

2009 NALMS e-Newsletter



June

President's Message – Go Team!

Now is the time of year that most of us focus our eyes on our favorite lake(s) and reservoir(s). Some of us are looking forward to all the good times that we have and are going to have enjoying the lake environment, while others of us are cranking in full gear working on, around, or in lakes. Some of us are doing both working and playing where we work. It is the time of year where Mother Nature brings forth its aquatic team to create the ecosystems we call lakes, while inviting us to share in and delight in these unique ecosystems. Certainly, from the human perspective the increased day light hours and temperatures help us take note of all that Mother Nature has brought to us. Please stop and enjoy this aquatic environment, take it in, embrace it, feel it, and understand it!

Lake systems are an integrated play of physical, chemical, and biological interactions that are in balance. With changes this balance adjusts and when significant changes or environmental stressors are introduced into an ecosystem the pre-existing lake balance will shift. At times that shift results in a degradation of environmental quality. One way to think of this lake ecosystem balance is like a team, different elements of the ecosystem function and compliment others and that team interplay results in a balance. With introduced changes some team members many change or simply be removed from the eco-team, the result is a radically different balance. This new balance is almost always viewed as degradation from the pre-existing balance.

NALMS is working to help lake ecosystems remain sustainable or to keep their pre-pollution balance. We, as NALMS members, also need to work to help sustain our lakes. This is where we through NALMS can work and play our way into helping manage lakes and reservoirs so that their ecosystems remain integrally intact to their environment. In part, we can make this happen through the transfer of information regarding lake sustainability. It is NALMS that can spread the need for and how to manage our lakes. NALMS is Team Lake! We are the team that is dedicated to lake and reservoir management, go team, go!

What better way to exchange ideas and learn than to attend the NALMS 29th International Symposium, “Ensuring Our Lakes’ Future” in Hartford, CT this October 27 – 31. Here we will have the opportunity to talk to each other and exchange ideas. At this meeting, I challenge each of you to help us identify activities that we can share and to help one another achieve our goals relative to lake and reservoir management issues. Attend the conference to build your team for lake management.

Once again, when it comes to lakes and reservoirs, NALMS is ready to move forward with its affiliates and members in reaching out to current and potential partners to enhance the understanding of lakes and reservoirs. I encourage you to get involved with NALMS and find issues that are of mutual interest to your local organization and NALMS. Please contact me or your

regional director and ask how you can get more involved with the many NALMS activities. Go to www.nalms.org to find contact information for NALMS officers, directors, and committees.

Thanks,

Harry Gibbons
President, NALMS

WITHIN NALMS

Word from the Executive Director – Susan Urbas

New Website Feature – Lake News

Many lake associations and agencies doing lake-related work publish a monthly or quarterly newsletter that contains coverage of lake issues and resources of general interest. The NALMS website is the ideal place to post these newsletters both to help promote the organizations who work so hard to publish them, and to ensure that the fruit of their labor is disseminated to and shared with the broadest possible audience.

Happily, the NALMS office receives a steady stream of these newsletters, and has begun contacting the organizations publishing them for a copy in electronic format and permission to post on the NALMS website. These newsletters are being posted on the website under Resources/News You Can Use, in a new “Lake News” section and will be organized there according to the state from which they originate.

If you would like to have your organization’s newsletter posted on the NALMS website, please send it upon each publication as a PDF to info@nalms.org, with a request for posting in the Lake News section.

Did You Know That . . .?

July is Lakes Appreciation Month! It’s right around the corner now – and the NALMS office wants to know how are you planning to celebrate it. Tell us by sending us an email at info@nalms.org, describing the activity planned and naming the lake involved. We will compile a list for the benefit of the NALMS community and others who are interested in learning new ways to honor and enjoy the object of our shared passion at this special time of the year. See the NALMS website at www.nalms.org, Citizens/Lakes Appreciation Month, for more information about Lakes Appreciation Month

Saying Goodbye to Hard Copy Membership Invoices

On the most recent round of membership renewal invoicing, the office discovered that it did not have current email addresses for an unduly large number of members – which means two things: (1) they are not receiving the many membership benefits, such as the newsletter and website access,

that are now delivered electronically; and (2) their renewal invoices had to be sent out by the costly postal mail route, which the office is phasing out as an invoicing method.

