

# Subcommittee on Hydrology (SOH)

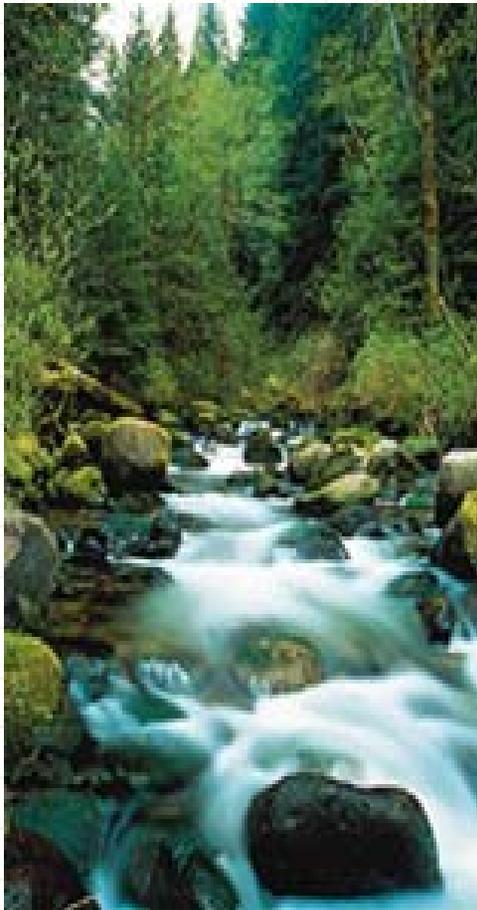
**ACWI-SOH Quarterly**  
**Thursday 10/23/2014**  
**NOAA NWS**  
**1325 East-West Highway**  
**Silver Spring, MD 20910**

**Victor Hom, SOH Chair**  
**NOAA National Weather Service**

**Robert Mason, SOH Vice-Chair**  
**United States Geological Survey**

**Remote Participants:**

1. Log-into: <https://www1.gotomeeting.com/join/262474320> (Meeting ID: 262-474-320 ) and
2. dial toll-free line: 1-877-989-4696 with Passcode: 1547347.
3. If PC fails, please download the slides and follow along.



- **Water Information Coordination Program**  
The WICP ensures collaborative efforts among Federal Agencies to improve water information for decision-making about natural resources management and environmental protection.
- **Advisory Committee on Water Information**  
The ACWI represents the interests of water-information users and professionals in advising the Federal Government on Federal water-information programs and their effectiveness in meeting the Nation's water-information needs.

# SOH Member Organizations

1. Agricultural Research Service (ARS)
2. Association of State Floodplain Managers (ASFPM)
3. BECKER
4. Bureau of Land Management (BLM)
5. Bureau of Reclamation (USBR)
6. Environmental Protection Agency (EPA)
7. Federal Emergency Management Agency (FEMA)
8. Federal Energy Regulatory Commission (FERC)
9. Federal Highway Administration (FHWA)
10. Forest Service (USFS)
11. National Aeronautics and Space Administration (NASA)
12. National Hydrologic Warning Council (NHWC)
13. National Science Foundation (NSF)
14. Natural Resources Conservation Service (NRCS)
15. NOAA National Weather Service (NWS)
16. Nuclear Regulatory Commission (NRC)
17. Office of Surface Mining (OSMRE)
18. U.S. Army Corps of Engineers (USACE)
19. United States Geological Survey (USGS)

# Subcommittee On Hydrology

## Purpose

Improve the availability and reliability of surface-water quantity information needed for hazard mitigation, water supply and demand management, and environmental protection.

## Activities

Quarterly Meetings, Workgroups, Workgroup Meetings, Newsletters, Conferences.

## Website

<http://acwi.gov/hydrology/index.html>

## SOH Workgroups

- **Hydrologic Frequency Analysis Work Group (HFAWG)**
- **Extreme Storm Events Work Group (ESEWG)**
- **Hydrologic Modeling Work Group (HMWG)**
- **Satellite Telemetry Interagency Work Group (STIWG)**

## SOH Activities

- Quarterly Meetings hosted by Member Agencies
- Participation by Senior Officials, Advisors, Staff of the Host Agency, SOH Members, and Guests
- Formal Presentation on a Topic of Mutual Interest
- SOH Review of Workgroup Activities
- Member Agency reports
- Cross collaboration with other ACWI Subcommittees

