Subcommittee on Sedimentation

of the

Advisory Committee on Water Information

Minutes of the January 13, 2004, Meeting

The Subcommittee on Sedimentation's (SOS) second meeting as a subcommittee under the Advisory Committee on Water Information (ACWI) was held from 8:40 a.m. to 4:30 p.m. on January 13, 2004, in the Colorado Room, Building 67, Bureau of Reclamation, Denver Federal Center, Colorado. The SOS last met on September 24, 2003 (see http://water.usgs.gov/wicp/SOS_finalminutes-9-24-03.pdf). The following constitutes the meeting minutes.

SYNOPSIS OF ACTION ITEMS AND OTHER NOTABLE RESULTS

The following are provided in abbreviated format in the order in which they appear in the minutes:

- 1. Next SOS Meeting: Tuesday, September 14, 2004, USEPA, Washington, D.C.
- **2. Electronic Motions**: The SOS agreed to continue to use electronic motions as one means for transacting business between meetings (see appendix H for a description of the procedure).
- **3. Technical Committee and the Private Sector**: Doug Glysson and ACWI Executive Secretary Toni Johnson will investigate the legality of private-organization representation on the Technical Committee and report their findings to the SOS as soon as they are available.
- 4. FISP MOU: Glysson offered to work with the Technical Committee toward development of a new MOU.
- **5. Technical Committee Business Plan:** The SOS recommends that the Technical Committee develop a business plan in FY04 to implement the FISP vision statement.
- **6. Reservoir Information System-II (RESIS-II):** A workgroup, to be led by Jerry Bernard, was formed to resolve the status of progress on RESIS-II and develop a plan or proposal for RESIS-II.

COMPLETE MINUTES OF THE JANUARY 13, 2004, SOS MEETING

On behalf of the BOR, Christi Young, welcomed the participants to the BOR building 67. Chair John R. Gray led a role call of meeting participants; received approval of the agenda; and noted that this meeting was the first following distribution of a letter announcing expanded SOS membership opportunities (see the fourth entry from the top at: http://water.usgs.gov/wicp/acwi/sos/). Gray also summarized the consensus approach and other means for conducting SOS business as described in the Terms of Reference (see: http://water.usgs.gov/wicp/sos_TORS_9_23_2003.pdf).

NEXT SOS MEETING: September 14, 2004, USEPA, Washington, D.C.

APPENDICES: The following appendices contain:

- A: Meeting participants.
- B. The agenda.
- C. The draft revised Mission Statement for the Federal Interagency Sedimentation Project (FISP).
- D. A December 17, 2003, letter from the Technical Committee to the SOS regarding the SOS's request for an "action plan" for the FISP's research and development activities.
- E. A link to the paper, "The need for surrogate technologies to monitor fluvial-sediment transport" Proceedings of the Turbidity and Other Sediment Surrogates Workshop, 2002 (available at: http://water.usgs.gov/osw/techniques/TSS/gray.pdf).
- F. A list of SOS Committees as of January 13, 2004.
- G. The minutes of the January 14, 2004, 8FISC/3FIHMC Organizing Committee meeting.
- H. Description of the "electronic motions" protocol for transacting SOS business between meetings.

AGENDA: The agenda was approved as shown in Appendix A.

<u>USE OF ELECTRONIC MOTIONS</u>: Electronic motions, used since March 17, 2003, to conduct SOS business between meetings, electronic motions remain an acceptable communication and voting medium (per consent of the SOS). This procedure is described in Appendix B.

SOS MEMBERSHIP LIST: The list was updated and re-posted at: http://water.usgs.gov/wicp/sed_sub_com_addresses_1_21_2004.pdf.

PERSPECTIVES FROM DON FREVERT, CHAIR, SUBCOMMITTEE ON HYDROLOGY: The Subcommittee on Hydrology (SOH) is comprised of 15 organizations, about three-fourths of which are Federal agencies. Their meetings, held quarterly, are usually 2-3 hours long. ACWI meetings are held annually but communicate between meetings, usually via electronic means.

The SOH is taking a "friendly approach" to membership and are not being hard-nosed about meeting attendance, the rules for which are the same as those for the SOS.

The SOH's scope is limited to surface water. There used to be a ground water subcommittee but it "fizzled out" before Don became active on the SOH.

The Hydrologic Frequency, and Hydrologic Modeling work groups are active. Frequently asked questions regarding Bulletin 17-B and their answers are posted on-line, as is a paper on flood frequency in ungaged watersheds (http://water.usgs.gov/wicp/acwi/hydrology/Frequency/index.html). Other two work groups are the Hydrologic Radio Frequency work group (limited to Federal representation by Federal regulations) and the Satellite Telemetry work group.

Federal Interagency Hydrologic Modeling Conferences sponsored by the SOH were held in 1998 and 2002. The next one will be held in 2006 jointly with the 8th Federal Interagency Sedimentation Conference.

