SUMMARY OF THE MEETING OF THE
ADVISORY COMMITTEE ON WATER INFORMATION’S (ACWI)
SUBCOMMITTEE ON HYDROLOGY (SOH)
12:30 p.m. – 3:15 pm, Eastern Standard Time
January 28, 2016

1. Welcome
Chair Robert Mason called the meeting to order at 12:38 pm.

2. Words from our Host
Robert welcomed everyone to the Department of Interior, Main Building and the “Penthouse North” conference room.

3. Roll Call (Remote Participants/In-Person Attendees)
The meeting began with a roll call. A list of attendees is attached. A quorum of 14 was not reached, so this is considered an informational meeting.

4. Background on SOH
Robert provided some background to those who are new to the SOH. The ACWI has a number of subcommittees, including the SOH. The purpose of the Subcommittee is to exchange information on hydrology, particularly surface water. A list of member organizations is available through the ACWI website. There are four SOH workgroups.

5. Review of agenda
Robert reviewed the agenda and noted the change to the draft agenda proposed by Martin Becker. There were no objections to the modified agenda.

6. Peer review charge
Martin requested that the members be allowed to review the “peer review charge” and provide feedback, possibly followed by a conference call. Robert agreed to wait until the public comment period has ended before the peer review charge is sent.

Martin made a motion that the group have two weeks to review and comment on the peer review charge, with a conference call to follow. Don Woodard seconded the motion. There were no objections and the motion carried.

7. Feature presentation
Robert introduced the speakers for the feature presentation, Pixie Hamilton and Doug Yeskis. Pixie retired from the USGS and has returned as a temporary appointee. She is co-coordinating the USGS Groundwater-Streamflow Information program with Doug Yeskis.

The USGS water budget restructure includes four new programs: National Groundwater and Streamflow Information; National Water Quality; Water Availability and Use Science; Water Resources and Research Act (WRRA).
The National Groundwater and Streamflow Information program consolidates all streamgaging and WATERSMART work under one activity. It is a changed organizational structure, but the science will not change. It enables better communication and streamlined business practices.

Vital components of the National Groundwater and Streamflow Information Program (GWSIP) are a unified national streamgaging network, with everything under one program. The strategy is to have a nationally consistent network.

Major funding components are the National Streamflow Information Program, cooperative matching funds, the National Groundwater Monitoring Network, and research and technical development funds. There are requests for funding increases for continued stabilization of the network.

Complications of one network include the national implementation through 35 water science centers, 850 partners, multiple sources of funding, myriad uses and needs, and federal responsibilities.

The strategy requires an internal team, known as the USGS Streamflow Information Working Team. The external team will be called the Streamflow Information Collaborative. The priority action for this team is to consider customer uses for hydrologic monitoring data and serve a broad base of users.

The next steps are to develop a representative group, a meeting schedule and forum, a vision and scope, a communication mechanism and a definition of roles and responsibilities.

Robert could circulate a draft of the group charter to the Subcommittee, for discussion in April. A workgroup could be formed to devise the charter; the workgroup would be confirmed by the SOH.

Victor Hom asked if this is the same charter distributed on October 5. The charter did not mention internal/external working groups. The answer is that this is for the external working group only. Victor noted that he would like to provide comments.

Peter Evans asked if we are the appropriate venue as we (the SOH) are surface water and GWSIP includes groundwater elements also. The answer is that there is that the ACWI Subcommittee on Groundwater is working parallel (and ahead of) the SOH on groundwater information issues.

8. Review of previous meeting summaries
Don made a motion to accept the October 22, 2015 minutes. Victor commented that there a few typos he corrected and sent to Robert. Don made a motion to accept the minutes with the minor revisions. Siamak Esfandiary seconded the motion. There were no objections and the motion carried.
Victor made a motion to approve the December 21, 2015 conference call minutes, with the correction that the highlighting on the last page be removed. Siamak seconded the motion, there were no objections, and the motion carried.

9. **Review of action items**

**Action Item 1 – Minutes:** All SOH members please send corrections regarding the 7-23-2015 minutes to Robert. Follow-up: The July 23, 2015 minutes were submitted to the ACWI website and posted.