Much as we wish it were otherwise, we don't have any mind readers on staff, so we depend on our members to keep the office up-to-date on all of their contact information, including street address for the delivery of NALMS publications, and email address for the delivery of a wide variety of other membership services. So take a minute to consider whether any of your contact information has changed in the past year and if so, send an update straightaway to Sarah Unz at slunz@nalms.org.

Bailout News! NALMS Job Bank

The bailout reference was just a ploy to get your attention so we can make sure you know that among the features of the new website is a "Post a Job" page, where employers can create their own online employment ads to be posted on the NALMS Job Bank. (As this particular bank invests only in the bright future of lake management talent, it needs no federal handouts to stay afloat). Go to www.nalms.org, Resources/Post a Job to begin the process of entering your employment ad.

The NALMS Job Bank is a two-fer. It is both a great way for employers to recruit talent best suited to their needs for lake management science related skills, and an important mechanism for increasing traffic to the NALMS website. Help yourself and NALMS at the same time! Can't beat that. Go to www.nalms.org, Resources/Job Bank to view current job posting.

Open Invitation for a few more Associate Editors

We congratulate G. Dennis Cooke on what appears to be true retirement, as he steps down from the Editorial Board of Lake and Reservoir Management. At the same time, we believe that we need to increase our ranks slightly to handle the increasing submission load. So, if you have a strong technical background in one or more aspects of lake management and an interest in managing reviews of manuscripts for LRM, get in touch with Ken Wagner, Editor-in-Chief, at kjwagner@charter.net or 508-612-5799 to discuss this opportunity. We try to keep the number of papers handled by each Associate Editor to 4 or less per year, and it is a great bunch of Associate Editors to work with, so give it consideration.

How Papers Get Published in Lake and Reservoir Management

This is not a mystical process, but we wanted NALMS members to know how manuscripts are handled; this is meant to encourage you while setting realistic expectations for publication. Papers are submitted online through ScholarOne's Manuscript Central; directions are online on the NALMS website. The Editor-in-Chief or an assigned Associate Editor screens each paper for applicability and writing quality. LRM has pretty wide range, but some topics are just not appropriate, and we do look for a management focus wherever possible. Writing quality is a touchy subject, but we don't want reviewers having to decipher meanings or to get frustrated by repeated poor grammar or overly wordy text. Additionally, there is a definite format for papers submitted to LRM, with author guidance also available on the NALMS website, and it is important to consistency and the publication process to follow it. If a paper needs more work, it will be sent back to the authors with suggestions, encouraging resubmission. Once a paper is found acceptable in the screening process, it is assigned to an Associate Editor who finds three reviewers (suggestions by authors are welcome without obligation) to peer review the paper. These reviewers

are volunteers and are the backbone of the process. It is rare for a paper to be outright accepted or rejected after first review; most are requested to revise and resubmit. If problems cannot be addressed (e.g., inadequate data, unsupported conclusions), the paper will be rejected. Once all concerns are satisfied, the paper can be accepted and goes to copyediting, where a professional editor addresses details of writing and formatting. The author receives proofs for acceptance or further correction, after which a final proof is corrected and sent for review and author acceptance. The paper will then be published online in short order, making it an official peer reviewed paper, with publication in hard copy to follow when enough papers are accumulated to release an issue, no less than quarterly. The whole process takes about 6 months on average, although it can be shorter and is often longer if reviewers are slow or authors are not prompt about their resubmission when requested. The author instructions describe the types of papers sought and other requirements for publication, and are a great place to start if you have material you would like to publish. We look forward to hearing from you!

Affiliate Newsletters

For organizations which are affiliate members of NALMS, we have a special section of the website devoted to affiliate newsletters: go to Resources/NALMS Affiliates/Newsletters. All that is required for affiliate members to get their newsletter posted on the website is to send an electronic copy of the newsletter as a PDF to info@nalms.org with a request that it be posted in the affiliate newsletter section.

