



Meeting Notes – National Water Quality Monitoring Council (Council) April 2 - 4, 2013

(Agenda and list of participants on pages 6-8, presentations posted on Council website at: <http://acwi.gov/monitoring/>)

Actions, Decisions and other Information

1. **Council Updates** – Mike Yurewicz gave an update on the current Council membership and overview of status of the 2014 National Monitoring Conference.
2. **2013 Council meeting dates:**
 - August 6 - 8, 2013, WebEx
 - December 2 - 5, 2013, US Fish & Wildlife, National Conservation Training Center, Shepherdstown, WV
3. **Decision:** Upon a motion duly made (Dan Sullivan), seconded (Mike McDonald), and carried, the November 27-29, 2012 Council Meeting minutes were approved and will be posted on the website (Dan Sullivan).
4. **National Network of Reference Watersheds** – Jeff Deacon, USGS gave an update on the progress made on the FY2103 Workplan tasks since the November 2012 Council meeting. Mike McHale was acknowledged for gathering information and working on the website/data access tasks. Jeff gave a presentation on the Website (See presentation – “*National Network of Reference Watersheds*” for overview and details).
5. **Water Quality Portal (WQP)** – Nate Booth, USGS gave an update of the WQP FY13 workplan, including, operations and maintenance, portal stats, communications. Charles Kovatch, USEPA gave a presentation on “Update: Sharing Data via WOQ”, the OGC’s Climate-Hydrology Sharing Pilot which is a collaboration of Environment Canada, USEPA and USGS, and “Models in R” (see presentation – “*Water Quality Portal Update*” for details).
 - **Suggestion:** Session/Workshop on Water Quality Portal and continuous monitoring data at the 2014 National Monitoring Conference.
6. **Roundtable: Erik Host-Steen**, Industry Representative to the Council, is a product marketing manager with the Hach Company based in Loveland, Colorado. His role is part of Hach Hydromet which is a group focused on environmental water monitoring. Erik is primarily responsible for the Hydrolab brand of multiparameter water quality instruments, but he also works closely with the Sea-Bird Electronics, WET Labs, Satlantic, and Hach product teams. His 16-year career has been spent in various product development, sales, marketing, and business development roles in specialty materials and measurement instrumentation manufacturing businesses, the last five of which has focused on environmental water quality instruments with Hach. Erik is eager to build on his contributions to the Aquatic Sensor Workgroup of the Methods and Data Comparability Board and to leverage the diversity of his background to bring valuable perspectives and contributions to the Council.
7. **Roundtable: Mike Higgins**, U.S. Fish and Wildlife, Ft. Collins, Colorado. He is an aquatic insect ecologist. Mike works in the National Fish and Wildlife Refuge System. There are 561 refuges representing 150 million acres with about half located in Alaska. Their mission is wildlife habitat conservation. Only a few dozen refuges conduct water quality monitoring and their efforts aren’t coordinated. A new Inventory and Monitoring Initiative was started to identify water quantity and quality issues; fix problems with standardization in methods and data quality; and increase collaborate among activities. Current issues are nutrients and metals (mercury, selenium) and developing issue is energy development and how it affects water quality. Water quality data are not available right now and they have an issue of where to put the data. Barb Horn suggested he consider using the Colorado Water Quality Monitoring Council’s Data Sharing Network to upload data.
8. **Volunteer Monitoring:** Barb Horn, Colorado Parks & Wildlife, Volunteer Monitoring Representative, gave the following updates:
 - Barb attended a Citizen Biomonitoring workshop sponsored by Confluence. Confluence is the Water Technology Innovation Cluster for the Ohio River Valley Region (see 15. p. 6 of minutes). Summary:
 - Brainstormed about increased use technology by citizen monitors.
 - Attendees did not know about the Council so Barb informed them.