Following are SOS members that also serve on the SOH: Chris Knopp (FS), Eric Janes (BLM), and David Wingerd (USACE). It is the hope of the SOS and Don Frevert that these representatives will regularly attend meetings of both subcommittees to enhance information transfer between the SOS and SOH.

PETITIONS TO JOIN THE SOS: None was received. Late in 2003, Gray alerted the Federal Energy Regulatory Commission; National Oceanic and Atmospheric Administration; Sandia National Laboratories; and Tennessee Valley Authority (TVA) of membership opportunities. Other than TVA's indication of interest and participation in this meeting in a guest status, none opted to seek SOS membership at this time.

Ted Yang, formerly of the BOR and now with Colorado State University (CSU), indicated that CSU's Hydroscience and Training Center may petition for SOS membership. Jeff Bradley, West Consultants, indicated that the American Society of Civil Engineers (Environmental and Water Research Institute), of which he is a member, may also petition for membership. Both were encouraged by the SOS to do so.

Some confusion was expressed on the protocol for seeking SOS membership. The following steps for petitioning for membership were articulated:

- 1. An organization submits a letter petitioning for membership to SOS Chair at least two weeks before the next SOS meeting.
- 2. ACWI Executive Secretary Toni Johnson determines if the petitioning organization qualifies for SOS membership. If so,

3. The letter of petition and supporting information are sent to the SOS membership, and members either vote in person or via electronic motion. Votes are couched in terms of "does anyone object to the petitioning organization's prospective SOS membership?" Membership status is conferred by a majority vote.

It was proposed that the ACWI codify these requirements on their web site in a blanket arrangement for all ACWI subcommittees.

JOINT 8TH FEDERAL INTERAGENCY SEDIMENTATION, AND HYDROLOGIC MODELING

CONFERENCES: The full meeting of this workgroup was held on January 14 and is summarized as Appendix G. Questions raised on January 13 regarding permanent archival of the proceedings; and the potential to serve historical proceedings on-line; along with some other discussion are included in the minutes of this working group's meeting of January 14, appendix G.

STATUS REPORT TO THE SOS ON THE FISP: Steve Blanchard reported that the FISP and the Hydrologic Instrumentation Facility (HIF) have worked together to physically move all of the FISP equipment to the HIF in Bay St. Louis, MS. This physical move took place during the last part of September 2003. The HIF is now accomplishing all the sales of FISP equipment. The HIF has established Technical Assistance—Work for Others Agreements with the vendors so that the sales of FISP equipment to the public sector will and has continued through the HIF. The Technical Committee raised several issues related to the move, and the USGS is working to incorporate the Technical Committee suggestions into the operations at the HIF. These suggestions include such things as keeping the FISP inventory sales in a separate book-keeping system (this has been accomplished), providing biannual financial reports on sales status from the HIF to the FISP (this will be done, the first at the spring TC meeting), developing a pricing mechanism for the FISP equipment that will yield income to the FISP for R+D activities (the operation plan is in near final draft), and for technical support for sediment sampler users (this will be part of the operations plan).

The most important item remaining to be accomplished is for the HIF to train personnel to fabricate and calibrate the FISP samplers. The goal is for this to be done in FY04. Until that is accomplished, FISP staff will have to fabricate and calibrate the samplers. The staff of the FISP has been reduced by two FTE. Administrative and secretarial support will be provided by the USGS from USGS HQ and/or the HIF.

The USGS has noted the priorities for the FISP for FY04 that have been specified by the Technical Committee. The USGS will work with the FISP staff to accomplish these priorities in FY04.

TECHNICAL COMMITTEE ACTION PLAN FOR FISP RESEARCH AND DEVELOPMENT

<u>FUNCTIONS</u>: Gray provided the following *synopsis* of Technical Committee Chairman David S. Mueller's December 17, 2003, response letter to the SOS action plan requested by the SOS on March 17, 2003. The letter:

- 1. Transmits the Technical Committee's revised version of the FISP Vision Statement.
- 2. Indicates current needs of member agencies are shifting to "new technologies."
- 3. Indicates that contracting is probably necessary in future, and is tied to funding level. Member agencies should cooperatively fund/conduct projects.
- 4. Lists technical and managerial expertise needed by FISP Staff to address "new technologies."
- 5. Indicates that there is no compelling reason to move the R&D function from USACE Waterways Experiment Station in Vicksburg.

The Technical Committee agrees on the SOS position on development and standardization of the next generation of sediment measurement and analysis technologies inside and outside FISP.

The Technical Committee agrees that everything proposed in the paper at:

http://water.usgs.gov/osw/techniques/sediment/sedsurrogate2003workshop/gray_glysson.pdf was within the mission of the FISP and that the FISP is a logical group to implement the proposed actions.

