Subcommittee on Sedimentation of the Advisory Committee on Water Information

Minutes of the September 24, 2003, Meeting

The Subcommittee on Sedimentation's (SOS) first meeting as a subcommittee under the Advisory Committee on Water Information (ACWI) was held from 8:50 a.m. to 4:40 p.m., September 24, 2003, at the U.S. Army Corps of Engineers, 441 G. St. NW, Washington D.C. The SOS last met on March 17, 2003 (see http://water.usgs.gov/wicp/sos_final_minutes_March-17-2003.pdf). Results of some decisions obtained via EMAIL subsequent to the March 17 meeting are included in these notes. The following constitutes the approved meeting minutes.

SYNOPSIS OF ACTION ITEMS

The following action items are provided in abbreviated format in the order in which they appear in the meeting minutes.

1. Advertising the ACWI-SOS: John Gray will prepare a short letter to cover the TOR's and distribute it to the member agencies for their information and distribution. The letter will include Doug Glysson's name as a principal contact.

2. Technical Committee and the Private Sector: *Doug Glysson and John Gray will investigate the legality of privateorganization representation on the Technical Committee and report their findings to the SOS as soon as they are available.*

3. ACWI Subcommittee Liaisons: Members are to examine the ACWI organizational chart (the second slide at: http://water.usgs.gov/wicp/Orgslides.pdf) and determine if they can act as liaison to any committee.

4. Technical Committee and New Technologies: The Chair, SOS, is to advise the Technical Committee that the SOS supports development and standardization of the next generation of sediment analysis and measurement methodologies not only within the FISP and the USGS's Hydrologic Instrumentation Facility, but also among other Federal and non-federal organizations.

5. Technical Committee Action Plan: The Chair, SOS, should forward the paper, "Attributes for a Sediment Monitoring Instrument and Analysis Research Program," by J.R.Gray and G. D.Glysson (at: http://water.usgs.gov/osw/techniques/ sediment/sedsurrogate2003workshop/gray_glysson.pdf) for consideration in the Technical Committee's deliberations on an Action Plan for the Federal Interagency Sedimentation Project's future research and development functions.

6. 2006 Joint Conference: SOS recommends holding a joint "8th Federal Interagency Sedimentation/3rd Federal Interagency Hydrologic Modeling Conference" if all details can be worked out. Doug Glysson will present this recommendation to the ACWI Hydrology Subcommittee on October 2, 2003.

7. Recommendations from the Turbidity and other Sediment Surrogates Workshop: The SOS considered and came to resolutions on the nine recommendations from the April 30-May 2, 2002 workshop as shown in the body of these minutes. These resolutions are referred to the ACWI.

8. Reservoir Information System: David W. will determine if the NID excludes locational information on section, township, and range; nearest U.S Post Office; and latitude-longitude. If it does not, he will investigate the potential for the USACE to become the administrator for RESIS-II. If the USACE declines to take RESIS-II, other Federal agencies are asked to consider becoming the databases's administrator.

9. SOS Web Site Pilot: The IBWC should contact Thad Pratt to move forward on developing a new SOS web site.

10. SOS Web Site Linkages: At the next SOS meeting, each agency should be prepared to provide a 10-minute presentation on sediment and ancillary information available on their web site.

11. Summary of Planned Meetings: A list of meetings relevant to the SOS should be submitted to the SOS Chair for posting on the web.

FULL SOS MEETING MINUTES

<u>NEXT SOS MEETING</u>: Begins on January 13, 2004, U.S. Bureau of Reclamation, Lakewood, CO (backup date is March 23, 2004, USBR, Lakewood; SOS members are asked to keep this date open until further notice).

