NALMS Launches Subject Matter Experts List

*Subject Matter (n.): the topic dealt with or the subject represented*
*Expert (n.): person who has a comprehensive knowledge or skill in a particular area*

At the 2018 midterm board meeting, NALMS launched the first list of Subject Matter Experts (SME). Subject Matter Experts are just that – individuals that possess a comprehensive knowledge on a particular topic – in this case a lake and reservoir management topic. All SMEs are Certified Lake Managers (CLM) or Certified Lake Professionals (CLP). CLMs and CLPs demonstrate a high level of education, training and commitment to further the science and protection of lakes and reservoirs and serve as a great source of SMEs for the society.

Subject Matter Experts are expected to write or speak confidently on a lake management topic based on education and firsthand experience. SMEs will be called upon to assist with lake management questions as an “Ask the Expert”; provide feedback for regional lake and reservoir management issues; and/or speak, write or educate on topics to further the education, recognition and expansion of NALMS and its mission. Board approval of the SME list does not indicate an endorsement of the SME’s opinions or expert advice given but serves as recognition of individual CLMs and CLPs that possess a specific area of expertise and a willingness to serve NALMS and our members to improve lake, reservoir and watershed management.

Who’s on the list? The initial SME list includes 21 individuals from nine of NALMS’s twelve regions. Topics covered include diatom identification, fisheries, hydroacoustics, mercury cycling, algal bloom prevention, public perceptions, eutrophication, nutrient sources, watershed/nonpoint source management and more! Subject Matter Experts are listed on the NALMS website at www.nalms.org/subject-matter-experts/ along with their area of expertise. Ask these experts your lake management questions, test their knowledge in their subject area and use their expertise to protect and improve your lake or reservoir.

Want to be an SME? Are you interested in responding to “Ask an Expert” requests or providing input on media questions and replying to hot topics in lake management? Would you be willing to assist with writing short articles in your subject area, hosting webinars or other trainings, and assisting with position statements? First, check your certification status as all SMEs are CLMs or CLPs. If you are already a CLM or CLP and

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I hope you are enjoying springtime. There are also many new and exciting things springing up at NALMS. At the recent midterm board of directors meeting in Henderson, Nevada, the board approved a new membership category starting in 2019 called Early Career; it is a reduced rate category with all of the benefits of a Professional membership for only $80 per year for young NALMS members in their first five years of graduation. We hope this new category will encourage recent college graduates to join NALMS and enjoy all member benefits. At the midterm board meeting, we also approved a list of NALMS members who will voluntarily provide free advice on lakes to other NALMS members including individuals, lake associations, and municipalities. Each of the volunteer experts is a NALMS Certified Lake Manager. These experts will also provide responses to questions NALMS members submit to “Ask the Lake Expert”, our new feature on the NALMS website.

Our next NALMS Conference will be held in Cincinnati, Ohio from October 30 to November 2. The theme of our conference this year is “Now Trending: Innovations in Lake Management.” This year we plan to increase the number of our popular pre-conference workshops. This year we also plan to have many of our exhibitors provide demonstrations of their monitoring and lake management products. We are also planning some exciting field trips for the conference. I would personally like to invite students to submit papers and posters for the NALMS conference. Each year we have a student awards program where we present awards for the best student presentation and the best student poster.

NALMS continues to be a leader in lake and watershed management and education. We are developing state of the art information on managing toxic blue-green algae. We are developing position papers on timely lake topics. All of this information will be available to NALMS members through our many publications (LakeLine, NALMS Notes and Lake News, and our professional journal) and on our website. Have a great spring!

Do you have an item you’d like to see in NALMS Notes & Lake News?
Send it to us by the 15th of February, April, June, August, October and December for consideration in the next issue of NALMS Notes & Lake News.
News From Our Affiliates

**Colorado Lake and Reservoir Management Association (CLRMA)**

[clrma.org](http://clrma.org)

CLRMA will be hosting its annual Spring Luncheon on April 17, 2018 in Westminster. This year’s luncheon will include an Algae Identification Workshop led by Patrick Kociolek, an algae expert from CU. Visit the CLRMA website for more information and to register.

**New York State Federation of Lake Associations (NYSFOLA)**

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

The New York State Federation of Lake Associations, Inc. is preparing for the 33rd season of the Citizens Statewide Lake Assessment Program (CSLAP) this year. Over 150 lakes will be participating, and we are looking forward to having two new field technician interns from the SUNY College of Environmental Science and Forestry in Syracuse. In collaboration with the Finger Lakes Partnership for Regional Invasive Species Management, NYSFOLA will also be working on “Hydrilla Hunt” strategies for CSLAP lakes in the Great Lakes basin.

Harmful algal blooms are making headlines in the Empire State with Governor Andrew Cuomo announcing a $65 million initiative to address the problem. *Twelve lakes across the state have been selected for pilot studies.* We’re glad that some of our lake associations can see the humor in HAB issues.

NYSFOLA is also gearing up for their 35th anniversary annual conference that will be held May 4–5, 2018 at the Fort William Henry Hotel and Conference Center in Lake George. Questions? Contact Nancy Mueller [fola@nysfola.org](mailto:fola@nysfola.org).

**North Carolina Lake Management Society (NCLMS)**

[nclakemanagement.org](http://nclakemanagement.org)

The North Carolina Lake Management Society will be hosting the Southeast Chapter of NALMS conference with the theme: “Stirring the Waters: Innovations is Lake Management” April 16–18, 2018.

**Oregon Lakes Association (OLA) & Washington State Lake Protection Association (WALPA)**

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

It’s back! The Oregon Lakes Association (OLA) and the Washington Lake Protection Association (WALPA) are once again collaborating to organize a joint OLA/WALPA Lakes Conference. The conference will be held September 26–28, 2018 at the DoubleTree by Hilton in Portland, so put it on your calendar now!