Gray noted that it is clear from the letter and his discussions with several of those knowledgeable on the topic that the Technical Committee felt that the subject was in the province of the SOS (After the meeting, Young provided the following clarification: "The main item the Technical Committee elevated to the SOS is funding with the thought that there was potential for SOS representatives to lobby for additional funding in their respective agencies or as a whole through ACWI or perhaps to get other agencies to participate. Other issues such as conducting a Request for Proposals for alternate locations or making staffing decisions are believed by Technical Committee members to be beyond the authority of the Technical Committee and the SOS because the responsibility for personnel issues and the associated costs lie with USGS and USACE.").

Young, who is also the BOR's representative on the Technical Committee, provided some perspectives on this topic. She commented that in the past year it has been very hard for the FISP staff to maintain productivity because of disruptions from the physical relocation of sales functions and low morale stemming from their uncertainty of the future of the project, staff reductions, and change. She went on to say that developing consensus on the future vision for FISP and responding to SOS requests has also been very trying for TC members because of their close working relationship with the FISP staff. Regarding Technical Committee plans to utilize the remaining FISP staff, decisions will have to be made on how best to handle parts of the workload if there is any future attrition. She posed the question to the SOS of whether or not future vacancies in FISP staff should be filled or could that salary be used for contracting out work? She also questioned if the USGS and USACE funding was linked to project FTE levels.

Young believes that the TC has responded to each of the SOS requests as stated in the letter and demonstrated in the revised vision statement and the work priorities itemized in the Technical Committee's last meeting minutes. She read the list of priorities. High priorities include completing development of a 1-liter point sampler, XD-99, and producing a technology summary. Medium priorities include work on what should be the last isokinetic sampler, the XDH-2, collaboration and coordination, and evaluation support for the LISST-SL. Networking projects were listed as a low priority. She thinks the FISP will make progress in "new technologies," but "not overnight" (i.e., in the short term). She stressed that significant funding has been contributed to the research and development of the XD-99 and XDH-2 and they must be completed in the next year or two. Many agencies have justified base level funding for the project based on these deliverables; any further delays in completion of the samplers could jeopardize future funding.

Young stated that the Technical Committee considers their work on the FISP vision statement, which started in 2001, as "done." She recommends that it be considered something of a "living document" subject to periodic review and update. She objected to the formation of a SOS workgroup to work on a vision statement or action plan for FISP, stating that many of the SOS members are not contributors to the FISP and are too far removed from history and current FISP issues to be asked to be responsible for drafting future plans. Young subsequently asked any of the SOS members to direct ideas for the future operation of FISP to the Technical Committee through the SOS chair.

After the meeting, Young provided the following clarification: "By putting in priority items such as collaboration, coordination, and networking into FISP work directives we have also started the shift more directly from a focus on R&D to the clearinghouse of information source as suggested by the SOS. So it is not just new technology that the Technical Committee is trying to focus on, it is a new way to do the business of FISP."

Römkens inquired as to any impending retirements among FISP staff. No definitive response was forthcoming. He proffered that the FISP might benefit from a change in environment or location, such as at or near a university, so that the FISP could be more directly engaged in a more scientifically stimulating environment.

Jackson, citing the Interagency Sediment Technologies meeting he attended in September 2003, Flagstaff, indicated substantial changes is occurring in sediment-surrogates technologies. The private sector is developing most of these technologies in this "new world." He feels that the FISP should function in a "clearinghouse" role for these technologies, and provide contracting services. He believes that some of the FISP visions statement (see appendix C) are obsolete. He stated that "government laboratories" for evaluating the technologies aren't needed in some cases, citing testing of a laser technology by the USGS in the Colorado River, Grand Canyon, and elsewhere.

Schmidt indicated the need for testing to compare sensor performance to some accepted standard. He highlighted the need for at least two characteristics: A great deal of agility, and a desire to address new technologies. FISP staff must be cognizant of those who know what is needed regarding new technologies. He and Jackson agree that we cannot "staff for the job." Schmidt indicated the need for a group located such that it can "get around readily," observing that Vicksburg is not easy to get in or out of (referring to the *cost* of accessibility). We must admit that we're not going to have a lot more money with which to work; we should ask, "how can we best leverage the money we have?"

Schmidt also observed "bluntly" that the FISP has not been the best source for a response to the Forest Service's needs. There has been no change in the Technical Committee approach to managing the FISP since he joined the Technical Committee a decade ago, while the mission of the FISP is in a state of flux. A viable vision of how we are going to do things hereafter is needed. Bill Jackson observed that validation of new technologies is needed. This requires a longer-term and broader vision than what currently exists. Bradley concurred on the need for a longer-term and broader vision (subsequent to the meeting, Jackson proposed the following modification to the FISP Mission Statement to replace the 3rd hollow bullet under the 2nd solid bullet of, "Guiding Principles" as follows: "Based on the priorities set by the TC, facilitates testing and validation of promising samplers through contract, cooperative agreement, interagency agreement, or other mechanisms using specified procedures, defined standards, and approved protocols. Reviews and formally accepts and certifies the results of all 3rd party instrument testing and validation programs."