- Held an interactive session on how to build a highway of getting data in and data out. Increasing the use of AWQMS to get data into WQX.
 - VM groups are collecting “apps” on biodiversity that are already publically available.
 - Volunteer Monitoring Committee Activities
 - New addition (Issue 3) of the Volunteer Monitoring News is out: http://acwi.gov/monitoring/vm/publications/newsletters/VM_News_Issue3_Mar2013.pdf
 - Webinars on Volunteer Monitoring will be sponsored by USEPA
 - Success stories are being posted on the VM webpages on the Council's Website <http://acwi.gov/monitoring/vm/index.html>
 - State and EPA Volunteer Contact List is progressing
9. **Methods Board:** Dan Sullivan, USGS, Co-chair provided updates on Methods Board activities including (See presentation “*Methods Board Report out*”):
- NEMI 4.0. – A functional version is 95% complete. A link to NEMI 3.0 will still be on the website so that users can ease into new version. NEMI 4.0 is simpler, more powerful, and more flexible. Still trying to link to MEMO. NEMI-SAMS will still be included. A public version will be available. The plan is to have a phased rollout, integration with Water Quality Portal, and additional protocols and possibly models. Leslie McGeorge suggested that there needs to be a discussion somewhere on differences between detection level and reporting limits somewhere.
 - What methods board will be working on in 2013-14:
 - Workshop for the 2014 Conference (sensor QA)
 - Integration of continuous monitoring data with discrete data for CWA 305(b) and 303(d)
 - Nutrient monitoring by sensors
 - Other things being discussed:
 - QA issues in the National Monitoring Network
 - Potential role as advisory group to the NEON (National Ecological Observatory Network)
 - Role in defining QA needs for National Reference Network
 - Taxonomic Issues Workgroup (Moulton, USGS)
10. **National Monitoring Network:** Bernice Smith, USEPA; Mike Yurewicz, USGS, Co-Chairs summarized highlights from the NMN March 20 call and breakout session below:
- Summary of March 20 call
 - Purpose of workgroup -- To build the National Monitoring Network (NMN) as a summit to sea network of networks that links nutrient monitoring and modeling of eutrophication, harmful algal bloom and hypoxia in coastal and near shore waters to freshwater monitoring and modeling.
 - Why Implement? -- NMN identified as a 2017 milestone in the National Ocean Policy implementation strategy
 - Other topics discussions:
 - NMN brochure, web pages, webinars
 - Identification of ongoing nutrient monitoring & modeling efforts
 - Established Communication Strategy and Nutrient Flux subgroups.
 - Communications Strategy Breakout: (Bernice Smith and Hugh Sullivan, USEPS) – See presentation “*NMN communications Strategy Breakout Session*” for detailed notes.
 - Topics discussed included: What are program objectives? Why is communications essential for advancing objectives? What do we want to accomplish through communications? Whom do we want to engage with communications? What are key messages? How will messages be delivered?
 - Next Steps
 - Meeting to develop actions and timelines to identify volunteers, draft communication strategy, update website, and update brochure
 - Webinar with Regional Integrated Ocean Observation System Directors to identify ongoing nutrient monitoring efforts
 - Webinar with place-based programs to identify data needs
 - Nutrient Flux Models Breakout: (Mike Yurewicz, USGS) – See presentation “*NMN Modeling Session*” for detailed notes.
 - Topics discussed included: Models that are in place or being developed; inventory of models currently being used and the role of partnerships; comparisons of models including a session at the 2014 Monitoring Conference; and, how continuous monitoring can be incorporated in models.

- Next steps:
 - Develop plans for briefing IOOS Associations
 - Long-term: assess how a hypoxia data portal can be linked to the Water Quality Portal.
 - **Action:** Mike Yurewicz suggested that Jeff Deacon could pull data of targeted Coastal Sites from their database.