Invasive Species Cards

The office has received a large number of requests for the four baseball size cards that it has produced through a BoatUS Foundation grant to help lake users identify and combat the spread of Curly-leaf Pondweed, Eurasian Watermilfoil, Hydrilla, and Zebra Mussels. Go to Resources/Publications/Invasive Species Cards to view the front side of the cards on the website. Kudos to those who have requested the cards. You are performing a great service in educating the public by distributing them at a wide variety of lake-related meetings and events. Upon request, these cards are available to NALMS members free of charge. To request yours, download the order form found on the Invasive Species Card page on the NALMS website.

Free NALMS Trial Membership for Members of NALMS Affiliates

Online registration for the free three-month trial membership in NALMS that is being offered to members of NALMS' affiliate organizations is now available. This is a great opportunity to get your members plugged into important information flows concerning lake management. Go to JOIN NOW on the NALMS website and then to Affiliates Members Free Trial to sign up online.

Also, a reminder that all affiliate organizations need to provide a contact to Sarah Unz at slunz@nalmsm.org, who she can work with to verify the persons signing up for the free trial NALMS membership are members of a NALMS affiliate.

Got A Little Time to Spare for Lakes?

Both NALMS in general and the NALMS office are looking for volunteers to lend a hand with pulling the laboring oar through the water. Even just a couple of hours of your time can be a big boost in helping to accomplish the work NALMS does. At this time, opportunities abound to join one of the volunteer committees (visit www.nalms.org, About US/Committees) which cover a broad

diversity of topics relating to lake management, or, if you are local to the Madison office, to help the staff tackle one of its many projects. (visit www.nalms.org, Protect Our Lakes/Get Involved).

NALMS 2009 Achievement Awards - Call for Nominations

Each year NALMS recognizes individuals, organizations, and programs, corporations and projects that have contributed to the Society and to the science of lake and watershed management.

Presented at the annual NALMS international symposium banquet, these awards were established to encourage the advancement of the North American Lake Management Society's mission of forging partnerships among citizens, scientists, and professionals to foster the management and protection of lakes and reservoirs. These awards are an excellent opportunity to recognize the many outstanding efforts of our colleagues, and to encourage similar activities.

The awards to be presented this year at the Society's 29th Annual Meeting in Hartford, Connecticut (October 24-31, 2009) include:

- **The Secchi Disk Award** – bestowed upon the individual member considered to have contributed the most to the achievement of NALMS' mission.
- **Outstanding Corporation Award** – given to the corporation considered to have contributed the most to the achievement of NALMS' mission.
- **Friends of NALMS Award** – awarded to individuals or corporations making major contributions to NALMS. Recipients do not have to be NALMS members, and “contributions” extend beyond monetary donations.
- **Technical Merit Awards** – this award may be selected from four categories:
 - ❖ **Successful Projects** – for demonstrable success in achieving lasting improvements in water quality or recreational utility through lake and/or watershed management in a cost-effective manner. Projects are evaluated with respect to project success, cost-effectiveness, and benefit duration.
 - ❖ **Volunteer Actions** – for individuals or groups involved in documented grass-roots efforts to manage a lake or watershed, with emphasis on local involvement, creative methods of funding and demonstrable success.
 - ❖ **Research Efforts** – for individuals or groups performing research that contributes to the science of lake management. Selection criteria are relevance, approach and applicability. (Copies of journal papers should accompany nominations).
 - ❖ **Public Education/Outreach** – for individuals, groups or programs that have creatively and effectively contributed to the development and dissemination of watershed management and/or related educational programs, materials and/or assistance.

The Awards Committee appreciates the assistance of nominators in ensuring that recipients are present at the Annual Banquet to receive their awards. The Awards Committee may also request photographs or other graphic materials be made available for the Awards Presentation.

Recipients of the distinguished Secchi Disk and Outstanding Corporation awards must be NALMS members; otherwise these awards are open to any individual or organization contributing to lake science and/or management. However, current NALMS officers and regional directors and members of the NALMS Awards Committee are not eligible for nomination.

Any individual or organization may make nominations for these awards. To submit a nomination by the deadline of September 11, 2009, contact the Awards Committee Chair, Marty Kelly to get a nomination form (marty.kelly@swfwmd.state.fl.us).

UPCOMING CONFERENCES & EVENTS

2009 NALMS Annual Symposium in New England – Register Now!

You can now register for the 2009 symposium. It is a great time to do it. There's also information about student travel grants, pre-symposium workshops, sponsorship opportunities, and information for exhibitors.