Glysson asked about the potential for agencies to come up with proposal(s) to address a given project. If, for example, an extra \$30,000 was needed to address a project, what might the success rate be of obtaining the additional funds? Most agencies present indicated that it would be easier to get additional money for specific projects than to get increases in their base funding for the project, although this does not mean that agencies would in fact put up additional funds.

Glysson noted that the FISP Memorandum of Understanding (MOU), which has been rendered inoperable by dint of moving part of the FISP operation to the HIF in Bay St. Louis and because the SOS is now under ACWI, needs to be rewritten. He indicated that this is a Technical Committee obligation, but offered to work with the Technical Committee in this regard.

Glysson also asked for opinions of whether or not the Technical Committee should remain a working group under the SOS, or should the bond between these committees be severed? Also, should the Technical Committee MOU be rewritten to permit non-Federal participation? The MOU could be re-written to include any paying member. A minimum contribution to sit on the Technical Committee of \$10,000 was suggested. Blanchard recommended that the legality of non-Federal organizations sitting on the Technical Committee be discussed with ACWI Executive Secretary Toni Johnson.

ACTION: Glysson will consult with Toni Johnson on the issue of non-Federal participation on the Technical Committee. He also offered to work with the Technical Committee to develop a new MOU.

Robinson inquired on whether the FISP could replace a USGS employee of the FISP with a non-USGS employee, should one of the USGS employees leave the FISP. Glysson pointed out that this would be governed by the contents of a new MOU.

Bernard noted that the Technical Committee oversees the FISP. Technical Committee members are those that contribute funding for the FISP. He questioned the need to having the SOS oversee the Technical Committee. Schmidt sees a need for linkage between SOS and Technical Committee to provide broader oversight of the latter.

Bradley asked, "if the agencies still approach FISP to take on special projects?" Glysson responded that the USGS and USACE provided most of project needs, most recently the D-99 and 1-liter bag sampler projects. However, the need for these types of projects (designing and building devices that collect a physical water sample) is "pinching out." Bradley sees a marked difference in the FISP's viability today compared to FISP 15 years ago.

Bradley noted that possible FISP funding sources need to be expanded beyond just the USGS and USACE, which contribute the large majority of funds to the FISP, and that the FISP needs to become more cognizant of new opportunities for funding.

Gray, observing that the Technical Committee letter does not address some key issues related to an "action plan" – most notably, funding issues (he quoted from an EMAIL from John Potyondy, Forest Service, and from others who have pointed out the fact that this critical issue remains unresolved). Gray reminded the SOS that the committee requested the subject action plan from the Technical Committee at the winter 2003 SOS meeting.

Blanchard indicated that the Technical Committee should focus on implementation of the Vision Statement (appendix C), a concept with which Glysson concurs.

RECOMMENDATION: The SOS will recommend that the Technical Committee develop a business plan in FY04 to implement the FISP vision statement (appendix C).

WORKGROUP REPORT: TURBIDITY AND OTHER SEDIMENT SURROGATES

<u>WORKSHOP FOLLOW-UP</u>: Glysson, speaking on behalf of the workgroup on "Storage of Turbidity Data, Implementation of Recommendations," indicated that he has been working with ASTM International on the turbidity issue. There will be tightly controlled round-robin test, perhaps in the late summer.

Glysson also noted that preparation of a USGS National Field Manual chapter on turbidity, authored by the USGS's Chauncey Anderson, is largely complete. There will be a table in that report that matches turbidity measuring devices to the type of measurement each provides (NTU, NTRU, etc.).

WORKGROUP REPORT: NATIONAL SEDIMENT MONITORING NETWORK AND

FEDERAL DATA STORAGE AND AVAILABILITY: Gray used a PowerPoint presentation to demonstrate the need for a nationally consistent fluvial-sediment monitoring program and on-line-accessible database. According to a paper by the USGS and ARS (1998), sediment damages in North America total about \$16 billion (about three-fourths that for the United States) annually. A National Sediment Monitoring Instrument and Analysis Research (NSMIAR) Program might cost \$4M to \$8M. Hence, a 1% reduction in sediment damages in the US from an NSMIAR Program would cover the annual costs of the program 40-times over. Gray has communicated with USEPA's Office of Water on the need for an optimally designed and based-funded NSMAR Program. The subject was deferred until the full work group could come up with a set of recommendations.