Our last joint conference in 2013 — in Vancouver, Washington — was a great success, so the Boards of both organizations enthusiastically agreed to make this collaboration a regular thing. A joint conference allows us to share ideas across borders, form new partnerships, and brainstorm collaborative initiatives and joint research projects. Since WALPA includes both Washington and Idaho, this conference is really THE regional lakes conference for the Pacific Northwest!

Visit [www.walpa.org/annual-conference/](http://www.walpa.org/annual-conference/) or [www.oregonlakes.org/Events](http://www.oregonlakes.org/Events) for more information.

**Pennsylvania Lake Management Society (PALMS)**

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

The Pennsylvania Lake Management Society is currently gearing up for the 28th Annual Pennsylvania Lake Management Society conference, to be held in State College Pennsylvania on March 7th and 8th. This is the largest annual gathering of lake professionals, associations, and academics in the Commonwealth. By the time this update is published the conference will have passed. You can check out how the conference went at: [www.facebook.com/palakes/](http://www.facebook.com/palakes/). In other notable news, PALMS was part of a sub-committee of the Pennsylvania Governor’s Council on Invasive Species to coordinate a meeting with legislators on the emerging threat of Hydrilla in Pennsylvania. That meeting took place on December 12, 2017 with a very favorable response from those in attendance. The sub-committee hopes to continue that dialog with those involved to help further a response to the threat of hydrilla as well as other aquatic invasive species within Pennsylvania.

**Submit Your Affiliate News**

Let us know what your affiliate is up to! Send your news to us at [nalmsnotes@nalms.org](mailto:nalmsnotes@nalms.org).
This is an open call to contribute to LakeLine. Please feel free to reach out to me anytime at LakeLine@nalms.org with ideas or suggestions.

Here are the proposed themes for the next few upcoming issues of LakeLine.

**Summer 2018 – National Lake Assessment Data Utilization**

No additional articles will be accepted at this time. The issue is looking full!

**Fall 2018 – In-Lake [and/or] Watershed Management**

Does it have to be one or the other? Should it be both? What is our responsibility in evaluating all of the “tools in the toolbox” and implementing a combination approach to solving a problem? Articles for this issue are due by July 1, with a publication timeline for early October. There is space for additional articles in this issue.

**Winter 2019 – Why It Didn’t Work – Learning from Less Than Successful Management Projects**

We often tend to focus on publishing papers or articles on success stories, but there is a lot to be learned from evaluating and sharing projects that may not have initially had the full or anticipated outcomes that we predicted in the planning phases. It is ok to share how we erred, because it helps to build from that knowledge and move to the next step. Emphasis for these articles should be placed on assessing why the project did not work as intended, and detailing next phases of the project to achieve intended goals. Articles for this issue are due by October 1, with a publication timeline for January 2019. There are still spots for articles in this issue.

**Spring 2019 – Students at Work in Limnology**

This issue will feature articles from NALMS student members who will share their work. If you are a student and wish to submit an article, please contact Sarah Burnet at shburnet@uidaho.edu, who will be working with students to pull articles together.

**What would you like to see for topics and articles in the future? Please let me know!**

Articles are generally around 2000 words, and photos, graphics and tables are encouraged. If you wish to write an article for one of the above listed themes, or if you would like to suggest a theme or other content, please contact me at LakeLine@nalms.org. This will be the new standard email address for LakeLine related business.
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would like to further serve NALMS as a recognized SME, contact Alyssa Schulte to join our list – simply provide your contact information and area of expertise to be added to the SME list.

If you are not already a CLM or CLP, visit our Certification page to complete and submit your certification application. The aim of the NALMS certification program is to recognize people that have special training and experience in lake management. Once your application is reviewed and approved by the certification committee, you will receive a certificate, plaque and lapel pin to call out your expert status to your colleagues and clients and be invited to join the SME list. Being part of the SME list not only provides an opportunity to serve NALMS and its membership but also the opportunity to create connections with those experiencing lake and reservoir management issues and provide them with your expert advice.

Did you know ... that there are advertising opportunities in LakeLine?

• Distributed to a national and international audience of NALMS members and subscribed university libraries
• Discounted rates for Corporate members and consistent advertisers
• Reach audiences through hard-copy and digital format

Promote your business and support NALMS ... at the same time!

https://www.nalms.org/lakeline-magazine/nalms-advertising/

Thank You to Our Corporate Members!

NALMS Corporate members are leaders in the water industry. By maintaining a NALMS membership (even going above and beyond by participating in our yearly symposiums, encouraging their employees to serve on our program committees, and in countless other ways), they affirm their belief that our lakes and other freshwater sources are valuable resources that deserve care, respect, and protection.

Thank you to our active Corporate members! We appreciate all that you do to support and give back to NALMS.

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PhycoTech, Inc.
Premier Materials Technology, Inc.
Restorative Lake Sciences
SePRO Corporation
SOLitude Lake Management
Turner Designs, Inc.
Vertex Water Features
Water Resource Services

If your company’s name is not on this list, but you’d like it to be, please contact me at aschulte@nalms.org - or - visit the NALMS website to join or renew.

Find NALMS Online

Website • Facebook • Twitter
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OLMS Collegiate Scholarship to Attend the 2018 NALMS Conference

The Ohio Lake Management Society (OLMS) will provide SCHOLARSHIPS of up to $400 per student for graduate and undergraduate students at OHIO PUBLIC and PRIVATE COLLEGES and UNIVERSITIES to attend the 2018 NALMS Conference. The money is available on a first come, first served basis. Please send proof of your registration to Marty Hilovsky, Treasurer of OLMS at mhilovsky@enviroscienceinc.com. Notification of award and reimbursement procedures will then follow. Reimbursement will be made immediately following the conference.