- 11. **Collaboration and Outreach Workgroup** – Cathy Tate, USGS, cmtate@usgs.gov and Barb Horn, Colorado Parks and Wildlife, barb.horn@state.co.us, Co-chairs. Cathy presented a general overview of workgroup activities including webinars, social media, newsletters, communication with State/Regional/Tribal Councils, marketing of Council products, and National Monitoring Conference (see presentations "*C&O Workgroup Updates*" for details).
 - **Action: Deadline** for Fall 2013 issue of "**National Water Monitoring News**" newsletter is **September 13, 2013**. Send articles to Cathy Tate, cmtate@usgs.gov
 - **Website redesign breakout:** Jen Bruce, USGS, presented a mock-up of main page (see presentation "*NWQMC website redesign*" and Dan Sullivan's presentation "*Methods Board Report out*" for details)
 - Purpose
 - Expand website audience to larger water-quality monitoring community
 - Improve messaging
 - Build NWQMC brand recognition
 - Improve usability and accessibility to information
 - Make content more usable, meaningful, and up-to-date
 - Plans/Discussion
 - Add "**Framework**" link to prominence in top navbar; Consider an *interactive framework graphic* and some way of tying in website components better w/ framework.
 - **ACTION:** Need more **photos!** Will send out solicitation to Council members for good shots to use.
 - Put "Working together for Clean Water" in banner
 - Timeline
 - May 31, 2013: Revised Graphic design for final Council approval
 - September-November, 2013: Begin rollout of new pages

- 12. **Water Information Strategies (WIS) Workgroup** – Mary Skopec, Iowa Department of Natural Resources, Mary.Skopec@dnr.iowa.gov, Chair. (See *WIS notes* for details)
 - Water Quality Indices Questionnaire: Leslie McGeorge, NJ DEP, gave a status report of questionnaire (See "*Water Quality Indices and Report Cards Summary*" at end of WIS notes) and requested additional participants for the survey.
 - **Action:** Add Susan's question to the survey, "Are you in the process of developing an index?"
 - **Action:** Finish gathering information
 - **Action:** Schedule webinar at later date and a report for Council website.
 - National Network of Reference Watersheds (Jeff Deacon, USGS)
 - Outreach to States – help states understand the purpose of the network, value in participating in the network and potential issues that may arise.
 - Update from Jeff Deacon:
 - Starting small and focusing on water chemistry. Will not lose sight of biological data (phase 2),
 - Original NNRW vision was to work with states to get an inventory of reference sites. New vision: work with states to get ideal reference sites. States input metadata to prevent a duplication of effort. NNRW will create its own site metadatabase. Site file will relate to the Portal. STORET doesn't require identification of reference sites (does have project weighting field). NARS sites have a tag (hand-picked and screened sites).
 - BioData primarily NAWQA data (20+ years of data). Relaxing this to include the other protocols – will likely increase the volume of data captured.
 - Jeff showed an update on the data compilation project. The eastern half of the US will be completed in April 2013. The western states will be approached for data later this year. During the compilation, USGS is asking for data not routinely entered into other datasets (STORET) and finding good data sets. USGS is asking for data providers to flag a site if it has ever been considered a reference site.
 - **Action:** Set up a presentation of the new BioData system? How does it integrate with STORET?
 - **Action Items:** Jeff Deacon will send Mary the 2-page summary and the desired requirements document for develop a 1 paragraph elevator speech for state representatives. The state representatives will talk with their counterparts in

their regions (Jason Jones, Monty Porter, Greg Pettit have volunteered. Leslie suggested Martha Clark Mettler provide the information to ACWA).

- Water Quality Portal/WQX (Charles Kovatch)
 - WIS will work with EPA to help promote State data entry to WQX/STORET Data Warehouse.
 - Review the inventory of state data flows.
 - Discuss challenges regarding data flows.
 - Outline ways to improve the process for states.
 - Establish Goals for 2013 – what can be accomplished?
 - **Action:** Create a subcommittee to discuss the issues outlined above and formulate strategies to address the issues. Committee member nominees: Charles Kovatch, Mike Yurewicz, Barb Horn, Mary Skopec, Dwayne Young. Mary will recruit others for the subcommittee.
 - **Action:** Mary Skopec will follow up with Nate Booth regarding coordination on the Water Quality Portal.
- **Action:** Mary Skopec will finalize the WIS Integration report and post on Council website

13. Call for Proposals for the 2016 Conference (Mike Yurewicz, USGS)

- Given the long time period to get approval from the Dept. of Interior for the 2016 Conference site, the Steering Committee has decided it would be a good idea to get bids for the 2016 Conference well in advance.
- **Action:** Mike Yurewicz and Cathy Tate, USGS, will send out call for proposal packages to the Council. The potential site is open to any interested group.

