to learn more about frogs in your backyard and some fun froggy activities!

Protecting Georgia's Waters

In this session, Dr. Ania Truszczynski, Assistant Branch Chief in the Environmental Protection Division's Watershed Protection Branch, will provide an overview of EPD's efforts to protect Georgia's waters through existing regulatory and non-regulatory programs, and updates regarding rule making changes that address water quality, water efficiency, and drought protection in Georgia.

Water Science Student Poster Session Part 2 (Aug 21st)

This session provides a platform for students and volunteers to share water science research or monitoring projects, receive recognition throughout the water quality monitoring community, and interact with peers and professionals in the field. View participants' abstracts on the 2020 Water Science Poster Session page on the AAS website.

AAS Macroinvertebrate QA/QC Workshop

Stream macroinvertebrates (insects, mollusks, & crustaceans) are excellent indicators of the condition of both water quality and habitat. The Macroinvertebrate Monitoring Workshop will focus on collection techniques for either rocky or muddy bottom streams and macroinvertebrate identification. This workshop will cover necessary background information for certification. The field portion of the workshop and testing will be conducted separately by an AAS local coordinator or AAS state staff.

Build a Water Trail! Realizing Your Community River as an Economic Asset

Georgia River Network's Water Trails Program supports a statewide network of water trails and provides technical assistance and resources to communities who want to build water trails in their watershed. In this workshop Gwyneth Moody, GRN's Director of Water Trails and Outreach, will describe Georgia's established and developing water trails, the many ways in which water trails can benefit your community from tourism/ economic development to river conservation/ restoration, and the useful tools available to help build a successful trail.

AAS Jr Activity: Let's Get WET!

Explore the wonders of water with at-home interactive activities, led by Project WET State Coordinator Monica Kilpatrick!

Heavy Metal Soil Contamination in West Atlanta

In working with Historic Westside Gardens, we recently found high soil lead contamination in West Atlanta, and it resulted in an U.S. Environmental Protection Agency (EPA) site investigation. Dr. Eri Saikawa from Emory University will discuss the problem and the recent research findings to help create a healthy and safe neighborhood.

Streams of Plastic in Georgia

Join a panel of experts from Athens-Clarke County and the University of Georgia for a session packed with all the information you've been searching for when it comes to plastics. Topics include the following:

- Plastics in the Recycling Stream in Georgia
- Plastics in Our Streams and Waterways (Monitoring with Marine Debris Tracker)
- Technology to Keep Plastics Out of the Waste Stream (Solution Framework, Can I Recycle This)
- Keeping the Stream of Plastics Out of Our Homes (Repair Cafes and more)
- New Methods to Remanufacture Plastics

Aquatic Habitat Connectivity

Every time you cross a stream on a road or trail, there is a structure in place to enable that crossing – many of these structures are poorly designed or have become degraded over time so they cut off the ability of aquatic organisms to move between habitats, and they can be unstable/prone to failure during storm events. Join staff from The Nature Conservancy to learn why aquatic habitat connectivity is so important to fishes, amphibians, mussels, and other species and how to assess the level of barrier presented by culverts under road crossings. We will go over the basics of aquatic connectivity and the methods used for measuring barriers and provide examples from the field of sites that have been assessed, the methods used to remediate the connectivity issues discovered, and the resulting benefits on aquatic habitat and fish movements.

SOCIAL EVENTS

Adopt-A-Stream Social

Join us for a fun night of networking and getting to know your fellow stream enthusiasts! *Update: A second AAS Social has been added and will take place on 8/21. Register here!*

Water Trivia

Test your water knowledge with teams of volunteers, veteran trainers, students, and those new to AAS for chances to win great prizes! There will be several rounds of water related trivia questions with differing levels of difficulty and multiple opportunities to win a prize for your group. Topics span from pop culture to miscellaneous water facts to Adopt-A-Stream monitoring protocol. All attendees are welcome, and anyone can win!

Hidden Rivers Documentary Screening

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 - revealing both the beauty and vulnerability of this aquatic life- and how many people are finding ways to protect these ecosystems. Session includes introduction by Jeremy Monroe, Executive Director of Freshwaters Illustrated.

Keynote Address, Year in Review, and the Adopt-A-Stream Awards

This session will kick off with the keynote address, given by Georgia River Network's Joe Cook. Afterwards, AAS staff will give an overview of the program's accomplishments of the previous year and honor the efforts of AAS volunteers, watershed groups, and trainers at the annual awards ceremony.