Lake Management Institutions Are Broken
Dick Osgood & Ken Wagner, Past-Presidents | dick@dickosgood.com & kjwagner@charter.net

We support the recently adopted NALMS Position, “Changes in US EPA Policy Implementing the Clean Water Act Are Required to Restore Water Quality in the Nation’s Lakes and Reservoirs.” This position is apt and timely and speaks to a larger concern regarding the institutionalization of the watershed-approach to managing lakes.

The institutions involved with managing lakes, including the US EPA, have evolved to the nearly exclusive application of the watershed management paradigm with the result that more and more lakes are becoming impaired and few are actually being fixed.

The watershed approach is an important and critical element of any lake management approach but one that ought not to be used exclusively. The NALMS position argues for a shift to a more balanced approach.

Our management institutions include regulatory agencies (federal, state, local), legal mandates, funding appropriations, educational institutions, nonprofit organizations, funding foundations, and any other organization that oversees or otherwise directs lake management activities without being the actual lake manager. Interestingly, the actual laws that govern lake management are fairly sound. Certainly updates and improvements are needed in our laws, but it is mainly the resulting regulations and policies that have skewed lake management toward an unbalanced approach that is failing to improve our imperiled water resources.

We have become too reliant on the watershed approach without an objective and critical assessment of the results. What we do know is that in heavily urbanized or agricultural watersheds, contaminant generation greatly exceeds the documented ability of best management practices to stop those contaminants from reaching lakes. The heavy focus of our institutions on an often very expensive watershed approach leaves too many lakes and reservoirs lacking the resources necessary for timely and meaningful improvements.

In addition, our institutions no longer support demonstration studies that are critical to the advancement of sound, science-based development of new or improved management
President’s Message

Reed Green, President | nalmspres1415@gmail.com

Call to Action

Many activities are in need of action this month. The Call for Abstracts for our 35th International Symposium in Saratoga Springs, New York, November 17–20 went out recently, and we need you to submit your work and your story to the program. I encourage students to submit abstracts; this is a great forum for students to present. Faculty, I encourage you to get your students to submit their work, as well. Travel grants are available for post-baccalaureate students from NALMS, and conference registration for students is reduced. NALMS membership for students is reduced, and there are grants available for first-time NALMS student members. All this information is available on the NALMS website.

The theme for this year’s symposium is, North American Lakes: Embracing Their History, Ensuring Their Future. Topics include: harmful algal blooms, citizen science and monitoring, boat launch stewardship, management and research (Lake Champlain, Lake George, Finger Lakes, Great Lakes, and others), hydriella management, invasive species control, role of lake association in lake management, storm-water management, lake management techniques, internal loading, dam safety, reservoir management, international perspectives on lake management, and winter road maintenance and water quality.

No nonprofit, 501(c)(3) organization like NALMS can be operated from membership dues only. Other sources of funding (sponsorships) are needed, and there are plenty of opportunities and levels of sponsorship available (click this hyperlink). The annual symposium brings together hundreds of lake managers, professionals, association members, environmental scientists and engineers, and vendors. Each year, our sponsors and exhibitors make the NALMS conference a success by supporting travel grants, workshops, and conference activities and products.

NALMS used to receive annual sponsorships from the US Army Corps of Engineers, US EPA, and USGS, but those days are long gone. This leaves a big void in revenue for operating the annual symposium and NALMS in general.

Before I go any further, I would be remiss if I didn’t tell you how much I personally, as well as NALMS, appreciate those who already sponsor and donate to NALMS in so many ways. Without you all, NALMS wouldn’t exist.

Besides sponsorships (see page 4), NALMS has three different funds you can donate to: Eberhardt Memorial Student Fund, G. Dennis Cooke Symposium Fund and the Lake Givers Club. The Eberhardt Memorial Student Fund was set up to support student travel grants for students to present the results of graduate-level research at the annual Symposium. The G. Dennis Cooke Symposium Fund was set up as an investment fund with Dr. Cooke’s gift, and

Continued on page 7 ...
Membership in Motion

February is an in-between month for NALMS in terms of membership. Typically I’m still entering late renewals from the Winter membership period while at the same time kicking off the Spring membership period. This year is no different and I find my hands in many membership projects.

