

**ACWI**  
**Streamflow Information Collaborative (SIC)**  
**Tuesday, March 12, 2019**  
**10:00 am Central**

**Phone:** 1-855-547-8255 (toll free), Access Code 74449#  
1-703-648-4848, Access Code 74449#

**WEBEX:** <https://global.gotomeeting.com/join/882470341>

**Call Purpose:**

- Presentation:  
*The Interoperable Watersheds Network – Data Standards in Action*
- Update on streamflow related activities

**Agenda:**

- Approval of agenda – additions/deletions
- Approval of previous minutes
- Interoperable Watersheds Network presentation
- Info exchange – streamflow information related activities

**Attendees:**

Sandy Eberts (USGS Co-Chair), Sue Lowry (Co-Chair), Amy Shallcross, Becca Fong, Chad Wagner, Doug Curtis, Dwane Young (speaker), Greg Kruse, Heather Gacek, Jason Todd, Meredith Carr, Michele Eddy, Richard Antoine, Richard Rockel, Larry Shores, Tom Littlepage

**Business Portion:**

Approval of agenda – additions/deletions: Agenda approved

Approval of previous meeting minutes: Minutes from 02/12/2019 were adopted

**Presentation:**

Dwane Young, U.S. Environmental Protection Agency, Office of Water,  
Water Data Integration Branch, [Young.dwane@epa.gov](mailto:Young.dwane@epa.gov)

Although the [Water Quality Portal](#) is a great way to serve water quality data from a multitude of organizations, nothing comparable exists for the myriad of sensor data being collected. Thus, the Interoperable Watersheds Network (IWN) demonstration project was initiated to evaluate approaches for improving sensor data sharing. The project received no funding, but was quite successful none-the-less. It ended in 2016 and a ‘lessons learned’ paper was written ([https://www.epa.gov/sites/production/files/2017-01/documents/iwn\\_lessonslearned\\_final\\_201612.pdf](https://www.epa.gov/sites/production/files/2017-01/documents/iwn_lessonslearned_final_201612.pdf)). Ideally, the Consortium of Universities for the Advancement of Hydrologic Science (CUAHSI) will keep the effort going using NSF funding.

The IWN project focused on (1) data standards, (2) metadata, and (3) system architecture. Water and sensor data standards that were set by the Open Geospatial Consortium (OGC) prior to the project were adopted. Metadata standards did not exist; the project team had to develop standard ways of answering questions such as, “What data are available and for what parameters?” and “What is the quality of the data?” In terms of system architecture, the team chose to use a central catalog/index that references every data owner’s assets with corresponding metadata for each sensor. This approach allowed for quick search and discovery of data without the need for data to

be pushed to a central location. The team developed a ‘data appliance’ from a collection of open source software components that enables data providers to serve up their data and register their sensors in the catalog. The data appliance is available on the IWN github site; the URL is included in the presentation slides (see below). [The data appliance is not needed for organizations whose data are already being published using the sensorML and waterML2 standards (e.g. USGS data).] In summary, the IWN demonstration project developed a central search index that can find data of interest. Actual data come from providers’ systems in real-time. At present, units are not harmonized, but they are reported. A mobile app that leverages the services/API that were developed for the demonstration also was developed.

The demonstration tool from the project can be found at <http://54.210.62.171>. Dwane presented screenshots during his presentation. He also noted that the approach should work for any time-series data (e.g. streamgauge data, water-level data, snowpack data, etc.)

Presentation slides ... <https://acwi.gov/hydrology/sic/presentations/index.html>.

### **Q&A Following Presentation:**

Question: Sue Lowry inquired about CUAHSI’s future role. Answer: Dwane pointed out that it makes sense for CUAHSI to house the search index because the index will include more than just federal agency data. Sue indicated that the SIC could provide a letter of support, if needed.

### **Round Robin:**

Sue asked participants to start thinking about the SIC’s next steps, while keeping in mind the Collaborative’s Charter ([https://acwi.gov/hydrology/sic/gwsip\\_collaborative\\_charter\\_final\\_02-22-2017.pdf](https://acwi.gov/hydrology/sic/gwsip_collaborative_charter_final_02-22-2017.pdf)).

Sue shared that the ICWP round table will be held during the first week of April at the Doubletree Hotel in Crystal City, VA. The agenda includes many of the same topics that the SIC discusses. The meeting will be followed by a Water Infrastructure Forum in DC that will include a panel of high-level federal officials, including Tim Petty, Assistant Secretary for Water & Science (DOI).

ICWP is once again coordinating a streamgauge support letter and is actively seeking signatures for the letter from entities that use USGS data. The deadline for signing is March 22<sup>nd</sup>.

Chad Wagner announced that the USGS is releasing a new product this week—an animation of hydrologic conditions at streamgages throughout the 2018 water year (<https://www.usgs.gov/media/videos/us-river-conditions-water-year-2018>).

### **Next SIC Meeting:**

May 14, 2019, 10:00 central.