

**MEETING OF
ADVISORY COMMITTEE ON WATER INFORMATION'S (ACWI'S)
SUBCOMMITTEE ON HYDROLOGY (SOH)**

**April 12, 2005 Silver Baron B room
Silver Legacy Hotel
407 N Virginia St., Reno, NV 89501**

AGENDA

1. Welcome and Introductions
2. Review and Approval of Agenda
3. Approval of Minutes from January 27, 2005 Meeting
4. Action Items from January 27, 2005 Meeting
5. Report of Hydrologic Frequency Analysis Work Group
6. Report of Hydrologic Modeling Work Group and Hydrologic Modeling and Sedimentation Conference
7. Report of Satellite Telemetry Work Group
8. Process for Nominating and Electing Officers for Fiscal Year 2006
9. Announcements and Business Reports from Member Organizations
10. Other Business
11. Plans for July 18th Meeting in Washington, D.C.
12. Adjournment

SUMMARY OF MEETING

PARTICIPATING

Will Thomas, Association of State Floodplain Managers (ASFM) (*by phone hookup*)
Martin Becker, Defenders of Property Rights (DPR) (*by phone hookup*)
Douglas Bellomo, Federal Emergency Management Agency (FEMA)
Sam Lin, Federal Energy Regulatory Commission (FERC) (*by phone hookup*)
Joe Krolak, Federal Highway Administration (FHWA) (*by phone hookup*)
Bill Merkel, Natural Resources Conservation Services (NRCS)
Tom Donaldson, National Weather Service (NWS)
Stan Brua, US Army Corps of Engineers (USACE) (*by phone hookup*)
Jeff Harris, USACE
Don Frevert, USDI Bureau of Reclamation (BOR)
Doug Glysson, US Geological Survey (USGS)
David Wells, US Environmental Protection Agency (EPA) (*by phone hookup*)
Steve Blanchard, US Geological Survey (USGS) (*by phone hookup*)

(Note: A total of 13 participated - six in person and seven by conference call; Phone call in # 888-808-5102, Password 3177)

MEETING HIGHLIGHTS

Don Frevert called the meeting to order at 12:30 p.m. EDT.

1. Welcome and Introductions

There were 12 participants representing 11 member organizations.

2. Review and Approval of Agenda

The meeting agenda was adjusted and approved as listed above.

3. Approval of Minutes from January 27, 2005 Meeting

The minutes of the January 27, 2005 subcommittee meeting have been posted on the subcommittee's website below. The minutes of the January 27, 2005 meeting were approved.

http://water.usgs.gov/wicp/acwi/hydrology/minutes/SOH_Minutes_012705Final.pdf

4. Action Items from January 27, 2005 Meeting

Action: All SOH members continued to distribute the call for papers and generally promoted the conference within their organizations.

5. Report of Hydrologic Frequency Analysis Work Group (HFAWG)

Will Thomas reported that the HFAWG has not met since the January 2005 meeting of the Subcommittee on Hydrology (SOH). The HFAWG has not completed the draft statement that would encourage greater coordination among Federal agencies on post-flood data collection. This statement will be completed and circulated to the SOH before the July 2005 meeting. He also reported that he had sent Carol Lewis, USGS, minutes of HFAWG meetings on July 24, 2003 and January 28, 2004 for posting on the HFAWG web site. With these minutes posted, all meetings of the HFAWG will be documented on their web site.

Based on discussions at the January 2005 SOH meeting, Martin Becker asked if the scope of the HFAWG should be expanded to include tidal and storm surge frequency analysis. Will Thomas felt that the HFAWG should concentrate more on improving Bulletin 17B at this time and possibly undertake the coastal frequency analysis issue at a later date. Doug Bellomo briefly

described the recently completed study by FEMA on new coastal mapping guidelines and indicated that the summary report for this study included recommendations on frequency analyses of tidal data. Doug indicated that FEMA is still reviewing the recommendations from this study so it was not clear what statistical procedures would be recommended for coastal frequency analysis. Coordination between the HFAWG and FEMA may be appropriate in the future on this issue.

Action: Don Woodward had previously volunteered to prepare a draft statement for the Subcommittee that would encourage greater coordination among federal agencies to identify the types of data collection, and suggest improved approaches for making the data available to the public through published reports and the internet.

