

**SUMMARY OF THE MEETING OF THE
ADVISORY COMMITTEE ON WATER INFORMATION'S (ACWI)
SUBCOMMITTEE ON HYDROLOGY (SOH)
1:30 p.m. – 3:00 pm, Eastern Standard Time
September 21, 2017**

1. Welcome

Chair Robert Mason called the meeting to order at 1:34 pm.

2. Roll call

The roll call is included as Attachment 1. It was confirmed that there was a quorum of committee members attending the call.

3. Review and approval of the agenda

Robert apologized for unusual timing of meeting, and explained it was due to the July meeting having been suspended. The Department of Interior (DOI) was reviewing the ACWI charter; the SOH was given approval to resume meetings just a few weeks ago. There are several items to address.

Robert reviewed the agenda. He noted that he might skip overview of the SOH as there were no new attendees on the call.

Don Woodward moved to accept agenda, Claudia Hoeft seconded the motion. There were no objections and the motion passed.

The agenda is included as Attachment 2.

4. Background on the SOH

Sarah Kreitzer asked for an introduction to the SOH since she is new to the subcommittee, therefore this was not skipped on the agenda. Robert provided the overview.

ACWI has several subcommittees, including the SOH. The SOH work groups are the Hydrologic Frequency Analysis Work Group (HFAWG), the Extreme Storm Events Work Group (ESEWG), the Satellite Telemetry Interagency Work Group (STIWG), the Streamflow Information Consortium, the data gaps group and the Hydrologic Modeling Work Group (HMWG). The SOH meets quarterly, typically the third Thursday of the quarter, for about three hours. There is usually a feature presentation as well as work group reports.

Robert is nearing end of his two-year term. The vice chair typically becomes the new chair. There should be a new chair by the October 20 meeting.

5. Approval of the April 20, 2017 meeting minutes

Laura Chap provided a description of edits received on the May 3rd draft minutes. Martin Becker moved to approve the minutes, with edits received from Tom Nicholson, Sam Lin and Terry Davies, as well as clarifications from Jerry Coffey on his own statements, to be provided a few days. Don seconded and there were no objections.

6. Status of action items from the April 20 meeting

- Work groups to submit reports – done and posted in the meeting summary
- Agencies to submit business reports – done and posted in the meeting summary
- Streamflow information group to find a vice chair – the DOI intervention delayed this, so there have been no meetings yet, still ongoing
- Martin and Will Thomas to conduct 17C test – done, this will be summarized in the HFAWG report
- Robert to take group concerns about travel budgets back to HMWG to consider –No subsequent meetings have been held
- Ted Engman to prepare a charter for the data gaps group and distribute –Report is pending. Ted will update the charter status with the work groups

Victor Hom noted that Tom’s motion concerning the testing of B17C and a vote on its acceptance had not been listed as an “action item” in the minutes. Victor would like to add this to the agenda. Robert agreed that it could have been listed as action item, but was not identified during the meeting by the group and was, therefore, not included in the status report. He noted it was one of the reasons for the current (9/21) meeting and would be addressed during the HFAWG report-out.

7. New business – nominations for vice chair

Victor would like to nominate Sujay Kumar as vice chair. Don seconded. Sujay accepted the nomination.

Tom nominated Chandra Pathak. Martin seconded. Chandra was not present to accept the nomination.

Robert asked if there were any more nominations. Hearing none, Don made a motion to close nominations and Martin seconded the motion. There were no objections and the nominations closed.

Robert will send out an email and requesting each member’s vote. He noted that members should please copy current Vice Chair Siamak Esfandiary with their response. Results will be announced in October.

Martin requested if Sujay could speak for two minutes on his background and qualifications for vice chair. Claudia suggested that a CV be included for the nominees. Martin would be happy with a CV plus a summary in an email rather than putting the nominees on the spot now. Martin suggested next Friday as a due date for the CV and summary.

8. Work group reports

HFAWG

Martin commented that the process of the 17C testing that he and Will worked on went smoothly. There was a lot of help from Steve Yochum, and both Martin and Will were pleased with the amount of cooperation from professionals. Will did a great job of assembly.