RESERVOIR INFORMATION SYSTEM II (RESIS-II): Bernard reiterated (from past SOS meetings) that RESIS-II is available for the taking. All form 39's received for surveys performed up through 1992 have been scanned. The issue of homeland security issues related to location-specific information on the forms remains unresolved.

Options on the future include simply "giving the database out" and advertise the location of on-line down-loadable software to use to query the database.

ACTION: Form a RESIS-II workgroup to come up with a plan/proposal, led by Bernard, to include Young and Glysson. Possibly to include a representative from the ARS National Sedimentation Laboratory, and possibly also the NRCS's Lyle Steffen. The workgroup will need to determine the status of the work on RESIS-II done under the guidance of Bob Stallard, USGS, Boulder, CO.

<u>CURRENT SOS WEB SITE</u>: Gray announced that the web site had been largely re-worked since September 2003. It now includes a "sediment meetings" entry among other new links. Members are asked to access it and provide suggestions. Gray will ask for an additional node on the web site to link to sediment training opportunities. Glysson notes that the "look" of the ACWI web site may change, but the content of the SOS web site will remain essentially the same.

<u>VISION FOR SOS WEB SITE</u>: Glysson feels that this site needs to be reborn as the SOS. It currently exists under Sedimentation under USGS Water Information Coordination Program. He would like to see the RESIS-II data, as well as an interactive "Notes on Sedimentation" which may be comprised solely of links to current sediment information and contacts in the agencies, on the SOS web site.

ELECTION OF SOS VICE-CHAIR: Bernard was elected as vice-chair, and will take over for Gray as Chair on September 30, 2004. A new vice-chair will be elected upon Bernard's ascendancy to the throne.

<u>OTHER BUSINESS</u>: Bradley noted that the next annual American Society of Civil Engineers (ASCE) meeting will take place in Salt Lake City in May 2004. He asks for the SOS to advertise this meeting (the 2004 annual meeting will be in Anchorage). Additionally, Bradley pointed out that there are opportunities to serve on ASCE committees, partly in light of the fact that ASCE has "lost a lot of Federal involvement."

Bradley described the updated version of ASCE's "Sedimentation Engineering" (1975) being coordinated by Marcelo Garcia at the University of Illinois at Urbana-Champaign. It is "about a foot tall" and will be published in two volumes. Although there is a desire to have it completed in time for the 2003 annual meeting in Salt Lake City, it may in fact take another 6-9 months before it is available.

Gray noted that he is co-leading an effort with the USGS's Waite R. Osterkamp to form an International Watershed Research Network (IWRN). Information on the proposed IWRN can be found at: http://water.usgs.gov/osw/techniques/china.pdf .

Gray also noted a proposal to form a Bedload Research International Cooperative with Osterkamp and Jonathan B. Laronne, Beer Shiva University, Israel. More information will be presented at the next SOS meeting.

Bernard recommended that the SOS send a letter to each agency head announcing that the SOS is a new FACA committee, and that we are seeking new applications for membership. Bernard and Gray will collaborate on this after consulting with Toni Johnson.

APPENDIX A: Participants in the January 13, 2004, Subcommittee on Sedimentation Meeting.

Larry Schmidt FS (alternate)	Mitra Jha, EPA (acting member)
Bill Jackson, NPS (member)	Doug Glysson, USGS (alternate)
Matt Römkens, ARS (alternate)	Don Frevert, BOR; Chair, SOH
Jerry Bernard, NRCS (member)	Ted Yang (guest; BOR, retired)
Christi Young, BOR (acting member)	Jeff Bradley (guest, West Consultants)
Jim Robinson, IBWC (member)	Brennan Smith, TVA (guest, phone)
Bill Carey, BLM (alternate)	Stephen Blanchard, USGS (guest, by phone for
John Gray, USGS (member), Chair, SOS	FISP-related topics)

APPENDIX B: Final agenda for the January 13, 2004, Subcommittee on Sedimentation Meeting.

TUESDAY, JANUARY 13, Colorado Room, Building 67

Time	Topic	Lead
8:30	Welcome to the U.S. Bureau of Reclamation	Young
8:40	Introduction and Welcome to Attendees Gray	
	Review and Approval of Agenda	
	Overview of organization, status and progress of the SOS	
	Terms of Reference	
9:20	Perspectives from the Chair, Hydrology Subcommittee	Frevert
9:35	Perspectives from others	