14. 2014 National Monitoring Conference

- Overview (Cathy Tate, USGS, Alice Mayo, USEPA, Conference Co-chairs; See "**2014 National Monitoring Conference**" presentation)
 - Planning for meeting in Cincinnati, OH on April 28/May 2, 2014 should be continued as scheduled
 - Continue to plan to send out Call for Abstract and set up abstract submission website by mid- to late- May.
 - **Action:** Preparation for Call for Abstract includes: Finalizing themes/sub-themes, final guidance for extended sessions, final guidance for award nominations, deadline for abstracts and how to submit them, registration costs, links for sponsors and exhibitors, sponsor logos, and layout for Call for Abstracts.
- Local Planning Committee (Jeff Thomas, ORSANCO)
 - LPC hold monthly conference calls on the 3rd Tuesday of the month.
 - Activities the committee members have been work on include:
 - Plenary speakers – checking on potential speakers schedules
 - Locations for field trips
 - Schedules for socials
 - Multi-agency participation and attendance
 - Considering some type of sampling on the River near the Conference Center
- Program Committee (Curtis Cude, Oregon Health Authority, Co-chair)
 - Themes have been finalized and a set of potential sub-themes/topics for each theme have been compiled
 - Conducted Polls for each of the Themes to reduce number of subthemes (See presentation "**Collaboration & Outreach Report Out**" for example of poll results)
 - Participants provided comments, edits, other advice for wording.
 - Next steps:
 - Program chairs will take results and update the themes and subthemes and send out to committee
 - Have call or give committee time to update and finalize the themes prior to Call-for-Abstracts.
- Extended Sessions (Monty Porter, Oklahoma Water Resources Board)
 - Details of When, Where
 - Twenty 90 Minute Sessions
 - Extended workshops/courses can be placed on Friday
 - Goals for this week
 - Finalize a council priority list of extended sessions
 - Assign a council lead for each designated priority
 - See presentation "**Extended Sessions Report Out**" for details and excel file "**Extended Sessions Table.4April2013**" for list of suggested extended sessions and leads.

- Next Steps
 - Finalize list by middle to end of May (Accomplish through either a conference call or e-mail)
 - Meet with Planning Committee or through Conference Committee call to determine how Extended Session Priorities fit in with the Conference Themes/Subthemes
 - Start process of developing applications for the priorities (target leads, pursue presenters, etc.)—Council generated applications due mid-late August
 - Review applications and develop sessions (July through November)
- Plenary (Mike Yurewicz, USGS)
 - Local committee (Peter Tennant, ORSANCO) has offered some suggestions for speakers that represent Regional/Local perspectives
 - Tuesday will have 1-2 keynote speakers
 - Thursday night will have dinner, speakers, awards and maybe entertainment
 - Might consider a panel rather than just one speaker
 - Suggestions for Potential Speakers:
 - EPA ORD – Sally Guderia
 - Bruster Rhoades: local advocate; dynamic speaker and tied to the river.
 - Friends of the Mississippi River:
 - Anne Castle – Assistant Secretary in Department of Interior
 - Robert Glennon – talks on value of water. **Action:** Need to check if he charges a fee or just needs travel funds and availability.
 - **Action:** Please send ideas for plenary speakers to Mike Yurewicz
- Sponsors/Exhibitors (Mike Yurewicz, USGS)
 - In the process of compiling 4 spreadsheets of potential sponsors/exhibitors into one spreadsheet
 - Getting input from the local committee to add to spreadsheet
 - Will have a call once spreadsheet is finished and begin to divvy up list to make calls
 - **Action:** If you know of potential sponsors or exhibitors let Mike know
 - **Action:** If you are interested in making calls contact Mike Yurewicz. There are guidelines and tips for making calls.
 - Greg Pettit volunteered to help make calls.
 - Philip Forsberg will be contact for Exhibitors, Greg Arenz will contact person for sponsors;
 - Greg Arenz has created a 2014 Flyer listing different levels of sponsorship.
- Awards (Dan Sullivan, USGS)
 - Are in the process of revising Awards announcement and call for nominations.
 - Plans to build webpages that will provide background information about awards and the people that awards were named after.
 - Hoping to get numerous applications for awards.
- 5k Run (Kris Stepenuck, Wisconsin)
 - Kris has been provided the name of a local contact
 - The local contact can help in planning a route (close to the venue), what permits are required and costs, etc.,
 - Mike Higgins volunteered to help with race
- Miscellaneous suggestions:
 - In call for abstracts or on website, make it clear that acceptance of abstract or extended session does not mean that the Council will compensate for travel or registration.
 - Leslie McGeorge and Greg Pettit – emphasized that the support from USEPA to States to cover travel costs is critical and suggest having NARS combine with conference to help get support. Alice Mayo stated that this was the intent of USEPA but may not be able to support as many individuals as last conference.