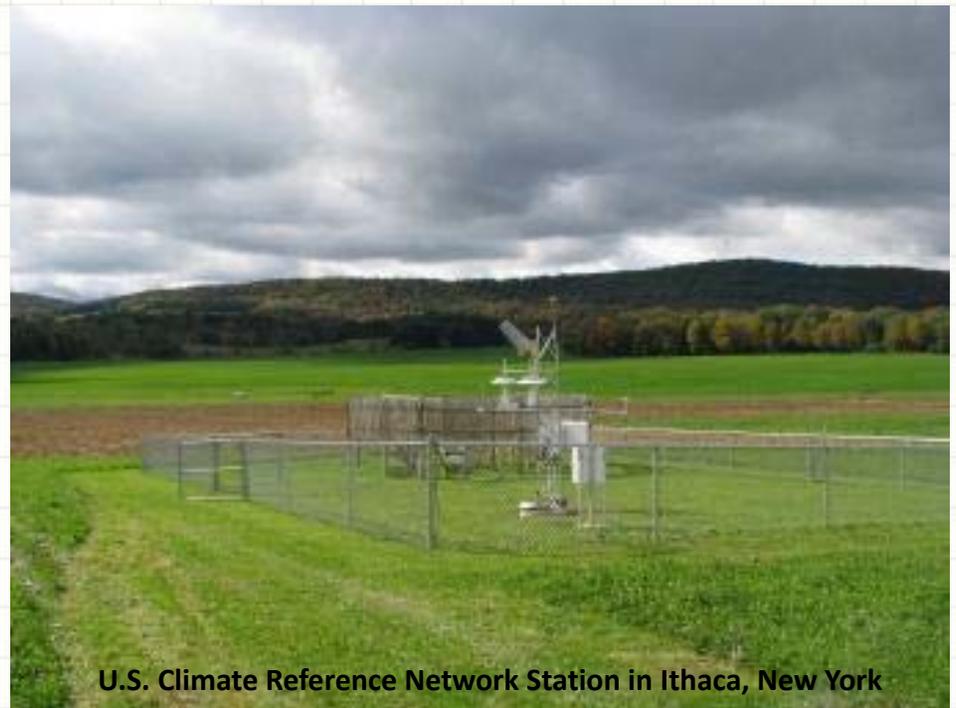
## List of Past Feature Presentations

- [USGS Streamgaging](#)
- [Impact of Climate Change and Population Growth on the National Flood Insurance Program](#)
- [Engineering Guidance Frame Work for In-land Hydrology Considering Climate Change](#)
- [Climate Change Adaptation and Water Resources](#)
- [National Dam Safety Program and Hydrologic Needs](#)
- [The 2011 Mississippi River Basin Flood - A Perspective on Forecasting, Water Management, and Flood Fight](#)
- [Army Water Footprint](#)



# Feature Presentation

- **NOAA's National Climatic Data Center**
- **Dr. Dongsoo Kim**





# Words From our Host

## Welcome to Silver Spring, Maryland



## Word about NOAA

- [National Environmental Satellite, Data, and Information Service](#)
- [National Marine Fisheries Service](#)
- [National Ocean Service](#)
- [National Weather Service](#)
- [Office of Oceanic and Atmospheric Research](#)
- [Office of Program Planning and Integration](#)

## Key Attendees

## Emergency Procedures

## Facilities



# SOH Quarterly Meeting Agenda

- Welcome and Background on SOH (5 mins)
  - Words from our Host (10 mins)
  - Roll-Call (Remote Participants/In-Person Attendees)
  - Review and Approval of Agenda (2 mins)
  - Review Past Meeting Summary (2 mins)
  - Review Action Items from Past Meeting (5 mins)
  - Feature Presentation (~60 mins)
    - **Dongsoo Kim, NCDC**
    - **NCDC Precipitation Data** (1:05 – 1:50 PM)
    - **Q&A/Discussion** (1:50 – 2:05 PM)
- **Announcements (10 mins)**
    - Upcoming Workshops,*
    - Upcoming Conferences*
    - Business Reports*
  - **BREAK (2:15 – 2:30 PM)**
  - **News from the SOH Workgroups (30 mins)**
    - HFAWG, ESEWG, HMWG, STIWG*
  - **Review Actions and Plans for next SOH meeting (15 mins)**
  - **Meeting Adjourn (Around 3:30 pm)**

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## **SOH Hydrologic Modeling Workgroup (HMWG)**

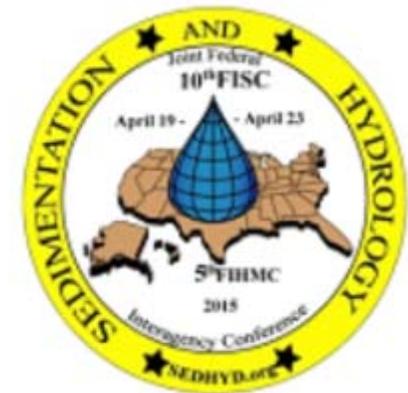
- **Jerry Webb, Chair** US Army Corp of Engineers (USACE),
- **Joe Giacinto, Vice-Chair**, Nuclear Regulatory Commission (USNRC)

### **Purpose and Goals:**

- Promote sharing of information on modeling tools and modeling systems in hydrology and water resources.
- Plans, organizes, and promotes the Federal Interagency Hydrologic Modeling Conference every four years and
- Engages in other modeling related activities as appropriate.