10:00	Break	
10:15	Petition(s) to join the SOS	
10:45	Overview of 8 th Federal Interagency Sedimentation	Glysson,
	and 3 rd Federal Interagency Hydro. Modeling Conferences	Bernard,
	Work Group (full meeting on Jan. 14)	Frevert
11:15	Federal Interagency Sedimentation Project (FISP)	Blanchard
11:30	Lunch	
12:30	Technical Committee Response to SOS Request for	Young et al.
	FISP Research and Development Action Plan	
2:00	Turbidity Work Group: Progress and Plans	Glysson, Gray
2:15	Sediment Monitoring and Data Work Group:	Gray
	Progress and Plans	
2:30	Break	
2:45	RESIS-II: On-going saga	Bernard
3:05	SOS Web Site	
	Current	Gray demo
	Future	Glysson
3:20	New Business (tbd)	SOS
4:30	Election of SOS Chair and Vice Chair	SOS
4:45	Wrap-up of main meeting	Chair
5:00	Adjourn	

APPENDIX C: Draft Revised Mission Statement of the FISP

Federal Interagency Sedimentation Project Revised Mission Statement Dated: December 9, 2003

MISSION

Provide, identify, and evaluate tools and techniques for accurate, standardized, calibrated, cost-efficient, and safe measurement and analysis of sediment properties and transport.

VISION

FISP is the national leader in the identification, evaluation, and development of standardized, calibrated equipment and methods to allow consistent, accurate quantification and analysis of sediment characteristics and transport in surface waters, which support to allow for the proper characterization and management of natural resources.

SCOPE

Activities focus on measurement and analysis of suspended sediment, bedload sediment, bed material, bed topography, adsorbed constituents, and sediment characteristics and surrogates for their measure.

PURPOSE AND NEED

The Nation faces critical concerns that include the influence of fluvial sediment on the navigation of rivers, reservoir storage, aquatic environments, municipal water treatment, streambed and bank stability, and flood impacts. Accurate knowledge of sediment characteristics and transport vitally affects the ability of public agencies to properly respond to sediment-related impacts.

FISP identifies and seeks solutions to tractable sediment measurement and analysis problems common to participating Federal agencies. Sponsoring agencies and the public gain a distinct advantage from cooperative action that leverages resources and leads to common standards, methods, equipment, and procedures for the measurement and analysis of sediment characteristics and transport.

GUIDING PRINCIPLES

- Works under the guidance of the FISP Technical Committee (TC), a working group of the Advisory Committee on Water Information (ACWI) Subcommittee on Sedimentation (SOS), comprised of representatives from participating Federal Agencies.
- Serves as the primary federal resource for quality-assured equipment and techniques for acquiring sediment and sediment-based water-quality data
 - o Develops standardized, calibrated sediment samplers and associated equipment that are noncontaminating to be suitable for water-quality sampling
 - o Identifies emerging direct or indirect measurement technologies and provides recommendations to the TC regarding their applicability to mission goals and agency needs
 - o Based on the priorities set by the TC, tests selected promising sediment sampling and analysis technologies using standardized criteria under laboratory and field conditions, and recommends appropriate use
- Interacts with other organizations including academia and private industry on research and development to improve the quality and cost effectiveness of sediment-based data
- Builds and maintains institutional knowledge and expertise through staff development, publication of technical reports and user's manuals, and public technology transfer

<u>APPENDIX D</u>: Letter from the Technical Committee to the SOS regarding the SOS's request for an "action plan" for the Federal Interagency Sedimentation Committee's research and development activities.

APPENDIX E: "The need for surrogate technologies to monitor fluvial-sediment transport"—Proceedings of the Turbidity and Other Sediment Surrogates Workshop, 2002 (available at: http://water.usgs.gov/osw/techniques/TSS/gray.pdf).

APPENDIX F: Summary of SOS Working Groups, January 13, 2004, Subcommittee on Sedimentation Meeting

- Technical Committee of the FISP (standing workgroup, leadership rotates annually, currently David S. Mueller of the USGS chairs the Technical Committee)
- 8TH Federal Interagency Sedimentation Conference/3rd Federal Interagency Modeling Conference (disbands after the 2006 conference. Glysson, Bernard and Frevert lead).
- Storage of Turbidity Data, implementation of recommendation (Glysson, EPA (Norton to nominate), ASTM, Sadar/Hach; Glysson lead)
- National Sediment Monitoring Network and Federal Data Storage and Availability (Formed at John Gray's request, lead by Gray, includes Mark Weltz, Doug Norton, Doug Glysson; active until recommendation is made to SOS).
- Reservoir Information System Part Two (RESIS-II): Lead by Bernard, includes Young and Glysson.

APPENDIX G: Minutes of the January 14, 2004, 8FISC/3FIHMC meeting.

Call to order and introductions, meeting started at 8 am.

Attendees in Denver: Paula Makar, John R. Gray, Jerry Bernard, Don Frevert, Marshall Flug, Jim Robinson, Francisco Simoes, Steve Markstrom, Doug Glysson, Christi Young Attendees via phone: Tom Donaldson, Jeff Rieker, Gary Barbato, Bill Charley, George Wilkins, Larry Schmidt

Status of the Joint Conference:

Glysson gave a brief overview of where we stand with the conference and reviewed the organizational chart. Several key positions had not been filled. A Proceedings Coordinator position under the Joint Chair was formed and Francisco Simoes agreed to serve in that position. A revised organizational chart is attached to this summary. Gary Barbato agreed to serve as the field trip coordinator and George Wilkins tentatively agreed to serve as the joint AV/equipment coordinator. Larry Schmidt agreed to serve as the local contact for shipping.

