



# National Water Quality Monitoring Council

Working together for clean water



## Meeting Minutes – National Water Quality Monitoring Council (NWQMC) Web Meeting February 21 and 23, 2018

(Agenda and list of participants on pages 4-6, presentations posted on Council website at: <http://acwi.gov/monitoring/>)

### Actions, Decisions and other Information

1. **Decision:** Upon a motion duly made (Aaron Borisenko), seconded (David Chestnut), and carried, the December 11, 2017 NWQMC Web Meeting minutes were approved and will be posted to the website.
2. **ACWI Meeting Highlights:** Wendy Norton updated the group on the annual ACWI (Advisory Committee on Water Information) meeting which took place January 17 and 18, 2018 in Reston, Virginia. About 70 people attended the meeting live; Jim Kreft and Gary Rowe presented on the NWQMC and its activities. Al Rea of the Subcommittee on Spatial Water Data gave a shout out to the Water Quality Portal and the recent addition of a feature that enables identification of upstream and downstream monitoring locations. There was an appearance by Tim Petty, the Assistant Secretary of Water and Science, who is the Chair of ACWI. Sandra Conners (EPA) and Don Cline (USGS) are likely to act as chairs of ACWI as Tim Petty may be tied up with other activities.
3. **2019 National Monitoring Conference (NMC):** Larina Guenzel presented updates from the Conference Planning Committee (CPC, [see presentation "NMC CPC Update 180221"](#)). The CPC is still looking for more NWQMC members to become involved with planning the Conference. We still need people to fill in the Local Committee, but we need to finalize a venue and dates first. It is likely we will hold the Conference at the Downtown Denver Sheraton, but Jeff has not finalized details or dates. The CPC is also considering which training courses to offer at the Conference since many people have indicated that trainings will likely increase meeting attendance.
4. **Collaboration and Outreach (C&O) Work Group** –Candice Hopkins presented on outreach and collaboration activities. The webinar series is going well and hosted six webinars since the December NWQMC meeting. There has been an increased in using the webinar series to help with the training and class series subgroup. The deadline for the Spring 2018 newsletter is on March 2<sup>nd</sup> and we still need more articles from states. In 2018, C&O plans to help with outreach for the 2019 NMC and promote the NWQMC at meetings and conferences. The group also intends to help publicize other council products and activities as they are released.
5. **Volunteer Monitoring (VM) Work Group:** Julie Vastine presented the VM Work Group's plans for 2018 ([see presentation "VM 2018 Work Plan"](#)). During the year, the group plans to help prepare for the NMC by encouraging abstract submissions from volunteer groups, helping search for scholarship opportunities, and hosting a VM meeting at the Conference. The group is continuing to help keep the VM Directory updated and is focusing on strengthening relationships with other NWQMC workgroups, including gathering articles for the newsletter and working with WIS on fact sheets. The group has also been involved with conversations about incorporating VM data into the Water Quality Portal, and the Pisces Foundation is providing some funding to explore minimum metadata requirements and create a VM shared community of practice.
6. **Methods and Data Comparability Board:** Dan Sullivan updated the Council on activities of the Methods and Data Comparability Board (see presentation "[MDCB Update 4 feb.2018 Webmeeting](#)"). The group is trying to get some products out in the short-term while working on a long-term work plan. The Biological Assessment and Comparability group has had a few calls and has now developed a spreadsheet with identified fields that will help to update the National Environmental Methods Index (NEMI) with pertinent information. The Sensors Workgroup has been discussing various issues based on last fall's poll; many respondents wanted training and the group has been working to put those together. Dan has ideas for several more training sessions, including on a variety of uses for continuous monitoring data. The group also hopes to put together training on

remote sensing at a variety of scales. The Sensors Workgroup is hoping to address uncertainty issues associated with sensors and is hoping to write a white paper or fact sheet to address the topic.