As we move into March my primary focus will be on Spring membership renewals. Not sure if your membership expires in Spring? Just have a look at the upper right-hand corner of your NALMS Notes email. If you see 3/31/2015 hanging out there then you’re on deck! If your membership expires soon you should receive your first renewal reminder by mail shortly if you haven’t already. Once you have this in hand you can either send your renewal into our office, print and return a member application, or renew online.

Lastly, I wanted to be sure that all College Student members, Electronic Lake Leader members, and any other member who prefers to receive their LakeLines digitally know that the latest issue of LakeLine is now in the “Members Only” section of the website. You can read your copy of “Lakes in Winter” by logging into the website and clicking on the LakeLine link on the right-hand side of the page.

News from Our Affiliates

What are NALMS affiliates doing these days? State and provincial lake management groups do fun stuff. Let NALMS and others know what you are up to. You spend a large amount of volunteer time to put on great events, might as well share them.

Oregon: Last fall, the Oregon Lakes Association had their annual meeting in Astoria and organized a fun field trip to see constructed floating islands that help take up nutrients.

NALMS Office Notes

For a short month, we have an awfully jam-packed issue of NALMS Notes for you. Luckily for you, that leaves less space for my blathering!

I hope that by now you have received an email or seen the announcement on our website that the Call for Abstracts for our 35th International Symposium is now open. This year’s symposium will be held in Saratoga Springs, New York.

I keep records of how many abstracts are submitted each week and it’s amazing how many we receive during the week before the submission deadline. We tend to receive almost half of our abstracts during that last week. Staying true to form, we see the same thing when it comes to registering for the conference. The week of the early bird registration deadline is easily our busiest week of registrations.

While we’re just now starting to accept abstracts for Saratoga Springs, other aspects of our program are starting to take shape with workshops, including a few new ones, and a field trip being offered on Tuesday of the conference week. Our plenary sessions on Wednesday and Thursday are also close to being set. We’ll open registration in May, but we’ll be posting more details on the NALMS website and here in NALMS Notes in the months leading up to that as we start to finalize different aspects of the program and registration fees. We realize that some of you need quite a bit of lead time to get travel approval, so we’ll do our best to get details posted as soon as we can.
Conferences & Events

North American Lakes: Embracing Their History, Ensuring Their Future
The Call for Abstracts for NALMS 2015 in Saratoga Springs, New York is now out and we are accepting abstracts.

Preliminary session topics include:

- Harmful Algal Blooms – Research and Monitoring
- Citizen Science and Monitoring
- Shoreline Restoration
- Boat Launch Stewardship
- Management & Research: Lake Champlain, Lake George, Finger Lakes, Great Lakes (and other lakes)
- Hydrilla Management
- Invasive Species Control
- Role of Lake Associations in Lake Management
- Stormwater Management
- Lake Management Case Studies
- In-Lake Restoration and Management Techniques
- Internal Loading
- Dam Safety and Lake Management
- Reservoir Management
- International Perspectives on Lake Management
- Winter Road Maintenance and Water Quality

Abstracts are due by May 22, 2015.

NALMS Symposium Sponsorship

Call to Action – seriously consider sponsoring the 35th annual Symposium this year. Our sponsorship levels are listed below. Complete details may be found by clicking here to download the sponsorship packet.

Conference Co-sponsor ($15,000 and above)

Leading Sponsors ($10,000+)

Supporting Sponsors ($5,000+)

Sustaining Sponsors ($2,500+)

Contributing Sponsors ($1,000+)

General Sponsors (Less than $1000)

In Kind Sponsors

Plenary Speaker/Presenter Travel Sponsor

Student Scholarship Silent Auction

In addition to the sponsorship levels listed above please consider donating an item to our silent auction. Bidding takes place during exhibition hours and all proceeds go to student travel scholarships. If you do not have an appropriate product or discount certificate available for the auction please consider bringing along an item or gift basket that would be of interest to our attendees. Items in hand are preferred but a large picture can substitute for any large items or configurable items that you are willing to ship to the winner.