For general information, contact NALMS: nalms.org, 608-233-2836

For other details, contact conference co-chairs David Culver (culver.3@osu.edu), Eugene Braig (braig.1@osu.edu), or Sara Peel (speel@arionconsultants.com)
Now Trending: Innovations in Lake Management
The Ohio Lake Management and Indiana Lakes Management societies are excited to welcome NALMS to the Midwest’s “Queen City,” Cincinnati, Ohio. On the shores of the mighty Ohio, the river was impounded to serve modern navigation; those impoundments now function like a series of lakes. Cincinnati is also home to a burgeoning craft-brewery industry that is certain to be one focus for conference outings. With Thomas More College’s field station, active urban reservoir projects, and Environmental Protection Agency research facilities nearby, we’ll find plenty to see, do, learn. Our region is also bordered by the Great Lakes to the north, and our conference theme is well served by recent cutting-edge efforts to understand and mitigate western Lake Erie’s press-grabbing eutrophication issues.

Join us at one of the nation’s most opulent masterpieces of art-deco architecture, the award-winning Hilton Netherland Plaza, a short walk from sessions at the convention center.

Preliminary Session Topics
We encourage the submission of abstracts for papers or posters on any of the topics listed below, or abstracts that address topics of broad interest to the lake and reservoir management community.

- Monitoring Technologies
- Autonomous Sampling
- Remote Sensing
- Large Data Sets
- Toxins in Source Waters
- Nutrient and Water-quality Management
- Utilizing Citizen Science
- Harmful Algal Blooms
- Great Lakes
- Inter-basin Water Management
- Combating Invasive Species
- Riverine Impoundments as Lakes
- Environmental DNA
- Geospatial Applications

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Sara Peel | speel@arionconsultants.com

Program Co-Chairs
Suzanne Gray | gray.1030@osu.edu
Doug Kane | dkane@defiance.edu

General Conference, Exhibitor & Sponsorship Information
NALMS Office
608-233-2836 • www.nalms.org

Important Dates
May 11, 2018
Abstracts due.

Late Spring
Registration opens.

August 17, 2018
Registration and payment from presenters of accepted abstracts due.

September 28, 2018
Last day conference hotel rate available.

Visit www.nalms.org/nalms2018 for more information and to submit your abstract.
Conferences & Events

**MA COLAP Conference**
April 13, 2018 • Westborough, Massachusetts
macolap.org

**Southeastern Lake Management Conference**
April 16–18, 2018 • Asheville, North Carolina
nclakemanagement.org

**40th Annual Wisconsin Lakes Partnership Convention & Water Action Volunteers Symposium**
April 18–20, 2018 • Stevens Point, Wisconsin
www.uwsp.edu/uwexlakes/

**57th Annual Michigan Lake and Stream Associations Conference**
April 20–21, 2018 • Thompsonville, Michigan
www.mymlsa.org

**New York State Federation of Lake Associations Annual Conference**
May 4–5, 2018 • Lake George, New York
nysfola.org

The New York State Federation of Lake Associations 35th Anniversary Conference will be held May 4–5, 2018 at Fort William Henry Hotel and Conference Center in Lake George, New York. Join lakefront property owners, lake managers, researchers, and government officials from around the state for the 35th annual gathering of people dedicated to protecting and improving New York's lakes. The Fort William Henry Hotel and Conference Center in beautiful Lake George, New York provides a perfect setting for a gathering of lake enthusiasts. We invite you to join us.

Interested in becoming a speaker, exhibitor or sponsor? Contact Nancy Mueller fola@nysfola.org (800) 796-3652.

**Aquatic Plant Management Society 58th Annual Meeting**
July 15–18, 2018 • Buffalo New York
www.apms.org

**29th Annual Florida Lake Management Society Technical Symposium**
August 28–31, 2018 • Fort Lauderdale, Florida
films.net

**California Lake Management Society 2018 Conference**
October 11–12, 2018 • Lake Tahoe, California
www.california-lakes.org

**The 2018 Upper Midwest Invasive Species Conference**
October 15–18, 2018 • Rochester, Minnesota
www.umisc.net

**NALMS Affiliate Organizations**

Do You Have a Conference or Workshop You’d Like to See Listed in NALMS Notes & Lake News?

Email the details to us at NALMSNotes@nalms.org.

You can also add your event to our online calendar of events by visiting www.nalms.org/events/community/add/

Not a NALMS Member? It’s Easy to Become One. Join Today!

NALMS Notes & Lake News is free for everyone, but only NALMS members can have LakeLine Magazine and Lake and Reservoir Management delivered to their mailboxes 4 times a year. NALMS members also receive discounts on publications and conference registration.

Joining is easy! Visit our website to get started.
The theme of the Conference reflects the high value and dedication the NALMS membership has for protecting the quality of our most precious natural resource. Not only is water fundamental to all life, but it is also used in nearly all aspects of human activity. Our challenge is to manage, in the face of increasing and often conflicting demands, this valuable resource. This Conference provides an opportunity to highlight innovations in technology and science and how they relate to the quality of our waters while simultaneously highlighting the technical guidance required to intelligently manage our aquatic resources into the future.

This year’s conference will be held at the DoubleTree by Hilton Hotel Asheville—Biltmore. The hotel is within walking distance of the Biltmore Estate, Biltmore Village and the Blue Ridge Parkway, offering quaint shopping, an assortment of dining opportunities, and stunning architecture. Feel valued and cared for from the moment you arrive at our Asheville hotel, once an integral part of the Biltmore Estate and featuring stunning Vanderbilt-inspired gardens.