15. Open Discussion Topics/Ideas:

- **EPA Water Clusters:** Charles Kovatch,, USEPA, suggested that the Council learn more the EPA Water Cluster's activities. The Water Cluster is EPA Cincinnati's water technology collaboration and transfer initiative to advance research, development, and deployment (RD&D) in the Cincinnati, Dayton, northern Kentucky, and southeast Indiana regions to provide cost-effective and timely solutions to protect human health and the environment. Charles suggested contacting Peter Tennant with ORSANCO to brief the Council on the overall efforts of the Cluster and provide ideas for 2014 meeting topics. <http://www.epa.gov/nrmrl/watercluster/index.html>

- **Effectiveness of monitoring at different scales in agricultural areas:** Greg Pettit, Oregon DEQ, attended AWRA meeting in St. Louis on Agriculture and Water Quality and noted that there is a lot of water quality monitoring by academics, USDA agencies (e.g., NRCS, ARS), EPA, etc., at different scales in agricultural areas. The NRCS has a National Water Quality Initiative and that the Council should encourage participation in the **2014 conference**. A potential topic could be "How to connect monitoring at the project/field/small watershed scale up to larger basin scale (e.g., Mississippi Basin)".
 - **Action:** Greg Pettit will contact Shaun McKinney about organizing a sessions at 2014 Conference
- **Other Potential Topics for 2014 Conference:**
 - Nutrient/Temperature Trading – examples from Ohio River Basin (Peter Tennant), Minnesota, Oregon (Greg Pettit)
 - Climate change and effects of extreme flows especially drought (water quantity, quality, uses)
- **Update on monitoring in Gulf of Mexico activities** (Steve Wolfe): A proposal has been submitted to the Gulf Restoration Council to establish a Gulf Restoration Monitoring Endowment to fund long-term monitoring in the Gulf. This endowment would be funded out of the Restoration Trust Fund, where 80% of the civil penalties from the Deepwater Horizon oil spills are deposited for use in Gulf restoration activities. The Gulf of Mexico Alliance is in the process of designing a Gulf network which included identifying and prorating the monitoring topics, ranking questions associated with the topics, and creating a monitoring design and an implementation plan.
- **Hypoxia Data Portal** will be going public in a year.
- **Suggestions for future Council meetings:**
 - There is value in piggybacking meetings together (e.g., ACWI and Counsel) to make it more cost effective
 - Ideas for WebEx meetings in future:
 - Like to include technical presentations in meeting agenda
 - Roundtable discussions are valuable to keep up with what's going on across country
 - Don't have meeting on 3 consecutive days – easy to get pulled away when office for 3 days.
 - Have workgroup stagger breakouts during weeks before and just get reports during full WebEx Council meeting.

