

Subcommittee on Sedimentation
April 3, 2014
Meeting
Bureau of Reclamation, Denver Federal Center, Denver, CO
Minutes

Subcommittee on Sedimentation (SOS) Chair Amanda Cox called the meeting to order at 9:00 a.m. MDT. The minutes were prepared by Peter Nelson. Present were:

- Amanda Cox, Chair, Assistant Professor, Missouri Water Resources Research Institute (MWRRI), Saint Louis University, St. Louis, MO
- Tim Randle, Vice-Chair, Manager of the Sedimentation and River Hydraulics Group, Bureau of Reclamation (Reclamation), Lakewood, CO
- Jerry Bernard, via webex, retired NRCS, SEDHYD Technical Program Coordinator, Stafford, VA
- Jenifer Bracewell, via webex, USGS, RESSED FilemakerPro Database Programming Team Member, Reston, VA
- Jeff Bradley, via webex, WEST Consultants representing ASCE, Salem, OR
- Matt Collins, via webex, Hydrologist, National Marine Fisheries Service, National Oceanic and Atmospheric Administration (NOAA), Gloucester, MA
- Deborah Cooper, via webex, Research Hydraulic Engineer, Engineer Research and Development Center, U.S. Army Corps of Engineers (USACE), Vicksburg, MS
- Alan Ellsworth, via webex, U. S. National Park Service
- Marie Marshall Garsjo, via webex, retired geologist, Natural Resources Conservation Service (NRCS), Fort Worth, TX; SEDHYD FISC Technical Program Chair
- John R. Gray, via webex, Scientist Emeritus, Office of Surface Water (OSW), USGS, Reston, VA
- Meg Jonas, via webex, Research Hydraulic Engineer, U.S. Army Corps of Engineers (USACE), Alexandria, VA
- Mark Landers, via webex, Federal Interagency Sedimentation Project Chief and OSW, USGS, Atlanta, GA
- Kevin Laurent, via webex, USGS RESSED FilemakerPro Project Database Management System Expert, USGS, Patuxent, MD
- Paula Makar, Civil Engineer (Hydraulics), Sedimentation and River Hydraulics Group, Reclamation, Lakewood, CO
- John Moore, via webex, National Geologist, Natural Resources Conservation Service (NRCS), Washington, D.C.
- Peter Nelson, Assistant Professor, Colorado Water Resources Research Institute (CWRI), Colorado State University, Fort Collins, CO
- Matt Römken, Director National Sedimentation Lab, and Researcher in erosion processes, Agricultural Research Center (ARS), Oxford MS
- Joseph Schubauer-Berigan, via webex, Research Ecologist and Chief, Environmental Stressors Management Branch, USEPA, Office of Research and Development, National Risk Management Research Laboratory, Cincinnati, OH

Minutes from January 2014 SOS Meeting

Cox

The minutes from the January 22, 2014 meeting will be circulated by email for approval.

Federal Interagency Sedimentation Project

Landers

Mark gave a summary of the currently funded FISP research projects. One project discussed aims to develop techniques using multispectral imaging to indicate suspended sediment characteristics (a 'low level' test). An iPhone app (<http://umaine.edu/news/blog/2014/03/06/crowdsourcing-data/>) has recently been developed with similar capability.

SEDHYD 2015 Planning Overview

Makar/ Bernard

SEDHYD is April 19-25, 2015 at the Peppermill Hotel in Reno, NV

The website is up and running: www.SEDHYD.org – many thanks to Jerry B and Darren Nezamfar (USACE)!

We have 3 coordinator positions still open – field trips, poster/demo, proceedings. This is an opportunity to help justify attendance at the conference. Please contact Paula, Doug or Jerry B with suggestions.

Hotel & Exhibit Contractors

Exhibit contractor RFPs have been sent out. Mark Landers, USGS, is the Exhibits Coordinator.

Doug will be in Reno in May, please provide any questions for Doug to bring up by May 1. He would like an itemized list of equipment for registration and presentations. Last year in Reno, it was suggested that we might be able to use computers from USGS training. Paula checked with Russell Smith at 303-445-4675 and got a positive response. Paula will check back and provide an update.

Keynote Speaker – Tim contacted Gerry Galloway last year and will contact him again.

DOI Approval and Agency Conference Attendance

Doug will continue to check with Wendy Norton on DOI permission to hold meeting. Agency contacts for the conference are Mark Landers USGS, Jerry Webb USACE, Claudia Hoeft (who will find contacts from USFS) and John Moore for NRCS, Matt Romkens from ARS, Tim Randle from Reclamation (who will find contacts for NWS, BLM, NPS), and Matt Collins for NMF. These contacts will facilitate agency approval for the conference, reach out to people in their agencies to encourage attendance, and keep the conference committee informed on likely attendance numbers. Their contact information will be added to the website.

The question was raised on whether papers would be published if authors couldn't attend. Current policy is no, but discussion ensued about changing this to encourage abstract submittals.