7. **National Network of Reference Watersheds (NNRW):** Mike McHale gave updates on recent progress on the NNRW ([see presentation "McHaleNNRWUpdate\\_02212018"](#)). Currently NNRW includes data from over 2,500 watersheds, the majority of which contain USGS data and also have flow data associated with them. The focus of work in 2018 includes expanding users and data, developing a revised hydrologic disturbance metric, developing R analytical tools, revising the Core Watersheds webpage, and increasing the visibility of the website. NNRW also plans to launch a Communications Plan in 2018 with the assistance of the C&O Work Group. Mike is waiting for some technical updates to NNRW, including fixing a broken link to the Water Quality Portal.
8. **Water Information Strategies (WIS) Work Group**—Mary Skopec updated the group on WIS's activities over the past several months ([see presentation "Water Information Strategies to NWQMC 022118"](#)). The group has focused on various fact sheets, both working on content in current draft form and planning other fact sheets for future years. The group has been interested in tracking the use of the Water Quality Portal (WQP) and is interested in reaching out to various states to have conversations about who uses the Portal. WIS has also been actively involved in helping the WQP's communication plan.
  - **Action Item:** Aaron or Mary will update the Fact Sheet Tracking document and distribute it to NWQMC members
9. **Water Quality Standards Subgroup:** Chris Greene updated the group on the subgroup's work ([see presentation "NWQMC-CWG-21Feb2018"](#)). There are currently several fact sheets being developed focused on types of guidance, ecological and aquatic life standards, and human health standards. The group hopes to conduct an inventory of existing state and federal water-quality standards and will be active in 2018. Susan Holdsworth recommended Chris be sure to include information from the Water Quality Standards Academy.
10. **Data Submission Subgroup:** Jane Caffrey led a conversation about increasing submissions to the Water Quality Portal. There have been challenges with getting certain types of data (such as academic data, VM data, etc.) into the WQP. This group would like to create best practices for data submission, and try to encourage people to submit as much data as they can. There are current efforts at USGS and EPA to start discussing tiered data and data quality issues, so this group will be tied into those conversations. Jane suggested coming up with a template that can help people to examine data before it's put into the WQP. Dwane Young mentioned that there are already metadata requirements, but perhaps this group could help to compare what is currently required with what should be required. Future meetings will likely focus on detailed metadata elements and requirements.
  - **Action Item:** send Jane Caffrey contacts who may be interested in participating on this effort

## 11. Technical Presentations

- **Meghan Smart (Arizona Department of Environmental Quality)** gave a presentation on Arizona's approach for low-cost intermittent stream sampling ([see presentation "NWQMC 2.21.18"](#)). The studies she presented included novel approaches for a probabilistic study using remote game cameras to classify intermittent streams into flow categories. Meghan has used citizen scientists to help process photos, sample streams, and maintain cameras.
- **Susan Holdsworth (EPA)** gave a presentation on NARS: a Partnership with EPA, States, and Tribes to conduct a statistical survey across the United States to report on the condition of aquatic resources and rank stressors. Susan also shared a paper on predictive mapping of the biotic conditions of rivers and streams; more information can be found [here](#).
- **Kathleen Weathers (GLEON)** gave a presentation on the Global Lakes Ecological Observatory Network (GLEON) which includes scientist and citizen scientist that conduct research and share data across the world. The group focuses on networked lake science and sharing data from around the world. GLEON conferences have a different structure than other conferences, and focus on collaboration and working groups. Many members of GLEON are early-career level scientists and students. GLEON also has a graduate student fellows program that encourages collaboration outside of other graduate work; many of the graduate programs leverage work done by the National Lakes Assessment. In addition, GLEON has recently released "Lake Observer", a citizen-science mobile app that has been used for two years.

- **Orin Shanks (EPA)** gave a presentation on using quantitative microbial source tracking in the Tillamook basin to source E. Coli in many different waters. Orin covered many of the background science and assumptions involved in this work and shared a success story from sourcing bacteria in the Tillamook basin, Oregon.