**Action Item 2 – SOH B17C Communications Plan:** All SOH members please send comments on “B17C communications plan” to Robert. Follow-up: Robert received the comments; some were significant. After consultation with USGS peer-review agenda authorities, the decision was made to list the B17B as a “highly influential science product”. That listed required considerably more formality in the peer-review process which was reflected in the SOH B17C communication plan that was circulated to the SOH and subject to a vote to accept it at the 12/21/15 meeting. The USGS Peer Review Plan has been incorporated in to the SOH communications plan.

**Action Item 3 – Proposal for Streamflow Information Collaborative Working Group:** Robert to circulate draft charter for a proposed Streamflow Information Collaborative Working Group. This has been distributed and was discussed during the presentation on the USGS GWSIP program.

**Action Item 4 – Next Meeting:** Normally would be held on January 21, 2016, but key members had conflict. Proposed meeting date shifted to January 28, 2016. The meeting was moved. To interject, another meeting is coming up to be scheduled.

**Action Item 5 – from December 21 meeting, Robert will provide an opportunity for members who missed the December 21 meeting an opportunity to vote on the main motions of the meeting. In response Ashley set up a “survey monkey” for the absent members to register their preferences. The results are summarized as attachment 7.

10. **Old Business**

**Report from the ACWI annual meeting:** Reported progress on the B17C report and plans for public comment and peer reviews. Reactions were positive and affirmative.

Reported on proposal to form new workgroup on streamflow information collaborative. Reactions were positive. Was asked about “furnished records” and was encouraged to consider data portal (similar to the ACWI/SOG).

**Status of B17C website and public comment** (defer to the HFAWG report). The website has been drafted and will be shared with the SOH. The Federal Register notice has been submitted but has not been published yet; Robert was unsure of the cause for the delay.
Claudia Hoeft asked if the draft B17C can be circulated within the agencies before the Federal Register notice has been published. The answer is yes, but the notice should be posted any day and we can use the B17C website to circulate the B17C draft thereafter.

11. Announcements

*Agency Business Reports*

**FERC** – Sam Lin provided the report. The full report is provided as an attachment to these minutes and summarized here.

In January, FERC participated in a Board of Consultants (BOC) meeting to discuss starting reservoir elevations for the PMF study for the Missouri-Madison upgraded spillway on the Madison River in Montana. FERC also attended a BOC meeting to review the PMP/PMF studies for the North Umpqua Hydroelectric Project in southern Oregon. In December, staff participated in a BOC meeting to discuss the increase in spillway capacity to safely pass the design flood for the Twin Falls Dam project in Michigan.

FERC conducted a construction inspection of the spillway expansion work at the Norway Dam in Indiana. FERC also participated in a working session on the site-specific PMP/PMF study for Conowingo Dam in Maryland. FERC met with the City of Columbia, South Carolina to discuss proposed permanent repairs to the Columbia Canal Project, which breached during an October 2015 flood.

In November, FERC met with Pacific Gas and Electric to discuss the hazard classification of the FERC Project, Pit 7 Afterbay Dam in California.

**NWS** – Victor provided the report
The American Meteorological Society had its annual meeting. The experimental product Winter Weather Outlook has been released. Also released are information on UAVs for damage assessments, the El Nino winter forecast, and information on the Pacific Northwest floods.

**NRCS** – while not a business report, Claudia did report on a flood she experienced in her hometown of Union, Missouri, where the flood levels were 0.5 feet higher than the previous record.

**ARS** – Dave Goodrich provided the report. Leader Mark Walbridge will be retiring at the end of the month. There will be a restructuring. In addition, they will also be putting out their five year research plans soon. Robert asked if these plans could be an SOH presentation at some point. Dave said it is a possibility.
FEMA – Siamak provided the report. Heavy rainfall in South Carolina resulted in the failure of 30 state regulated dams and many unregulated dams. A FEMA task force put together a fact sheet which will be shared with the group.

USGS – Robert provided the report. The USGS performed a flyover of the Mississippi flood to develop velocity fields to complement the discharge measurements. Don Cline has moved from the NWS to the USGS. The USGS is about to release a new report about collecting high water marks. Storm tide monitoring assets were deployed along the Atlantic coast to monitor the storm surge with recent storms. The USGS will be having a conference in Nevada in August/September for surface water.

12. News from SOH workgroups

HMWG – Claudia provided the report. The full report is provided as an attachment to these minutes and summarized here.

The Hydrologic Modeling Work Group (HMWG) is actively recruiting new members; please contact Claudia if interested.

