





Society of Wetland Scientists Pacific Northwest Chapter

http://www.sws.org/pacific-northwest-chapter

2016-2017 Board of Directors President

Vyonne Vallette USEPA, Region 10 805 SW Broadway, Suite 500 Portland, OR 97205 (503) 326-2716 Vallette.Yvonne@epa.gov

Executive Vice President

Lizbeth Seebacher Department of Ecology Water Quality Program, PO Box 47600 Olympia, WA 98504 (360) 407-6938 <u>lsee461@ecy.wa.gov</u>

Immediate Past President

Nate Hough-Snee USDA Forest Service National Stream and Aquatic Ecology Center Fort Collins, CO (435) 535-5085 <u>nate@natehough-snee.org</u>

Program Vice President

Fiona McNair GeoEngineers, Inc. 600 Dupont St. Bellingham, WA 98225 (360) 647-1510 <u>fmcnair@geoengineers.com</u>

Treasurer

Karla Gallina Aqua-Terr Systems, Inc. 511 E Magnolia St. #3 Bellingham, WA 98225 (360) 393-9921 KarlaG@AquaTerrSystemsInc.com

Secretaries/Newsletter Editors

Maki Dalzell HDR Engineering, Inc. 500 108th Ave. NE, Suite 1200 Bellevue, WA 98004 (425) 450-6322 maki.dalzell@hdrinc.com Katrina Poppe Northwest Ecological Services, LLC 2801 Meridian Street, Suite 202 Bellingham, WA 98225 (360) 734-9484 <u>katrina@nwecological.com</u>

Volume 26, No. 2: Summer 2016

President's Corner

By Yvonne Vallette, PNW Chapter President

Last year I was set to take a break from serving on the Pacific Northwest Chapter's Board after a 15 year stint. I joined the Chapter's Board in 2001, first as the newsletter editor and then as the chapter Treasurer. Instead I'm here now serving as your Chapter President. So I'm looking forward to continuing to look for ways to serve the needs and further the interests of our Chapter for just a while longer.

Representing the Chapter, I attended the International SWS Meeting in Corpus Christi, Texas last month. Though it was a smaller than usual meeting (only about 400 participants) and a test run of a modified 3 day conference format instead of the usual 4, there were plenty of interesting and informative sessions mainly focused around the concept of the ecosystem services that wetlands provide. Some of the business discussed at the International SWS Board meeting included: nomination and selection of the first SWS Wetlands Treasure, the Forest Woods Nature Preserve located in Ohio. The goal of the <u>SWS Wetland Treasures initiative</u> is to raise public awareness of wetlands and their many benefits to human health and environmental quality.

The Wetland Treasures initiative will help to create a onestop shop for information on the biology, ecology, conservation status, and access opportunities of highfunctioning wetlands across the nation. SWS is also collaborating with the <u>U.S. National Ramsar Committee</u> so that Wetland Treasures can become a vehicle for identifying and processing future applications for U.S. Ramsar designation. The US has the fewest Ramsar designated wetlands of any of the participating countries. The SWS Board also approved the creation and funding of a Wetlands Ambassador Program. This program would help fund international graduate students to study wetland research topics in other countries. SWS hopes to be able to support up to 5 ambassadors each year.

As an organization, SWS continues to grow with over 3,500 members. On the fiscal front, the organization has generated about \$1.5 million in reserves that they have put into investments funds to help generate income without

needing to raise membership rates. The good news for our Chapter is that more of the membership fees will now be distributed down to the Chapters. Instead of \$5 of your annual membership being disbursed to our chapter, we will now receive \$10. This is to allow Chapters to have more resources to continue to provide many of the on-the-ground membership services. There is finally a strong recognition from the International SWS Board that a lot of membership connections happen at the Chapter level.

