



# Ooze News



Society of Wetland Scientists Pacific Northwest Chapter

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

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## President's Corner

By Nate Hough-Snee, PNW Chapter President

April showers bring May's flowers, so the saying goes. And this year, much of the Pacific Northwest really needs those showers. As we round the corner from early spring into May, the American West's snowpack is amazingly low. In fact, snow-water equivalents are at record lows across much of North America. The USDA/NOAA drought monitor indicates that drought affects *a portion of every state in the West*. At the time of writing, nearly 55-million people are affected by drought in the American West. Many stream flows have peaked well in advance of their average historic dates.

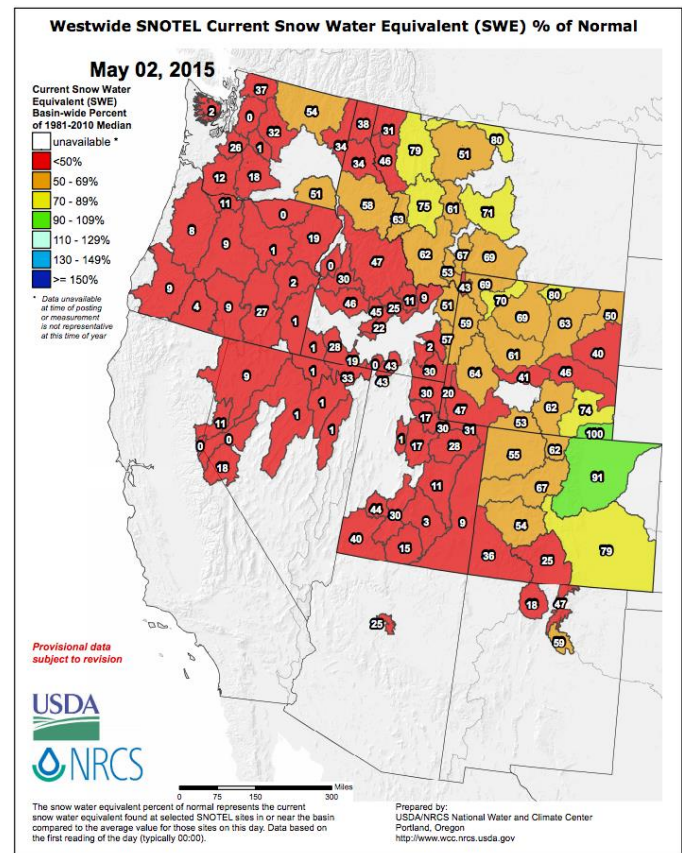
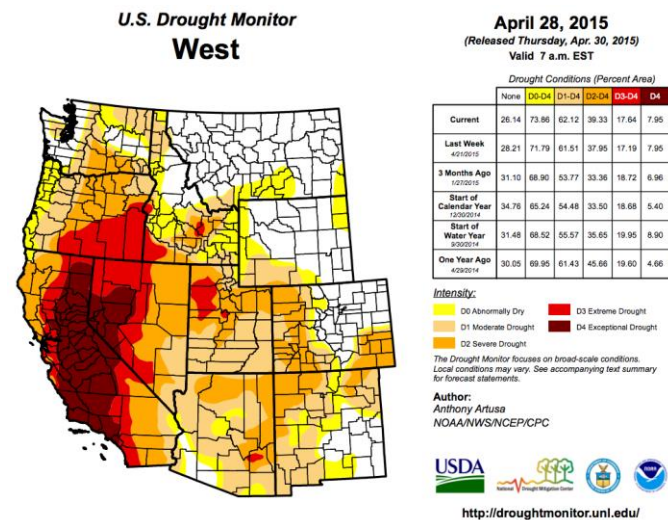


Figure 1. May 2, 2015 Snow Water Equivalents for Select Basins of the American West. All regions excluding Colorado's northern front range are below average. Low snow areas include all of Washington, Oregon and Idaho. This map updates in real-time at: [http://www.wcc.nrcs.usda.gov/ftpref/data/water/wcs/gis/maps/west\\_swepctnormal\\_update.pdf](http://www.wcc.nrcs.usda.gov/ftpref/data/water/wcs/gis/maps/west_swepctnormal_update.pdf)

If you were a skier within our chapter's focal regions of Washington, Oregon, and Idaho, then you certainly feel the pain of this hard water year. Ski areas were open as little as forty days in both Washington and Oregon. Backcountry snowpack was centimeters above non-existent. Even usually consistent mountain snowpacks, like those around the famed Mt. Baker ski area and Timberline at Mt. Hood, were at or near record lows. At least the Northwest's other gems, running, kayaking, hiking, and cycling have been good, right? While this article sounds like it's about skiing, it isn't. Really this discussion is about the West's drought amid an uncertain climate future, especially in the Pacific Northwest. This article is about weather, climate, and our changing Northwest world – and the role that wetland scientists must play in shaping the future moving forward.