The HMWG met in early December to discuss plans for the Joint Federal Interagency Sedimentation and Hydrologic Modeling Conference (SEDHYD). This is a “down year” as the conference will be next year.

The idea has been proposed for HMWG to take up development of the newsletter. In the last two years we have fallen away from that; may move that forward again. A discussion on the use and purpose of the newsletter will be needed. Victor noted that it was hard to administer the group and take care of the newsletter. Victor, Robert and Claudia may discuss the issue.

STIWG – LySanias Broyles provided the report. The group has made updates to the web page, including membership and the white paper.

ESEWG – no representatives were present at the meeting. A written report will be requested from Tom Nicholson.

HFWAG – John England provided the report. (Will Thomas has since submitted a written report. See attachment 6). Progress since December includes that the update is now considered “highly influential science” instead of “influential science”. Bulletin 17C and supporting materials are on the HWFAG website for the 45 day public comment period. The group assisted the USGS in creating the public comment webpage. Three peer reviewers were nominated and accepted by the SOH. The group assisted with the SOH communication plan and the charge for the external peer review.

The path forward is to have the public comment period; develop the responses and circulate; revise as appropriate based on public comment; submit to external peer review; submit to USGS editorial review; submit for approval of the ACWI; develop software, examples and training materials; hold the training course at ASCE EWRI 2016 in West Palm Beach, Florida.
Sam commented that there is an ASCE hydrology paper by Jose Salas regarding nonstationarity. John replied that the group was aware of the idea but decided not to include as nonstationarity issues exceeded the charge of the writing group.

John noted that some had questioned the sufficiency of the peer-review panel membership. Regarding additional peer reviewers, the peer-review plan adopted by the SOH called for nominations to be made by the Chair, HFAWG. As such, SOH members who wish to put forth new names for the panel should discuss them with Will Thomas first, a list will be made and an additional meeting called to discuss. Siamak asked what would be the correct number of reviewers. At a certain point, enough is enough. Robert replied that two additional reviewers will provide more diversity of opinion that might be valuable.

13. Review Actions and Plans for next SOH meetings (15 mins) Robert Mason
   • Laura chap and Robert to draft and circulate 1-28-16 meeting summary.
   • Robert will distribute a call for volunteers to develop a workgroup for the Streamflow Information workgroup charter.
   • As per Martin’s motion, SOH members should review the peer review charge and forward comments to the group. Robert will set up an SOH conference call meeting for a follow-on discussion and a motion to adopt the charge. Persons wishing to suggest additional peer reviewers should speak with Will Thomas so that they can be considered during the conference call.

14. Meeting To Adjourn (Around 3:45 pm)

Don moved to adjourn the meeting, Siamak seconded the motion. The meeting was adjourned at 3:16 pm.
## Attachment 1 – Attendee List