As for Chapter happenings, now that we have shifted to a biennial schedule for our 3 day technical conferences, we are looking at organizing one-day technical sessions on topics relevant to our region, perhaps followed by a day of workshops and field trips, on our off conference years to continue to provide an annual forum for our members. So in the spring of 2017, we hope to be testing this idea of a cheaper, less resource-intensive, but content-rich meeting. Meanwhile, we are looking at a possible joint chapter meeting with the Society of Ecological Restoration's Northwest Chapter in 2018. We have had successful collaboration with SER on joint conferences in the past, so we welcome this opportunity to work with SER-NW again. The chapter's coffers are now full again after the success of the October 2015 meeting in Olympia. So the Chapter would like to remind folks that we have lots of financial resources to help in the sponsorship of any training or workshop opportunities. Our sponsorship can be used to offset many of the costs that can't always be covered by registrations or public agency support.

In closing, I would like to make the plug for members to consider volunteering some of their time to SWS either at the Chapter level or with one of the International committees or sub-committees. There is always a need for fresh perspectives and experiences to help our organization to expand and stay relevant in this ever changing science. If you ever have any questions or comments don't hesitate to drop me a line via email: <u>vallette.yvonne@epa.gov</u> or give me a call at: 503-326-2716.

US Forest Service Stream Notes Resumes Publication

By Nate Hough-Snee, Immediate Past President

After a several year hiatus, the <u>US Forest Service</u> <u>National Stream and Aquatic Ecology Center</u> recently resumed publication of <u>Stream Notes</u> in 2015.

Stream Notes is an aquatic and riparian systems publication that has the objective of facilitating knowledge transfer from research and development to on-the-ground application, through technical articles, case studies, and news items. Stream related topics include hydrology, fluvial geomorphology, aquatic biology, riparian plant ecology, and climate change. Recent articles include post-fire channel responses, stream restoration on national forests, and software tools for watershed planning.

StreamNotes was previously published from 1992 through 2012 by the Stream Systems Technology Center (Stream Team). 1992-2012 editions are posted on 'Archived StreamNotes (1992-2012)'. These editions are being updated to be 508 accessible and will be posted as processed. If there is a specific edition you need, please contact Stream Notes.

The editors of Stream Notes would appreciate seeing your comments and suggestions – email them at <u>StreamNotes@fs.fed.us</u>. They are especially interested in specific topics you would be interested in seeing covered in StreamNotes, as well as potential case studies to be featured. Please include author suggestions.

Interested parties can subscribe to Stream Notes at <u>http://www.fs.fed.us/biology/nsaec/products-</u> streamnotes.html - subscribe

2011 National Wetland Condition Assessment Results Released, and 2016 Effort Now Underway!

By Yvonne Vallette, Chapter President

The 2011 National Wetland Condition Assessment (NWCA) is the first national assessment of the ecological condition of the nation's wetlands. The Environmental Protection Agency (EPA) conducted the NWCA in partnership with state environmental agencies and other federal agencies, including the Natural Resource Conservation Service and U.S. Fish and Wildlife Service. The assessment supplements the U.S. Fish and Wildlife Service's Status & Trends program, which has been documenting changes to the extent of wetland area in the U.S. for more than 30 years. EPA's collaboration with states and other federal agencies on NWCA has catalyzed and dramatically accelerated state and tribal efforts to monitor and assess wetlands.

Taken together, these surveys increase understanding of these dynamic, extremely important ecosystems that were once actively removed throughout much of the U.S. With new insight gained over time, the assessment will enable EPA and partners to more effectively manage and protect existing wetlands and hopefully restore some of those that have been lost. EPA is also launching the National Wetland Condition Assessment Campus Research Challenge to encourage graduate students to identify and use the data to address one or more key and innovative questions and hypotheses on water quality, wetland health, or wetland ecology. The research may examine relationships nationally, eco-regionally, or for other subpopulations of interest.

Key findings:

- Nearly half of the 1,179 wetland sites assessed (48%) are in good condition; 32% are in poor condition, with the remaining 20% in fair condition.
- Physical disturbances to wetlands and their surrounding habitat such as compacted soil, ditching, and removal or loss of vegetation, are the most widespread problems across the country. Wetlands with high levels of compacted soil are about twice as likely to have poor plant communities.
- Nonnative plants are a problem across the country, particularly in the interior plains and west. 46% of wetland area in the interior plains and 72% of wetland area in the west have high or very high levels of stress from nonnative plants.