**Figure 2. April 28, 2015 Drought Monitor. Abnormal to moderate drought are the best-case scenarios across much of the West. Much of Washington, Oregon, and Idaho have slipped into abnormal, moderate or severe drought. Semi-arid and arid portions of Idaho and Oregon are in extreme drought. This map is available at:**  
<http://droughtmonitor.unl.edu/Home/RegionalDroughtMonitor.aspx?west>

As wetland scientists, we often enjoy multiple levels of evidence, and consider as much current science as possible when doing our professional duties. Amid our short-term, day-to-day work though, climate change isn't often the first thing we step up to talk about. We work under regulatory frameworks that strive to accommodate the best available science in real time. We design restoration with reference biological, hydrologic and geomorphic conditions that incorporate how these processes have, should, and could function. We provide information to the public, our clients, and scientific community, striving to be current and accurate. But the world is changing, quickly.

Our understanding of how global and regional climate shapes weather, like the warm, dry winter that can lead to the red blobs in the figures above, is rapidly evolving. [A recent paper by Simon Wang and others at the Utah Climate Center](#) showed that warming sea surface temperatures are responsible for anomalous weather like last year's high pressure ridge that allowed California to further dry out to its present state. [Last year the Intergovernmental Panel on Climate Change \(IPCC\) released a new report](#): climate change is likely irreversible, caused by greenhouse gas emissions, and the effects will be widespread. In the same year, the [National Climate Assessment](#) issued their report on how climate change will affect the U.S., with detailed sections on geographic regions' vulnerability to change, [including the Northwest](#). These larger efforts have laid a framework for panels commissioned within the states of [Washington](#) and [Oregon](#).

So, in short, climate is changing, it's influencing the weather regimes and hydrogeomorphic processes that shape our region's characteristic streams, rivers, and wetlands. Within the Pacific Northwest Chapter, we're used to state and federal agencies, non-profits, conservation planners, and researchers actively considering the [IPCC's](#) technical reports and regional studies in decision-making for over a decade. So what? How does climate change come into *my* professional identity?

The mission of the Society of Wetland Scientists (SWS) is "...to promote understanding, conservation, scientifically based management and sustainable use of wetlands throughout the world." Alongside the Society's larger mission, the Pacific Northwest Chapter strives to enhance the professional development of our membership, maintaining the Northwest as a hotbed of highly qualified, cutting-edge wetland scientists. To this end, I encourage you to stay current in how climate change, among other pressures, is shaping and will shape *our Northwest*. Below are a few suggestions...

1. **Stay current.** Many of us jump at the opportunity to familiarize ourselves with updated National Wetland Plant Lists, EPA Rules, and hydric soil field indicators. We should engage the climate change literature and climate-related professional training opportunities with the same fervor. Seek out the abundant information on how climate change may shape your region, state, and watershed.
2. **Stay open-minded.** While we often design wetland restoration projects with specific hydrologic and biological targets, such as those required for compensatory mitigation, these targets may be unrealistic under anomalous future conditions.

Practitioners and scientists must consider a range of potential trajectories for ecosystems in the future, embracing and communicating uncertainty.

3. **Stay connected.** Wetlands are dynamic systems, and accordingly, they are connected to the landscape through multiple paths. When identifying threats to wetlands and potential conservation opportunities, put wetlands into a broader landscape context alongside the standard hydrogeomorphic contexts.
4. **Keep the forest in the context of the trees.** While climate change has the potential to reshape our wetland and water resources, so do short-term processes including land and water degradation, pollution, and aggressive invasive species. Climate change will not trump these ecosystem effects in the short-term. It will interact with them, perhaps in novel ways.
5. **Get and stay involved.** If you're reading this, chances are that you're already a member of the Society of Wetland Scientists. In the spirit of my first four suggestions, I recommend getting involved with [one of the Society's many sections](#) that are involved in climate and global change issues. Additionally, climate change and global change are recurring themes at our chapter's meetings. I encourage you to share your work with the chapter and stay networked with your fellow wetland professionals and students. The current chapter meeting is scheduled for October 6-8 in Olympia, Washington. All information will be disseminated through our [chapter website](#). Abstracts are currently being accepted and you'll find more details here and in *Wetland Science and Practice*.