MEETING AGENDA

Wednesday, February 21st			
Time (EST)	Topic	Duration	Speaker
11:00 AM	Welcome and Introductions	5	Susan Holdsworth and Gary Rowe
11:05 AM	Council Business: Approve of December 11th minutes	5	Candice Hopkins
11:10 AM	ACWI Meeting Highlights	15	Wendy Norton
11:25 AM	WIS Work Group Updates	60	Mary Skopec, Aaron Borisenko, and Subgroup Leads
12:25 PM	Camo, Hose Clamps, and Pixels: Arizona's Approach for Low-Cost Intermittent Stream Monitoring	30	Meghan Smart
12:55 PM	Break	15	
1:10 PM	National Network of Reference Watersheds	30	Mike McHale
1:40 PM	2018 National Monitoring Conference Update	45	Jeff Schloss, Tim Oden, Lariena Guenzel, Marie DeLorenzo
2:25 PM	MDCB: Sensors and Bioassessment Workgroup Updates	30	Dan Sullivan
2:55 PM	Adjourn for the Day	5	

Friday, February 23rd			
Time (EST)	Topic	Duration	Speaker
11:00 AM	Welcome and Introductions	5	
11:05 AM	Volunteer Monitoring Work Group Update	30	Danielle Donkersloot, Julie Vastine
1 1:35 AM	Template to establish quality of Data Submissions	30	Jane Caffrey
12:05 PM	Technical Presentation	30	Susan Holdsworth
12:35 PM	Break	15	
12:50 PM	Networked Lake Science: How the Global Lake Ecological Observatory Network (GLEON) is using National Lakes Assessment Database for Research and Graduate Student Training	60	Kathleen Weathers
1:50 PM	Quantative Microbial Source Tracking in the Tillamook Basin	45	Orin Shanks
2:35 PM	Collaboration and Outreach Work Group Update	15	Danielle Donkersloot, Candice Hopkins
2:50 PM	Adjourn Meeting		

Attendees via WebEx:

Attendee Name	Attendee Email Address
Aaron Borisenko	borisenko.aaron@deq.state.or.us
Alan Ellsworth	alan_ellsworth@nps.gov
Amy Kathman	akathman@wef.org

Barb Horn	barb.horn@state.co.us
Candice Hopkins	chopkins@usgs.gov
Chris Bellucci	christopher.bellucci@ct.gov
Chris Greene	christopher.greene@state.mn.us
Dan Sullivan	djsulliv@usgs.gov
David Chestnut	chestnde@dhec.sc.gov
Dean Tucker	dean_tucker@nps.gov
Doug McLaughlin	dmclaughlin@ncasi.org
Dwane Young	young.dwane@epa.gov
Ed Sherwood	esherwood@tbep.org
Elizabeth Smith	elizabeth.smith@ks.gov
Erich Emery	erich.b.emery@usace.army.mil
Gary Rowe	glrowe@usgs.gov
Jane Caffrey	jcaffrey@uwf.edu
Jeff Schloss	jeff.schloss@unh.edu
Jeff Thomas	jthomas@epri.com
Jeremy Zumberge	jeremy.zumberge@wyo.gov
Jim Dorsch	jdorsch@mwrddst.co.us
Jim Kreft	jkreft@usgs.gov
Julie Vastine	vastine@dickinson.edu
Kathleen Weathers	weathersk@caryinstitute.org
Kim Martz	kimmartz@usgs.gov
Lareina Guenzel	guenzel.lareina@epa.gov
Larrey Willis	larry.willis@deq.virginia.gov
Leslie McGeorge	leslie.mcgeorge@dep.nj.gov
Marie DeLorenzo	marie.delorenzo@noaa.gov
Martha Clark Mettler	mclark@idem.in.gov
Mary Skopec	mary-skopec@uiowa.edu
Meghan Smart	ms14@azdeq.gov
Michael McDonald	mcdonald.michael@epa.gov
Mike Eberle	mbeberle@fs.fed.us
Mike Higgins	mike_j_higgins@fws.gov
Mike McHale	mmchale@usgs.gov
Monty Porter	monty.porter@owrb.ok.gov
Nancy Schuldt	nancyschuldt@fdlrez.com
Nichole Halsey	nhalsey@seabird.com
Orin Shanks	shanks.orin@epa.gov
Ronnie Martin	martinrd@dhec.sc.gov
Sara Peel	speel@arionconsultants.com
Sheri Alcalde	salcalde@usgs.gov

Steve Greb	srgreb@wisc.edu
Susan Holdsworth	holdsworth.susan@epa.gov
Tim Asplund	tim.asplund@wisconsin.gov
Tim Oden	toden@usgs.gov
Wendy Norton	wenorton@usgs.gov