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

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

Find NALMS on the Web
Illinois Lakes Management Association 32nd Annual Conference
February 19 – 21, 2015 • Dekalb, Illinois
илаm-a-lakes.org/ilma-annual-conference

2015 Annual Midwest Aquatic Plant Management Society Conference
February 22 – 25, 2015 • Indianapolis, Indiana
www.mapms.org/2015-conference/

27th Annual Indiana Lake Management Conference
March 5 – 6, 2015 • Syracuse, Indiana
www.indianalakes.org

2015 Virginia Water Conference
March 8 – 10, 2015 • Richmond, Virginia
www.vlwa.org

12th International Rainy-Lake of the Woods Watershed Forum
March 11 – 12, 2015 • International Falls, Minnesota
www.lowwsf.com/forum.html

Pennsylvania Lake Management Society Annual Conference
March 18 – 19, 2015 • State College, Pennsylvania
www.palakes.org

34th Annual Western Aquatic Plant Management Society Conference
March 30 – April 1, 2015 • Portland, Oregon
wapms.org

2015 Conference on Water Ethics
April 16 – 18, 2015 • La Crosse, Wisconsin
www.viterbo.edu/centers/ethics/conferences.aspx

2015 Wisconsin Lakes Partnership Convention
April 23 – 25, 2015 • Stevens Point, Wisconsin
www.uwsp.edu/cnr-ap/UWEXLakes/Pages/programs/convention/default.aspx

New York State Federation of Lake Associations 30th Annual Conference
May 1 – 3, 2015 • Hamilton, New York
www.nysfola.org

Florida Lake Management Society 26th Annual Technical Symposium
June 8 – 11, 2015 • Naples, Florida
www.flms.net

Aquatic Plants 2015: 14th International Symposium on Aquatic Plants
September 14 – 18, 2015 • Edinburgh, Scotland
sites.google.com/site/aquaticplants2015/

NALMS Affiliate Organizations

Saratoga Springs, New York Trivia:
en.wikipedia.org/wiki/Saratoga_Springs,_New_York

There are over twenty springs around town. The springs occur on a line where the north-south Saratoga Fault allows water trapped in subsurface shale layers to reach the surface.

Believed to have healing powers, springs can be found all over town. Most of the springs are covered by small pavilions and marked by plaques; others, however, are less conspicuous, sometimes just a spigot in a rock. The springs are famous for their varied and distinct tastes: some are clear freshwater, others are saltier, and some taste strongly of a certain mineral such as sodium bicarbonate or sodium chloride. There is a sulfur odor, but mineral analysis of the water consistently shows almost no presence of dissolved sulfur. The sulfur is in the form of the gas hydrogen sulfide, which degasses from the water very quickly. Visitors are welcome to bottle the spring water for personal consumption.

Toward the end of the nineteenth century excessive pumping for commercial bottling was threatening to deplete the springs. In 1911 the New York State Reservation, now the Spa State Park, was created to protect the springs.
One of the World’s Biggest Lakes is Dying and We’re to Blame
Source: Mother Jones
www.motherjones.com/environment/2015/01/climate-change-lake-victoria-overfishing

For Lake Victoria in Africa, less fish are being caught so the prices are going up at local markets. The supply of fish could be an early indicator that the large lake is dying. The combination of overfishing and climate change is the perfect storm for the health of the fish and lake. The government has not set or enforced fish limits and at the same time, East African has warmed by about 2 degrees Fahrenheit over the past century.

First Beer from Algae, Now from Wastewater
Source: Consumerist
consumerist.com/2015/01/27/can-you-make-good-beer-with-sewer-water-oregon-company-says-yes-you-can/

Clean Water Services of Hillsboro has an advanced treatment process that can turn sewage into drinking water. The company, which runs four wastewater treatment plants in the Portland metro area, wants to show off its “high-purity” system by turning recycled wastewater into beer.

Clean Water Services has asked the state for permission to give its recycled water to a group of home brewers. The Oregon Brew Crew would make small batches of beer to be served at events.