Martin has asked Robert to recuse himself from 17C discussions. Siamak had not joined the call at that point, so Victor has agreed to act as chair during the HFAWG discussions. There were no objections.

Will provided the summary of the test. He noted that he had sent out the revised results from the test on September 19 (Tuesday). The purpose of the test was to see how well people can navigate through

the process. Sample data was sent out to several testers. The overall results were good, but several testers mistakenly used the default Bulletin 17B regional skew (Plate I) that is embedded in PeakFQ (because it still supports users who wish to use Bulletin 17B) instead of finding the latest regional skew from USGS reports. Fortunately, Bulletin 17B has regional skews that are similar to those of the new USGS reports in most areas. According to Will, other than the regional skew issue, testers were able to use PeakFQ to consistently estimate flood-frequencies based on the new Bulletin 17C methodology.

The recommendation is to emphasize that when using PeakFQ to do a flood-frequency analysis based on Bulletin 17C, the user needs to provide an updated regional skew rather than the PeakFQ Bulletin 17B default.

Martin noted that five people used the default Bulletin 17B skew in the USGS program, and asked if there was a pattern; were they employed in private industry or the federal government? Will answered that there was no pattern to the mistake that could be attributed to employment.

Martin said he is pleased with the results of the exercise, and did not have any major concerns with the results of the testing.

Victor commented that in previous email, Will had sent a spreadsheet. This spreadsheet was very helpful.

Jerry asked to confirm that everyone did not return the same results. Will said this is correct, different users input different regional skews and perception thresholds. This did not result in significant differences for three out of four stations.

Martin noted that the largest percentage of the difference was caused by used of different skew coefficients.

Jerry asked if there is uncontrolled input, as this changes the output. Will responded yes. There are new regional skew studies and they are on the SOH/HFAWG/B17C website. The key is using the right report.

Martin offered a clarification, that the USGS software (PeakFQ) provides a default skew from the old Bulletin 17B report. However, the USGS has made a change in the software to now require the user to provide the regional skew rather than default to the old value.

Jerry asked that if you follow the instructions correctly, can you still get different answers? Will answered no, as long everyone enters the same skew, the software will yield the same results. Jerry noted that instructions are part of the system.

John England said that there are instructions with the software that the users did not read. Users erroneously used the default value and did not enter the data correctly.

Victor noted that we are way beyond the discussion time.

Martin asked if a higher percentage of people use the Corps or the USGS software program? John did not know. There is a 2006 USGS techniques and methods report for PeakFQ; it explains in the report that it uses default skew estimates that may be changed.

Martin asked if there are a wide variety of results due to the skew issue and if someone needs to alert past users to the potential for unreliable results based on use of an outdated skew estimate. Will answered no. Somebody will always review a frequency analysis. If it is submitted to FEMA, FEMA would review. People who do these analyses frequently understand the process.

Steve has some concerns about selection of the proper regional skew coefficient. We need better guidance than what the USGS is providing in the regional reports. It is not easy to use what the USGS is providing.

Will mentioned USGS Scientific Investigations Report 2010-5260 that provides the updated regional skew for California. Steve commented that it is not a map, it is an equation based on elevation. Robert said that in California it is not so simple; the reality is that location and elevation affect skew. Steve noted that users need additional clarification.

Martin said that considering comments from John, Jerry, and Steve, he is inclined to want to reconsider his recommendation that nothing of concern was found in this test. Martin would like time to think about this and let Will inform him, in approximately a couple of days or a week. He thinks this issue deserves further attention. He will probably make a motion that Steve, Jerry and John share their thoughts by email so the group can consider.

Will disagrees that the guidance in Bulletin 17C is unclear. Most of the time the regional skew is just an average value for the state, so determining the correct skew is not a big issue.

Martin would like to give Steve a chance to go back to other analyses he has done outside of California. Will will be happy to work with Steve and discuss further.

Steve said we should consider providing some improvements in the guidance for selection of the correct regional skews.

Robert noted that the Bulletin 17C routine in PeakFQ no longer defaults to the plate based on latitude and longitude, but instead asks the user for a value. He reported that the USGS has plans to incorporate the updated regional skews (maps and relations) into PeakFQ as they become available. Victor commented that this would help.

