

Advisory Committee on Water Information Interim Teleconference

June 14, 2011

The meeting opened at 10:00 a.m. Eastern Time, with about half of the member organizations in attendance via telephone (see attendance list at the end of this document).

Resolution from National Water Quality Monitoring Council regarding establishment of a Water-quality Reference Sites Network

Bill Wilber gave a brief presentation on the need for a National Reference Network for surface-water sites (see PowerPoint presentation). *Bill's* gave an overview to the ACWI on the proposed establishment of a collaborative and multi-purpose national network of reference watersheds. Goals of the project are:

- Define organizational structure for executive committee and technical steering committee
- Develop collaborative relationships and support with other federal, non-federal, and state agencies
- Inventory existing reference networks

Objectives:

- Develop a plan for shared, multipurpose, long-term national reference site network for freshwater streams
- Assessment and inventory of existing monitoring networks
- Contact and develop collaborative relationships
- Systematic review and prioritization of existing networks

Benefits of network: internet access to national database of high quality observations from minimally disturbed watersheds; annual summaries and syntheses that are responsive to current environmental issues; increased efficiency of monitoring and improved coordination and collaboration, increased comparability of results by use of common procedures and protocols.

- Next steps: define org structure of exec committee and tech steering committees; develop collaborative relations and support with other Fed and no-Fed agencies (underway for a year); inventory reference networks with other Federal and State agencies (already underway).
- *Bill Werkheiser* – This network is sorely needed. Without a national network of pristine conditions, it's hard to determine what our desired end-points are. Will there be different levels of data quality across the network, since not all the participating agencies will be collecting the data for the same purpose? *Bill Wilber* – Yes, the network would be tiered (long-term monitoring and research, national and regional synoptic surveys, inventories and remote sensing), and these tiers would be integrated through modeling and research. We envision a series of data quality objectives and a list of data requirements for each of the objectives, to help users determine whether the data are suitable for their particular use.
- *Matt Romkens* – Do you have a map in which the sites are pinpointed? *Bill Wilber* – I have several maps: NSIP sentinel sites, which were systematically reviewed and selected during the

1990's; USEPA Wadeable Stream Assessment and Temporally Integrated Monitoring of Ecosystems / Long-Term Monitoring (TIME / LTM) Stream Sites; Forest Service Stream Assessment and Experimental Forest Sites; and National Park Service Water-Quality Sites. We are currently inventorying these networks to characterize each of the sites.

- *Sue Lowry* – As I recall, some of the sentinel National Streamflow Information Program (NSIP) sites are funded through the USGS Cooperative Water Program, and as the design moves forward, we're concerned about distribution of limited Cooperative Water Program dollars. Also, we need to keep educating congressional staff and others about the necessity of having long-term streamflow data in order to have reference water quality data, and perhaps we need to say something more about that in the information sheet you prepared on this reference network. *Bill Wilber* – It's not our intention to divert Cooperative Water Program funds. We want participants in the network to come to us freely, with their own resources. Like everyone else, we're trying to leverage our activities as much as possible, and we're hoping that this network will make things more efficient over the long term and will encourage collaboration.

Resolution from the Subcommittee on Sedimentation regarding the RESSED Reservoir Sedimentation Database

John Gray gave background on the Subcommittee on Sedimentation's (SOS) resolution expressing support for the maintenance and development of a permanent, publically accessible Reservoir Sedimentation Database. John started with an overview of the RESSED effort and noted that the database is current to the 1990s. There are about 1800 reservoirs of 6000 in the database; this is only a small percentage, but the database does have data for the largest reservoirs. Format of the database is archaic – average last date of survey is 1960. The National Inventory of Dams has 89,000 dams and reservoirs. There are 6-9 million impoundments in the United States.

John displayed two maps – percent capacity loss per year, and a map of data extrapolated to 2010 (total percent capacity loss).

Want to make an updatable database that can be queried – FileMaker Pro. The Corps of Engineers has run out of money to support this effort, and SOS does not have resources to continue maintaining and updating the database. We would need \$250,000 per year over 4 years. This is an unprecedented request for SOS to make of ACWI.

- *Sue Lowry* – Did you mention the Bureau of Reclamation (BOR), and has there been any coordination with them? How does BOR fit in? *John Gray* – BOR is a member of SOS, and they have been heavily involved in the project over the last few years, through SOS's reservoir sedimentation workgroup.