The Oregon Health Authority has already approved the company’s request. But the Oregon Environmental Quality Commission will also have to sign off on it. The Oregon Department of Environmental Quality held a public hearing on the proposal on February 12.

72 Dams Removed in 2014
Source: WaterWorld

The American Rivers has tallied 72 dams that were removed in 2014 with Pennsylvania having the most for the 12th year in a row with 17 dams. California had 12 removed, and Michigan had 6 removed. American Rivers has been keeping track each year and according to their database, 1,185 dams have been removed since 1912.

You Decide
Read this item and then decide for yourself what you think about it?
Is it worth $80,000 to get open water evaporation data? Would a lake manager go to this extreme if there wasn’t a drought? How much is water worth in arid places? What do you do with the data?
Source: Capital Public Radio (Sacramento, Calif.)
www.capradio.org/articles/2015/01/12/floating-weather-station-will-measure-water-evaporation/

Read the article and decide for yourself on what you think about this topic. Measuring evaporation from evapo pans can be off by as much as 30% the article says. Do you agree? Can you ever have too much data? Check out the website of the month to see the open water evaporation network site (still under construction).

Lake Tahoe’s Tiny Creatures Dying Off
Source: Reuters
www.reuters.com/article/2015/01/22/us-usa-california-laketahoe-idUSKBN0KV0AB20150122

Scuba divers completed a circumnavigation of the shallow areas and certain deep spots, collecting data that showed population drops in eight kinds of invertebrates, including some only found in Lake Tahoe.

The findings, which researchers are still reviewing, are the latest cause for concern for the nation’s second-deepest lake. The benthic invertebrates include flatworms, the blind amphipod, and the Tahoe stonefly. They have declined anywhere between 55% to 99.9% from measurements taken in the 1960s.

Ohio Senate has a Bill to help Fight Toxic Algae
Source: Ohio Senator Randy Gardner
us2.campaign-archive2.com/?u=54e677d5b8196cde4d9e91d7fe&id=54d6bab954&c=36183da26c

Ohio Senator Randy Gardner (R-Bowling Green) and Ohio Senator Bob Peterson (R-Sabina) are calling for a new Office of Harmful Algae Management and Response in the Ohio Environmental Protection Agency. The office will work with local governments and water treatment plants to coordinate support for Lake Erie and inland lakes with other state agencies and departments.
**Website of the Month**

owen.dri.edu

The objective of OWEN is to improve estimates of reservoir evaporation through continuous and near real-time monitoring of over water weather variables and water temperature. This network was developed and funded through collaboration between the U.S. Bureau of Reclamation, California Department of Water Resources, and the Desert Research Institute.

There is no data available yet so bookmark for now.

**12 Dams over the Next 12 Months**

Source: The Guardian

www.theguardian.com/environment/blog/2015/jan/12/12-dams-that-changed-the-world-hoover-sardar-sarovar-three-gorges#img-1

Dams illustrate the brilliance and arrogance of human ingenuity. They generate one-sixth of the world's electricity and irrigate one-seventh of our food crops. They cover a land area the size of California. One of the top 12 important dams will be highlighted each month in 2015. There are about 57,000 large dams world-wide but that would take 4,750 years to highlight.

**Hoover: the dam that gave us Las Vegas**

The Hoover Dam was the world's highest and most powerful dam when it was completed in 1936. It spurred the agricultural and industrial development of the Southwest and severely altered the Colorado River downstream. Climate change is greatly affecting the dam's capacity to supply water and generate power. A severe drought in the Southwest has left the reservoir at just 39% capacity, with water levels at 1,082 feet (330 meters), down from a high of 1,225 feet (373 meters) in 1983. That is a 143 feet (43 meters) drop.

**Lake Management Institutions Are Broken**

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methods. In this vacuum, private interests are developing and promoting products and services that too often lack objective, third-party assessments and lake interest groups are vulnerable. Again, lakes that need repair are not being fixed. In many cases, the techniques necessary to make a difference already exist but cannot be applied due to regulatory or funding limitations. In other cases, potentially useful approaches cannot gain proper acceptance through carefully monitored application for the same reasons.

