

# SUBCOMMITTEE on SEDIMENTATION

## Advisory Committee on Water Information

### Meeting Minutes

**Monday, August 27, 2018**

2:00 to 4:00 PM, EDT; 1:00 to 3:00 PM, CDT  
12:00 to 2:00 PM, MDT; 11:00 AM to 1:00, PM, PDT

#### Meeting Host

Teleconference

#### Roll Call

Subcommittee on Sedimentation (SOS) Chair, Eddy Langendoen, called the meeting to order and began with a roll call of member organizations.

| Organization   | Representatives | Mailing Address  |
|--|-----------------|--|
| American Society of Civil Engineers (ASCE)   | Jeff Bradley    | American Society of Civil Engineers; West Consultants, Inc., 2601 25th St. SE Suite 450, Salem, OR 97302   |
| Colorado Water Resources Research Institute (CWRI)                                   | Absent          | Colorado Water Resources Research Institute, Colorado State University; 1372 Campus Delivery, Fort Collins, Colorado 80523-1372                    |
| Consortium of Universities for the Advancement of Hydrologic Sciences, Inc. (CUAHSI) | Absent          | The Consortium of Universities for the Advancement of Hydrologic Science, Inc., Executive Director, CUAHSI Cambridge, MA                           |
| Cooperative Institute for Research in Environmental Sciences (CIRES)                 | Absent          | Cooperative Institute for Research in Environmental Sciences, 216 UCB University of Colorado Boulder, CO 80309                                     |
| DOI - Bureau of Land Management (BLM)  | Doug Curtis     | Water Resources Specialist<br>Bureau of Land Management<br>Environmental Quality and Protection<br>20 M St., SE, Room 5282<br>Washington, DC 20003 |
|  | Bob Boyd        | Bureau of Land Management<br>Denver Federal Center, Building 50<br>Denver CO 80225-0047  |
| DOI - Bureau of Reclamation (USBR)   | Tim Randle      | Bureau of Reclamation<br>Denver Federal Center, Building 67<br>PO Box 25007, 86-68240  |
|  | Caroline Ubing  | Denver CO 80225  |
| DOI - National Park Service (NPS)  | Absent          | National Park Service, 1201 Oakridge Drive Suite 250, Fort Collins CO 80526  |

| Organization  | Representatives | Mailing Address  |
|---|-----------------|--|
| DOI - U.S. Geological Survey (USGS)                 | Molly Wood      | U.S. Geological Survey, Office of Surface Water, 230 Collins Rd, Boise, ID 83702   |
| DOT - Federal Highway Administration (FHWA)         | Absent          | Federal Highway Administration, Central Federal Lands Division, 12300 West Dakota Ave., Suite 340, Lakewood, CO 80228  |
| Federal Energy Regulatory Commission (FERC)         | Absent          | Federal Energy Regulatory Commission, Division of Hydropower Licensing, 888 First St. NE, Washington, D.C., 20426  |
| Missouri Water Resources Research Center (MWRRC)    | Amanda Cox      | Missouri Water Resources Research Center, Saint Louis University, 3450 Lindell Blvd, Saint Louis, Missouri 83103   |
| NOAA - National Marine Fisheries Service (NMFS)     | Absent          | NOAA Fisheries, 55 Great Republic Drive Gloucester, MA 01930-2276  |
| Tennessee Valley Authority (TVA)                    | Absent          | Tennessee Valley Authority, Dam Safety Governance & Oversight, WT 10C-K, 400 W. Summit Hill Dr., Knoxville, TN 37902   |
| U.S. Army Corps of Engineers (USACE)                | Paul M. Boyd    | River and Reservoir Engineering Section, U.S. Army Corps of Engineers - Omaha District, 1616 Capitol Avenue, Suite 9000, Omaha, Nebraska 68102   |
| U.S. Environmental Protection Agency (USEPA)        | Absent          | Chief, Environmental Stressors Management Branch, U.S. Environmental Protection Agency, Office of Research and Development, National Risk Management Research Laboratory, 26 W. Martin Luther King Drive, Cincinnati, OH 45268 |
| USDA - Agricultural Research Service (ARS)          | Eddy Langendoen | Agricultural Research Service; United States Department of Agriculture; Watershed Physical Processes Research Unit; 598 McElroy Drive, Oxford, MS 38655  |
| USDA - Forest Service (USFS)                        | Dan Cenderelli  | U.S. Forest Service, National Stream and Aquatic Ecology Center, 2150 Centre Ave, Bldg. A, Suite 368, Fort Collins, CO 80526   |
|   | Steven Yochum   |  |
| USDA - Natural Resource Conservation Service (NRCS) | Absent          | National Resources Conservation Service, 12th and Independence Ave, SW, Room 6137, Washington, DC 20250  |
| U.S. Society on Dams (USSD)                         | Marty Teal      | USSD; WEST Consultants, Inc., 11440 W Bernardo Court, Suite 360, San Diego, CA 92127-1644  |

## General Comments

Eddy Langendoen provided a status update of the Advisory Committee on Water Information (ACWI). ACWI's Charter was signed June 29 by DOI Secretary Zinke, and ACWI is authorized through June 29, 2020. Candice Hopkins, hydrologist at the Idaho Water Science Center, is the current ACWI Executive Secretary. Tim Randle stated that the SOS Position paper on Reservoir Sedimentation and Sustainability has not been approved yet by ACWI, since it was put on hold.