<table>
<thead>
<tr>
<th>Name</th>
<th>Attending</th>
<th>How</th>
<th>SOH Member</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashley Knoll</td>
<td>Yes</td>
<td>In Person</td>
<td>No</td>
<td>Atkins/STARR II</td>
</tr>
<tr>
<td>Ben Pratt</td>
<td>Yes</td>
<td>In Person</td>
<td>Yes</td>
<td>National Hydrologic Warning Council</td>
</tr>
<tr>
<td>Claudia Hoelt</td>
<td>Yes</td>
<td>In Person</td>
<td>Yes</td>
<td>USDA - Natural Resources Conservation Service</td>
</tr>
<tr>
<td>Julie Kang</td>
<td>Yes</td>
<td>In Person</td>
<td>No</td>
<td>USGS</td>
</tr>
<tr>
<td>Laura Chap</td>
<td>Yes</td>
<td>In Person</td>
<td>No</td>
<td>Atkins/STARR II</td>
</tr>
<tr>
<td>Michael Liberle</td>
<td>Yes</td>
<td>In Person</td>
<td>Yes</td>
<td>USDA - Forest Service</td>
</tr>
<tr>
<td>Peter Evans</td>
<td>Yes</td>
<td>In Person</td>
<td>No</td>
<td>Interstate Council on Water Policy (ICWP)</td>
</tr>
<tr>
<td>Ryan Mueller</td>
<td>Yes</td>
<td>In Person</td>
<td>No</td>
<td>Interstate Council on Water Policy (ICWP)</td>
</tr>
<tr>
<td>Sujay Kumar</td>
<td>Yes</td>
<td>In Person</td>
<td>Yes</td>
<td>NASA GSFC</td>
</tr>
<tr>
<td>Ted Engman</td>
<td>Yes</td>
<td>In Person</td>
<td>Yes</td>
<td>NASA</td>
</tr>
<tr>
<td>Victor Horn</td>
<td>Yes</td>
<td>In Person</td>
<td>Yes</td>
<td>NOAA NWS</td>
</tr>
<tr>
<td>Will Thomas</td>
<td>Yes</td>
<td>In Person</td>
<td>Yes</td>
<td>Association of State Floodplain Managers</td>
</tr>
<tr>
<td>Bill Karpel</td>
<td>Yes</td>
<td>Phone</td>
<td>No</td>
<td>Applied Weather Associates</td>
</tr>
<tr>
<td>David Sutley</td>
<td>Yes</td>
<td>Phone</td>
<td>Yes</td>
<td>FEMA</td>
</tr>
<tr>
<td>Don Woodward</td>
<td>Yes</td>
<td>Phone</td>
<td>Yes</td>
<td>Global Ecosystems</td>
</tr>
<tr>
<td>Dongsoo Kim</td>
<td>Yes</td>
<td>Phone</td>
<td>Yes</td>
<td>NOAA/NCEI</td>
</tr>
<tr>
<td>Ed Tomlinson</td>
<td>Yes</td>
<td>Phone</td>
<td>No</td>
<td>Atmospheric Science Consultants</td>
</tr>
<tr>
<td>Jack Felbinger</td>
<td>Yes</td>
<td>Phone</td>
<td>Yes</td>
<td>Office of Surface Mining Reclamation and Enforcement</td>
</tr>
<tr>
<td>John England</td>
<td>Yes</td>
<td>Phone</td>
<td>No</td>
<td>HFAWG</td>
</tr>
<tr>
<td>Kevin Stewart</td>
<td>Yes</td>
<td>Phone</td>
<td>Yes</td>
<td>National Hydrologic Warning Council</td>
</tr>
<tr>
<td>Li-Chuan Chen</td>
<td>Yes</td>
<td>Phone</td>
<td>No</td>
<td>NOAA/NWS/CPC</td>
</tr>
<tr>
<td>LySanias Broyles</td>
<td>Yes</td>
<td>Phone</td>
<td>No</td>
<td>STIWG</td>
</tr>
<tr>
<td>Sam Lin</td>
<td>Yes</td>
<td>Phone</td>
<td>Yes</td>
<td>FERC</td>
</tr>
<tr>
<td>Sara Larsen</td>
<td>Yes</td>
<td>Phone</td>
<td>No</td>
<td>Western States Water Council</td>
</tr>
<tr>
<td>Brian Beuder</td>
<td>Maybe</td>
<td></td>
<td></td>
<td>FHWA</td>
</tr>
<tr>
<td>Christopher Cook</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curt Jawdy</td>
<td>No</td>
<td></td>
<td>Yes</td>
<td>TVA</td>
</tr>
<tr>
<td>Doug Holstrand</td>
<td>No</td>
<td></td>
<td>No</td>
<td>Applied Weather Associates</td>
</tr>
<tr>
<td>Karen Melchis</td>
<td>No</td>
<td></td>
<td></td>
<td>EPA</td>
</tr>
<tr>
<td>Quan Quan</td>
<td>No</td>
<td></td>
<td></td>
<td>EPA</td>
</tr>
<tr>
<td>Zhida Song-James</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Martin Becker</td>
<td></td>
<td>Phone</td>
<td>Yes</td>
<td>Becker</td>
</tr>
<tr>
<td>Pixie Hamilton</td>
<td></td>
<td>Phone</td>
<td></td>
<td>USGS</td>
</tr>
<tr>
<td>Doug Yesjis</td>
<td></td>
<td>Phone</td>
<td></td>
<td>USGS</td>
</tr>
<tr>
<td>Claudia P.</td>
<td></td>
<td>Phone</td>
<td>Yes</td>
<td>USACE</td>
</tr>
<tr>
<td>Marie Peppier</td>
<td></td>
<td>Phone</td>
<td></td>
<td>USGS</td>
</tr>
<tr>
<td>Jerad Ratel</td>
<td></td>
<td>Phone</td>
<td></td>
<td>USGS</td>
</tr>
<tr>
<td>Dave Goodrich</td>
<td></td>
<td>Phone</td>
<td>Yes</td>
<td>USDA ARS</td>
</tr>
<tr>
<td>Ian Fugerson</td>
<td></td>
<td>Phone</td>
<td>Yes</td>
<td>USBOR</td>
</tr>
<tr>
<td>Brian Reece</td>
<td></td>
<td>Phone</td>
<td></td>
<td>USGS</td>
</tr>
<tr>
<td>Jerry Coffey</td>
<td></td>
<td>Phone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>John England</td>
<td></td>
<td>Phone</td>
<td></td>
<td>USACE</td>
</tr>
<tr>
<td>Prevain Rania</td>
<td></td>
<td>Phone</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In this January, FERC participated in a Board of Consultants (BOC) meeting to discuss issues regarding starting reservoir elevation for use in the PMF Study which is being developed for the Hebgen Development of the Missouri-Madison Project. The results of the study will be used in final design of an upgraded spillway at the development. The dam is located on the Madison River in Gallatin County, Montana.