Certificate of participation and or CEU's were discussed. It was suggested that at a later date, we investigate going through a university to get this accomplished.

Short courses, probably will be non-fed and feds putting them on. Need to know how many, length, Sunday or Thursday, charge per student, equipment requirements (we will not supply computers). Jim Robinson will get write-up to be placed in call for papers.

Status and needs of the FIHMC

Don Frevert gave general status of the Hydrology side of the conference. All of their key positions have been filled.

Status and needs of the FISC

Jerry Bernard gave a brief general status of the sedimentation side of the conference. The technical program chair, Jerry Webb, has been called up to active duty with the Army and is serving in Iraq. He should be home in a couple of months. An AV coordinator is still needed for the Sediment side of the conference. Jerry discussed the Letter of Intent used for the 7thFISC, to prevent gin-milling of papers and no-shows. Marshall suggested requiring PowerPoint presentation to be submitted WITH paper, or paper would not be accepted? The committee will have to decide on this at some later date.

Status and needs of the Operation Section

Savings and checking accounts are separate for Sediment and Hydrology Subcommittees. Eventually all moneys will come and go from the SOS accounts. Doug and Paula will handle the money. Profit will be divided equally between the two subcommittees.

Marshall Flug, of USGS-BRD in Ft. Collins, noted that ASCE produced a CD with navigation, indexing, for a past conference. Cost is a consideration, and Marshall will investigate. Francisco will look into what the cost would be for hiring a proceedings contractor.

SOH needs to decide if they will prepare a CD with all of the 3 conferences on it. Last one was software, first one was hard copy. Other decision is what CD(s) will be done for the conference participants: 1 for the SED side, 1 for the HYD side? 1 combined for this conference? 1 for all of the SED conferences, 1 for all of the HYD conferences? Or possibly one for all conferences, if space permits?

Proceedings hard copies. Two-volume sets of printed proceedings were provided to the 7thFISC registrants, along with a CD-ROM that contained all of the proceedings from FISCS 1 through 7. The trend today is NOT to print hard copies. The possible decisions are as follow:

Alternatives	Consequences
a) Prepare a single CD-ROM of all 8thFISC and	+ Participants will have access to all papers in a
3rdFIHMC	searchable format, and can use with their laptops

	during the sessions. Sufficient lead time is required to design and burn the CD-ROMS, including covers, cover format (jewel case, sleeve, etc.)
b) Prepare hard copies of Proceedings for registrants, in addition to CD-ROM(s).	 Additional time is required to design and print the hard copies (includes covers, etc.) Copies would need to be in color, since the original files will allow color Additional expense for printing No additional mailing or handling costs except for getting copies sent to the conference
c) Prepare limited number of hard copies of Proceedings for libraries, posterity.	 Time required to produce would be after the conference. + Design, layout, and printing can be done after the conference, including all last-minute changes, and actual conference presentations (drop noshows, e.g.)
d) Prepare separate CD-ROMs for the SED and HYD tracks.	 Registrants would have to work with two separate CD-ROMS and could not search across all papers for this conference. + 7thFISC CD and 2ndFIHMC CD could each be added to, rather than creating new CD-ROMS. Two separate CDs may result in each having significantly different look and feel.
e) Prepare a single CD-ROM for all of the SED conference and all of the HYD conferences, including this one.	 Probably not enough file space on a single 700MByte CD-ROM for all of the proceedings. Would have to consider DVD technology (5 Gbytes+). HYD conference(s) proceedings that are only available as hard copy will require scanning. Need clean copy for scanning and copies to sacrifice due to binding shearing.

Note that the 7thFISC CD is set up with the original table of contents as the links to contained papers. Note also that each paper has a navigation pane that allows jumping around in the CD, from conference to conference, session to session, paper to paper. The papers are password-protected PDF versions, with viewing, copying of text and graphics (very low resolution), and printing allowed.

6 concurrent sessions with 4 papers each session:

Monday = 48 papers Tuesday = 96 papers Wednesday = 72 papers Thursday = 48 papers TOTAL = 264 papers

Need to standardize the citation for all proceedings papers, how to get the papers or CD, etc. NTIS publication? Francisco says that they sent an electronic copy of GSTARS plus a paper copy to NTIS, and NTIS is selling it. It was agreed that a label be placed on the cover of the CD as to how it should be referenced.