**Action Item:** Eddy Langendoen will contact Candice Hopkins to have the position paper approved by ACWI.

## Terms of Reference and Prospectus

Tim Randle has edited the terms of reference and incorporated subsequent comments from Eddy Langendoen and Jo Johnson. The new draft of Terms of Reference is similar to the previous draft (September 10, 2003), but the emphasis on data collection was replaced by interpretation of sediment data and about sediment analysis and modeling methods.

**Action Item:** SOS members were asked to review and comment on the new draft Terms of Reference by September 21, 2018.

The general outline of the last Prospectus was discussed:

- I. INTRODUCTION
- II. SEDIMENT ISSUES CONFRONTING THE FEDERAL SECTOR, 2007
  - A. Sediment Production from Land Use Change
  - B. Reservoir Sedimentation
  - C. River Channel Processes
  - D. Coastal Processes
  - E. Database Management
- III. SUBCOMMITTEE STRUCTURE AND ACTIVITIES TO ADDRESS ISSUES
  - A. SOS Goals
  - B. Technical Activities
  - C. Communication/Coordination Activities

Continuation of this same general outline should work well for the new prospectus. Much of the SOS work in recent years has focused on producing workshops, webinars, guidelines, white papers, and position papers. Tim Randle proposed to draft a list of new SOS goals that provides the underlying goals for these activities.

**Action Item:** Tim Randle will send a draft list of SOS goals and list of sedimentation issues to the SOS Chair and Vice Chair for distribution to SOS members by September 14, 2018. SOS members will be asked to review and comment on these draft lists by September 28, 2018.

## Work Group Reports

### SEDimentation and HYDrologic Modeling (SEDHYD) 2019 Planning – Tim Randle

SEDHYD-2019 is being hosted by SEDHYD, INC. and Co-Sponsored by ASCE-EWRI. The conference web site is functional <https://www.sedhyd.org/2019/>

The first call for paper has been distributed to:

- SOS member organizations
- SOH members of the SEDHYD Planning Committee
- Attendees at SEDHYD-2015
- Gilbert Club
- American Society of Civil Engineers, EWRI

An updated call for papers will go out this week

- Abstract due date: Extended to September 17, 2018
- Draft papers and extended abstracts due December 15, 2018.
- Final papers and extended abstracts due April 25, 2019.
- June 24-28, 2019, Peppermill Hotel, Reno, NV

SEDHYD-2015 had room for 63 sessions, 252 oral presentations, 30 poster presentations, and 10 computer model demonstrations, 11 short courses, and 3 field trips. We are hoping to have similar number for SEDHYD-2019, but perhaps more than 3 field trips.

Representatives from SOS and SOH comprise many members of the SEDHYD Planning Committee

We have at least one volunteer for each position, except for the Media Coordinator. We are still looking for Young Professionals to serve as the

- AV Equipment Coordinator
- Poster and Model Demonstration Coordinator
- Proceedings Coordinator
- Student Program/Competition Coordinator
- Media Coordinator

Young professional networking events are being planned as part of the conference

Several activities are being planned for students:

- Student paper competition
- Student luncheon to meet representatives from SOS and SOH organizations and learn about career options
- Opportunities for students to volunteer to become A/V assistance and get their travel costs paid and registration fee waived

### **Reservoir Sedimentation and Sustainability** – Tim Randle

This work group is known as the National Reservoir Sedimentation and Sustainability Team (NRSST). This team has produced several resources, which are now available to the public for free:

#### **Introductory Video about Sedimentation**

<https://www.youtube.com/watch?v=HQ-Y8CIEpgw&feature=youtu.be>

#### **Frequently Asked Questions about Reservoir Sedimentation and Sustainability**

[https://acwi.gov/sos/faqs\\_2017-05-30.pdf](https://acwi.gov/sos/faqs_2017-05-30.pdf)

#### **Reservoir Sedimentation Management – Big Deal! Why should we even care about it?**

Dr. George Annandale, P.E.

<https://cires.colorado.edu/events/reservoir-sedimentation-management-big-deal-why-should-we-even-care-about-it>

#### **Sedimentation Management Alternatives at Reservoirs**

Dr. Greg Morris, P.E.