Suggested Presentation Topics

- New Technologies
- Water Quality
- Hydrology Restoration
- Nuisance Species
- Algae & Plants
- Climate Change
- Contaminants
- Citizen Science
- Dredging
- Monitoring
- Data Analysis / Assessment
- Seepage/Leaks
- Remote Sensing
- Stormwater

Please submit abstracts in Microsoft Word. Abstracts should be limited to 250 words. Speakers may register for the conference after acceptance of your abstract. Send Abstracts to: nclakemanagement@gmail.com. Abstracts Deadline is February 8, 2018.

Additional conference information and forms will be posted at: www.nclakemanagement.org
ANNOUNCEMENT

APMS GRADUATE STUDENT RESEARCH GRANT

Subject Matter: A graduate student research grant in the area of aquatic plant or algae management and ecology is being offered by the Aquatic Plant Management Society. Co-sponsors of this academic award include regional APMS chapters: Florida, MidSouth, Midwest, Northeast, South Carolina, Texas, and Western.

Objective: Provide a grant for a full-time graduate student to conduct research in aquatic plant or algae management techniques (used alone or integrated with other management approaches) or in aquatic ecology related to the biology or management of regionally or nationally recognized nuisance aquatic vegetation (macrophytes, algae, or cyanobacteria).

Applicants: Solicitation for proposals is open to any full-time faculty member and/or graduate student of an accredited U.S. academic institution. A faculty sponsor must be identified if the application is submitted by a graduate student.

Amount: $40,000 (APMS does not pay overhead or indirect charges).

Duration: Two (2) years ($20,000 per year).

Proposal Deadline: Applications must be postmarked no later than April 15th, 2018.

Guidelines for Proposals: Proposals should contain a concise statement of the project, including its purpose and justification, as well as sections that discuss study objectives, methodology, schedule, budget, and planned publication of results. The résumé of the faculty applicant and graduate student (if known) should not exceed two (2) pages each. Proposals should not exceed ten (10) pages, and must be signed by the applicant (principal investigator) and an appropriate university official. Include copies of your five (5) most recent peer reviewed publications.

Please submit a pdf file of your full application via email to Mark Heilman, APMS Vice President at: markh@sepro.com

Award: Notification of award will be provided to the faculty member in time to make arrangements to attend the APMS 58th Annual Meeting (July 16-18, 2018 – Hyatt Regency, Buffalo, NY). Formal announcement of the recipient will be made at the Annual Meeting, with initiation of the grant scheduled for the 2019-2020 academic year. Payments in the amount of $20,000 will be made before January 31st of 2019 and 2020.

Requirements: Semi-annual progress reports must be submitted to APMS prior to June 30th and December 31st for each year of the grant. The faculty member and student must participate in at least one APMS Board of Directors meeting and attend the APMS Annual Meeting. The student must present results of the funded research at least one time over the duration of the grant, although it is preferred that presentations are made annually. Upon completion, a final report must be submitted to APMS.

For more information on the APMS Graduate Student Research Grant Visit the APMS website at: http://www.apms.org

Inquiries: Mark Heilman APMS Vice President 317-388-3336 markh@sepro.com
NALMS Approves Strategic Plan for 2017–2020

At the recent midterm meeting in Las Vegas, the NALMS Board of Directors voted to approve a new Strategic Plan that sets its sights on strengthening and achieving NALMS’ mission, vision, values, and goals. The plan details strategic goals in regard to four crucial areas: membership, communication, the NALMS brand, and financial health.

The focus of each successive strategic plan is to build upon past successes and identify new initiatives that can assist NALMS in meeting future challenges and opportunities. The result is an updated plan detailing NALMS’ priorities and direction. Though this strategic plan will ideally guide NALMS through 2020, the plan is a living document and will be updated as NALMS continues to grow and excel. In addition, a formal review of this plan will be conducted in 2020 and every five years thereafter to evaluate the need for modification and updates.

You can view the strategic plan online here.

New Chair for Certification Program

NALMS’ Region 3 Director, Kiyoko Yokota, has been named the new chair of the Certification Program. The Certification Program recognizes members with special training and experience in lake management. We encourage you to apply to become a Certified Lake Manager or Professional. Visit the program website to get started.
NALMS members and affiliates in Region 3 (Mid-Atlantic) were busy with annual conferences, legislative activities, and planning for the upcoming “lake” season as winter weather lingered into spring this year.

In my home state of **Maryland**, NALMS members organized the first-ever lake session at the **23rd Annual Maryland Water Monitoring Council Conference (MWMC)** on December 8, 2017. The conference theme was “Managing Water Quality in a Changing World.” Sherm Garrison, past NALMS regional director and board member, was coaxed out of retirement to moderate the well-attended session, which included four speakers: 1) The State of Lakes in a Changing World (Lisa Borre, Cary Institute of Ecosystem Studies); 2) Overview of Aquatic Invasive Species Management in Maryland Lakes (Mark Lewandowski, Maryland Department of Natural Resources); 3) Managing Multi-purpose Lakes and Ponds in Columbia, Maryland (John L. McCoy, Columbia Association); and 4) Managing Lakes—Building a State Framework (Barbara Beelar, Friends of Deep Creek Lake).

Building on last year’s legislative success to establish a lake restoration fund in Maryland, NALMS nonprofit member Friends of Deep Creek Lake (DCL) is active in Annapolis again this year to advocate for appropriation of $3 million per year to “fund the fund” and support protection and restoration of state-owned and –managed lakes. Many groups are supporting the State Lakes Fund bill (SB 501/HB 801), including NALMS, NALMS affiliate Deep Creek Lake Property Owners Association (POA), and Garrett County Chamber of Commerce. The bill is still working its way through the legislative process, so stay tuned.