Paula requests the equipment and space requirements for both sides. Need a coordinator for the Exhibits. Doug says that he has someone. Need a computer AV equipment coordinator to determine the needs, rent the equipment, and keep track of the equipment. Need someone to load and coordinate the presentation files (this will fall under the Proceeding coordinators purview). Laptop shuffling to LCD projectors will not be permitted. Paula also needs to eventually schedule agency people to work the registration desk. Potential resources are from the University of Nevada, which provided excellent support to the 7thFISC. Students got free registration for working the A/V support. NSF gave \$10,000 to support retirees and students at the last modeling conference.

Christi Young volunteered to coordinate the "prizes," including shirts, bags, etc.

Review of Joint Conference time table.

Glysson distributed a time table for the planning of the conference. The table was reviewed and some changes made. A copy of the revised table is attached. Responsibilities for some of the items shown on the time table are noted on the attachment.

Setting of general Conference format

Glysson presented a general conference format, based on the format of the 7th FISC. He noted that for the most part, both conferences followed the same general format. He presented three options to handle the poster, exhibit, and demo sessions. The committee agreed to use an option that has the Exhibit Hall opening and reception on Sunday evening and the Exhibit Hall closing on Tuesday after the afternoon break, Poster displays and reception would be on Monday evening and continue until after the afternoon break on Tuesday, and the Demo/station dinner would take place on Wednesday. A copy of the agreed-upon schedule is attached to this summary.

Discussion and Selection of Joint Conference - theme and sub-themes

The group decided that the general theme for the Joint Conference will be "*Interdisciplinary Solutions for Watershed Sustainability*." Each of the two groups will have to come up with sub-themes that reflect their interest and coordinate them with Francisco to be used in the call for papers.

Plans for development of Call for Papers

Need to decide to whom the original abstract will be returned to from the call for papers. Francisco will coordinate putting this together and Glysson and Makar will see to getting it printed. It should be in both hard copy and electronic formats.

Summary of Action items

- 1. Francisco will look into what the cost will be for hiring a proceedings contractor.
- 2. Marshall will look into the cost associated with getting ASCE to help produce the CD's
- 3. All committee members who have agency offices in the Reno area need to get Gary Barbato the name, phone number, and email address of a local contact that he can contact about potential field trips.
- 4. Glysson to contact USGS HIF Chief about getting coordinator for the exhibits.
- 5. Glysson and others are to look into the possibility of going directly from electronic format to microfilm for distribution to libraries.
- 6. Francisco will need to schedule a conference call for the two groups to decide on a format for the papers and presentations.
- 7. Glysson will contact the Hotel on several issues including hotel registration code, can the silver and gold combination room be locked, can we set up a wireless network in the hotel, cost of getting internet access

- 8. Glysson will invite, when the time is right, Bob Hirsch to give open address as Chair of the ACWI. We may want to ask Toni Johnson to give brief background on the ACWI.
- 9. Paula needs space and equipment requirements for both sides.
- 10. Someone in either the SOS or SOH should approach Doug James, SOH rep for the NSF, to see if they would be willing to give the \$10,000 for the support of retirees and students to attend the conference.
- 11. Committee needs to decide to whom the abstracts will be sent to when people are applying to get into the conference.
- 12. Each of the two groups will have to come up with sub-themes that reflect their interest and coordinate them with Francisco to be used in the call for papers.
- 13. The two groups will have to decide on a format for the opening session which will include the plenary session, key notes, agency types, etc.
- 14. As a group, we need to decide if we are going to offer a certificate of participation for the conferences and short courses and or CEU's, and if so, how are we going to do this.
- 15. Jim Robinson will get write up to be placed in call for papers and pre-announcement about short courses.

Next Joint meeting:

Glysson hopes not to have to have a full face to face meeting of the organizing committee until the premeeting at the Silver Legacy in March 2005. Most of the work for the joint committee will be done via email and conference calls.

Adjourned at noon.

APPENDIX H: Protocol for Using Electronic Motions (originally described in a May 9, 2003, memorandum to the SOS from the SOS Chair)

An "electronic motion" without need for a second to that motion is made by any committee member via EMAIL to the Chair. The Chair forwards the motion to all SOS members and alternate members via EMAIL. Each agency is given a deadline to respond to the following choices in their EMAIL response on the motion (par usual, one vote per organization):

- 1. Vote to Approve,
- 2. Vote not to Approve,
- 3. Abstain from voting,
- 4. Propose <u>postpone</u>ment of the vote for reasons that are clearly stated in the response; if appropriate, an alternate electronic motion can be proposed as a subsequent electronic motion.

If all responses received by the deadline are in categories 1-3 above, a simple majority of respondents determines the outcome of the motion. A single response to postpone the motion will be honored. It will be disseminated to the full committee with follow-up as appropriate. Results of formal electronic outcomes will be summarized as part of the minutes of the next formal meeting of the SOS membership.