6. Hydrologic Modeling Work Group Update and Federal Interagency Hydrologic Modeling Conference

Don Frevert reported that the 3rd Federal Interagency Hydrologic Modeling Conference will be held in conjunction with the 8th Federal Interagency Sedimentation Conference at the Silver Legacy Hotel in Reno, NV on April 2nd through 6th, 2006. It is anticipated that there will be six concurrent tracks. Presently there has been a relatively light submission of abstracts for the Hydrologic Modeling Conference and additional abstracts are welcomed and encouraged. The target date for abstract submittal is April 15, 2005 and there is the possibility that the date may be extended.

Presently about 10 at large abstracts have been received – and it is anticipated that additional sessions and/or abstracts will be submitted on the cooperative BOR-USGS Watershed and River Systems Management Program, the National Weather Service, the Corps of Engineers Hydrologic Research Center, Agricultural Research Service, the South Florida Water Management District and the Federal Energy Regulatory Commission.

Tom Donaldson reported that a poster and demonstration session is being planned and Jeff Harris noted that as many as 10 to 12 short courses may be proposed.

The organizing committee will be meeting on Wednesday, April 13 at the Silver Legacy Hotel in Reno to formulate the budget and set the registration fee for the conference, to discuss logistical issues related to audio-visual support, poster and demonstration sessions and field trips and to meet with hotel staff on other specific requirements.

Action: All member organizations are urged to continue promoting the conference – both potential presenters and potential attendees.

7. Report of Satellite Telemetry Interagency Work Group (STIWG)

Stan A. Brua, the chairman of STIWG reported that major activities since the previous SOH meeting on 27 Jan, 2005 have focused on soliciting support for the GOES-DCS system from the registered attendees for the March 2, 2005 NOAA Stakeholders Meeting, and setting up the

Spring meeting of the STIWG to be held on May 16, 2005 in Sacramento, CA, in conjunction with the National Hydrologic Warning Council (NHWC) conference to be held on 18-20 May. In addition, a GOES-DCS Technical Working Group (TWG) meeting is scheduled for May 17th and is open to all interested parties. An agenda for the STIWG meeting is available on our website at <http://water.usgs.gov/datarelay/stiwg/>. Additional details for the NHWC conference can be found at <http://www.alertsystems.org/>.

STIWG concerns regarding the GOES-DCS system are addressed in Attachment I. These concerns were provided to Robert Mason (USGS) to present at the NOAA Stakeholders Meeting. A copy had also been provided to Bill Parrish (Michael Baker Corp.) who had an opportunity to personally discuss the GOES-DCS and TP-40 update issues with Tim Keeney, NOAA Deputy Asst. Sec. for Oceans and Atmosphere. Bill also reported that the issues were brought up in the breakout sessions, and although they did not make it to the top of the list of issues, they are to be noted in the conference report.

8. Process for Nominating and Electing Officers for Fiscal Year 2006

Don Frevert noted that his term as Chair of the Subcommittee on Hydrology will expire in September and that Sam Lin will be replacing him as chair in October. Nominations for a new vice-chair to replace Sam should be submitted to Don and Sam by close of business Wednesday, June 1st. Self-nominations are welcome. Don will then circulate the list of candidates to the membership of the subcommittee and the next vice-chair will be elected at the July 18th subcommittee meeting.

9. Announcements and Business Reports from Member Organizations

National Weather Service

Tom Donaldson had no new developments to report.

NRCS

Bill Merkel reported below:

Water supply forecasts for western states are available through the NRCS National Water and Climate Center web site <http://www.wcc.nrcs.usda.gov>. They show below average water supply forecasts for the Pacific Northwest states.

NRCS is letting contracts for LIDAR topographic data in various parts of the US. Coordination of LIDAR and other digital elevation data are being done through the interagency National Digital Elevation Program <http://www.ndep.gov>. A Geospatial Data web site is available to download a variety of data types. Unique to the NRCS is digital and tabular soil data. The web site address is: <http://datagateway.nrcs.usda.gov>

NRCS has developed an ArcView GIS interface to the WinTR-20 hydrologic model. The Muskingum-Cunge flood routing has been incorporated into WinTR-20. At the last Federal Interagency Hydrologic Modeling Conference, a paper was written which discussed the mathematical formulation and comparisons with routings the full dynamic routing equations (St. Venant equations). More information is available through wcc.nrcs.usda.gov/hydro.