MEETING AGENDA

Tuesday, April 2, 2013 – Eastern Daylight Time

11:00 am – Welcome and Roll Call (Mike Yurewicz, USGS, Council Co-chair)

11:05 am – Brief Overview/Announcements (Mike Yurewicz, USGS)

11:15 am – Council Business -- Approval of November 27 – 29, 2012 Council meeting minutes (Cathy Tate, USGS, Council's Executive Secretary) See link: http://acwi.gov/monitoring/ppt/crystalcity_Nov2012/index.html

Updates from Council Workgroups and Committees

11:20 am --- Reference Site Network (Jeff Deacon, USGS)

11:35 am – Water Quality Portal (Nate Booth, USGS)

11:55 am – **Roundtable** – Erik Host-Steen, Hach Hydromet, Industry Representative

12:00 pm – Volunteer Monitoring Committee (Barb Horn, Colorado Parks and Wildlife, Volunteer Monitoring Representative)

12:10 pm – Methods Board – NEMI demo (Dan Sullivan, USGS, Co-chair)

12:40 pm – National Monitoring Network (Bernice Smith, USEPA, Co-chair)

12:55 pm – Break

1:10 pm – Open Discussion

1:40 pm – Collaboration & Outreach Workgroup (Cathy Tate and Barb Horn, Co-chairs)

1:55 pm – Call for proposals for 2016 Conference (Mike Yurewicz, USGS)

2014 National Monitoring Conference

2:10 pm – Overview (Conference Co-chairs, Cathy Tate, USGS, Jeff Schloss, NALMS, Alice Mayo, USEPA)

2:25 pm – Local Planning Committee (Peter Tennant, ORSANCO)

2:40 pm – Program Committee (Curtis Cude, Oregon Health Authority, Mary Skopec, Callie Oblinger, USGS)

2:55 pm – Extended Sessions (Monty Porter, Oklahoma Water Resources Board)

3:10 pm -- Break

Tuesday, April 2, 2013 – continued

- 3:25 pm – Plenary (Mike Yurewicz, USGS)
3:40 pm – Sponsors/Exhibitors (Mike Yurewicz, USGS)
3:55 pm – Awards (Dan Sullivan, USGS)
4:10 pm – 5k Run (Kris Stepenuck, Wisconsin)
4:20 pm – Roundtable – Mike Higgins, U.S. Fish and Wildlife Representative
4:25 pm – Open discussion Potential topics – 2014 Conference Network Block, Council Products & Sessions to highlight; Brainstorming topics (hydrofracking, Mississippi River Basin); other?
5:00 pm – Adjourn

Wednesday, April 3, 2013 – Eastern Daylight Time

- 11:00 am – Program Committee workgroup -- voting on subthemes survivor style (Curtis Cude, Oregon Health Authority, Mary Skopec, Callie Oblinger, USGS)
12:00 pm – Extended Sessions (Monty Porter, Oklahoma Water Resources Board)
1:00 pm – Council Website Makeover (Jen Bruce, USGS)
2:30 pm – **Communications Strategy** -- National Monitoring Network (Bernice Smith, USEPA, Mike Yurewicz, USGS, Dennis Apeti, NOAA, Co-chairs)
2:30 pm – **Modeling Group** -- National Monitoring Network (Mike Yurewicz, USGS)
5:00 pm – Adjourn

Thursday, April 4, 2013 – Eastern Daylight Time

- 11:00 am – Water Information Strategies Workgroup (Mary Skopec, Iowa Department of Natural Resources, Chair)
12:00 pm – Water Quality Statistical and Assessment (Doug McLaughlin, National Council for Air and Stream Improvement, Inc. Representative, Co-chair)
1:00 pm – National Monitoring Network (Bernice Smith, USEPA, Mike Yurewicz, USGS, Dennis Apeti, NOAA)
2:30 pm – Report outs from workgroups/committees
4:30 pm – Wrap up and Next Steps (Susan Holdsworth, EPA, Mike Yurewicz, USGS, Council Co-chairs)
5:00 pm – Adjourn

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