More information about the conference in general can be found on the NALMS website at <http://www.nalms.org/nalmsnew/nalms.aspx?subcatid=42&Sid=3>.

If you have questions relevant to the program please contact Amy Smagula at Amy.Smagula@des.nh.gov or 603-271-2248.



7th National Water Quality Monitoring Conference in Denver

NALMS is delighted to announce that it has been selected to serve as facilitator and co-sponsor of the 7th National Water Quality Monitoring Conference, to be held in Denver, Colorado from April 25-29, 2010. Preliminary information, including the Call for Abstracts, is now available on the NALMS website. Additional information will be announced here and posted on the NALMS website as it becomes available. Registration is scheduled to open in mid-August 2009.

This conference will also be the site of the 2010 NALMS Board of Directors Mid-year Meeting, which formerly was held in conjunction with the Chicago conference.

The National Water Quality Monitoring Council (NWQMC) has organized and sponsored the National Water Quality Monitoring Conference biennially since 1998. The EPA and other federal agencies support the NWQMC's national conference to address the issues important to the scientific and stakeholder communities in order to advance practices of water quality monitoring. This collaboration with NWQMC provides a platform to establish necessary dialogue to coordinate the national monitoring program.

In 1997, the National Water Quality Monitoring Council (NWQMC) was established to implement a voluntary, integrated, nationwide strategy to improve water resource monitoring, assessment, and reporting. The Council is a nationwide partnership of water monitoring and information management authorities from federal and state agencies, tribes, municipalities, business and industry, academia, agriculture, environmental groups, and others with expertise in environmental monitoring. The Council consists of 45 members representing a wide range of interest groups of which 71% are non-federal and 29% are federal entities. The NWQMC is charged with coordinating and providing guidance for implementation of the voluntary, integrated, nationwide monitoring strategies.

TMDL Conference in Minneapolis, Minnesota

TMDL 2009: Combining Science and Management to Restore Impaired Waters August 9 - 12, 2009 Hilton Minneapolis.

Conference Website: www.wef.org/TMDL

Don't miss this opportunity to attend the Nation's only conference focused exclusively on the TMDL provisions of the Clean Water Act. This conference will cover the entire scope of pollutants that impact our Nation's water bodies. TMDL 2009 will bring together several hundred water quality practitioners to exchange information on challenging regulatory and policy issues related to the TMDL process. Attending TMDL 2009 provides a unique opportunity to share new and evolving tools and information available to assist states, tribes, and local organizations develop and implement effective TMDLs.

Two pre-conference workshops will also be offered.

Workshop A: Wet Weather Management: Watershed Approaches, Permitting, and Regulatory Tools for Achieving Compliance This workshop will address watershed-based approaches and is designed to explain the interaction between the multiple regulatory requirements, scientific and engineering considerations, and ways to work within the system to make use of flexibility that exists.

Workshop B: Modeling Fate and Effects of Pollutants with AQUATOX Release3 AQUATOX is a PC-based model for aquatic ecosystems and simulates eutrophication, chemical fate, bioaccumulation, and ecotoxicology. This course will include comparisons with other dynamic ecosystem models used for risk assessment and TMDL development. Example applications will cover the impacts of nutrients, sediments, and toxic organics on a variety of ponds, lakes, reservoirs, rivers, and an estuary.

The conference website is www.wef.org/TMDL for more information.

Call for 2012 & 2013 NALMS Symposia Host Committee Proposals

Requests for Host Committee Proposals for the 32nd (2012) and 33rd (2013) International Symposia have now been posted on the NALMS website. Proposals are due by September 1st and will be evaluated by the Board of Directors at its meeting in Hartford in October. Each year priority is given to prospective locations according to a rotation schedule which is described in the 2012 and 2013 Requests. However, proposals may also be submitted for prospective locations not within the regional rotation schedule, as in the event no viable host committee is received from one of the rotational locations for a given year, the Board may decide to accept a host committee proposal from another location.

The 30th (2010) site is Oklahoma City, Oklahoma. The 31st (2011) site is Spokane, Washington. More information on 2010 and 2011 Symposia will be announced here and posted on the website as it becomes available.