<https://cires.colorado.edu/events/reservoir-sedimentation-management-options-and-data-needs>

#### **Sedimentation Management for Multi-Purpose Reservoirs: A Federal Perspective**

Dr. Tim Randle, P.E. and Dr. Paul Boyd, P.E.

<https://cires.colorado.edu/events/sedimentation-management-multi-purpose-reservoirs-federal-perspective>

#### **Permitting for reservoir sediment management**

Dr. Rollin Hotchkiss, P.E. and David Olson

<https://cires.colorado.edu/events/permitting-reservoir-sedimentation-management>

**Reservoir sedimentation monitoring**

Dr. Greg Morris, P.E.

<https://cires.colorado.edu/events/sedimentation-monitoring>

**Economics of Sustainable Reservoir Sediment Management**

Dr. George Annandale, P.E. and Dr. Rollin Hotchkiss, P.E.

<https://cires.colorado.edu/events/economics-sustainable-reservoir-sediment-management>

The NRSST is currently working on a white paper and planning a short course for SEDHYD 2019. A complete draft of the white paper with the working title: “Reservoir Sediment Management: Building a Legacy of Sustainable Water Storage Reservoirs” has been prepared. The Table of Contents of the white paper is:

Executive Summary

Introduction

Reservoirs: A Critical Element of the Nation’s Infrastructure

The Sedimentation Process and its Fundamental Causes

Dangerous Implications for the Nation’s Reservoirs

Sidebar or insert box of photographs

Sustainable Sediment Management Planning

Sediment Management Alternatives

Elements of a Sustainable Sediment Management Plan

Reservoir Screening

Diagnostic, Design and Implementation

Sediment Deposition

Monitoring

Costs, Benefits, and Environmental Outcomes

NEPA and Permitting

Suggested Policy

Conclusions and Recommendations

References

Appendix A – Selected Reservoir Case Studies

The draft white paper is now 35 pages from the Introduction through the end of the Conclusions and Recommendations. The goal is to limit the length of the main paper to 15 pages by summarizing some of the longer sections and moving the material to an appendix. There may be multiple appendices. A one-page Executive Summary has been drafted. The comment was made to include a couple of “eye-catching” photographs to help make the point.

**Work Group on Dam Removal Sediment Analysis Guidelines – Tim Randle**

A short course on the published guidelines was presented by Tim Randle and Jennifer Bountry at the US Society on Dams 2018 Conference, April 30-May 4, Miami, FL. The work group is exploring a recorded webinar and other venue options to further publicize the guidelines. Also, the work group is encouraging submissions for a special session on dam removal at SEDHYD 2019.

### **Work Group on Environment and Infrastructure** – Caroline Ubing

The work group has submitted an article to the Journal of the American Water Resources Association (JAWRA). The article is currently under review. The journal article is a condensed version of the guidance document “Managing Infrastructure in the Stream Environment” prepared by the work group in 2017.

### **Work Group on Climate and Sediment** – Eddy Langendoen

No activity since the Spring 2018 SOS meeting. A goal of the work group is to solicit papers for sessions on climate and sediment at SEDHYD 2019.

### **Work Group National Stream Morphology Data Exchange** – Eddy Langendoen

No activity since the Spring 2018 SOS meeting. Eddy Langendoen will explore cooperation with the Subcommittee on Spatial Water Data and Subcommittee on Hydrology.

## **Federal Interagency Sedimentation Project (FISP) Update**

FISP released a Call for Proposals for new projects. Proposals are due to Tim Straub by October 15. SOS members were encouraged to distribute to others who may be interested in submitting a proposal.

## **Subcommittee on Sedimentation Website**

No activity since the Spring 2018 SOS meeting. ACWI has encouraged the subcommittees to update the content of their websites as they are being reviewed for adherence to the Federal Advisory Committee Act (FACA). Eddy Langendoen will provide Candice Hopkins with updates (meeting minutes, NRSST flyers, etc.) to the SOS website. Sheri Alcade and Kim Martz (USGS) are available to assist us with changing the look-and-feel of the SOS website. Tim Randle proposed to add a web page with URLs/brief descriptions of ‘sedimentation’ computer models developed by SOS member organizations.

## **SOS Membership**

Various member organizations have not attended the last few subcommittee meetings. The Terms of Reference state that member organizations will be removed from the membership rolls if it is not represented at 50 percent of the meetings in any fiscal year.

**Action Item:** Doug Curtis will contact the National Park Service, while Eddy Langendoen will contact Tennessee Valley Authority, Department of Transportation and the Federal Energy Regulatory Commission to inquire about their interests in contributing to SOS.

## **Next Meeting**

The Fall 2018 SOS in-person meeting is scheduled for November 6-7, 2018 in Portland, Oregon, to coincide with the drawdown of the US Army Corps of Engineers Fall Creek Reservoir to increase passage of juvenile Chinook salmon.

## **Adjourn**

The meeting adjourned at 2:50 PM CDT.