Yours amid the sedge and willow,  
Nate Hough-Snee

### ***In Memory and Recognition of Suki Cupp***

*By: Yvonne Vallette, Treasurer*

It is with deep sadness to the Pacific Northwest chapter that we have lost a much beloved colleague and friend, Mary 'Suki' Cupp. Suki passed away in Portland on January 11<sup>th</sup> from ovarian cancer. Suki was an active member of the Pacific Northwest Chapter of SWS, serving for years as the Chapter's Executive Vice President, then as our Chapter President in 2000-2001. Her ultimate contribution was serving as the Co-Chair for the 25<sup>th</sup> Anniversary of the Society of Wetland Scientist's meeting in Seattle in 2004. Her energy, organizational skills, laughter and wit were without bounds. Suki's contributions to the Pacific Northwest Chapter were recognized by her receipt of our Lifetime Achievement Award in 2004. In addition to her

volunteer efforts to the Chapter, Suki worked for over 28 years at CH2M Hill in Portland, first as their Senior Ecologist, then as their International Staffing Manager. She was a loving and a great friend to many of us. She will be well missed.



"What we have once enjoyed, we can never lose. All that we love deeply becomes part of us." -Helen Keller

### ***E. coli in Idaho Mountain Waters***

*By Clif Amundsen, SWS-PNW Member*

My continuing field study concerns characteristics of certain minor (lacustrine to "riverene"; lentic to lotic) mountain waters. These particular waters support resilient hydric to mesic (generic wetland obligates to facultatives) forage plant dominated communities. These habitats show intrusively wetted soil profiles during the growing season. This *pro bono* effort has now encompassed 14 years. (Amundsen, Clif. 2014. Certain field measures of characteristics affecting wetted biorefuges in the steppe/montane altitudinal zones of the Sawtooth National Forest (SNF), Idaho (*Online J. Idaho Academy of Science*. 50:1, p 65-76.).

In the past three growing seasons the field measures of such waters in frequently visited recreation areas have included field tests for coliform bacteria. Using field test kits from Bluewater Bioscience the results show all waters tested are positive for coliform bacteria as expected (Bluewater Waterchecks). More detailed tests (Bluewater Coliplates) show persistent presence of *Escherichia coli* (*E. coli*) in waters frequented by grazing domestic and wild animals and easily accessible to humans.

In a fortunate coincidence it has been called to my attention of research in Idaho's Salmon River drainage, Middle Fork and main upper Salmon. This large watershed is adjacent to my northern SNF study areas. These efforts have repeatedly found *E. coli* in sampled scats

(mammalian, likely including human and perhaps avian) when tested by antibiotic digestion protocols. These studies in 2013 and 2014 were carried out by Brian Burnes, Ph.D., who is on the faculty of the University of West Alabama.

A preliminary report from Dr. Burnes appeared in the Proceedings of the April 2014 Annual Meeting of the Southeastern Society of Biologists (Abstract 159 in Volume 61). I am in contact with Dr. Burnes and we are cooperating on discussions of *E. coli* sources and detection methodology.

Unlike my younger days growing up in Idaho I no longer drink untreated mountain waters.

### ***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!

### ***Chapter Board Meetings***

*By Nate Hough-Snee, 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 April 21st at 4:30 pm, and our next Chapter meeting date will be an informal gathering of SWS-PNW members at the SWS National Meeting in Providence, RI. If you will be in attendance at the Providence meeting and are interested, please contact Nate Hough-Snee at [nate@natehough-snee.org](mailto:nate@natehough-snee.org) to let him know.

The next full board conference call will occur **June 30 at 430pm PST**. Call-in information is as follows:

#### **June SWS-PNW Chapter Board Meeting**

Tue, Jun 30, 2015 5:30 PM - 6:00 PM MDT

You can join the meeting from your computer, tablet or smartphone:

<https://global.gotomeeting.com/join/896973965>

You can also dial in using your phone.

United States : +1 (224) 501-3412

Access Code: 896-973-965

### ***Final WA Wetland Program Plan Released***

*By Katrina Poppe, Co-Secretary*

The WA State Department of Ecology released its final Wetland Program Plan in March 2015. The WPP outlines a comprehensive strategy developed by a collaborative group of state agencies, describing what the state plans to focus on in its wetland program over the next six years. The plan describes goals and objectives for six core elements: regulation, voluntary restoration and protection, monitoring and assessment, water quality standards, outreach and education, and sustainable financing.