AFFILIATE TALK

To foster better communication amongst the diverse group of NALMS Affiliates, this section will feature a monthly topic or question which may be of interest to many affiliates. The goal is to help affiliate groups learn from each other, be more efficient with their time and resources, and better manage our lakes and reservoirs.

WAL work in shoreland zoning around lakes

Wisconsin's shoreland zoning rule (NR 115) contains statewide minimum standards for shoreland development in unincorporated areas. The proposed rule set to go before the Natural Resources Board June 24th includes the first changes to shoreland standards since 1968 in Wisconsin.

This revised rule includes important new provisions to prevent over-development of shorelines in order to minimize impacts on water quality, habitat, and natural scenic beauty, while protecting the legitimate interests of people who own cottages and other structures built before Wisconsin first undertook to regulate shorelands 40 years ago.

NR 115 sets a baseline of minimum standards applicable across the state. Nothing in the proposed rule changes the core authority of counties and other local governments to establish more restrictive shoreland regulations for the lakes and streams within their boundaries. Many counties have developed innovative approaches to manage unique local resources within their shoreland ordinances in the past 40 years, and they can continue to do so.

A one-size-fits all approach cannot possibly do justice to Wisconsin's collection of lakes that range from the largest in the world—Lake Superior—to more than 15,000 smaller ones. Some of the lakes are remote and little used. Others are busy with boaters and anglers and have densely developed shores. Pristine North Woods lakes certainly warrant different development standards than those for highly developed shores in more populous areas.

WAL (Wisconsin Association of Lakes) is committed to the successful implementation of the new shoreland standards and engaged in further efforts to more fully protect and restore shoreland habitat for future generations.

Important provisions within the proposal include: a 15% cap on impervious surfaces and up to 30 percent where "mitigation" is done, stronger regulation of trees and vegetation within 35 feet of the water, limits development of substandard lots, and allows counties to permit owners of cottages and other buildings that were legally built but don't meet current setback or other standards to expand existing structures away from the water.

You can look at the proposed NR 115 at <http://dnr.wi.gov/org/water/wm/dsfm/shore/news.htm>

How has WAL represented member interests on NR 115? WAL has been closely involved with this evolving rule package since revisions were first proposed. The content of the shoreland rule (NR 115) has been markedly advanced by the Wisconsin Association of Lakes' work over the last eight years and most especially over the last ten days.

Since the winter of 2007, WAL has been in continuing meetings and negotiations with key stakeholders to resolve difference over the proposed drafts of the rule. There are many aspects of

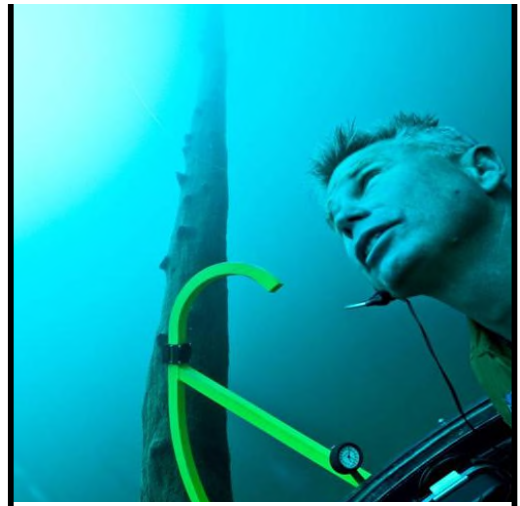
the proposed rule— for example, the standard for mitigation was markedly strengthened—that have been strengthened as a result of WAL's work.

WAL's position has always been to seek standards for local shoreland regulations that respect both the property rights of lakefront owners and the natural habitat, scenic beauty, and water quality that drew us to lakes in the first place.

Affiliate Websites – Check out this one

A great way to see what other affiliates are doing is to check out their websites and see what they are up to and how fancy their web pages are.

Oregon has a nice website that features important lakes around the state. Go to: www.oregonlakes.org to check out their site and compare it to yours.



Scott Cassell, founder of the Undersea Voyager Project, pilots his submarine past an ancient submerged tree in Fallen Leaf Lake in California near Lake Tahoe.

LAKE NEWS & INFORMATION

Lake Tahoe Submarine Mission

SOUTH LAKE TAHOE, Calif. — A team of submariners that spent the month of May exploring Lake Tahoe and examined, among other things, evidence of an earthquake fault that may have ruptured thousands of years ago, is hoping the operation is just the beginning of their underwater explorations.

