## SUBCOMMITTEE on SEDIMENTATION April 5, 2012, 9:00 AM, EST

The meeting will be held at the USGS Office of Surface Water 415 National Center 12201 Sunrise Valley Drive Reston, VA 20192

To dial into Teleconference: 703.648.4848 code 27513

#### **WebEx Information**

Topic: (18) SUBCOMMITTEE ON SEDIMENTATION

Date: Thursday, April 5, 2012

Time: 8:00 am, Eastern Daylight Time (New York, GMT-04:00)

Meeting number: 711 425 788

Meeting password: (This meeting does not require a password.)

Host Key: 781069

Please take the time to review the Prospectus from 2007-2012, available at our website: http://acwi.gov/sos/Prospectus2007 2012 online 12 18 2007.pdf.

If you are making a presentation during the Subcommittee meeting, please prepare a written summary of your comments so that they are correctly represented in the minutes.

If you have a handout that you would like to be included as an Appendix to the minutes, please send it to me no later than Monday, April 2, at <a href="mailto:texasgarsjo@sbcglobal.net">texasgarsjo@sbcglobal.net</a>.

If you have a .ppt for the WebEx, please send it to jrgray@usgs.gov prior to Wednesday, April 5.

Thank you for your help, I am looking forward to the meeting and visiting Reston and the home of the U. S. Geological Survey. Please feel free to contact me if you have any questions prior to the meeting.

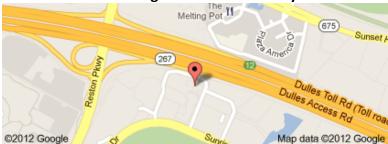
# Marie Marshall Garsjo

Marie Marshall Garsjo Chair, ACWI Subcommittee on Sedimentation Home 817-563-0091; Cell 817-209-8993

#### **ACCOMMODATIONS**

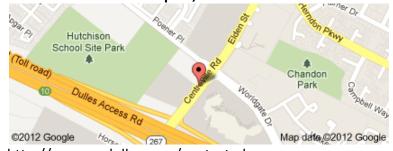
The following include several suggestions for places to stay that are near Dullas International Airport and the USGS headquarters.





http://www.starwoodhotels.com/westin/property/overview/index.html?propertyID=1752 11750 Sunrise Valley Drive; Reston, VA, 20191; Phone: (703) 391-9000. Fax: (703) 391-9115. Free Airport pick-up and drop-off, free shuttle service within surrounding area, free breakfast, on-site restaurant

Crowne Plaza Dulles Airport, Herndon VA



http://www.cpdulles.com/contact.php

2200 Centreville Road, Herndon, VA 20170, Phone: (703) 471-6700, Fax: (703) 742-8965 Free airport shuttle, free breakfast with government rate, on-site restaurant

#### Holiday Inn Express Reston/Herndon Dulles Airport

http://www.hiherndon.com/

485 Elden Street, Herndon, VA 20170, Phone: (703) 478-9777, Fax: (703) 471-4624

Deluxe continental breakfast, free airport shuttle, no on-site restaurant

**Driving Directions from Dulles Airport:** Route 267 East (Dulles Access Road), Exit 11-Farifax County Parkway North (Route 7100), Exit-Elden Street West (Route 606), Hotel located ½ mile on Left.

#### SUBCOMMITTEE on SEDIMENTATION

## Agenda

April 5, 2012 9:00 AM, EST

9:00 Request and thank volunteer for note taking
Roll Call
Review agenda, any changes?

#### **OLD BUSINESS**

9:15 Review and accept minutes of January 24, 2012 meeting Garsjo

9:30 National Stream Morphology Database John Gray/Marie Peppler

Marie Peppler will report on the progress made by the adhoc committee formed to explore recommendations made at a workshop held in April, 2011. This resulted in the submission of a news brief in early March 2012 for publication in AGU Eos. Jerry Bernard provided a colleague review of the draft news brief, which will be authored by Matt Collins, Faith Fitzpatrick, Marie Peppler, Joe Schubauer-Berigan, and John R. Gray. The draft is available upon request. Marie will also discuss the next steps that the subworkgroup have been working on in developing the National Stream Morphology Database

9:45 Letter of support on NWRI National Stream Morphology Database J. Gray/M. Muste Discussion included as Appendix A, letter of support included as Appendix B.

Are these documents ready to be posted to our website? (in absentia)

10:00 BREAK

10:30 RESSED John Gray

John will include a summary of his Briefing to Dave Wegner, Senior Democratic Staff, Subcommittee on Water Resources and Environment, Committee on Transportation and Infrastructure, on The Hill January 30, 2012.