In **Virginia**, the Virginia Lake and Watershed Association (VLWA) held their annual **Virginia Water Conference** in Richmond on March 4–6, 2018 with 415 in attendance. This year’s theme was “Meeting Virginia’s Water Challenges” with three keynote addresses: 1) “Municipal Separate Storm Sewer System (MS4) Program: Then, Now, and Beyond Program Development, Maturity, and Incorporation of TMDL Requirements” by Andy Dinsmore, NPDES Branch Chief, USEPA; 2) “Flint Water Supply: Experiences and Research Updates Since March 2016” by Rebekah Martin, Graduate Student, Virginia Polytechnic Institute and State University (VA Tech); and 3) “Dam Related Flood Risks: How Will the Dam Safety Community Meet New Challenges?” by James E. Demby, National Dam Safety Program, FEMA.

The Virginia Water Conference 2018 had five concurrent sessions on topics ranging from stormwater management and dam safety to environmental restoration, floodplain management, green infrastructure, water quality and quantity, watersheds and TMDLs, flooding, and lake and reservoir management.

VLWA provides an impressive level of student scholarship support. Three Virginia Tech scholarship recipients gave outstanding talks at the conference on using models and high-resolution mapping to prioritize restoration of endemic...
fish (Joseph Famularo), whole-ecosystem experiments to understand phytoplankton response to epilimnetic mixing (Mary E. Lofton), and modeling the cumulative effects of impoundments on downstream flow alteration (Tyler A. Keys).

The Pennsylvania Lake Management Society (PALMS) held its 28th Annual Conference March 7–8, 2018 in State College with just over 100 registered attendees. Attendance was affected by one of the strong Nor’easter storms, especially those traveling from the Poconos lake region in the northeastern part of the state. Like the MWMC, the theme for the Pennsylvania lakes conference was “Lake Management in a Changing World.” I gave the Wednesday keynote talk: “Managing Lakes in a Changing World: Think Global, Act Local,” and Craig Williamson, Ohio Eminent Scholar of Ecosystem Ecology at Miami University in Ohio, delivered an interesting Thursday keynote talk: “Why Are Lakes Browner and Why Does it Matter?” Erin Urquhart, USEPA, couldn’t travel due to the weather but was able to join the meeting remotely to talk about examining changes in cyanobacteria harmful algal blooms (cyanoHABs) spatial extent and frequency in the US using remote sensing.

Attendees at the Pennsylvania lakes conference learned about how to request assistance from the Consortium for Scientific Assistance to Watersheds (C-SAW), a team of specialists available to provide free organizational and technical assistance to PA-based watershed groups. Two concurrent sessions included talks on topics such as fish habitat restoration, nutrient inactivation treatment for internal phosphorus load control, quagga mussel treatment, cyanotoxins, a brief history of “why phosphorus?” (by Milt Ostrofsky, Allegheny College), rapid response to aquatic invasive species, using real-time buoy data for lake management, management of invasive hydrilla, fisheries management “that doesn’t have to break the bank,” lake and pond dredging, keeping pesticides out of groundwater, shoreline habitat restoration, and another talk by me about the GLEON Lake Observer mobile app.

NALMS has re-established a connection in West Virginia with Danielle Nathanson, the new lead of the lakes program in the Watershed Assessment Branch, West Virginia Department of Environmental Protection. She attended the PALMS conference this year, and with no state affiliate in West Virginia, was officially “adopted” as a member in the neighboring state’s lake management society.

In Washington, DC, the USEPA completed the latest round of field sampling for the National Lakes Assessment (NLA) in cooperation with state and tribal partners in 2017. The NLA is conducted every five years, and last year’s fieldwork represents the third nationwide lake assessment since 2007. Results are now being analyzed.

When it was completed in 1867, the Roebling Suspension Bridge was the longest of its kind worldwide and was the prototype for the Brooklyn Bridge.
For lake lovers in the Great Plains, spring is a time change and excitement as the ice recedes and we gear up for another summer on the water. It is also that time of year when we see the most precipitation (and subsequently, nutrient runoff) that influences our fragile lake ecosystems. As we prepare for another growing season, I am reminded of all of the challenges we as lake managers face, from invasive species to harmful algal blooms and eutrophication, and how our communities will work together to protect and enhance our lakes and reservoirs.

**Iowa:** Here in Iowa, partners around the state are working together to restore and improve water quality in a number of public lakes. The Iowa Department of Natural Resources’ Lake Restoration Program is currently working to restore over 20 lakes throughout the state. Current projects include watershed and in-lake restoration efforts on several County Conservation Board Owned Lakes, like Central Park Lake in Jones County (see photo). Central Park Lake is a small reservoir that is a local favorite for fishing, wildlife watching, and boating. Together, project partners are working to remove excess sediment from the lake bottom, protect shorelines from erosion through hard armoring, re-vamp the beach area to make it more accessible for swimmers, update the lake’s outlet infrastructure, and install a variety of structures on the lake bed for fish habitat. The lake will re-open in the spring of 2019.

In other news, The Iowa Water Conference was held at Iowa State University on March 21–22 and featured talks on urban green infrastructure practices and agriculture best management practices (BMPs) for water quality improvement. This conference focuses on the relationship between land use and water quality, and brings together a variety of urban and rural partners to work together to solve water quality issues around the state. The 2019 conference will be held on March 12–13 at Iowa State University. For more information, please visit [www.water.iastate.edu/IWConf](http://www.water.iastate.edu/IWConf).

The 3rd Annual Prairie Lakes Conference will be held on the shores of the Iowa Great Lakes on August 8–10, featuring a field day tour where conference participants and locals can learn more about innovative farming practices that protect water quality, numerous presentations on lakes in the prairie pothole region, and The Blue Water Festival: an annual festival celebrating water quality in the Iowa Great Lakes. More information about the conference can be found at [plciowa.com](http://plciowa.com).