The plan is available at:

<http://www.ecy.wa.gov/programs/sea/wetlands/ProgramPlan.html>.



Nooksack River delta. Photo credit: Katrina Poppe

### ***Calendar of Wetland Classes and Workshops***

*By Katrina Poppe, Co-Secretary*

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 [katrina@nwecological.com](mailto:katrina@nwecological.com).

#### **Coastal Training Program:**

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

- Puget Sound Coastal Processes, Shoreline Modifications, and Beach Restoration: May 28. Lacey, WA.
- Using the Revised Washington State Wetland Rating System (2014) in Eastern Washington: June 16. Spokane, WA.

#### **Northwest Environmental Training Center:**

<https://nwetc.org/>

- ArcGIS 10: An Introduction to Environmental Applications: June 15 – 17. Bellingham, WA.

- National Environmental Policy Act (NEPA): Writing the Perfect EA/FONSI, or EIS: July 28 – 29. Bellevue, WA.
- Advanced NEPA – Taking the National Environmental Policy Act to the Next Level: July 30. Bellevue, WA.
- ArcGIS 10: Geoprocessing – Advanced Techniques for Environmental Applications: August 4 – 6. Olympia, WA.
- Habitat Site Restoration: September 15 – 16. Bellevue, WA.
- Wetlands Delineation: June 23-25. Tigard, OR.
- Wetlands Delineation: September 22-23. Bellevue, WA.
- Wetlands Permitting: June 25. Tigard, OR.
- Wetlands Permitting: September 24. Bellevue, WA.

#### **Portland State University Environmental**

##### **Professional Program:** <http://epp.esr.pdx.edu/>

- Wetland Hydrology Indicators and Problem Situations: June 2-3, 2015, Portland, OR.
- Wetland Plants of the Pacific Northwest: June 15-19, 2015, Portland, OR.
- Grasses, Sedges, and Rushes of the PNW: October 6-7, 2015, Portland, OR.

#### **Richard Chinn Environmental Training, Inc.:**

<http://www.richardchinn.com/>

No wetland related courses offered in our region 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.engr.washington.edu/epp>

No wetland related courses at this time.

#### **Washington Native Plant Society:**

<http://www.wnps.org>

- Grass Identification Workshop: June 17–19, 2015, Seattle, WA.
- Ferns and Fern Allies Identification Workshop: July 28–29, 2015, Seattle, WA.

#### **Western Washington University – Extended Education:**

<http://www.acadweb.wvu.edu/eesp/default.shtml>

Wetland Identification and Delineation: June 22-26, 2015, Bellingham, WA.

[http://www.pacificecologic.com/pacific\\_wvu%20w1%20del.htm](http://www.pacificecologic.com/pacific_wvu%20w1%20del.htm)

#### **Wetland Training Institute:** <http://wetlandtraining.com/>

- Basic Wetland Delineation: August 17-21, 2015, Arlington, WA.
- Wetland Delineation Field Session: August 13-14, 2015, Arlington, WA.
- Advanced Hydric Soils: August 24-25, 2015, 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: <http://www.sws.org/Pacific-Northwest-Chapter/pacific-northwest-chapter-events.html>

#### **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/docs/Consultant\\_List.pdf](http://www.sws.org/images/chapters/pacific_northwest/docs/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 [maki.dalzell@hdrinc.com](mailto:maki.dalzell@hdrinc.com).

#### **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?Site=SWS&WebCode=LoginRequired>

#### **Ooze News Deadlines for Articles**

Articles and announcements are welcomed and appreciated for the spring edition of the Chapter newsletter, Volume 25 Number 2, no later than April 15, 2015. Please send associated documentation to incoming co-secretaries Katrina Poppe at [katrina@nwecological.com](mailto:katrina@nwecological.com) or Maki Dalzell at [maki.dalzell@hdrinc.com](mailto:maki.dalzell@hdrinc.com). We will review your information for submission to the Ooze News.

Thank you.

## Pacific Northwest Chapter 2015 Meeting News

### Call for Abstracts

By *Katrina Poppe, Co-Secretary*

The PNW Chapter Board is pleased to announce that the call for abstracts is open for the 2015 Chapter meeting, *From a Watershed Perspective: Integrating Science into Policy*, in Olympia, WA this October 6-8, 2015. Please submit your abstract directly at:

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

Abstracts for posters and presentations will be accepted until **August 1st, 2015** and notifications of abstract reception and acceptance will occur on a rolling basis.