So what are the leading problems facing U.S. wetlands?

Physical disturbances to wetlands and their surrounding habitat such as compacted soil, ditching, and removal or loss of vegetation, are the most widespread problems across the country. Wetlands with high levels of compacted soil are twice as likely to have poor plant communities. Nonnative plants are also a problem across the country, particularly in the interior plains and west.

- 27% Surface hardening: More than a quarter of national wetland area has high occurrences of activities related to surface hardening (e.g. soil compaction, roads). These activities affect how water flows in and out of wetlands and the amount of water that enters and stays within wetlands, potentially impacting plant productivity, nutrient cycling, and overall physical habitat.
- 27% Vegetation removal: More than a quarter of wetland area nationally has high occurrences of activities related to plant removal. Removal or loss of

Alaska Coastal Plain Sites

vegetation, such as grazing, mowing, and forest clearing may increase sediment, nutrient, and pollutant loads entering and staying in a wetland.

EMU Eastern Mtn and Upper Midwest

IPL Interior Plains

- 23% Ditching: Nearly one quarter of wetland area nationally has high occurrences of ditching. Ditching affects how water flows in and out of wetlands, potentially impacting plant productivity, nutrient-cycling, and physical habitat.
- **19% Nonnative plants**: Nonnative plants are also a problem in wetlands across the country, particularly in the interior plains and west. 46% of wetland area in the interior plains and 72% of wetland area in the west had high or very high levels of stress from nonnative plants. Nonnative plants replace native plants, resulting in loss of biodiversity and habitat for fish and wildlife species.

The 2011 NWCA final report and technical data can be found at:

https://www.epa.gov/national-aquatic-resourcesurveys/national-wetland-condition-assessment-2011results

2016 NWCA Effort

The second sampling field season is now underway. Training of the assessment protocols were done for participating states and tribes in March and April. Field crews began deploying in May. The good news is that in the 2016 effort, sampling of wetlands in the Western portion of the US will nearly triple. In 2011 a total of 36 wetland sites in OR, WA and ID were assessed. This year, 91 sites will be assessed within those 3 states. Similar to the 2011 effort, field crews will be using a consistent procedure at every site so that results can be compared across the country. Sampling and measurements at each wetland will include:

- Presence and abundance of grassy and herbaceous plants, trees and shrubs.
- Soil properties and chemistry
- Water chemistry (such as nutrients and chlorophyll-a)
- Hydrology information
- Condition of the habitat surrounding the wetland area.

Aquatic Invasive Species: Flowering Rush

By Maki Dalzell, Co-Secretary

What is it?

Flowering rush (*Butomus umbellatus*) is an emergent freshwater plant that can rapidly colonize slow moving waters found in side-channels and irrigation canals, along shorelines and in wetlands. Flowering rush can be scattered in among wetland vegetation but it can also be found growing in waters over 9 feet in depth with flower stalks emerging to 3 feet above the surface (it water greater than 9 feet it remains submersed). Spread of this species is often downstream through rhizome fragments and bulbils.

Native to Eurasia, flowering rush is established in the upper Columbia River Basin in areas like Flathead Lake MT, in portions of ID and in the Yakima River Basin, WA. It is listed as a class A noxious weed in both Washington and Oregon and is a containment species in Idaho.

Why worry?

Flowering rush infestations can restrict water flow, alter sediment transport and deposition, inhibit fishing and recreational opportunities and displace native plant and invertebrate communities. Monotypic stands of flowering rush are believed to provide favorable habitat for invasive fish species such as small and large mouth bass, yellow perch, and northern pike.

Between summer 2014 and summer 2015, 37 new flowering rush sites were detected on the mid-Columbia River between Juniper Canyon and McNary Dam and just this past month a team from Portland State University found 4 new sites below McNary Dam as far downstream as Arlington.