So we would go one step farther – in addition to advocating for changes with the implementation of the Clean Water Act and many state corollaries, we would also advocate for changes to how NALMS supports the profession of lake management, especially through its Certified Lake Managers and Certified Lake Professionals (CLM/CLP) program. We recommend NALMS develop CLM/CLP standards of care so professional lake managers walk the walk. It is imperative that managers support holistic lake management, considering technical feasibility, proven track record, and economic reality when recommending remedial actions. We need to be drivers of sound lake management, not followers of unbalanced programs.

**President’s Message**

...Continued from page 2

the returns from this fund will support themed sessions and plenary speakers at the annual Symposium. The Lake Givers Club was set up to provide a way for individuals and organizations to make a significant contribution towards the management and protection of lakes and reservoirs.

NALMS also accepts general donations that support the following: 1) NALMS’ Educational Publications – LakeLine Magazine, Lake and Reservoir Management, NALMS Notes and other NALMS publications, 2) NALMS’ Programs – Professional Certification Program, Lakes Appreciation Month, Secchi Dip-in, Inland HAB Program and the National Inventory of Lakes, and 3) NALMS’ Operations – office equipment, supplies, expenses and salaries.

There are many other “action” needs, but not enough space in this newsletter to list them all. Contact the NALMS staff, your NALMS regional Board member, or NALMS.org for more information.

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**Do you have an item you’d like to see in NALMS Notes?**

Send it to us by the last Friday of each month to be considered for inclusion in the following month’s issue.
Lake Photo of the Month

*Canadian Hockey Player on frozen Lake Vermilion - (Alberta)* by Eric Pelve

Photo was taken in Banff National Park, Vermilion Lake (Alberta).

To be considered for NALMS’ Lake Photo of the Month please submit your photo to the North American Lake Management Society (NALMS) Flickr Group. Photos should focus on the lake and be geotagged or include the name or location of the lake in the title, description or tags of the photo.

Welcome New Members!

Anamari Boyes  
Paul Craig  
Tiffany Determan  
Laura Diemer

Walter Dutcher  
Michael Eytel  
April Frederick  
Jason Lech

Caitlin Miller  
Kathleen Paap  
Forrest Payne

Thank You to Our Renewing Members!

Michael Adam  
Alabama Power Company  
Allied Biological Inc.  
Thomas Amidon, CLP  
Paul Ash  
Ernie Benoît  
Bio-Limo Research & Consulting Inc.  
Larry Blumenstein  
Gabe Bolin, CLM  
Andy Bruere  
Eleanor Burkett  
Frank Burns  
Camp and Center Lakes Rehabilitation District  
Victor Castro  
James Darlington  
Julie Davis, CLM  
Mike Deas  

Steven Faigen  
Marta Griffith  
Jerry Guajardo  
David Halliwell  
Dean Hamontree  
Dave Hayman  
Steven Heiskary  
Connie Jarvis  
Jack Jones  
Robert Kennedy  
George Kipphut  
Peter Kurtz  
Hye Keun Lee  
Paul Lucas  
Jacob Macholl, CLM  
John Madsen  
John Magnuson  
Laurel Mann

Sherwood McIntyre  
Jesse Montgomery, CLM  
Sunil Nanda  
Richard Napiello  
Chris Perrin  
Al Preston  
Beth Proctor  
Carolyn Ruttan  
Brian Scully  
Angela Shambaugh  
Sonic Solutions LLC  
Jo Stuckert  
Susan Sutherland  
Neville Ward  
Dennis Westhoff  
Susan Wilde  
Keith Williams  
Tom Zagar

Update Your Contact Information:

NALMS members can now go online to correct their own contact information and are encouraged to do so. Please tell your friends and colleagues who are NALMS members to check and update their records. If they are not getting *LakeLine, Lake and Reservoir Management* or *NALMS Notes* something is wrong. If they don’t have access to fix their own contact info, they can call the NALMS office at 608.233.2836 or email Greg Arenz at (garenz@nalms.org) to make changes. This goes for postal service mail as well.