

Subcommittee on Sedimentation
January 24, 2013
Teleconference/Webinar
Minutes

Subcommittee on Sedimentation (SOS) Chair Marie Marshall Garsjo called the meeting to order at noon EST. Thanks to Meg Jonas for taking the minutes. Present were:

- Marie Marshall Garsjo, Chair, and retired geologist, Natural Resources Conservation Service (NRCS) National Design, Construction and Soil Mechanics Center, Fort Worth, TX; SEDHYD FISC Technical Program Chair
- Jerry Bernard, retired NRCS, SEDHYD Technical Program Coordinator
- Jennifer Bracewell, USGS, RESSED FilemakerPro Database Programming Team Member, Reston, VA
- Matt Collins, Hydrologist, National Marine Fisheries Service, National Oceanic and Atmospheric Administration (NOAA), Gloucester, Maine
- Amanda Cox, Research Scientist in Hydraulics Lab, Colorado Water Resources Research Institute, Colorado State University (CWRRRI)
- Alan Ellsworth, Water Resources Division Liaison for National Park Service (NPS), Washington D.C.
- Jon Fripp, Stream Mechanics Engineer, NRCS, Fort Worth, TX
- John R. Gray, National Sediment Specialist, Office of Surface Water, USGS, Reston, VA
- Doug Glysson, Retired Hydrologist, Office of Water Quality, USGS, Washington D.C., SEDHYD Joint Conference Chair
- Meg Jonas Assistant Levee Safety Program Manager, U.S. Army Corps of Engineers (USCOE), Washington D.C. (note taker)
- Lee Koss, National Lead for Water, Bureau of Land Management (BLM), Washington, D.C.
- Kevin Laurent, RESSED FilemakerPro Project Database Management System Expert, USGS, Reston, VA
- Paula Maker, Hydraulics Engineer, Sedimentation and River Hydraulics Group, Bureau of Reclamation (BOR), Denver, CO
- John Moore, National Geologist, (new NRCS alternate), Washington D.C.
- Tim Randle, Manager of the Sedimentation and River Hydraulics Group, BOR, Lakewood, CO
- Matt Römken, Director National Sedimentation Lab, and Researcher in erosion processes, Agricultural Research Center (ARS), Oxford MS
- Joseph Schubauer-Berigan, Research Ecologist and Chief, Environmental Stressors Management Branch, USEPA, Office of Research and Development, National Risk Management Research Laboratory, Cincinnati, OH
- David Wegner, Senior Democratic Staff, Subcommittee on Water Resources and Environment, Committee on Transportation and Infrastructure

Minutes: The minutes from the August 20, 2012 meeting in Port Angeles were approved.

REServoir SEDimentation, RESSED: John Gray

- John presented status yesterday, January 23, at quarterly USGS-USACE coordination meeting.
- Data entry functions are ready for use, and data reports are being developed. They are developing a provision for checking existing data prior to adding more data.
- The runtime version has just been released to 38 Corps districts, and training will be done within the next several weeks.
- USGS has committed to \$75k annual funding (from WaterSMART program) for maintenance; the funding presupposed no significant reductions in WaterSMART program funding.
- Since it is funded by USGS, RESSED must adhere to the mission of the USGS, “to collect, archive, and disseminate the data to the public” (per OMB memorandum 92.01). John would like to see public release within one to two years, which is achievable. A second goal is to have the public input data, however this would require more funding than the \$75k.
- Kevin L – We need to say we are not correcting any data. Since we don’t have a fully automated database, we would have to devote resources to inputting the data, and for user support. Data in RESSED are geo-referenced, and searchable by location. It can be imported into a GIS database, and an interactive mapping location has been developed.
- Conclusions:
 1. USGS will release data after Corps and USBR have reviewed them and concur on public release. This will be around the end of the FY, when Corps districts have updated their data.
 2. The database will be open for SOS members and other federal agencies for data input in an experimental role (not ‘production’ input) until the current Corps and USBR projects are finished.
 3. USGS and USBR should convocate to address some errors noted in the database by Kevin Laurent.
 4. The USGS plans to set up a software system to capture error reports and upgrade requests. This will enable USGS, with SOS input, to prioritize RESSED “fixes” and allocate funds to highest-priority needs. Special requests of interest limited to a single entity may require additional funds.
 5. The RESSED-21 project, requiring an average of about \$333K/year over 5 years (2012 dollars) remains an unfunded goal. The SOS is encouraged to ‘drum up support funds’ for this purpose.
- Dave Wegner – suggested putting the RESSED program in the context of river basin management, to assist with better management of water systems. If you can use the RESSED data for determining water storage, then it has more value. Dave offered to “write a paragraph or so” on the subject for SOS’s benefit.
- WestFAST – Alan Ellsworth recommended that we give them another briefing. He will send us contact info for WestFAST liaison. John indicated his availability for this purpose, particularly if done by WebEx.
- Jerry Bernard – suggested one way to create some impetus for data to be put into RESSED would be to create policy to require it. Express requirements plus value. Meg Jonas– each agency has guidance requiring input into the old reservoir sedimentation data inventory (Form 34 data). Suggested refreshing and reissuing existing guidance that has fallen into disuse.
- SEDHYD – Doug Glysson suggested a paper and a short course on RESSED.