**Kansas:** The Kansas Department of Health and Environment recently published their draft 2018 303(d) List of Impaired Waters, with public hearings conducted in March to address comments on the draft list.

Kansas continues to be a leader in HABs research and management, hosting a multi-agency symposium on HABs in 2018 with representatives from state, county and city commissions,
public works, planning, water and parks departments, academia, and regulatory agencies. Topics at this year’s symposium included: the role of rough fish on HABs, public heath impact due to HABs, and management strategies to control HABs for Milford Lake.

The University of Kansas (KU) will host the 2nd Great Plains Limnology Conference at the KU Biological Field Station October 5–6, 2018. The 2017 Conference featured speakers and posters on research conducted throughout the Great Plains region. For more information about the conference, please contact Ted Harris at ted.daniel.harris@gmail.com.

**Missouri:** The Missouri Department of Conservation teamed up with the USGS this spring to remove over 47,000 Asian Carp from Creve Coeur Lake (near St. Louis) using an experimental method called the Unified Method. While the method has been used in Asia to essential herd fish, it has not been used frequently as a management tool within the United States.

The Unified Method essential herd fish to a desired area of the lake by using sounds broadcast underwater. Asian Carp are particularly sensitive to certain sounds, including the sound of outboard motors. Fisheries management biologists were able to isolate that sound and play it underwater to move fish across the lake and block bays in the lake after pushing them away from the area to ‘herd’ them to a centralized location where they could be netted and removed. The entire process took about three weeks during cold weather earlier this winter, when waters are cold, and carp are generally less active.

Local authorities estimate that through this process, they were able to remove about 85% of the carp population in the lake. This will help managers establish a more favorable fishery with a better game fish population and potentially improve water clarity in the lake. Fish are also not likely to reproduce, as they require flowing waters for their eggs to hatch.

The Unified Method is effective at reducing Asian Carp numbers in lake systems because Asian Carp, or Silver Carp, tend to react to distinct sounds and are known for “jumping” out of the water when startled. Asian Carp are an invasive species that are commonly found in parts of the Mississippi and Missouri River Basins. The method doesn’t affect other invasive fish or native game fish, as they are generally not bothered by the sound of outboard motors.

**Nebraska:** Nebraska Parks and Game is working on a number of lake and stream improvement projects statewide to improve angler access, augment fish habitat, update boating access, rehabilitate cool water streams and construct new reservoirs. For more information about individual projects around the state, visit: http://outdoornebraska.gov/fisheriesprograms/.

The Nebraska Lakes Association (NLA) will hold their annual spring conference on Sunday, April 22, 2018 at the Nebraska Game and Parks Outdoor Education Center in Lincoln, Nebraska. The NLA is an association for private lakes throughout the state. For more information, please visit: http://www.nebraskalakes.org/.

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**The Cincinnati Red Stockings (later the Reds) became the first professional baseball team in 1869 with a total of 10 players. They were also the first team to travel to another city by airplane. In 1935, the Reds hosted the first night baseball game played under lights.**
**Government Affairs**

**Recent News on Government Spending Bill 2018**

The federal spending bill was signed into law in February and contains funding for several important lake protection and management programs:

- $8.4 million appropriation for EPA's Lake Champlain Basin Program, a 90 percent increase in funding over fiscal year 2017. The bill also includes an additional $5.5 million – $2 million more than in fiscal year 2017 – for “sea lamprey control and other work to restore aquatic habitat and fisheries in the Champlain basin,” according to a press release from US Senator Patrick Leahy's office.

- $300 million for the Great Lakes Restoration Initiative, the same funding as current fiscal year. The bill also includes the Great Lakes and Mississippi River Interbasin Study ($1.85 million), Chicago Electric Barrier ($16.7 million for operations and management), $8 million for the International Joint Commission, and $33.29 for the Great Lakes Fishery Commission, according to a press release from the Healing Our Waters Coalition.

- Funding to preserve and protect Lake Tahoe through funding for the Lake Tahoe Reauthorization Act and funding for invasive species work to implement the Lake Tahoe Restoration Reauthorization Act, according to a press release from US Senator Dean Heller's office.

For information about “What the Government Spending Bill Means for Water,” read the excellent review in an expert blog post by NRDC staff attorney Becky Hammer. Of note for members who have been following proposed changes to the Waters of the United States (WOTUS) Clean Water Rule, Hammer reports:

“…Congress thankfully did not adopt an especially radical provision that aimed to shield the Trump administration’s repeal of the Clean Water Rule – a critical safeguard for numerous waters, including the sources of drinking water of 117 million people – from public and legal scrutiny. This rider would have exempted such a repeal from any statute or regulation that would have otherwise applied, sabotaging the public’s ability to have a voice in the actions of their government. If enacted, this rider would have encouraged the administration to ignore the Clean Water Act and Administrative Procedure Act’s requirements to meaningfully consider public comment. It could have also interfered with the courts’ ability to review if the repeal is “arbitrary or capricious.” It is hard to imagine a more undemocratic provision, especially when you consider that the Clean Water Rule was adopted after years of scientific research and public engagement.”

**News from the US Congress**

In January, Rep. Fudge of Ohio introduced the “Collaborative Water and Soil Enhancement Act of 2018.” This bill focuses on protection of drinking water sources by promoting best management practices on farms. Provisions of the bill incentivize changes in farming practices that help to keep nutrients on farms. Funding would go specifically to the Conservation Stewardship Program and the Environmental Quality Incentives Program. The bill would also create a fast track to certification of “Certified Crop Advisors” and promote identification of priority areas for protection of source waters.