US Army Corps of Engineers

Jeff Harris reported that the Corps of Engineers is sponsoring the Tri-Service Infrastructure Conference August 2-5, 2005 in St. Louis. The theme of the conference is Reenergizing Engineering Excellence in DOD. Along with the general plenary session, the conference also contains Construction, Geotechnical, Materials, Mechanical, Electrical, Dam Safety, Structural, Hydraulics and Hydrology, Sedimentation and Ecosystems technical tracks. Conference proceedings will be available at a later date.

In February of this year, the Corps and the Bureau of Reclamation signed a partnership agreement to help ensure effective management of the Nation's water and related land resources. Management of the program on the Corps side will be handled by the Hydrologic Engineering Center.

FEMA

Doug Bellomo reported below:

- (1) The President's budget for FY06 and FY07 shows \$200m for Map Mod. FEMA is continuing program planning for FY07 and beyond.
- (2) The Multi-year Flood Hazard Identification Plan (MHIP) Version 1.5 is scheduled to be delivered late spring. Comments received on V1.0 of the MHIP included: a) inadequate funding for mapping the nation, b) proposed changes to scheduling of studies, and c) comments regarding definition of "modernized map".
- (3) FEMA is continuing to work on separating "guidelines" from standards. In the next few months procedure/policy memos regarding technical mapping issues will be released to assist/guide our Regions as they continue to update flood maps.
- (4) Key technical issues likely to be addressed involve: levees, coastal, topographic data collection, and more. Included in the coastal issues may be some technical guidance regarding statistical analyses of storm surge gage records.

Bureau of Reclamation

Don Frevert reported that good progress has been made by both Reclamation and USGS on the cooperative Watershed and River Systems Management Program Truckee River Basin modeling effort. The primary tools involved are the RiverWare modeling framework and the Modular Modeling System (MMS). Tools are presently being deployed and will be used for forecasting and operational decisions in the upcoming runoff season.

Reclamation and USGS are also planning the latest in series of parallel workshops with the Japanese Public Works Research Institute (PWRI) for the fall of 2005. These workshops will most likely be held in the state of Washington in October or November.

Don will be meeting with Jeff Harris to discuss some of the ongoing cooperative efforts between the two agencies.

Association of State Floodplain Managers (ASFPM)

Will Thomas had no new developments to report.

Defenders of Property Rights

Martin Becker had no new developments to report.

FERC

Sam Lin reported below:

FERC's six Dam Safety Technical Resources Groups (TRGs) have each recently met in face-to-face meetings at the Washington Headquarters office. The Hydrologic and Hydraulic (H&H) Group met last month. In the two days of meeting, the H&H Group discussed and developed action items according to the purposes, duties and responsibilities defined in the Charter which was established for the FERC Dam Safety TRGs.

For example, one purpose of the charter is to "Foster technology development and transfer among dam safety agencies and industry through seminars, workshops, committee participation and training opportunities." One resulting action item to achieve this guideline is our plan to hold an H&H TRG meeting in conjunction with the Federal Interagency Hydrologic Modeling Conference of April, 2006 in Reno.

The contribution of each TRG to the FERC dam safety program and their success will be assessed using the established performance measures. Those measures for the H&H TRG have been specifically defined during their meeting. An annual report of this TRG's accomplishments based on those measures will be presented to our management by the end of this fiscal year. Overall, the practice of six newly developed TRGs will further consolidate internal expertise across their nation-wide offices to beneficially implement the FERC Dam Safety Program's Enhancement Plan to assure public safety.

USGS

Steve Blanchard reported that the USGS budget for FY05 for streamgaging was reduced by about 2.5% from FY04 levels. FY04 funding for the National Streamflow Information Program (NSIP) was \$14.179 M; the FY05 funding is \$13.814 M. The President's budget for FY06 requests funding of \$14.152, which almost restores the NSIP to FY04 levels but doesn't account for inflation cost increases.

There has been a great deal of interest in the streamgaging program from many stakeholders. These stakeholders have been very active in making their views about the importance of the streamgaging program to Congress, OMB, and the Department of Interior.

US Environmental Protection Agency (EPA)

David Wells had no new developments to report.

FHWA

Joe Krolak had no new developments to report.

10. Other Business

Don Frevert asked attendees to send their report notes to Sam Lin and cc to him by next Tuesday (4/19) for meeting records.