Voting on both resolutions

Bill Werkheiser – I consider both resolutions to be dealing with fundamental information sources that we need to manage the Nation's water resources.

Sue Lowry – Do we need to vote on this today, or can we wait and do it when we meet face to face in July?

Wendy Norton – We do not have a quorum and cannot vote today, but we will put it on the agenda for July and vote then. Will that cause any problems?

Bill Wilber – It's not a life-and-death problem, but we have been working on this effort with other organizations for a year now, and it would be nice to have the official sign-off from ACWI as soon as possible.

ACWI Membership Issues and Subcommittee Activities

Wendy Norton gave a brief update on vacancies and asked for recommendations for new member organizations. Also gave an update on status of Subcommittee on Spatial Water Data and highlighted their importance as a focal point for the wide range of efforts that the various ACWI subcommittees have underway related to data portals and use of web services for data sharing.

Sue Lowry – When Barney Austin left the Western States Water Council, Ruben Solis came on board, but we thought there would be more of a formal induction process. Has Ruben been accepted? *Wendy Norton* – There is still formal paperwork that needs to be completed, but essentially he has been accepted as Barney's replacement.

Peter Evans – If we are going to give you recommendations on possible new members for ACWI, it would help us to first get recommendations from Wendy Norton and Bill Werkheiser on what sectors are underrepresented on ACWI in terms of membership or participation. Which agencies have showed up to participate in meetings during the last few years? With that kind of information in our hands, we can make recommendations back to you regarding possible new members. *Wendy Norton* – My office can certainly compile that type of information and give it to you.

Sue Lowry – Can we talk about topics for the July meeting? *Wendy Norton* – Yes, the items we already have planned are the usual updates from the subcommittees, a discussion of the SECURE Water Act and its implications (this would be an extension of this afternoon's discussion), a possible presentation on the impacts of hydrofracking in the Marcellus Shale and other areas of the country where this process is being used to extract natural gas reserves, a possible panel on the aftermath of the Deepwater Horizon oil spill, and an update on the USGS Coop Water Program. *Sue Lowry* – Topics I would like to see covered are: SECURE Water Act (not just Section 9506 – what about the Reclamation report and other components?); status of the National Science and Technology Council's (NSTC) / Subcommittee on Water Availability and Quality (SWAQ) report on Section 9506; the IWRSS effort and MOU, and what's happening with getting those three agencies' data better coordinated and more available (maybe Don Cline can brief us on that).

Peter Evans – One other thought stemming from discussion of water quality reference network would be look at NSIP implementation. It looks like roughly 50% of the sentinel gages are active now, and the SECURE Water Act directed the Department to complete implementation of the design by 2019; how are we doing? (Mike Norris can perhaps update ACWI in July.) Also, we could have an update on the Water Census design from Eric Evenson; will the *ad hoc* committee be able to review the ACWI recommendations by the July meeting? *Wendy Norton* – I think that's unlikely, but we can talk to Eric and see what he says, and we can certainly ask him to give us an update in July.

Sue Lowry – What effect are partner budget cuts having on the sentinel gages, since USGS has to reshuffle funds to fill the gaps whenever gages are under threat of being lost? What are the priorities for funding the sentinel streamgages, versus the flood forecasting streamgages, for example? Can Mike Norris address this when/if he briefs us in July?

Victor Hom – NWS does coordinate with local sponsors and with USGS on prioritizing streamgages to fund with available dollars. We look at this issue every 2 years, at least.

The SECURE Water Act and the NSTC/SWAQ Report on the Act

Jerad Bales reviewed where we are on the SWAQ report on Section 9506 of the SECURE Water Act. Secretary and Administrator did not form a new panel but instead chose to use the existing climate change task force, which the Administrator co-chairs.

Jerad said that SWAQ appreciates ACWI's substantive comments on the report, and we have revised the report to address those comments. We did not attempt to set priorities in the report because we felt that was purview of the agencies, but we have tried to address all the other comments we received. We ended up with 25 findings and 6 "next steps." The next steps are concerned with strengthening data systems, prioritizing observations that fill important gaps in understanding water supply reliability, improving water quality and ecosystem monitoring systems, strengthening links between hydroclimatic data systems and models and data management/reporting, establishing an interagency climate data portal, strengthen coordination to improve quality and accessibility of data. We have an almost-camera-ready version ready for co-chair review later this week, then back through agency review and comment by the involved agencies. We think we will be finished by the end of June.