According to Congresswoman Fudge, “The Collaborative Water and Soil Enhancement Act of 2018 leverages new partners and prioritizes conservation efforts in places like the Great Lakes to ensure our soils remain healthy, and a clean and abundant supply of water is there for generations to come.”

Currently the bill is in the Conservation and Forestry subcommittee of House Agriculture. To track the bill’s progress go to https://www.govtrack.us/congress/bills/115/hr4892.

**HABHRCA Progress and Implementation Report Delivered to US Congress**

In March, NOAA transmitted to Congress a progress report on the Interagency Working Group on the Harmful Algal Bloom and Hypoxia Research and Control Act (HABHRCA). This report provides details on actions and activities that the agencies involved with this group have undertaken since the publication of National and Great Lakes-focused research plans and action strategies. The report is linked here on NOAA's HABHRCA page. ♦
NALMS Partnerships

Steven Heiskary, NALMS representative | steven.heiskary@gmail.com

NALMS and the Advisory Committee on Water Information (ACWI)

NALMS has been a member of the Department of Interior’s (DOI) ACWI since 2002. The ACWI advises the Federal Government, through the DOI, United States Geological Survey (USGS), on the Federal Water Information Coordination Program (WICP). The purpose of the committee is to represent the interests of water-information users and professionals in advising the Federal Government on activities and plans related to Federal water-information programs and the effectiveness of those programs in meeting the Nation’s water information needs. I was originally appointed as NALMS representative to this committee by then NALMS President Jeff Schloss and have had multiple reappointments from the DOI since that time.

The ACWI consists of a variety of Federal agency representatives including: US Environmental Protection Agency, USGS, US Department of Agriculture, US Fish and Wildlife Service, US Army Corps of Engineers, National Oceanic and Atmospheric Agency and a variety of other government, professional and nonprofit organizations that have an interest in water-information. Among these members are the Water Environment Federation, American Water Works Association, American Society of Civil Engineers, Ecological Society of America, Association of State and Interstate Water Pollution Control Administrators, and Association of Metropolitan Water Agencies.

Much of the work of ACWI is conducted within subcommittees and workgroups. The annual meeting affords subcommittees and workgroups opportunity to report out to ACWI on their activities over the past year. ACWI provides feedback and helps shape the agenda for the subcommittees. NALMS was an active participant in the Water Resources Adaptation to Climate Change workgroup via Nancy Turyk and Dennis McCauley. The workgroup issued a detailed report and recommendations on the topic in 2014, which may be accessed on the ACWI web site at acwi.gov/climate_wkg/index.html.

The January 17–18, 2018 meeting included presentations from the Subcommittees on Ground Water, Sedimentation, Hydrology, and Spatial Water Data. Challenges related to the management of the Nation’s water resources and collection of data was shared in these presentations. For example, the Subcommittee on Sedimentation described the need to manage sedimentation for long term sustainability of the Nation’s reservoirs. Intertwined with this, is the impact of climate change and extreme events on sediment dynamics, the overall aging of the reservoir system, and a general lack of funding to proactively address these issues. There were various other updates, such as the National Water-Quality Monitoring Council. One topic they shared was the national conference (which NALMS helps manage) which was to be held in 2018 but was postponed and is under consideration for 2019, with Denver a possible location. Copies of the presentations may be found at acwi.gov/acwi-minutes/acwi2017/index.html.

The January 2018 meeting marked the end of my tenure on this committee. ACWI will be seeking new representatives from many of the member organizations in spring/summer of 2018. NALMS Executive Committee will make the new appointment at that time. It has been an honor to serve on NALMS’ behalf. I look forward to NALMS’ continued participation in this important committee.

The Louisville District Corps of Engineers operates eight navigation structures on the Ohio, from Markland Locks and Dam downriver to the mouth. The projects operate 24 hours a day, 365 days a year, serving both the towing industry and recreational boaters.
**Pee and Pesticides: Thoreau’s Walden Pond in Trouble, Warn Scientists**
*Source: The Guardian*

In 1854, Henry David Thoreau described the water of Walden Pond as “so transparent that the bottom can easily be discerned at the depth of 25 or 30 feet.” Today? Not so much. Human activity has impacted the pond so much that it is estimated that over half of the phosphorus in the lake in the summer “may now be attributable to urine released by swimmers.”

**Some of the World’s Biggest Lakes Are Drying Up. Here’s Why.**
*Source: National Geographic*

National Geographic magazine published a feature story about the world’s drying lakes in the March 2018 issue.

Pulitzer-prize winning journalist Kenneth Weiss writes about how warming climates, drought, and overuse are draining crucial water sources and threatening habitats and cultures. Lake Poopó in Bolivia is featured in the article along with striking photos and stories of lakes on three other continents: Urmia (Iran), Tanganyika (Tanzania), and Great Salt Lake (United States). NALMS Region 3 Director Lisa Borre, a senior research specialist at the Cary Institute of Ecosystem Studies, worked behind-the-scenes as a researcher and advisor supporting the editorial team, writers and photographers and connecting them with the lake researchers and managers working on these issues, including numerous colleagues with the Global Lake Ecological Observatory Network (GLEON) such as Catherine O’Reilly, an aquatic ecologist at Illinois State University and co-leader of a global lake temperature study, who was quoted in the article: “…the fingerprints of climate change are everywhere, they don’t look the same in every lake.”

**Pennsylvania’s Environmental Rights Amendment Grows Some Teeth**
*Source: Circle of Blue*

Since 1971, the commonwealth has had an Environmental Rights Amendment as part of its constitution. A couple of recent court decisions have strengthened the amendment by upholding the ability of local communities to say no to fracking and ruling that money raised by leasing Pennsylvania’s natural resources may only be used to restore and maintain those resources.