Paula Makar made a motion that each agency contact be allowed to offer the possibility of loosening restrictions for publication when the author is unable to attend the conference due to travel restrictions. The motion was seconded by John Moore and passed unanimously.

Kevin Laurent suggested contacting Congressional staffers who might like to attend the conference. Please send names & contact information to Paula and Doug.

Technical Program – Jerry B

Abstract submittals have already begun. The question was raised as whether to require posters to submit a paper, agreement was to keep this optional, but abstracts would be published if a paper was not available. Jerry B will look into possibility of publishing pdfs of posters. There was agreement not to publish pdfs of presentations at this time.

Schedule deadlines: Abstracts – June 23, 2014; Papers – November 23, 2014; Presentations – April 15, 2015.

Registration - Paula

We are going with Active to manage web registrations again. We will need helpers to man the registration desk during the conference. Prices are in the table below.

REGISTRATION TYPE	Early, by 2/28/15	on site and after 2/28/15
Regular	\$ 400.00	\$ 450.00
Student	\$ 170.00	\$ 200.00
Senior*	\$200 if presenting \$300 if not presenting	
Spouse	\$ 80.00	\$ 110.00
Single Day		
Monday	\$290	
Tuesday	\$265	
Wednesday	\$320	
Thursday	\$240	

* 65 or over, working < 25% of the time.

Student Program – Amanda

We will continue the student program again this conference. The plan is to have winners from each conference, one for papers and one for posters for a total of 4 winners. Prizes are expected to be ~\$ 500 each.

Short course – Jeff B

We have a few short courses referred from last year. We would like agency contacts to encourage other potential courses and send the information to Jeff B.

ASTM Committee D19 on Water

Gray

John Gray has been in touch with Ron Ferrari (USBR), who has noted that because ASTM Committee D19 is concerned with turbidity measurements, and because the USGS is a leader in new turbidity measurement techniques, someone from USGS should be on the D19 Committee. John Gray will forward this request to USGS Office of Surface Water Chief Robert Mason and the Office of Water Quality Chief.

REServoir SEDimentation

Laurent/ Gray

PROGRESS:

1. NEW DATA RELEASE PENDING: Although we intended to have released next version of database by now, position expressed was that it would be a mistake to press forth until a resolution is provided by the Corps on duplicate records associated with some of the records provided by 16 Corps Districts. The last data release was in April 2013.
2. DATA EXPLORER FUNCTIONALITY UPDATE: the original data-explore function (http://water.usgs.gov/osw/ressed/data_explorer/index.html) developed in a year ago is being upgraded to be more useful to the public.
3. WEB APPLICATION INITIATION OF PLANNING/WORK: A business plan to enable web data entry for initial use by Subcommittee on Sedimentation (SOS) organizations was submitted to the SOS on April 3; to-date, no responses have been received. This is either good news ("it's a good plan") or questionable news ("no one has looked at it?"). A companion operational document is in development to complement the business plan. Both documents will be vetted before programming for the web-based application initiates.
4. RESSED SERVER NOW UNDER CONTROL OF USGS OFFICE OF SURFACE WATER: The original RESSED server at the USGS-HIF-Bay St. Louis, MS, facility was being shut down, and the OSW offered to host the website. Initial problems in the server switch (problems with the Data Explore module) have been resolved. All indications are that the switch resulted in a fully functional and transparent application.
5. 10th Federal Interagency Sedimentation Conference Paper: An update to the 2010 9th Federal Interagency Sedimentation Conference RESSED paper is proposed for the April 2015 conference (if it is held).

PLANS THROUGH FY14:

1. DATA MERGE: Merge latest Corps data and release dataset in three different formats from RESSED website (dependent on Corps handling of duplicate-record issue).
2. WEB-BASED APPLICATION: Finish operational plan for RESSED web data-entry application, and initiate programming.
3. LEADERSHIP: Gray remains lead of the RESSED project but will necessarily cycle out of this role as FY14 closes out.

Attached as appendices to the minutes are a proposed outline for the development and maintenance of a RESSED On-line User Interface, and a spreadsheet outlining the service level implementation phases. These have been distributed to the SOS for review and comment.

Reservoir Sustainability

Randle

- Finalize list of SOS Task committee on Reservoir Sedimentation and Sustainability
- Update membership list for the National Reservoir Sedimentation Team
- Agency reservoir sustainability activities
- Ideas to promote sustainability to policy makers

The SOS task Committee on Reservoir Sedimentation and Sustainability was reviewed:

- Tim Randle, USBR, Chair
- Meg Jonas, USACE
- Lee Koss, BLM
- Peter Nelson, CWRRRI
- Jon Fripp, NRCS
- Marie Garsjo, NRCS (retired)
- John R. Gray, USGS (retired)

Other SOS member organizations are invited to participate. The first meeting of this committee took place the afternoon of April 3, 2014 to brain storm questions that the National Reservoir Sedimentation Team could address. A suggestion was made to convene a workshop of this team during summer or fall 2014 to address these questions and plan a short course to be offered at SEDHYD-2015.