Martin asked if the skews varied region by region? Robert answered yes. Martin noted that the correction can be made where the regional reports are available and in PeakFQ, but there is more susceptibility where there is no report. This seems to be a loose end that could cause variation in results. Martin proposes that we need to think about this. Will answered that the same problem existed in Bulletin 17B. This has always been an issue.

Steve commented that we need the right tools. John responded that we have the right tools and documentation. He referred to the materials on the HFAWG website. There are trainings for these tools and these issues are discussed in the classes for these tools.

Martin believes an important point is that there will not be a big turnout from the private sector for these classes.

Claudia's concern is that testers are not doing due diligence. We should ask the testers why they did not. She agreed with Will that a lot of guidance is available. One point of clarification is that there is a

methodology, there is a piece of software and there are inputs to methodology. What is the update cycle on the methodology, software, inputs? Methodology should point to the latest software.

Will said we should be getting ready to vote on the 17C document.

David Raff commented that that the question is whether we can improve upon a 30-year-old document. Is there software available for which everybody gets the same answer? This does not have anything to do with 17B versus 17C. This is not a relevant point. It is an improvement over an existing document. He is prepared to vote.

Martin asked if Robert could send out updated guidance for the software? Robert says it is in process.

Don noted that the document and program for 17C are good. Misuse and incorrectly entered data will happen in every software program.

Terry made a motion to vote.

Martin wanted a vote as called for in the term of references. Victor responded that the subcommittee will follow the terms of references.

Victor said the motion is closed. Thank you for the report. Victor noted that John made several presentations on Bulletin 17C. Victor do we have a consensus?

Martin requested a vote.

Victor confirmed that there was a request for vote on the floor.

Robert stated, "Mr. Chairman, I move that the SOH recommend to ACWI the adoption of the draft Bulletin 17C and its use by federal agencies for flood frequency computations." Terry seconded the motion.

The vote tally is as follows.

NSF (Terry) - yes

ASFPM (Will)– yes

BECKER (Martin) – abstain

BLM – not present

BOR (David) – yes

OSW (Sarah) – yes

USGS (Robert) – yes

FERC – not present

FHWA (Brian Beucler) – yes

GEC (Don) – yes

NASA (Sujay) – yes

NHWC – not present

NOAA (Victor) – yes

USACE – not present

USDA-ARS (Dave Goodrich)– yes

NRCS (Claudia) – yes

USFS (Steve) – yes

USEPA (Karen Metchis) -yes
FEMA (Siamak) - yes
USNRC (Tom) - yes
TVA (Curt Jawdy) - yes

Victor reiterated that the SOH has called the vote. We have a quorum. An affirmative vote of the majority will constitute approval of this document. We have an affirmative vote and can move forward this motion. We would like to thank John for all the hard work and his presentations, and appreciate the HFWAG's work on this.

11. Actions and plans for next SOH meeting

There is a correction to the agenda; the correct date of the meeting is Thursday, October 20.

Victor asked for a motion that the other work groups submit their report for minutes. Don made the motion and Claudia seconded.

The HMWG report is provided as Attachment 3.

As an action item, Robert will contact the group regarding the location for the next meeting and speaker for the feature presentation, as well as regarding nominations for vice chair.

12. Meeting adjourn

Martin moved to adjourn. Robert seconded. The meeting adjourned at 3:04 pm.

Attachment 1 - Attendees

Robert Mason	USGS
Brian Beucler	FHWA
Dongsoo Kim	NWS
Jerry Coffey	
Jason Giovannettone	Dewberry
Sarah Kreitzer	OSW
Steven Yochum	USFS
Sujay Kumar	NASA
Victor Hom	NWS
Will Thomas	ASFPM
David Raff	USBR
Donald Woodward	GEC
Ian Ferguson	USBR
Martin Becker	BECKER
Claudia Hoeft	NRCS
Tom Nicholson	NRC
Dave Goodrich	ARS
Ted Engman	NASA
John England	USACE
Teresa Davies	NSF
Curt Jawdy	TVA
Karen Metchis	USEPA

**MEETING OF THE
ADVISORY COMMITTEE ON WATER INFORMATION'S (ACWI)
SUBCOMMITTEE ON HYDROLOGY (SOH)
1:30 p.m. – 3:00 pm, Eastern Time
Thursday September 21, 2017**

Location: No in-person meeting: Conference Call and WebEx only.