**US Supreme Court Rejects Challenge to EPA Water Regulation**
*Source: Reuters*

The Supreme Court upheld a lower court ruling that transfers of water between water bodies by governmental agencies are exempt from pollution discharge permit requirements.

**Infographic: More than 30,000 water samples have been tested in Flint since the crisis**
*Source: Michigan Radio*
[www.michiganradio.org/post/infographic-more-30000-water-samples-have-been-tested-flint-crisis](www.michiganradio.org/post/infographic-more-30000-water-samples-have-been-tested-flint-crisis)

Flint’s drinking water system is one of the most closely monitored in the country. Since September 2015, more than 30,000 samples have been tested.

**Building a Better Rainbow Trout: Colorado Biologists on Breeding Blitz to Revive Species Ravaged by Whirling Disease**
*Source: Denver Post*

Colorado Parks and Wildlife biologists are releasing a whirling disease-resistant subgroup of rainbow trout into the Arkansas River in the hopes of creating a naturally reproducing population of the non-native species.

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**Have a job to post? Looking for a job?**

**Check out the NALMS website!**
[www.nalms.org/home/find-a-job/](www.nalms.org/home/find-a-job/)
[www.nalms.org/home/post-a-job/](www.nalms.org/home/post-a-job/)
Website of the Month – Road Salt: Reducing Impacts to the Environment and Human Health


A recent study found that North American lakes are becoming saltier due to road salt. The Cary Institute of Ecosystem Studies hosted a management-based forum about the impact that road salt has on natural areas and drinking water supplies, with a focus on successful salt reduction strategies being used regionally and nationally. You can learn more about this issue in the articles, videos, and podcasts on the Cary Institute website.

Kansas Farmers Cut Ogallala Water Use – And Still Make Money

Source: Circle of Blue

Five years ago, a group of about 60 farmers in Kansas decided that pumping vast quantities of irrigation water from the Ogallala Aquifer wasn’t such a good idea, so they decided to use 20 percent less per year through 2017. The results? Profitability was the same or better and the rate of decline of the aquifer fell by two-thirds.

US EPA Releases Lake Erie Action Plan

Source: Cleveland.com

The goal of the plan is to reduce the amount of phosphorous going to Lake Erie by 40%.

Someone is Making a Multiplayer Trash Robot You Steer Through an Actual River

Source: The Verge

Urban Rivers, a nonprofit based in Chicago, has started a Kickstarter campaign to create a remote controlled, trash-collecting robot to clean up the Chicago River. And they’re going to turn it into a game allowing anyone to control the robot through a website and collect trash.

Could Sound Waves Keep Harmful Algal Blooms from Owasco Lake?

Source: The Citizen (Auburn, New York)

The idea is that a network of buoys emits ultrasonic sound waves will create a barrier that keeps algae from reaching sunlight at the surface of the lake.

Once Written Off for Dead, the Aral Sea Is Now Full of Life

Source: National Geographic

The Aral Sea was the world’s fourth-largest freshwater lake until the two rivers that supplied its water were diverted for irrigation. The sea’s salinity rose, and its fishing industry died. The sea is now two separate waterbodies. Thanks to an $86 million World Bank project, the North Aral Sea is coming back.

WGA’s ‘Top 50 Invasive Species in the West’ Offers First Regional Report

Source: Western Governors’ Association

The Western Governors’ Association has published its first ever “Top 50 Invasive Species in the West” list (25 terrestrial, 25 aquatic). The top 3 aquatic invasive species are Eurasian watermilfoil, quagga and zebra mussels, and the New Zealand mudsnail.

Lake Trout are Making a Comeback, and No One Knows Why

Source: Axios

Lake trout have been locally extinct in Lake Champlain for many years. In the 1970s, the lake was stocked with trout, which would reproduce, but the juvenile fish would die. In about 2014, those juvenile fish started to survive and no one’s quite sure why they were dying to begin with and why they’re making a comeback.
Consider a Donation to NALMS

You can donate at any time to the funds below by simply visiting the donation page on the NALMS website at http://tinyurl.com/qzm36dw.

**Eberhardt Memorial Student Fund**

The Eberhardt Memorial Student Fund supports travel grants for student presenters to attend the Annual Symposium.

**G. Dennis Cooke Symposium Fund**

The G. Dennis Cooke Symposium Fund supports NALMS’ effort to facilitate the exchange of information on managing lakes and watersheds.

**Lake Givers Club**

Contributions to the Lake Givers Club support NALMS’ educational publications, programs and operations.

**Secchi Dip-In**

Contributions support the operations of the Secchi Dip-In citizen science program.

You shop. Amazon gives...

to NALMS

You shop on Amazon right? Well now you can help NALMS at the same time with AmazonSmile. When you shop at smile.amazon.com you still get all the same low prices and wide selection you’ve come to expect from Amazon. Only now 0.5% of your purchase price can go to NALMS. The average online order these days hovers around $70. So on average about 35¢ per order could come to NALMS to enhance our programs and further our mission. That may not sound like much but every penny can make a difference. And when you add those pennies up, say, over 1,000 NALMS supporters making two purchases a year, the total comes to $700. Not too shabby. Now imagine those 1,000 supporters got a couple of friends to join in as well. Now we’re rolling at $2,100. You can help us get going by getting set-up today – here’s how:

2. Log into your account or create a new one.
3. Look up and select “North American Lake Management Society” when prompted.
4. Shop until you drop.
5. And don’t forget to tell your friends and family!

Lake Photo of the Month

“Misty Morning on Lake Lure” by Clint Calhoun.

Clint’s photo was an entry in the 2017 NALMS Photo Contest held at the Denver Symposium. Look for your opportunity to enter the 2018 Photo Contest this summer. The 2018 contest will be held at the Cincinnati Symposium.