12:00 Lunch

1:15 Sediments Hydro-Acoustics Workshop summary, held 3/20-22/12 John Gray

1:30 SEDHYD Doug Glysson

2:00 Reservoir Sustainability Workshop Tim Randle

2:15 BREAK

#### **NEW BUSINESS**

2:30 Federal Interagency Sedimentation Project (FISP) Mark Landers Mark, FISP Chief, wishes to reinstate their working relationship with the SoS, and would like to secure a standing spot on the SoS agenda where he will provide regular updates.

FISP is staffed by USGS and USACE employees located at the USACE Waterways Experiment Station in Vicksburg, Mississippi. It is overseen by the Subcommittee's Technical Committee, currently chaired by the USGS, which consists of agencies that actively fund FISP. At present, these agencies are the USGS, USACE, BLM, BOR, ARS, and USFS. The Technical Committee is responsible for identifying and prioritizing Federal technical sedimentation issues. Those sediment and water-quality issues that are deemed of sufficiently high priority by the Technical Committee and considered tractable are placed on the priority list of the FISP. FISP supplies standardized, calibrated, sediment and water-quality samplers, and other instruments to Federal agencies and to foreign governments.

2:45 Prospectus 2007 – 2012 update Input has been provided by Paul Makowski Garsjo

3:15 Next meeting Garsjo June 21, Fort Worth, TX, hosted by the NRCS. Jon Fripp will coordinate WebEx.

#### Fall meeting

The fall meeting is tentatively scheduled for Monday, August 20, in Port Angeles. The Elwha Science Symposium will be held August 21-23, 2012, in Port Angeles, and we could join their field trip to Elwah Dam on August 21.

3:30 Adjourn.

## **APPENDIX A: Marion Muste's presentation to April 5 WebEx**

A proposal titled "Development of Design Specifications for the National Stream Morphology Database" was submitted to USGS – National Institutes for Water Resources for the 104(g) Competitive Grants Program for FY2012. The requested budget is: \$139,330 (plus a 1:1 match funds) for two years. The proposal is a direct outgrowth of the SOS National Stream Morphology Database (NSMD) workshop held in April 2011 (Middleton, Wisconsin). The proposal team comprises most of the experts charged by SOS National Stream Morphology Database workgroup to solve the technical details of the platform. The proposal team is provided below:

Name	Agency	Role in this proposal	Proposal tasks
Muste, M.	UI, CUAHSI	Principal Investigator (PI)	a) critically review available morphology data and their provenance
Booth, N.	USGS	Co-Investigator	
Peppler, M.	USGS	Co-PI	
Fitzpatrick, F.	USGS	Co-Investigator	
Ruhl, P.	USGS	Co-Investigator	b) critically review databases and information systems relevant to the NSMD;
Collins, M.	NOAA	Co-Investigator	
Wille, K.	USBR	Co-PI	
Fripp, J.	NRCS	Co-Investigator	
Hansis, B.	WDNR	Co-Investigator	c) conceptualize and formulate the design specifications for the NSMD; and
Keefer, L.	ILSWS	Co-PI	
Demir, I.	UI	Co-PI	
Cox, A.	CSU	Co-PI	
Watson, C.	CSU	Co-Investigator	d) assemble an NSMD blueprint for an actual watershed using existing resources.
Merwade, V.	PU	Co-PI	
Hersh, E.	UT	Co-Investigator	

The research approach embraces each agency's strengths and seeks to utilize the best available options to move quickly towards a baseline capability that fulfills the NSMD's development objectives. The nature of the proposed research can be assigned to operational science, which relies on services involving all technical aspects of water resource information systems, including system interoperability and data exchanges, enterprise GIS and geo-Intelligence, integrated information communication, and the acquisition and management of observations for supporting collaborative modeling and decision making. Consequently, the team is large and diverse, as no single institution can foster this comprehensive, multi-disciplinary research. Proposal activities include exploratory research (literature and data reviews, surveys, and syntheses), conceptual design, practical implementation, dissemination, and training. The research will be conducted under the direct supervision of and in constant interaction with the SOS NSMD workgroup, culminating in the annual workshop deliberations.

