

**Streamflow Information Collaborative** – Subcommittee to ACWI-SOH  
Conference Call Notes  
December 5, 2016

Agenda

Roll Call

Confirm date/time of January call

Finalize July call notes

Comments on November call notes

Continue discussion on objectives/finalization of Charter

Call started at 3PM Eastern/2 PM Central/1 PM Mountain/Noon Pacific

Attendees:

Doug Yeskis, USGS (for roughly 20 minutes)

Jack Felbinger, Pittsburgh Office, OSM

Sara Larsen, WSWC

Ryan Mueller, Interstate Council on Water Policy

Michele Eddy, RTI

Ted Engman, NASA

Notes

*First Item was to confirm time for future calls:*

The January conference call would normally be scheduled for Monday, January 2, which is a Federal Holiday. We discussed having the call on Monday, January 9 (late morning) but since there were a limited number of participants on the December 5<sup>th</sup> call, Ryan Mueller suggested that Doug Yeskis should send out a Doodle poll to confirm the time and date of the January Meeting.

*Second Item was to finalize July Notes:*

Ryan Mueller asked if there were any final edits required to finalize the July call notes. After no edits were suggested, the Collaborative considered the July call notes to be finalized.

*Third Item was to finalize November Notes:*

Ryan Mueller asked if there were any initial comments or edits needed for the November call notes. Michelle Eddy indicated that her name had been misspelled on the November notes (Edy vs. Eddy). After no additional edits were suggested, Ryan asked for the Collaborative to be prepared to finalize the November call notes during the January call. Doug Yeskis then confirmed that Julie Kiang, USGS would be providing a presentation on stream flow estimation at ungagged stream locations during the January call, and Claudia Hoeft, USDA NRCS would be providing a presentation on the SNOTEL network during the February call. Ted Engman suggested the Collaborative invite NOAA to provide a presentation on the new National Water Model during a future call.

*The Fourth and Final item was the continued discussion/finalization of the Workgroup Charter:*

Ryan Mueller began the discussion by introducing the suggested edits that had been made to the Charter following the November call (and distributed by Doug Yeskis). The following comments were suggested under the "Purpose, Scope and Objectives" section:

- There was a comment that a purpose statement should be added to show the relationship between this workgroup and other SOH committees – what benefit will this workgroup bring to the SOH and other workgroups/committees
- Objective #5 should be more explicit in stating that outside agencies/private sector members will be engaged by the workgroup. Also, Objective #5 still contains a placeholder that states “Reword to bring in other partners” that should be removed.
- Objective #6 should include the words “and uncertainty” after the words “measurement errors”

The “Collaborative Structure and Process – Composition and Tenure” needs to include the terms of the Chair and Co-chair positions.

Finally, Ted Engman mentioned an ongoing proposal in the SOH about what to do with missing data (sponsored by NASA) that might be of interest within the Collaborative.

Following the discussion of the Charter no new business was introduced and the call ended at approximately 3:45 PM eastern.

## **Bibliography**

### **USGS Streamflow Network Evaluations:**

Bales, J.D., J.E. Costa (chair), D.J. Holtschlag, K.J. Lanfear, S. Lipscomb, P.C. Milly, R. Viger, and D.M. Wolock), 2004, Design of a National Streamflow Information Program -Report with Recommendations of a Committee, Open File Report 2004-1263, <http://pubs.usgs.gov/of/2004/1263/>

Benson, M.A., and R. W. Carter, 1973, A National Study of the Streamflow Data-Collection Program, USGS Water Supply Paper 2028, <http://pubs.usgs.gov/wsp/2028/report.pdf>

Kiang, J.E., Stewart, D.W., Archfield, S.A., Osborne, E.B., and Eng, Ken, 2013, A national streamflow network gap analysis: U.S. Geological Survey Scientific Investigations Report 2013-5013, 79 p. plus one appendix as a separate file, <http://pubs.usgs.gov/sir/2013/5013/>

Lins, H.F., USGS Hydro-Climatic Data Network 2009 (HCDN-2009), USGS Fact Sheet 2012-3047, <http://pubs.usgs.gov/fs/2012/3047/pdf/fs2012-3047.pdf>

Thomas, W.O. Jr. and Wahl, K.L., 1993, Summary of the nationwide analysis of the cost effectiveness of the U.S. Geological Survey Stream-Gaging Program (1983-88), WRIR 93-4168, <http://pubs.usgs.gov/wri/1993/4168/report.pdf>

USGS, 1998, A New Evaluation of the USGS Streamgaging Network – A Report to Congress November 30, 1998, <https://water.usgs.gov/streamgaging/report.pdf>