FERC attended in this January in a BOC meeting to review the site specific PMP/PMF studies for the North Umpqua Hydroelectric Project, and the Prospect 1, 2 and 4 Project. The BOC is charged with reviewing the methodologies, assumptions and conclusions of the study and identifying any outstanding issues. PacifiCorp is the licensee for the projects which are located on the North Umpqua and North Fork Rogue Rivers in southern Oregon.

In last December, OEP staff participated in a BOC meeting for the Twin Falls Dam Project, licensed by Wisconsin Energy, and located on the Menominee River on the border of Wisconsin and the Upper Peninsula of Michigan. An 8.0 MW powerhouse is under construction along with a new tainter gate spillway to increase spillway capacity to safely pass the inflow design flood (IDF).

FERC conducted in last December a construction inspection of the spillway expansion work at the Norway Dam, a part of the Norway and Oakdale Hydroelectric Project, licensed by Northern Indiana Public Service Company, and located on the Tippecanoe River in Clark County, Indiana. The work involves modifying the existing gravity overflow spillway to lower its crest and install five vertical lift gates across the spillway to increase the spillway capacity to safely pass the IDF. The work is progressing on schedule and is planned to be completed by May 2017.

In last December, FERC participated in a working session on the Site-specific PMP/PMF study for Conowingo Dam. The Conowingo Dam is located on the Susquehanna River in Harford County, MD.

FERC met in last December with the City of Columbia, South Carolina, to discuss proposed permanent repairs to the Columbia Canal Project, located on the Broad River in Richland County. The canal embankment breached during an October 2015 flood. FERC also discussed the need to complete a Part 12 inspection of the project and a Potential Failure Modes Analysis (PFMA).

In last November, FERC met with Pacific Gas and Electric to discuss the hazard classification of the FERC Project, Pit 7 Afterbay Dam. Pit 7 Afterbay is located on the Pit River in Shasta County, California.
The American Meteorological Society (AMS) Annual 2016 Meeting

The AMS 96th Annual Meeting (http://annual.ametsoc.org/2016/) was held on 10-14 January 2016 in New Orleans, LA. This year’s gathering for the weather, water, and climate community drew close to 4,000 attendees with many folks participating from NOAA and NWS. Secretary of Commerce Penny Pritzker delivered the keynote speech during the Presidential Town Hall Meeting/2016 Presidential Forum (https://www.commerce.gov/news/blog/2016/01/commerce-secretary-penny-ritzker-discusses-innovative-ways-address-extreme). The unifying theme "Earth System Science in Service to Society" was organized to bring together many parts of AMS, supported by its 13,000 members of scientists, researchers, educators, broadcast meteorologists, students, weather enthusiasts, and other professionals in the fields of weather, water, and climate. NWS was provided an exclusive opportunity to reach out to its stakeholders and partners at a separate concurrent session held on January 14th (NWS Partners Meeting - http://www.nws.noaa.gov/com/weatherreadynation/calendar.html) in which Dr. Uccellini, Director of the NWS, and his leadership staff spoke about the various NWS program areas. AMS also provides opportunities to specialized groups such as AMS Conference on Hydrology to chair and lead sessions. Please see the following link to topics chaired by the 30th AMS Conference on Hydrology: https://ams.confex.com/ams/96Annual/webprogram/30HYDRO.html.