## SOH Hydrologic Modeling Workgroup (HMWG)

- **Jerry Webb, Chair** US Army Corp of Engineers
- **Joe Giacinto, Vice-Chair**, Nuclear Regulatory Commission (USNRC)



### Actions/Accomplishments:

- ❑ SEDHYD 2015 (April 19-23, 2015) - [www.sedhyd.org/2015/](http://www.sedhyd.org/2015/)
- ❑ Joint 10<sup>th</sup> Federal Interagency Sedimentation and 5<sup>th</sup> Hydrologic Modeling Conference.
- ❑ 250 abstracts, 20 posters, 10 model demos, short courses, student program, and 5 technical field explorations/reconnaissance surveys of our changing world.

## SOH Extreme Storm Events Workgroup (ESEWG)

- **Thomas J. Nicholson, Chair** US Nuclear Regulatory Commission (US-NRC)
- **Victoria Bahls, Vice-Chair**, US Bureau of Reclamation (USBR)

### Purpose and Goals:

- coordinate studies and databases for reviewing and improving methodologies and data collection techniques used to develop design precipitation estimates of large storm events up to and including the Probable Maximum Precipitation (PMP).
- develop a detailed scope of work/plan of study, and
- determine the necessary funding requirements to update the Catalog of Extreme Storms and Hydrometeorological Reports (HMR) for estimating PMP.

## SOH Extreme Storm Events Workgroup (ESEWG)

- **Thomas J. Nicholson, Chair** Nuclear Regulatory Commission (US-NRC)
- **Victoria Bahls, Vice-Chair**, US Bureau of Reclamation (USBR)

### Actions/Accomplishments:

- ESEWG Workshop on May 15, 2014
  - defined needed extreme precipitation products*
  - collected feedback from Federal, State agencies, and member organizations of the ICODS and NDSRB on their user needs for Extreme Storm data and services, and*
  - established ESEWG Proposal Writing Team (PWT)*
- Workshop on Probabilistic Flood Hazard Assessment on January 29-31, 2013 in Rockville, MD



## SOH Hydrologic Frequency Analysis Workgroup (HFAWG)

- **Will Thomas, Chair** Baker/ASFPM
- **John England, Vice-Chair**, US Bureau of Reclamation (USBR)

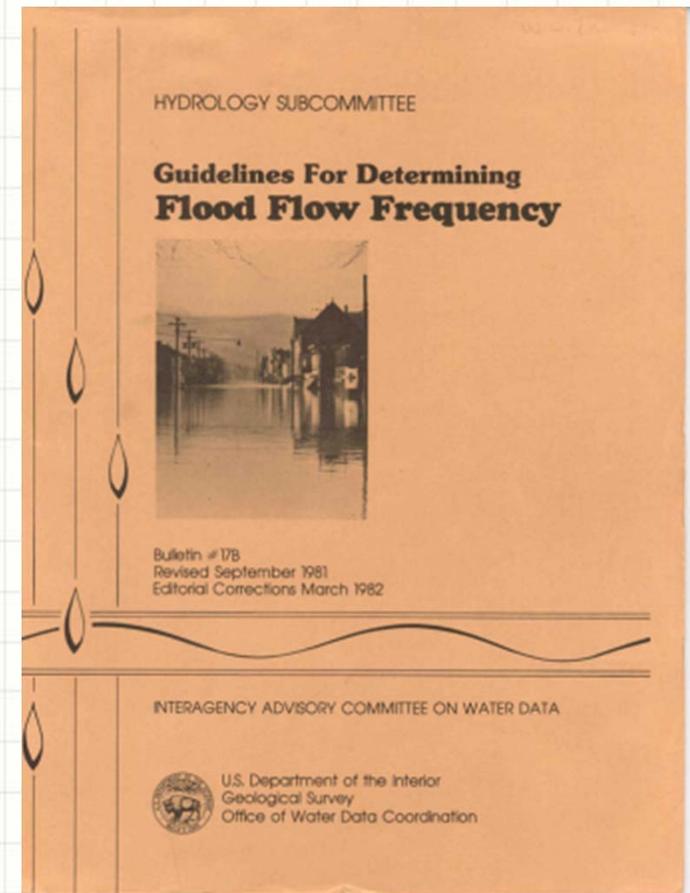
### Purpose and Goals:

- recommend procedures to increase the usefulness of the current guidelines for Hydrologic Frequency Analysis computations,
- evaluate other procedures for frequency analysis of hydrologic phenomena, and
- forward draft papers and recommendations to the Subcommittee on Hydrology of ACWI for appropriate action.