The design specifications for the NSMD developed through the present research will lay the foundation for a well-documented, feature-reach NSMD. The benefits of achieving a robust and widely accessible NSMD are potentially enormous because such a platform will amplify the value of the substantial investments made in each stream morphology data collection effort by making those data available to enhance the work of many public and private sector user groups. The NSMD's benefits extend well beyond our community to support researchers and practitioners in stream restoration, hydraulics and hydrology, ecology, and water quality and can ultimately serve as an authoritative basis for water-related planning from national to local levels.

### APPENDIX B: SoS (Marion Muste)'s letter to USGS

# United States Department of the Interior



U. S. GEOLOGICAL SURVEY Office of Surface Water 415 National Center Reston, Virginia 20192

February 21, 2012

Dr. John Schefter Chief, Office of External Research U.S. Geological Survey 424 National Center, 12201 Sunrise Valley Drive Reston, VA 20192

**RE:** Support for the National Water Resources Institutes Proposal, "Development of Design Specifications for the National Stream Morphology Database"

#### Dear Dr. Schefter:

This letter is written in support of the subject proposal on behalf of the Subcommittee on Sedimentation, Advisory Committee on Water Information, on which Marie Marshall Garsjo serves as Chair, and John R. Gray as the U.S. Geological Survey, (USGS) representative; and the USGS, Office of Surface Water, in which John is a staff hydrologist.

The science of stream morphological assessment has matured and expanded substantially in the last two decades, with applications including stream corridor restoration, dam decommissioning and removal, habitat assessments, and bridge safety. The cost for producing stream morphology data for a single site is considerable, and the U.S. locations at which such work has been, is, or will be performed likely exceeds 10<sup>5</sup> sites.

Unfortunately, the data collected as part of various programs tend to end up in spreadsheets and other electronic repositories that are generally unknown and inaccessible to the user community. Successful, and, more importantly, failed management efforts may well be quantified by these data but because of a lack of accessibility to this data, some practitioners are doomed to repeating earlier mistakes.

The ultimate effort on which this proposal is based – development of a National Stream Morphology Database – is a "no-brainer" in that it will store and serve data at comparatively inconsequential costs compared to those borne by the data collectors/contributors. Additionally,

it will provide data standards that promise to minimize inconsistencies that stem from use of different techniques to obtain a given metric. Ultimately, fewer stream morphology data will need to be collected if this database is developed.

The USGS and Subcommittee on Sedimentation, ACWI, are firmly in support of this critical effort to development design specifications for a National Stream Morphology Database. Accomplishing this critical step should render actual database development as a relatively straight-forward programming project.

We look forward to the proposal receiving a full and fair evaluation in light of the strong need for a National Stream Morphology Database.

Sincerely yours,

# John R. Gray and for Marie Marshall Garsjo

Marie Garsjo, Chair, and John R. Gray, USGS Member Subcommittee on Sedimentation Advisory Committee on Water Information

# APPENDIX C: Proposed revisions to the 2007-2012 Prospectus Paul Makowski, March 23, 2012

All of my comments relate to Part II. Sediment Issues Confronting the Federal Sector, 2007.

- 1. The items on page 2 are identified by solid and open bullets. Further on in Part II the items are discussed in detail in sections having letters for major headings and numbers for minor headings. This scheme should be used rather than the bullet-types on page 2.
- 2. There is overlap between *Reservoir Sedimentation* and *Dam Removal or Rehabilitation*. I suggest the following:
- B. Reservoir Sedimentation
- 1. Assessment
- 2. Sediment Management
- 3. Dam Removal (This topic would be removed from *River Channel Processes*. Rehabilitation is not needed; we are not talking about dams.)
- 3. In *River Channel Processes* I would remove "port" from the first bullet and move it under *Coastal Processes*.
- 4. The effects of dam removal would be discussed under Geomorphic Processes.
- 5. I would rename Interstitial Hydraulics and Sediment Movement to Benthic Habitat
- 6. I would add a topic of *Stream Restoration*.
- 7. Because database management is discussed as its own topic, I would include it in the list.

Including these suggestions, the outline would become:

- A. Sediment Production from Land-Use Change
- 1. Sediment-Related Hazards
- 2. Environmental Concerns
- B. Reservoir Sedimentation
- 1. Assessment
- 2. Sediment Management
- 3. Dam Removal
- C. River Channel Processes
- 1. Channel Operation and Maintenance
- 2. Geomorphic Processes
- 3. Stream Restoration

- 4. Benthic Habitat
- D. Coastal Processes
- 1. Coastal Sediment Delivery and Management
- 2. Effect of Episodic Events on Coastal-Sediment Transport and Morphology
- 3. Port Operation and Maintenance
- E. Database Management