Scott Cassell, the sub's captain and founder of the non-profit Undersea Voyager Project, has plans for a five-year mission to gather information and develop ideas to help restore endangered bodies of water around the world. The goal is to collect data and attract sufficient attention to prompt people and governments to halt pollution and overfishing and take other actions to protect threatened bodies of water.

A two-person submarine spent the past month cruising Lake Tahoe, examining earthquake faults, ancient submerged trees and beds of invading clams that threaten the lake. The faults observed indicated a potential earthquake between a magnitude 6.5 and 7.0. This size earthquake would be strong enough to generate a tsunami on Lake Tahoe's surface up to 30 feet high.

An Alternative Take on Detergent Phosphorus (by Ken Wagner)

While I am all for removing inputs of P to our aquatic resources, and I generally support source controls over downstream trapping or mitigation techniques, there is more to the detergent P issue than meets the eye or is commonly given coverage in news or even scientific articles. There are few substantiated claims of major improvement of aquatic resources when laundry detergent P was reduced in the 1980s and 1990s (high P formulations were gone by the mid-1990s), despite

documentation that it represented up to 50% of the P in the wastewater stream. It certainly didn't hurt the environment to remove it, and there are undoubtedly systems in which it did make a difference; quantification is difficult, especially where the route of entry is via septic systems. But the anticipated widespread improvement in receiving waters didn't occur. There are two problems that limit the effectiveness of this source control strategy.

The first problem is that septic systems depend on soil conditions for much of the P removal. Where a system is well designed and the soils are ideal, little P makes it to the nearest stream or lake. Certainly the extra load from laundry or dish detergents causes accelerated exhaustion of the leachfield, and where systems are not properly designed or sited, removal may be poor. Again, I don't think you can go wrong for the environment with banning sources of P. But in a detailed evaluation of how much of the P in a set of lakes came from groundwater, in which I was involved, the range was <1 to 31%, with a median of 14% for unsewered areas, while in sewerred areas the range was 1-11% with a median of 9%. By rough extrapolation, wastewater contributed a median of about 5% of the P and not likely more than 20%. And only a fraction of that P was from dish detergents, now targeted for a ban. I pose the simple question: would we be better off mandating better septic system design and function (as is required in Massachusetts when one sells a property, but not before) than banning inputs that represent such a tiny portion of measured loads to lakes? I can live with doing both, but not just the ban; it won't get the job done.

The second problem is even bigger. Wastewater treatments facilities (WWTF) are either too great an influence for detergent P removal to make enough difference, or treat to a mandated level, such that a reduction in sources does not change the discharge concentration or load. WWTF embody a wide range of contaminant removal techniques, and it is indeed possible to remove P to a very low level. Values of 0.02 mg/L are now achieved in some facilities; <1 mg/L is common, although still too high without a lot of dilution. Raw sewage tends to have upwards of 5 mg/L, often 8-10 mg/L, and typical treated discharges from secondary treatment range from 1-4 mg/L in the USA. As a discharge permit is required, treatment is geared toward achieving whatever limits are set. If no limit is set on P, no targeted removal is conducted, and the 1-4 mg/L range is typically achieved. If a source of P is removed, the concentration will decline, but even if that decline is proportional, removing a source that is only a fraction of the total does not result in acceptable discharge quality from the perspective of lake management (i.e., we can't get from 1-4 mg/L to <0.02 mg/L with source control). Worse yet, if the WWTF has a discharge limit that requires more stringent treatment, a reduction in sources just means a relaxation of treatment, with no change in the discharge quality. In other words, if a WWTF treats to a P concentration of 1 mg/L from a starting level of 5 mg/L and a source reduction that equates to half the load is made, the new input concentration would be 2.5 mg/L but the output concentration would still be 1 mg/L, still very damaging to a lake without about 100-fold dilution. Again the simple question: should we focus on lower limits for P in discharges through permitting programs, or spend time and resources reducing the input concentrations for WWTF? In this case I can't see any value in controlling sources if we lower the discharge limit, and I can't see adequate progress being made by source control alone.