New NWS Experimental Winter Weather Products

Numerical weather prediction guidance has advanced to the point in which NWS can provide partners a heads-up of hazardous winter weather as much as a week in advance. After 3 years of testing, refinement, and feedback from partners and NWS Weather Forecast Offices (WFOs), the NWS Weather Prediction Center made the experimental Days 4-7 Winter Weather Outlook available to the public (http://www.wpc.ncep.noaa.gov/wwd/pwpf_d47/pwpf_medr.php). This product shows the probability for accumulating snow for the contiguous United States in the medium range time frame and serves as the basis for collaboration among NWS forecast offices and National Centers. This product also gives emergency managers (EMs), the media, and the public a better idea of what to expect from upcoming winter storms and more information with which to plan how to mitigate issues that may arise from hazardous wintry conditions. The Experimental Winter Weather Products for the greater Washington DC area is available at: http://www.weather.gov/lwx/winter#wsoutlook. For description of this product, please see http://www.wpc.ncep.noaa.gov/wwd/pwpf_d47/WPC_WinWx_PDD.pdf.

Aviation Enthusiasts Assist with Damage Assessments

On November 19th, NWS Blacksburg, VA, in conjunction with the MidAtlantic Aviation Partnership, conducted the 2015 Hobbyist Unmanned Aerial Vehicle (UAV) workshop and simulcast webinar at the Virginia Tech Corporate Research Center. The workshop was offered to provide current FAA guidelines to hobbyist UAV operators and to explain how aerial imagery from hobbyists can help NWS assess storm damage. Providing aerial imagery of storm damage by safe and responsible hobbyist operators is an example of citizen science in action. NWS Blacksburg is looking forward to integrating hobbyist UAV operators into its network of storm spotters and leveraging this partnership to enhance post storm damage surveys. A three minute overview of this workshop was recorded by local Roanoke TV-Station (http://www.wdbj7.com/video/hobbyist-uav-workshop-coming-up-in-blacksburg/36450768).
El Niño Winter Forecast Draws Huge Crowds in California

After years of severe drought, Californians are now bracing a weather change. Since late August, NWS San Diego, CA, has held 80 briefings on El Niño and its likely effects to the city, county, state, federal, tribal, military and public. Attendance has ranged from 25 to 300 people, with the public venues drawing an average of 100 individuals, including mayors and city council members. Because flooding is a major concern with an El Niño weather pattern, all have been promoting the Turn Around Don’t Drown program (http://www.nws.noaa.gov/os/water/tadd/) and also displaying the flood signage at these public sessions. San Bernardino County, CA, alone, has hosted eight workshops with each having a separate EM meeting, a public open house, and panel discussion with representatives from Caltrans, the CA Department of Public Works, Sherriff’s office, the Office of Emergency Services and NWS San Diego. Please see YouTube Video on Winter 2016 and El Nino briefed by WFO San Diego and its seasonal impacts (https://www.youtube.com/watch?v=jPy4Nb0CNHs).

Pacific Northwest Flooding and NWS DSS in Action

Heavy rains fell in the Pacific Northwest from December 7 - 11 and caused significant flooding across northwest Oregon, southwest Washington and the greater Portland metropolitan area. While Portland received 2.67 inches of rain which was a daily record for December 7, parts of the Pacific Northwest coastal mountain regions received up to 18 inches of rainfall for this event. The storm caused multiple landslides and flooding on small streams, rivers, and, coastal waters. In addition to the issuing of numerous flood, wind, and marine warnings and advisories, the NWS provided daily partner DSS (Decision Support Services) briefings, webinars, interviews, and social media messages. As a result of these briefings, the U.S. Coast Guard and Columbia Bar Pilots were able to allow a few ships to safely pass when seas and winds temporarily subsided. Briefings provided by NWS Seattle led to an evacuation of a low-lying juvenile detention center near Grays Harbor, WA before a combination of high tides, heavy runoff from the Chehalis River and high surf caused water to engulf the center’s parking lot. This event demonstrated the value of DSS by providing key information to decision makers and helping emergency managers and the public to take appropriate actions in saving life and property (http://www.nws.noaa.gov/com/weatherreadynation//news/160501_nws_helps.html).