Reservoir Sustainability: John Gray and Tim Randle

- Propose forming National Reservoir Sedimentation team, as listed in workshop recommendations. Convening informally would avoid funding problems.
- A permanent task group as a sub-committee of the SOS could be formed and announced to ACWI. It is unlikely to be funded.
- Motion: Tim will have workgroup develop simple description or “terms of reference” for a National Reservoir Sedimentation team for discussion by SOS at March meeting. Seconded and approved unanimously.
- It was also suggested that Tim organize a session and short course for SEDHYD. Could be held in conjunction with RESSED course.
- Presentations from the workshop are available at:
<ftp://ftp.usbr.gov/tsc/mdelcau/ReservoirSustainabilityWorkshop/Presentations/> ; an AGU Eos summary is available at:
<http://onlinelibrary.wiley.com/doi/10.1002/2013EO010008/pdf> .

SEDimentation and HYDrology Interagency Conference SEDHYD: Doug Glysson, Jerry Bernard, Paula Makar

- Planning meeting will be held at Peppermill in Reno March 26 and 27, 2014. The room rate is \$90, and the \$12 resort fee will be waived.
- Meeting purposes: discuss short courses (Jeff Bradley), exhibits, abstracts, etc. If we don't get enough abstracts, we will have to postpone the conference.
- Amanda Cox and Jerry Bernard will finalize the call for papers for student paper competition. Amanda will contact UCOWR and Marian Muste to help advertise the event.
- Abstracts for papers are due March 15, 2013. Authors will be notified of their selection and provided with format instructions for preparing technical papers and posters by July 1, 2013. Papers are due for review by September 1, 2013. Notice of final acceptance of papers will be provided to authors by October 21, 2013. Final papers are due November 21, 2013.
- Link to Call for Papers is http://acwi.gov/sos/conf/SEDHYD2014-CFP_jrg_updated_marshall_twice_121312.pdf
- A motion to approve Paula Makar's proposal to spend less than \$10,000 to set up the SEDHYD website was made, seconded, and approved.

SOS Membership: Marie Garsjo

- OSM has not attended. Paula Makar will check them out.
- USFS - Mike Eberle suggested as a contact.

Prospectus: Marie Garsjo

- This document requires significant rewriting. To start, no one likes the term “prospectus”. Marie will finalize suggested edits and has proposed meeting at ARS in Oxford to complete the document. Matt has agreed to host it, Amanda and Marie are available to come. Meg will provide Corps input, and would like to attend the editing meeting, but would need travel funding.

National Stream Morphology Data Exchange (NSMDE): John Gray

- Marion will update and resubmit last year's proposal to the Institute of Water Research (IWR). Changes will include clarifying that the requested funding was not sufficient for delivering the actual database, and was only proposed to prepare the specifications for its development. He needs information on the NOAA Integrated Water Resources Sciences and Services Consortium, and a contact within it. He also needs details on how the database would be housed and maintained.
- Action: Amanda will refer Marian to the workshop report for details on the database. The report is on the SOS website.
- A more comprehensive proposal – one that not only outlines the key requirements and attributes of a NSMDE, as is the focus of the IWR/Marian's proposal, but that will develop the database/data exchange – will be developed, led by Amanda Cox with assistance from Joe Schubauer-Berigan and others to be identified. The proposal will be submitted to NASA's Research Opportunities in the Space and Earth Sciences (ROSES) and will focus on the database supporting NASA's Surface Water and Ocean and Ocean Topography (SWOT) Mission. SWOT deals in part with efforts to gauge streamflow using satellite data, and their predictions will be enhanced with ground-truth data that would be found in the NSME. This proposal will need to include Marion's proposal on developing specifications, as well as a second phase of full implementation.
 - Amanda posed the question: if this is a yearly request for proposal by NASA – then perhaps we should wait until next year, and develop solid proposal.
 - Action: John Gray will look for an appropriate NASA contact for membership in the SOS.