# SOH Hydrologic Frequency Analysis Workgroup (HFAWG)

## Updating Bulletin 17B Guidelines:

- Published in March 1982, based on research from 1960s and 1970s
- HFAWG is updating Bulletin 17B using pertinent research since 1982
- Incorporating new statistical procedures for analyzing historical floods and nonstandard flood data and adjusting for low floods
- [http://water.usgs.gov/osw/bulletin17b/bulletin\\_17B.html](http://water.usgs.gov/osw/bulletin17b/bulletin_17B.html)



## SOH Hydrologic Frequency Analysis Workgroup (HFAWG)

### Progress since July 2012 ACWI meeting

- \* June 2013 – HFAWG voted to accept recommended revisions to B17B
- \* August 2013 – SOH voted in favor of HFAWG drafting a new B17C
- \* April 2014 – completed the testing report on “Evaluation of Recommended Revisions to Bulletin 17B” – to be published as USGS report
- \* USGS developed PeakFQ 7.0 program that implements EMA/MGB with new confidence intervals
- \* Currently drafting a new Bulletin 17C to be published as USGS Circular – effort being lead by USBR, USGS, and USACE

# SOH Hydrologic Frequency Analysis Workgroup (HFAWG)

**Draft Bulletin 17C**  
**by**  
**December 2014**



Prepared in cooperation with the Hydrologic Frequency Analysis Work Group, Subcommittee of Hydrology

## Guidelines for Determining Flood Flow Frequency

### Bulletin 17C



Circular XXXX – DRAFT for review purposes only

U.S. Department of the Interior  
U.S. Geological Survey

## SOH Satellite Telemetry Interagency Workgroup (STIWG)

- **Dan Schwitalla, Chair** US Geological Survey (USGS)
- **Howard Diamond, Vice-Chair**, NOAA National Climatic Data Center

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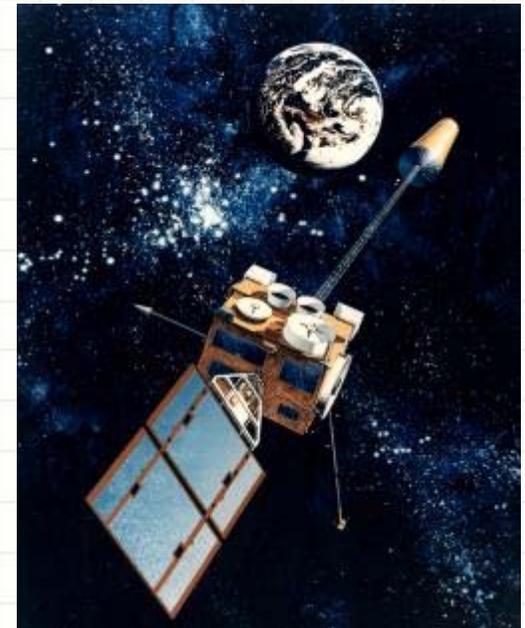
- User group for the Geostationary Operational Environmental Satellite (GOES) Data Collection System (DCS).
- Advises NOAA National Environmental Satellite, Data, and Information Service (NESDIS) on matters concerning satellite data relay user requirements
- Undertakes projects to benefit the GOES DCS community

## SOH Satellite Telemetry Interagency Workgroup (STIWG)

- **Dan Schwitalla, Chair** US Geological Survey
- **Howard Diamond, Vice-Chair** NOAA National Climatic Data Center

### Actions/Accomplishments:

- 118<sup>th</sup> STIWG Meeting - May 2014
  - DCS Administration and Data Distribution System (DADDS)
  - Emergency Data Distribution Network (EDDN)
  - Domestic Communications Satellite (DOMSAT)
- 100 baud DCP Transmitters to be replaced by May 2015
- Low Rate Information Transmission (LRIT) - alternative to DOMSAT



# Next Meeting

- SOH Website - <http://acwi.gov/hydrology/index.html>
- SOH Quarterly Meetings - <http://acwi.gov/hydrology/minutes/index.html>
- Joint Federal Interagency Conference April 2015 - [www.sedhyd.org/2015/](http://www.sedhyd.org/2015/)
- SOH HMWG - <http://acwi.gov/hydrology/Hydro-Modeling/index.html>
- SOH STIWG - <http://acwi.gov/hydrology/stiwig/index.html>
- LRIT - <http://www.noaasis.noaa.gov/LRIT/about.html>
- SOH ESEWG – <http://acwi.gov/hydrology/extreme-storm/index.html>
- SOH HFAWG - <http://acwi.gov/hydrology/Frequency/>
- Bulletin 17B - [http://water.usgs.gov/osw/bulletin17b/bulletin\\_17B.html](http://water.usgs.gov/osw/bulletin17b/bulletin_17B.html)
- PeakFQ - <http://water.usgs.gov/software/PeakFQ/>

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