Talks and posters on all wetland and wetland-related topics are welcome. These topics can take the form of research, case studies, methods, policy discussions, etc. Student volunteer opportunities and scholarships will be available, so please stay tuned to the chapter website for more information.

### Raffle Item Donations

By *Karla Van Leaven, Treasurer-Elect*

The chapter is seeking item donations for the raffle to be held at our October conference. The monies obtained from the raffle will support the chapter's student scholarships. Those interested or willing to donate, please contact [KarlaVanLeaven@gmail.com](mailto:KarlaVanLeaven@gmail.com) or (360) 393-9921.

### Student Travel Scholarships

By *Nate Hough-Snee, Chapter President*

To encourage student participation at the 2015 Chapter meeting, [From a Watershed Perspective: Integrating Science into Policy](#), the Pacific Northwest Chapter of the Society of Wetland Scientists is sponsoring student travel awards. These funds are available to assist students with the costs associated with traveling to and from the meeting to present their research.

**Awards:** The Pacific Northwest Chapter will make four \$500 awards for the upcoming SWS-PNW Meeting this October 6-8, 2015 in Olympia, WA. Awards can be used for travel, hotel and conference registration costs.

**Scholarship eligibility:** This competition is open to all currently registered graduate and undergraduate students regardless of location. However, preference will be given to students living, performing research or attending a university within the Pacific Northwest Chapter region (Washington, Oregon, and Idaho). Students **must submit an abstract online and present their work** as a poster or talk at the Chapter meeting. [Submit presentation abstracts here.](#)

To apply, email your application to [swspnw.meeting@gmail.com](mailto:swspnw.meeting@gmail.com) with “SWS-PNW 2015 Scholarship” as the subject line. All applications must be received by 11:59pm (PST) Monday August 17, 2015 and should include:

- A one-page cover letter describing your background, research and/or education, career goals, and how an award from the SWS-PNW chapter would help you to meet these goals. *Please paste this letter into the body of your email with your contact information.*
- A one-page resume
- A copy of your submitted SWS presentation title and abstract
- Please stitch the letter, resume and abstract into a single Word or pdf document and attach it with your email.

Students that receive awards are expected to provide a brief biosketch for the SWS-PNW newsletter and website. The conference talk or poster and any publications resulting from the work presented at the conference should acknowledge support from the Society of Wetland Scientists Pacific Northwest Chapter.

Students that are not offered awards will be offered the chance to volunteer at the meeting to defray registration costs. If interested in volunteering, please email [swspnw.meeting@gmail.com](mailto:swspnw.meeting@gmail.com) with the title “SWS-PNW Chapter Meeting Volunteer” expressing your interest.

Please address scholarship questions to SWS-PNW Scholarship Committee co-chairs, Tom Kohl ([KohlT@wsdot.wa.gov](mailto:KohlT@wsdot.wa.gov)) and Nate Hough-Snee ([Nate@natehough-snee.org](mailto:Nate@natehough-snee.org))



## CALL FOR ABSTRACTS

### SOCIETY OF WETLAND SCIENTISTS 2015 PACIFIC NORTHWEST CHAPTER CONFERENCE

October 6th, 7th & 8th 2015  
Red Lion Conference Center, Olympia, WA

#### FROM A WATERSHED PERSPECTIVE: INTEGRATING SCIENCE INTO POLICY

This conference will focus on aligning policy with current wetland science. We invite abstracts for presentations and posters. All topics in wetland science, policy and education are welcomed. Current session topics include:

Wetland Restoration, Compensatory Mitigation, Wetland Policy, Wildlife Ecology, Plant Ecology, Riparian Wetlands, Wetland Education/Outreach, Climate Change, Natural History, Conservation of Rare Wetland Biota, Tidal Wetlands, Mountain Wetlands, Aquatic Ecology, Biogeochemistry, Water Quality, Watershed Management, Soils, Hydrology, Wetland Mapping, Estuarine Ecology, Aquatic Entomology, Wildlife, Floating Wetlands, Fisheries, Delineation, and Wetland Scientist Certification.

Submit an abstract for a presentation or poster online:

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

We are accepting abstracts beginning April 17, 2015 – Abstract submissions close **August 1** (we will not be extending this deadline!). Notifications will be issued on or before Sept. 1, 2015.