Peter Evans – Thank you; this sounds like a really great effort. Can you say more about the "next steps"?

Jerad Bales – I don't want to get into the specifics right now because the task force chairs haven't signed off, but it's the type of thing you saw in the draft report, but with a little more specificity. For example, there are a number of data programs that have been authorized (for example, the National Monitoring Network), so we are encouraging implementation of those programs. I would have liked to have presented our final findings to you at the July meeting, but I don't think that will be possible.

Wendy Norton – Jerad, can you tell us anything about the Reclamation piece of SECURE Water Act requirements? *Jerad Bales* – The Reclamation report in response to the Act has been published.

Sue Lowry – The basin plan piece of Watersmart (Colorado plan) may have some reports ready that could be presented at the July meeting. *Wendy Norton* – We will have Eric Evenson talk to us in July, but I can also ask John Tubbs for an update, and perhaps he can tell us about the whole Watersmart plan and the SECURE Water Act activities of Reclamation and USGS/EPA.

Jerad Bales clarified a point of confusion, explaining the relation of SWAQ to CEQ, NSTC, and the Climate Change Adaptation Task Force. Mike Shapiro and Matt Larsen co-chair the climate adaptation task force, so it's about more than water, but it might be appropriate to ask to hear from the task force or the workgroup at the July meeting. *Wendy Norton* – I will work with Jerad to determine who would be the best candidate to talk to ACWI about this at the July meeting.

Victor Hom – Can we see everybody’s comments on the report? *Jerad Bales* – Yes, we may be able to let you see them. There are 19 sets of comments with about half of these from ACWI. About 80% of the comments are related to ACWI or are from ACWI directly. There were many good comments from NOAA/NWS as well.

Peter Evans – In terms of the comments, one possibility would be to just make them available online somewhere. Was there good communication between the authors of the 9506 study and the national action plan? *Jerad Bales* – Yes, given the time constraints, the coordination was fine.

Sue Lowry – I’m not sure what is involved in setting up a new subcommittee. *Wendy Norton* – I believe it’s just a matter of ACWI deciding to form such a subcommittee, and then deciding on the composition of the membership and approving a terms of reference document that lays out the purpose and objectives of the subcommittee; but before we take any steps in that direction, I want to know what the purpose of such a subcommittee would be. Is it meant to be a standing, permanent group, or will it have a limited scope and duration? *Peter Evans* – The secure water act has numerous instances where it says that ACWI should take a lead in climate science. *Jerad Bales* – One of the existing subcommittees might be appropriate for that role, or a new committee could be formed.

Wendy Norton – I will talk with Bill Werkheiser (and possibly Anne Castle) about the best approach, and will brief ACWI in July about next steps.

Sue Lowry – Perhaps ACWI should be hooked up with NOAA’s Regional Integrated Science and Assessment (RISA) centers on climate work. *Victor Hom* – NWS is in coordination with some of the RISA offices, and I can help people get hooked in to the RISA network. *Sue Lowry* – Also, the new climate centers at USGS may be a good group to approach.

Note: after the conclusion of the teleconference, *Victor Hom* provided the following url for NOAA’s RISA efforts: http://www.climate.noaa.gov/cpo/cpo_pa/risa/

Subcommittee on Ground Water Update – Bill Cunningham and Bob Schreiber

Bob Schreiber – We will have a time slot during the ACWI meeting in July, when we will make a more detailed presentation and have a question and answer session. Here are the highlights:

- Brief history of SOGW and the beginnings of the NGWMN Framework Document, which was approved by ACWI during 2009. In 2010 we began five pilot studies (MT, TX, MN, IN/IL, NJ).
- Summary of the tasks assigned to the five pilots:
 - Evaluate the network within the concepts in “Framework for a Nationwide Ground Water Monitoring Network”
 - Select aquifers, well characteristics, frequency, analytes, “tagging”, spatial distribution
 - Evaluate field practices, data elements stored in the GW database, and data management procedures and their documentation,
 - Identify network gaps
 - Evaluate ability to transmit data to the data portal
 - Identify all costs of potential participation in the NGWMN
 - Recommend changes/improvements to the Framework Document

Bill Cunningham talked about the NGWMN pilot portal:

- We are pretty far beyond the portal work that many of the other ACWI subcommittees are doing. We actually have a working portal for the pilots, which serves data that we have screened to meet the qualifications of the network; the data come from about 9 agencies.
- The data are housed with the data provided; there is no central database. Through a lot of “IT-related magic” and the use of web services, we now have a working portal. That is a huge step.