What is being done about it?

The Oregon Department of Agriculture and the Army Corps of Engineers have been engaged since 2014 in an eradication project for flowering rush at selected sites found along the Columbia River near McNary Dam. <u>http://www.eastoregonian.com/Oregon/20150825/divers</u> -yank-irrigation-clogging-weed



What can I do?

Learn to identify flowering rush, report new infestations and prevent the spread of flowering rush and other aquatic invasive species.

Identification:

- Leaves are thin, straight, sword-shaped, triangular in cross-section, and up to 40 inches long

- Flowers grow on tall, cylindrical stalks in round-topped umbrella-like clusters of 20-50 flowers with large pink petals. Bloom time is June – August.

- When not in flower, resembles bulrushes and true rushes - Bulbils (small bulb-like plant sprouts) may be present at
- the base of flower stalks and at the roots
- Rhizomes are fleshy and grow trailing along the ground

More ID information and resources:

http://www.kingcounty.gov/environment/animalsAndPlant s/noxious-weeds/weed-identification/flowering-rush.aspx

SWS PNW Member List Serve

By Maki Dalzell/Katrina Poppe, Co-Secretaries

Of the many benefits of becoming a SWS-PNW member, members enjoy being on an exclusive list serve which provides up to date information regarding events, workshops, news, etc. If you're not a member already, please consider becoming one or encourage your colleagues, employees, or the like to join. Thank you!

By Katrina Poppe, Co-Secretary

The U.S. Army Corps of Engineers (Corps) issues public notices soliciting public comments on proposed projects requiring individual permits. The Corps is currently updating their list of individuals and organizations interested in receiving email notifications of Corps public notices. If you would like to be added to the email list or update your contact information, complete the request form available at:

http://www.nws.usace.army.mil/Missions/Civil-Works/Regulatory/Public-Notices/

Upcoming Webinars

By Maki Dalzell, Co-Secretary

Society of Wetland Scientists:

Register online at <u>http://www.sws.org/About-</u> SWS/upcoming-webinars-for-members.html

• Status and Trends of Wetland Restoration: August 18, 10:00 – 11:00 AM

Association of State Wetland Managers:

Register online at <u>http://www.aswm.org/aswm/aswm-webinarscalls</u>

- ASWM Soils Training Webinar #2: Hydric Soil Processes: August 10, 12:00 – 2:00 PM
- ASWM Soils Training Webinar #3: Landforms and Landscapes: September 14, 12:00 2:00 PM
- ASWM Soils Training Webinar #4: Using Field Observations of Soils Onsite in Decision Making: October 12, 12:00 – 2:00 PM

Funding for Floodplain Restoration: Breaking Down Incentives to Develop Floodplains & Recent FEMA Policy Updates: September 1, 12:00 - 1:30 pm



Photo: Katrina Poppe

Calendar of Wetland Classes and Workshops

By Maki Dalzell/Katrina Poppe, Co-Secretaries

To better serve our members we have included a list of wetland related classes and workshops occurring in the Pacific Northwest. If you know of other organizations that offer classes please forward the web link to <u>katrina@nwecological.com</u>.

Coastal Training Program:

http://www.coastaltraining-wa.org/

- How to Determine the Ordinary High Water Mark: September 14-15, September 21-22, or October 18 and 19. Mt Vernon, WA.
- Using the Revised Washington State Wetland Rating System (2014) in Western Washington: September 28-29 or November 8-9. Lacey, WA.
- Using the Revised Washington State Wetland Rating System (2014) in Eastern Washington: October 5-6. Spokane, WA.
- Identifying Wetlands of High Conservation Value Using Vegetation classification and the Ecology Integrity Assessment (EIA): October 5-6. Lacey, WA.
- How to Explain Science, Share Data, and Build Trust: Presentation Skills for Scientists and Public Officials: October 13 and 26. Lacey, WA
- How to Conduct a Forage Fish Survey: October 25. Lacey, WA
- Using the Credit-Debit Method for Estimating Mitigation Needs: November 3. Lacey, WA