So, do we push for bans on P sources to the wastewater stream, or do we invest in treatment that improves discharge quality? Both, I suppose, but which is more likely to protect or restore our lakes?

Western States Taking Aquatic Hitchhikers Seriously

Colorado, Idaho, California, Washington, Utah, and other western states are making it harder to travel across state lines with a dirty boat and trailer. Boats are starting to be inspected and detained at state boards due to the recent infestation of zebra and quagga mussels. Just last month, the Idaho Department of Agriculture tracked and detained a boat suspected to be carrying mussels from Lake Mead.

To enter California and Idaho now, boats and trailer inspections are required. There are even cases where boats are inspected, decontaminated, then tagged to the trailer as “clean” in one state, such as Colorado, but are in need of more inspections and cleaning once they get to their final vacation destination. Washington and Oregon, with all the dams on the Columbia River, definitely do not want any byssal-wearing mussels to enter their watersheds as well and are closely watching their interstate highway entries.

One positive aspect of having Lake Mead infested is that the fear and education of these mussels has spread even quicker than the actual invasive species. States are starting to pass emergency legislation to find funds to pay for inspection and education programs statewide.

So the next time to hit the road with the family boat behind the motor home, make sure your boat and trailer are cleaned, drained, and dried. If not, you might find yourself looking like Bill Murray in the movie, “Stripes”, trying to enter Czechoslovakia.

Obama’s Summer of Service Campaign

President Obama will soon be announcing a Summer of Service campaign which offers a new and exciting opportunity to help you build up your roster of volunteers and raise awareness about volunteer monitoring and watershed stewardship. The President will be encouraging nonprofit organizations with a need for volunteers to register at www.serve.gov. On June 22, the President and his Cabinet will officially launch the Summer of Service and encourage Americans to volunteer for their communities. The President will direct potential volunteers to www.serve.gov to find local opportunities for service.

EPA is using this opportunity to promote volunteer monitoring and watershed stewardship. The hope is that this Presidential initiative will encourage many more people to work to protect their watersheds.

Please consider registering your program at www.serve.gov. You may get contacted by a number of volunteers eager to help your organization. Think through what opportunities you might have for this summer, including monitoring workshops and events, debris cleanups, riparian restoration, community education, storm drain marking, and other activities. If you want to sign up, you should do so as soon as possible, as a surge of web traffic is expected by both organizations and individuals looking to get involved in volunteering this summer. However, if you’re not quite prepared for a whole new cadre of volunteers, or for reporting the results of your summer volunteer activities at www.serve.gov, you may not want to sign up at this time. One of the goals of this effort will be sustainable volunteerism, so if you’re not ready to sign up this summer, you can always do so later on.

Obama Appoints Cameron Davis to Head Proposed Great Lakes Initiative

EPA announced on June 4 that President Obama has appointed the head of the Alliance for the Great Lakes to lead the administration's proposed \$475 million initiative to clean up the Great Lakes. Cameron Davis has served as president and chief executive of the Alliance for the past 11 years. The President included the \$475 million investment in a multi-agency Great Lakes initiative as part of his FY 2010 budget proposal. Under the proposed Great Lakes Restoration Initiative, EPA, in partnership with 11 agencies and Cabinet organizations, would lead the development and implementation of programs and projects that target the most significant problems in the Great Lakes ecosystem. The initiative would target five areas: toxic substances and areas of concern; invasive species; near-shore health and nonpoint source pollution; habitat and wildlife protection and restoration; and accountability, monitoring, evaluation, communication, and partnerships.

Legislation Approved by House Committee to Reauthorize BEACH Act

The House Transportation and Infrastructure Committee approved legislation on June 4 that would reauthorize and increase grants to states to improve beach water quality and strengthen pathogen testing and public notification standards. The Clean Coastal Environmental and Public Health Act of 2009 (H.R. 2093) would reauthorize the Beaches Environmental Assessment and Coastal Health (BEACH) Act through 2014 and increase grants for water quality monitoring and notification from \$30 million annually to \$40 million annually. Under H.R. 2093 (<http://thomas.loc.gov/cgi-bin/query/z?c111:H.R.2093>), the public would have to be notified within two hours after an appropriate state or local authority receives results of a coastal water quality sample, and existing public notification requirements would be enhanced by making beach warnings and closures available on the Internet. The bill would also strengthen EPA's review of individual states' compliance with BEACH Act requirements by requiring EPA to conduct an annual review and to take corrective action if state and local governments are not in compliance. It also would require the development and implementation of rapid testing methods for determining where and when coastal recreational waters exceed coastal water quality criteria. EPA would have to evaluate and validate by Oct. 15, 2012, a rapid testing method for water quality criteria and pathogens, and after providing an opportunity for public comment, publish guidance within six months for use at coastal waters adjacent to beaches.