USGS, 1999, Streamflow Information for the Next Century, Open-File Report 99-456, <http://pubs.usgs.gov/of/1999/ofr99456/>

### **Streamgaging Evaluation within a State:**

Maryland - Cleaves, E.T., and Doheny, E.J., 2000, *A strategy for a stream-gaging network in Maryland*: Maryland Geological Survey Report of Investigations No. 71, 72 p. [http://www.mgs.md.gov/reports/RI\\_71.pdf](http://www.mgs.md.gov/reports/RI_71.pdf) or <http://md.water.usgs.gov/publications/mgs-ri-71/mgs-ri-71.pdf>

Massachusetts and Rhode Island - Zarriello, P.J., and Socolow, R.S., 2003, The U.S. Geological Survey Streamflow and Observation-Well Network in Massachusetts and Rhode Island: U.S. Geological Survey Open-File Report 03-277, 120 p.

Pennsylvania –Currently a report is in development, close to Bureau approval. Report was of the streamgaging network in PA and the entire Susquehanna River Basin identifying potential gaps in the network and also streamgages with high substitution potential (i.e., redundancy).

Virginia – nothing since the 1980's.

Washington - Konrad, Christopher, and Sevier, Maria, 2013, Physiographic and land cover attributes of the Puget Lowland and the active streamflow gaging network, Puget Sound Basin, Washington: U.S. Geological Survey Data Series 815, <http://dx.doi.org/10.3133/ds815>

### **Streamgaging Evaluation within a Basin or Region:**

Susquehanna River –Currently a report is in development, close to Bureau approval. Report was of the streamgage network in PA and the entire Susquehanna River Basin identifying potential gaps in the network and also streamgages with high substitution potential (i.e., redundancy).

Upper Colorado River - Terry A. Kenney, Susan G. Buto, David D. Susong, 2011, USGS Scientific Investigations Report 2011-5081, <https://pubs.er.usgs.gov/publication/sir20115081>

**Others:**

Norris, J.M., Lewis, Michael, Dorsey, Michael, Kimbrough, Robert, Holmes, R.R. Jr., and Staubitz, Ward, 2008, Qualitative comparison of streamflow information programs of the U.S. Geological Survey and three non-Federal agencies: U.S. Geological Survey Open-File Report 2007–1426, 11 p., <http://pubs.usgs.gov/of/2007/1426/>

## Web Links

### **USGS**

<https://www.usgs.gov/>

Main USGS Web Page

<https://www.usgs.gov/science/mission-areas/water>

USGS Water Mission Area

Groundwater and Streamflow Information Program

<https://www.usgs.gov/science/mission-areas/water/groundwater>

Groundwater and Streamflow Information Program

<http://cida.usgs.gov/ngwmn/index.jsp>

National Groundwater Monitoring Network Portal

<http://water.usgs.gov/nsip/>

National Streamflow Information Program (what is now known as the Federal Priority Streamgages (FPS))

<http://waterdata.usgs.gov/nwis/rt>

NWIS Daily Streamflow Conditions

<http://water.usgs.gov/osw/hcdn-2009/>

USGS Hydro-Climatic Data Network (HCDN-2009)

Water Availability and Use Science Program

<http://water.usgs.gov/watuse/>

Water Use

<http://water.usgs.gov/wausp/>

Water Availability and Use Science Program

Water Resources Research Institutes (WRI) Program

<http://water.usgs.gov/wri/index.php>

Main WRI page

### **OTHER LINKS TO DATA AND CURRENT CONDITIONS**

<http://www.wcc.nrcs.usda.gov/snow/>

NRCS Snow Telemetry (SNOTEL) and Snow Course Data and Products

<http://mvs-wc.mvs.usace.army.mil/dresriv.html>

U.S. Army Corps of Engineers Lake and River Stage

<http://www.usbr.gov/main/water/>

Bureau of Reclamation Water Operations

<http://www.usbr.gov/watersmart/>

Bureau of Reclamation WaterSMART

<http://hydrodesktop.codeplex.com/>

CUAHSI Hydro Desktop

<http://droughtmonitor.unl.edu/>

US Drought Monitor

### **OTHER LINKS OF INTEREST**

<https://www.weforum.org/reports/the-global-risks-report-2016/>

The Global Risks Report 2016 by the World Economic Forum

<http://water.usgs.gov/swaq/docs/strengthening-scientific-understanding-aug-2011.pdf>

Report to Congress Strengthening the Scientific Understanding of Climate Change Impacts on Freshwater Resources of the United States

<http://www.wcc.nrcs.usda.gov/ftpref/support/drought/dmrpt-20160707.pdf>

Example of a weekly newsletter from the NRCS that you can subscribe to.

<http://acwi.gov/spatial/owdi/>

Open Water Data Initiative