Bob Schreiber – Many thanks to all the people who have worked on this effort, including Nate Booth and the Center for Data Analytics.

Bob Schreiber outlined the expectations for the July ACWI meeting:

- NGWMN Pilot study reports will be available for your information prior to the ACWI meeting.
- A report on the NGWMN data portal will be available for your information prior to the ACWI meeting. We expect to make the portal available to the public after the meeting.
- The pilot study summary report will be provided to the ACWI prior to the meeting for your review and comment. SOGW will request report approval at the July ACWI meeting.
- The SOGW will provide an update at the ACWI meeting on potential next steps for implementation of a National GW Monitoring Network.
- The SOGW is acting on the pilot study recommendations for changes to the Framework Document. SOGW will report on progress at the ACWI meeting.

We are doing our best to have the information for the July meeting sent to you within the next week or two, so you can have a chance to digest the materials prior to the meeting.

Subcommittee on Hydrology (SOH) – Claudia Hoeft

Claudia Hoeft – I do not have any slides, but I wanted to give you a brief update on recent SOH activities. I took over as chair when Mary Green passed away suddenly last year, and Richard Raione took over as vice-chair. I will serve the remainder of this term (through September), and then Richard will take over as chair.

During the last year we lost one member organization: American Forest (they reorganized). We have had an inquiry from California Division of Water about membership. Our Hydrologic Frequency Analysis workgroup is working on a revision to bulletin 17B; we hope to make a more detailed presentation to ACWI on this topic later. The Extreme Storm Events workgroup should have something to report, not at the July meeting, but at the next meeting after that. Dave Goodrich of Agricultural Research Service continues to coordinate with the Hydrology Domain Working Group.

Finally, SOH puts out a newsletter (usually on a quarterly basis), and it is available on the ACWI/SOH website. Richard Raione is the current editor, and member organizations submit articles; distribution of the newsletter is far beyond SOH members.

Member agency budget updates

This agenda item was deferred until the July 12-13 meeting, when more of the member organizations are expected to be present.

The meeting adjourned early.

Note: PowerPoint presentations and other meeting materials are available at:
http://acwi.gov/acwi-minutes/acwi2011_14June-webex/slide.lib/index.html

Attending

Bill Werkheiser, U.S. Geological Survey (ACWI Alternate Chair)
Wendy Norton, U.S. Geological Survey (ACWI Executive Secretary)
Terry Cheek, Tennessee Valley Authority
Claudia Hoeft, U.S. Department of Agriculture (Subcommittee on Hydrology)
Matt Romkens, U.S. Department of Agriculture (Subcommittee on Sedimentation)
Victor Hom, NOAA—National Weather Service
Ed Clark, NOAA—National Weather Service
Bill Wilber, U.S. Geological Survey
Jeff Deacon, U.S. Geological Survey
John Gray, U.S. Geological Survey (Subcommittee on Sedimentation)
Tim Smith, U.S. Geological Survey, Retired (Sustainable Water Resources Roundtable)
Cathy Tate, U.S. Geological Survey (National Water Quality Monitoring Council)
Bill Cunningham, U.S. Geological Survey (Subcommittee on Ground Water)
Jerad Bales, U.S. Geological Survey
Chris Reimer, National Ground Water Association (Subcommittee on Ground Water)
Peter Evans, Interstate Council on Water Policy
Sue Lowry, Interstate Council on Water Policy
John Miller, Association of State Floodplain Managers
Tom Leahy, Association of Metropolitan Water Agencies
Brandon Kernen, Association of State Drinking Water Administrators
Darryl Glover, Association of State and Interstate Water Pollution Control Administrators
Tish Robertson, Virginia Department of Environmental Quality
Bob Schreiber, American Society of Civil Engineers
Bob Goldstein, Electric Power Research Institute
Kim Martz, U.S. Geological Survey
Sheri Alcalde, U.S. Geological Survey
Sharon McKinney, U.S. Geological Survey
Carol Lewis, U.S. Geological Survey