ACWI Monitoring challenges workgroup: Marie Garsjo

- Reference Ann Castle's letter and other information on website: http://acwi.gov/monitoring-challenges_wkg/index.html. ACWI has been requested to provide guidance to streamline procedures to make monitoring more efficient. Webinars have been held every two weeks, with written directives requested by June, 2013. To this point, the SOS has not provided significant, written input.
- Meg's response is below. She will formalize them and send them to Marie, who will run them by the committee, then submit them to ACWI:
 1. There is a lack of sufficient streamgages, especially in the southwestern U.S.
 2. There is a severe lack of sediment gage data, and gradation data for sediment gages. These data are critical for watershed sediment management. This deficiency is national, and is more pronounced in the southwestern U.S.
 3. The RESSED database has the capability of complementing sediment gage data. Reservoir sedimentation data provides excellent information on watershed sediment yield. Reservoirs also capture bedload, which is rarely measured.
 4. The ability of the USGS to provide additional gage data on an ad hoc basis for events like floods and droughts by making additional measurements at ungaged locations, or by temporarily reactivating gages that are out of service, has been very helpful in supplying data.

Update on October FISP meeting: John Gray

- The committee decided to fund three surrogate sediment monitoring proposals, one or more of which could potentially replace conventional technologies within the next few years. Sediment hydroacoustics is the most compelling of the several technologies being

evaluated. To this end, a Sediment Acoustics Leadership Team (SALT) has been formed and is led and comprised primarily by the USGS but includes BOR and USCOE representatives.

- FISP is in the process of developing formal guidelines on the use of hydro-acoustics for sediment monitoring.

USGS Training on Sediment Data Collection Techniques, 3/18-22/13, Castle Rock, WA: John Gray

- The week after this conference call, the USGS had to cancel the training course due to insufficient registrants.

RESSED Project Development Awards for Jennifer Bracewell, Meg Jonas, and Kevin Laurent:

At the quarterly Corps-USGS meeting held at the USGS National Center on January 23, three Project Development Awards were presented to Jenifer Bracewell and Kevin Laurent, USGS; and Meg Jonas, Corps, by John Gray. Following is a summary of their RESSED contributions. Photographs of the awards and the citation for each recipient appear at: <http://acwi.gov/sos/awards/sos-pda-awards.html>.

- Jenifer Bracewell has been an integral member of the RESSED database programming team for over two years. In her capacity as the resident FilemakerPro expert, she has developed a logical and useful Graphic User Interface, along with the ability to provide new reservoir information and corrections to the database. She has also developed quality assurance features that include secure log-in procedures, and sequential screen capture training modules.
- Meg Jonas was the RESSED project representative from the USACE for about two years, during which she represented the Corps admirably. In this capacity, she provided the requisite information and support needed by the programming team to address the Corps' Mission-Critical need to ascertain the rates and status of capacity depletion for those reservoirs under their jurisdiction.
- Kevin Laurent is the database management system expert of the RESSED team, and has also worked on the project for over two years. He took RESSED's predecessor, RESIS-II, from a morass of convoluted and conflicting information into a logical database schema, which he used to port RESIS-II data to RESSED, where the data could be easily manipulated and accessed. Kevin also developed output functions in at least two formats.
- Without these people's expertise, passion and perseverance, the version of RESSED now being used by the USACE would not exist. The Subcommittee on Sedimentation sincerely appreciates their efforts.

Next SOS meeting: This meeting will be held in conjunction with the SEDHYD planning meeting held at the Peppermill Hotel, March 26-27, in Reno. The SOS meeting will be held from 8:30 until noon, Wednesday, March 27.

The meeting was adjourned at 2:55 EST.