Attachment 4. HMWG Report

Currently, the Hydrologic Modeling Work Group (HMWG), is comprised basically of Jerry Webb and Claudia Hoeft. The primary responsibility is organization and planning of the Joint Federal Interagency Sedimentation and Hydrologic Modeling Conference (SEDHYD). The Work Group is anxious to recruit new Work Group members, so if any new SOH members are interested in serving on this Work Group please contact Claudia.

SEDHYD 2015 was. Held in April 2015, so we are in a down period before planning kicks into high gear for the next conference. Claudia sat in the last Subcommittee on Sedimentation (SOS) meeting to touch base with SOS members also working on the conference. Future
meetings of the joint SOH-SOS planning committee are expected to start up in the next few months.

There has been discussion regarding using the HMWG for development of an SOH Newsletter. It is recommended that HMWG members (Claudia) meet with SOH leadership (Robert and Victor) to discuss how best to move the newsletter forward, including a better definition of how the newsletter be used, how frequently it should be issued, and other matters.

Attachment 5. ESEWG Report

The ESEWG planned to meet January 26, 2016 but the meeting was canceled due to inclement weather, an extreme snowfall event in the Washington, DC area. The planned Webinar by NOAA/NWS was to be a seminar on “Exceedance Probability Analysis for the South Carolina Rainfall Event” by Michael St.Laurent, UCAR Visiting Scientist at the Hydrometeorological Design Studies Center, National Water Center, NWS, NOAA, Silver Spring, MD.

The seminar abstract was “The Hydrometeorological Design Studies Center (HDSC) analyzed annual exceedance probabilities for the South Carolina rainfall event that occurred during 2 - 4 October 2015. The rainfall event delivered rainfall amounts that exceeded 20 inches in 48 hours in some locations. Observed rainfall amounts in several areas had exceedance probabilities of less than 1/1000 across all durations from 2-day to 60-day (ending on October 5).”

Dr. Sanja Perica, NOAA/NWS and Tom Nicholson, ESEWG Chair will reschedule the seminar for later in February 2016.

Attachment 6. HFAWG Report


Since the December 21, 2015 special meeting of the Subcommittee on Hydrology (SOH), a December 29, 2015 version of Bulletin 17C, Guidelines For Determining Flood Flow Frequency, was completed. A web site was set up to enable public review of the December 29, 2015 version of Bulletin 17C. The web site includes an Overview document giving background information on the development of Bulletin 17C, supplementary information supporting the new procedures, and procedures for the public to submit comments on Bulletin 17C. A 45-day public comment period will be announced in the Federal Register in the near future.

Three external reviewers for the USGS peer review process were nominated and accepted by the SOH. Because Bulletin 17C is now considered “highly influential science” instead of “influential science”, two additional peer reviewers are recommended to provide more diversity of review comments. SOH members who wish to put forth new names for peer reviewers should discuss them with Will Thomas,
Chair of the HFAWG. A charge for the external reviewers will be developed in consultation with the SOH.

The path forward for the review and publication of Bulletin 17C is as follows:

- Complete the 45-day public comment period,
- HFAWG writing team develops responses in a spreadsheet format to the public comments, circulates to HFAWG, SOH and posts on web site when approved,
- Revise Bulletin 17C based on the public review comments,
- Submit Bulletin 17C to the external peer reviewers as part of the USGS review process,
- Obtain USGS editorial review and USGS Director’s approval,
- Obtain approval of ACWI before publication as a USGS Techniques and Methods manual,
- Post software, examples and training materials on the HFAWG web site, and
- Conduct training courses at technical conferences such as the approved workshop and panel discussion at the ASCE EWRI Conference in West Palm Beach, Florida.

Will Thomas
Chair of the HFAWG
Michael Baker International
February 5, 2016

Attachment 7. Votes of absent members on motions considered by SOH on December 21, 2015.

<table>
<thead>
<tr>
<th>Name</th>
<th>Should the SOH adopt the proposed SOH B17C Communications Plan as amended?</th>
<th>Should the SOH adopt the slate of peer reviewers as nominated by Will Thomas, SOH/HFAG chair?</th>
<th>Should the SOH move forward with posting the draft B17C report for public comment?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curt Jawdy</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Victor Horn</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Wilbert Thomas</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>