11. Plan for July 18th Meeting in Washington, D.C.

FERC is pleased to host the July 18th meeting at our headquarters building (888 First Street, NE, Washington, D.C., 20426). The meeting will start at 1:00 pm EDT.

FERC needs to know how many people will be attending and teleconferencing in. Because of security concerns, FERC will need meeting participants to bring agency or government issued ID to check in. As the meeting attendees firm up, FERC will provide the security guards with everyone's information (name, agency, etc.) to expedite the entrance process.

Sam Lin will provide attendees directions, the conference call number and room details at a later date. Sam believes most attendees will use Metro, but he would also like to coordinate to get guest parking at the FERC building, if needed.

Action: The meeting participants entering the FERC building needs to preconfirm their attendance with Sam Lin

12. Adjournment

The meeting was adjourned at 1:45 p.m. EST.

Attachment I. Concerns about GOES Data Collection System

Summary Statement

NOAA/NESDES operates the GOES Data Collection System (DCS) which has become a crucial element of our nation's emergency preparedness systems. For example, it has been estimated that 99% of data used for NWS flood warnings passes through the GOES DCS. The GOES DCS user community, which has made major investments in technologies that use this system, is concerned that

The GOES DCS has not been given adequate priority and that continued, reliable operation of GOES DCS may be in doubt.

Because the GOES DCS is such an important asset for monitoring our nation's environmental conditions, the GOES DCS user community requests that NOAA develop a strategic plan for its continued operations to include:

- 1) Identifying sources of funding for operations, maintenance, and development, and
- 2) Developing a plan for the establishment of a robust backup system.

Importance of GOES DCS

The GOES DCS is used extensively by numerous Federal, State, and local governments as well as by private organizations to provide current information about hydrologic, meteorologic, and oceanic conditions. The GOES DCS user community includes:

- National Weather Service
- National Ocean Service
- National Climatic Data Center
- National Data Buoy Center
- United States Army Corps of Engineers
- National Interagency Fire Center(NIFC)
- National Forest Service
- Bureau of Land Management
- United States Geological Survey
- Bureau of Reclamation
- National Park Service
- Department of State (International Boundary & Water Commission)
- State of California
- State of Colorado
- Many Canadian Environmental agencies
- Many South and Central American Environmental agencies

The data collected using the GOES Data Collection System help protect the lives and property of citizens throughout the U.S. and much of the Western hemisphere during fires, floods, hurricanes, tsunamis, and other natural disasters or severe conditions.

Lack of Adequate Funding and Support

The GOES DCS community has invested a great deal into technologies utilizing the GOES DCS, and also in the GOES DCS itself. Because NOAA has not been directly funded to operate the GOES DCS, the needed improvements have often been funded by the user agencies themselves along with some ad-hoc funding from NOAA management.

In the present fiscal climate with the prospect for continuing budget cuts, the GOES DCS users are very concerned about the future of the GOES-DCS because NOAA does not have a formal mandate to fund and operate it. NOAA recently issued a Request for Information (RFI) to the private sector soliciting input for a new approach to operating the system. Should NOAA decide to take the DCS into a new direction, our investments, and our emergency preparedness systems may be in jeopardy unless the transition of existing systems is taken into account.

Lack of Adequate Backup

The GOES DCS user community has long felt that such an important system is too vulnerable because there is no backup to the ground system at the Command and Data Acquisition (CDA) facility at Wallops Island, Virginia. A study was completed by NOAA/NESDIS which recommended that a backup for the GOES DCS be placed in the Suitland Federal Center, in Suitland, Maryland and be remotely operated by the current Wallops Island staff. The GOES DCS users feel that this is not an acceptable backup system for the GOES DCS for three reasons:

1. Suitland, Maryland is in the same general location as Wallops Island, Virginia, and is therefore susceptible to the same events, such as hurricanes or regional power outages, that affect Wallops Island.
2. The proposed backup strategy requires that, after a catastrophic failure at the Wallops Island facility, personnel from Wallops Island be moved to Suitland in order to make the backup system operational. During a catastrophic event, this might take hours if it could be done at all.
3. Suitland, Maryland is in the Washington, D.C. Corridor which makes it a high-risk target for terrorist activities.

During the backup study, it was learned that the command and control of the GOES spacecraft itself is available only at Wallops Island, Virginia and Suitland, Maryland which puts the entire spacecraft system at risk if both facilities were disabled by the same event.

After the study was completed, the implementation of any backup system was suspended because of a lack of funding.