Northwest Environmental Training Center: https://nwetc.org/

- Wetlands Permitting: August 11. Kirkland, WA.
- Wetlands Delineation: August 9-10. Kirkland, WA.
- ArcGIS 10: Geoprocessing-Advanced Techniques for environmental Applications: August 30-September 1. Olympia, WA.
- ArcGIS 10: Geoprocessing-Advanced Techniques for environmental Applications: October 17-19. Seattle, WA.
- Pacific Salmonids: Ecology: October 18-19. Kirkland, WA
- ArcGIS 10: An Introduction to Environmental applications: December 13-15. Bellingham, WA

Portland State University Environmental Professional Program: <u>http://epp.esr.pdx.edu/</u>

- Freshwater Mussels of the Pacific Northwest: August 11-12. Portland, OR
- Principles of Streambank Analysis and Stabilization: October 13-14. Portland, OR

- River Restoration Design: October 24-28. Portland, OR.
- Restoration Project management: December 6-8. Portland, OR
- Using Beavers to Restore Stream: October 18-20. Portland, OR

Richard Chinn Environmental Training, Inc.:

http://www.richardchinn.com/

No classes are offered in Washington at this time.

The Seminar Group:

http://www.theseminargroup.net/ No wetland related courses at this time.

University of Washington – Professional Development Program:

http://www.pce.uw.edu/

- Wetland Science and Management: October 4 December 15. Seattle, WA.
- Wetland Law and Policy: January 3 March 7, 2017. Seattle, WA

Washington Native Plant Society:

http://www.wnps.org

• Aquatic Plants Workshop: August 23-24, Seattle, WA

Wetland Training Institute:

http://wetlandtraining.com/

- Advanced Hydric Soils: August 11-12, 2016, Arlington, WA.
- Basic Wetland Delineation: August 15-19, 2016, Arlington, WA.
- Basic Wetland Delineation eSession with Field Practicum: August 22-23, 2016, Arlington, WA.
- Wetland Delineation Refresher: August 22-23, Arlington, WA

SWS Funds Available for Wetlands Workshops

By Jeff Walker, Past Secretary/Newsletter Editor

The PNW Chapter Board is encouraging applications for SWS support to conduct workshops on relevant topics. The application can be found on the chapter website: <u>http://www.sws.org/Pacific-Northwest-Chapter/pacific-northwest-chapter-events.html</u>

SWS PNW Consultant Directory

By Maki Dalzell, Co-Secretary

The PNW Chapter hosts a quarterly updated consultant list on the website:

http://www.sws.org/images/chapters/pacific_northwest/do cs/Consultant_List.pdf

The only requirement to be on this list is current SWS PNW membership. If you would like to be added to the list or have your information updated, contact Maki Dalzell at <u>maki.dalzell@hdrinc.com</u>.

Update your contact information

The Chapter uses the current SWS membership list to email newsletters. Make sure your information is current to receive a copy:

http://sws.org/

https://netforum.avectra.com/eweb/DynamicPage.aspx?Sit e=SWS&WebCode=LoginRequired

Chapter Board Meetings

By Yvonne Vallette, Chapter President

The PNW Chapter Board conducts quarterly board meetings via conference call. These meetings are open to the general membership and you are encouraged to attend. If you have questions, concerns, want to get involved or are just curious please feel free to attend the meetings. Our last meeting was held on June 14 at 4:00 pm, and our next meeting date is TBD. If you are interested, please contact Yvonne at <u>vallette.yvonne@epa.gov</u> to receive conference call information.

Ooze News Deadlines for Articles

Articles and announcements are welcomed and appreciated for the fall edition of the Chapter newsletter, Volume 26 Number 3, no later than October 15, 2016. Please send associated documentation to co-secretaries Katrina Poppe at <u>katrina@nwecological.com</u> or Maki Dalzell at <u>maki.dalzell@hdrinc.com</u>. We will review your information for submission to the Ooze News. Thank you.