Problems? Laura Chap, Office: (301) 210 6800; Robert Mason, cell: (703) 405-5823

Meeting Instructions and Resources:

1. In the interest of time, we will be using the survey monkey to do our roll-call. Please register before COB on September 20, 2017 via <https://www.surveymonkey.com/r/H5G58YJ>
2. Webx link:
<https://usgs.webex.com/usgs/j.php?MTID=md15d48c56a19d7b91a4173985789625b>
3. Conference call Number(s): 1- 855-547-8255 (703-648-4848) ACCESS CODE: 20387
Note: PC weblink for meeting will be open around 5-10 minutes prior to the meeting. Please allow ample time to setup your computer.

I. Tentative Agenda

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|--|------------------------|
| 1. Welcome (5 mins) | Robert Mason |
| 2. Roll-Call (5 mins) <ul style="list-style-type: none">• <i>See Survey Monkey.</i> | SOH Members and Guests |
| 3. Review and Approval of Agenda (2 mins) | Robert Mason |
| 4. Background on SOH (5 mins) | Siamak Esfandiary |
| 5. Approval of the April 20, 2017 Meeting Summary (3 mins) | Laura Chap |
| 6. Status of Action Items from April 20, 2017 Meeting (5 mins) <ul style="list-style-type: none">• Work groups to submit reports –<i>Done and posted in meeting summary.</i>• Agencies to submit business reports –<i>Done and posted in meeting summary.</i>• Streamflow information group to find a vice chair –<i>Ongoing.</i>• Martin and Will to conduct 17C test -<i>Done, report pending.</i>• Robert to take group concerns about travel budgets back to HMWG to consider –<i>No subsequent meeting held.</i>• Ted to prepare a charter for the data gaps group and distribute –<i>Report pending.</i> | Robert Mason |
| 7. New Business (10 mins) – Nominations of new vice chair | Robert Mason |

8. **SOH Workgroups (50 mins)**

- [HFAWG](#)
- ESEWG
- [STIWG](#)
- *Streamflow Info Consortium*
- *Data Gaps*
- [HMWG](#)

(Siamak Esfandiary to preside.)

*Will Thomas
Tom Nicholson
LySanias Broyles
Doug Yeskis
Ted Engman
Claudia Hoeft*

11. **Review Actions and Plans for next SOH meeting (10 mins)**

Robert Mason

12. **Next Meeting:**

All

- *Thursday, October 20, 2017 from 12:30PM to 3:30PM EDT (Tentative)*
- *Location: TBA*
- *Guest Speaker Topics? Suggestions??*

13. **Meeting Adjourn (Around 3:00 pm)**

Attachment 3 – HMWG Report

The SEDHYD Planning committee held their last conference call on Thursday, May 11, prior to the suspension of ACWI activities. After receiving numerous proposals from numerous venues across the country, members of the planning committee made site visits to two venues in Reno, NV and two in St. Louis, MO. All four hotels had adequate meeting space, layout for the conference and adequate number and type of lodging rooms at or below government per diem rate without any resort fee. All four also had convenient transportation to and from the airport.

There was a strong desire by many members of the Planning Committee convene the next SEDHYD conference in a different city that had different field trip opportunities and was in a more central location than Nevada. St. Louis would be a convenient location for many federal employees working in the mid west. However, the committee ultimately decided on the Peppermill in Reno because of the lower cost (especially with the present budget uncertainty) and because we believe that problems with weather for travel and field trips in June are much less likely than in February or March. Planning for the SEDHYD-2023 conference should begin early enough so that we may have opportunities to be in a city like St. Louis in April or May, rather than February or March.

SEDHYD 2019 is scheduled for June 24-28, 2019.

Jerry Webb volunteered to serve as the overall conference Chair for SEDHYD-2019. We now need to begin identifying volunteers to fill the many other leadership roles to make this a successful conference.