Featured Lake – Ancient Lakes of the World - Lake Eyre

Exploring the 18 oldest lakes in the world – We now jump over to Australia where they claim to have the world's oldest lake.

Early explorers of central Australia were obsessed with finding an inland sea, but all they found, in the driest part of Australia, was a 9,000km² flat, blinding salt lake floating on a sea of mud - Lake Eyre (pronounced "air").



Lake Eyre is possibly the oldest of the ancient lakes in the world. It is estimated to be 20 - 50 million years old. Lake Eyre's lake bed is below sea level. The amazing detail is that this lake has a mean depth of 3.0 meters and the last time it topped 5 meters was in 1974.

Lake Eyre sits in the middle of one of the world's largest internal river systems and covers large parts of South Australia, the Northern Territory, and Queensland. Lake Eyre basin itself covers an area bigger than France, Germany, and Italy.

Besides being the world's oldest, Lake Eyre is the world's biggest expanse of salt and in some areas the salt crust is 50cm thick and solid enough to support a truck.

The lake has a very important ecological role in the area. Rainfall in Australia's center is totally erratic: some areas may not see rain for years, but when it does rain it can bucket down. This is when much of the desert floods and instead of flowing to the sea the normally dry rivers flow to the lowest point of Australia, Lake Eyre.

When recently flooded the Lake is almost fresh and native fresh water fish, including [boney bream](#) (*Nematolosa erebi*), the Lake Eyre Basin sub-species of [golden perch](#) (*Macquaria ambigua*) and various small hardyhead species (*Craterocephalus spp.*) can survive in it. The salinity increases as the 450mm salt crust dissolves over a period of six months resulting in a massive fish kill. When over 4m deep the Lake is no more salty than the sea and salinity increases as the water evaporates with saturation occurring at about 500mm depth. The Lake takes on a "pink" hue when saturated due to the presence of [beta-carotene](#) pigment caused by the algae [Dunaliella salina](#).

When Lake Eyre is dry, it is one of the most inhospitable places on earth, and yet life still exists on its salt crust. The small Lake Eyre dragon makes its home amongst the cracks in the salt. Here it shelters from the sun and when it's too hot, or too cool, it digs deeper down into the moist mud. Special eyelashes cut out some glare from the sun and white salt. When the lake floods, the dragons move to the sandy shore where they dig burrows and live amongst all the other lizards. This little lizard is Australia's most salt-adapted vertebrate

Recently, the 2009 Lake Eyre flood peaked at 1.5m deep in late May which is a quarter of its maximum recorded depth of 6m. Nine cubic kilometers of water crossed the Queensland - South Australian border with most of it coming from massive floods in the Georgina River. However the greater proportion soaked into the desert or evaporated en route to the Lake leaving less than one cubic kilometer in the Lake which covered an area of 800 square kilometers or 12% of the Lake.

This lake even has a yacht club. The *Lake Eyre Yacht Club* is a dedicated group of eccentrics who sail on the lake's floods, including recent trips in 1997, 2000, 2001, 2004, 2007 and 2009. This proves that recreation is important on every lake.

Website of the Month – www.uwex.edu/erc/music/index.html

Are you into music? Are you into aquatic invasive species? Then check out this website. In Wisconsin, they are using music to get the message out and there's even research to show that it works. Before long, we will all be humming along to "*One Bait, One Lake*".

Open Invitation to Add to the Next E-newsletter

If you are having a conference, have a lake-related question, need advice, looking for similar lake problems/solutions, have an interesting story to share, or just want to be heard throughout NALMS, please send your material to Steve Lundt at slundt@mwrd.dst.co.us. All e-newsletter material is due to Steve Lundt by the first Friday of each month to be considered for inclusion in that month's e-newsletter.