The National Reservoir Sedimentation Team will work under the direction of the SOS task committee. The suggested membership on the National Reservoir Sedimentation Team is listed below:

- Greg Morris, Gregory Morris Consultants (confirmed)
- George Annandale, Golder Associates (confirmed)
- Kyle Juracek, USGS, Lawrence, KS (confirmed)
- Ron Ferrari, USBR (retired), Lakewood, CO
- Kent Collins, USBR, Lakewood, CO (confirmed)
- Sean Kimbrel, USBR, Lakewood, CO
- Additional USACE members
- TVA member?

Specific names from some agencies need to be identified and confirmed.

Reporting of agency reservoir sustainability activities was discussed. Potential ideas ranged from formal annual reports from each agency to less formal reports on activities of special interest. The consensus was for SOS member organizations to periodically submit photographs (with detailed captions) of interesting sedimentation activities for posting on the SOS website.

Ideas to promote reservoir sustainability to policy makers were discussed. Ideas included the resolution to ACWI, a white paper calling for specific actions, focus on reservoir sustainability at the SEDHYD-2015 conference, and the SOS website.

Meg Jonas noted that a USACE regulation in force requires annual sedimentation notes, and she made a motion that these be posted by the SOS. Tim Randle seconded, and the motion passed unanimously.

Prospectus 2007 – 2012 update

Jonas

There has not been success in getting dedicated funding for a prospectus update. Meg Jonas would like more of a holistic approach that cuts across agency boundaries. She noted that USACE is collating a list of research and development needs across that agency, and this may be used as a starting point for developing the prospectus. Marie Garsjo received comments on this in the past and may have a list of volunteers willing to work on the prospectus. Marie will send Meg Jonas and Amanda Cox documentation from the last time this was worked on, and they will use that information to begin identifying a Task Committee for this.

National Stream Morphology Data Exchange Proposals

Collins

Marian Muste resubmitted the USGS-NIWR proposal to fund NSMDE development on February 20, 2014, to the Iowa Water Center Institute (IWC). We tragically learned on March 16 that the proposal was mishandled and the March 6 deadline for institutes and centers to submit the proposals to grants.gov was missed. Though there appears to have been a few issues in the series of events that transpired since IWC received Marian's proposal on Feb. 20, the ultimate mistake was made by Iowa State University's Office of Sponsored Programs confusing a 4pm EST deadline with 4pm CST. We also learned that grants.gov has no flexibility to accept proposals received after the deadline.

Amanda Cox resubmitted an NSMDE development proposal to the NASA ROSES Terrestrial Hydrology program (A.16) on July 15, 2013. She originally submitted the proposal in March, 2013, to the ROSES A.26 Rapid Response and Novel Research in Earth Science program and was given a quick response with advice to resubmit to the Terrestrial Hydrology program. ROSES representatives felt that program was a better match. Amanda has been advised that a response to the recent submission should be forthcoming in March 2014, but we have not heard as of this meeting.

Presently, the work group is considering responding to a solicitation for proposals from the USGS Powell Center (http://powellcenter.usgs.gov/proposal_process.php).

Technical Update: Elwha River

Randle and Bountry

Jennifer Bountry provided an excellent technical presentation on the Elwha River Restoration Project near Port Angeles, WA. Elwha Dam was completely removed by September 2012. Glines Canyon Dam

has been mostly removed by April 2014. Lake Aldwell was formed by Elwha Dam and contained an estimated 4.8 million m³ of sediment. Lake Mills was formed by Glines Canyon Dam and contained an estimated 16 million m³ of sediment. By September 2013, only a portion of the reservoir sediment had been eroded from either reservoir:

- 23 percent of sediment eroded from Lake Aldwell (1.1 million m³)
- 37 percent of sediment eroded from Lake Mills (6.0 million m³)

The sediment eroded and released from the two reservoirs was equivalent to about three decades of average annual sediment load. However, the Elwha River was able to accommodate this large increase in load without channel avulsions and without a significant change in channel planform. Aggradation did occur as the coarse sediment wave passed downstream.

Rob Hilldale also provided an excellent technical presentation on the bedload impact sensors installed on a weir crest at the Elwha Surface Water Intake for the City of Port Angeles. A total of 72 stainless-steel impact plates were installed (35 cm x 50 cm x 1.5 cm) along the weir crest. A geophone or accelerometer was installed on the underside of each steel plate to detect and count impacts by gravel and cobble bedload. Field bedload measurements are being used to calibrate the empirical correlation between the number of impacts and the mass transport of the bedload. Similar systems have been operating in Europe, but this is the first of its kind installation in North America.

New Business

Cox

SOS should include a technical presentation as a standing agenda item for each semi-annual face-to-face meeting. Matt Collins volunteered to coordinate a technical presentation and field trip to a dam removal site for the fall 2014 SOS meeting to be held in Washington D.C.

Set date and location of Summer 2014 meeting

Cox

Amanda Cox will setup a Doodle poll online to identify a date during the last week of June for the SOS summer conference call/WebEx meeting.

The meeting was adjourned at 12:17 MDT