APPENDICES: The following lettered appendices contain lists of:

- A: Attendees
- B. Meeting Handouts
- C. Electronic Motions March 17 September 24, 2003
- D. SOS Committees as of September 24, 2003

AGENDA: The agenda was approved with the addition of the following two topics:

- "New guidance on clean sediment criteria" Doug Norton
- "Conservation Effects Assessment Project" Mark Weltz

The remainder of these minutes are produced more or less in the order that the topics were addressed. Discussion on the agenda topic, "Sediment Monitoring Instrument and Analysis Research Program" Workshop will be presented at the next SOS meeting; see: http://water.usgs.gov/osw/techniques/sediment/sedsurrogate2003workshop.html .

<u>ACWI-SOS</u>: The Terms of Reference (TOR's; http://water.usgs.gov/wicp/sos_TORS_9_23_2003.pdf) were accepted without change by the ACWI on September 10, making the SOS an ACWI subcommittee.

Because there was inadequate time to advertise the fact that the SOS is now under the ACWI – and can now accept private organizations into its membership – it was decided to postpone election of a Chair and Vice-Chair until the next meeting, and for John Gray to continue as Chair (without a Vice-Chair) until then.

It was agreed to use the "Meetings and Procedures" guidelines in the Terms of Reference, although we lacked the two-thirds member representation that constitutes a quorum (see the membership distribution list at: http://water.usgs.gov/wicp/sed sub com addresses 3 17 2003.pdf).

Now that SOS is a subcommittee of the ACWI, SOS needs to advertise the availability of membership to potentially interested private-sector parties; and should advise current SOS members not present at this meeting of the requirements of participation in the SOS.

#1 Action: John Gray will prepare a short letter to cover the TOR's and distribute it to the member agencies. All member agencies are encouraged to distribute the letter and TOR's to potentially interested organizations. The member agencies should share the letter and TOR's with any private-sector organization that may be interested in SOS membership. The letter will include Doug Glysson's name as a principal contact. Doug will make an initial determination to the SOS on requests for membership he has received, and those he considers to qualify for SOS membership. Suggest they contact Doug Glysson.

Concern was expressed that the Technical Committee, a standing working group of the SOS, may not legally be able to include private organizations. It is possible that the Technical Committee MOU will have to be revised. It is also possible that the Technical Committee without linkage to the SOS. There is a precedent for a subgroup of the Hydrology Subcommittee that is composed solely of Federal members.

#2 Action: Doug Glysson and John Gray 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.

Concern was expressed that the SOS could be in violation of FACA law by making recommendations to the Federal Government. Doug Glysson pointed out that the SOS makes recommendations only to the ACWI. Any recommendations made by the ACWI would be governed by FACA law at the ACWI level (not the subcommittee level).

It was recommended that the SOS liaise with other ACWI subcommittees, Task Forces, and Ad Hoc committees.

#3 Action: Members are to examine the ACWI organizational chart (the second slide at: http://water.usgs.gov/wicp/Orgslides.pdf) and determine if they can act as liaison to any committee. David Wingerd agreed to be the liaison to the Hydrology Subcommittee.

<u>TECHNICAL COMMITTEE</u>: Technical Committee Chair John Potyondy was asked before the meeting to provide an update on the Technical Committee's progress in developing an Action Plan to redefine the mission, function, requisite skills, and location of the FISP Research and Development function. John P. reported on September 15 by EMAIL, indicating that "little

progress" has been made on the action plan. John P. referred to a draft FISP vision statement that he believes reflects the Technical Committee's position with regard to the action plan. John P. indicated that the Technical Committee will attempt to complete the action plan in their meeting during the week of October 27, 2003.

Ted Yang asked if FISP's R&D functions can remain viable as a result of separation from the sales functions. Doug Glysson responded that the R&D function is already "de-coupled" from the sales function, and will remain viable.

Doug Norton reiterated a statement from the previous SOS meeting to the effect that there appears to be a consensus that the age of developing new isokinetic samplers is, for the most part, over. New technologies have been a top or very high priority for the FISP since the later 1990's (completion of isokinetic samplers currently in development have taken precedence in the last year). But the emerging new technologies involve a much greater variety of disciplines for which it may be impossible to have all the expertise in one place. As a result the Technical Committee's strategic planning needs to address some challenges associated with more technological variety and consider how to be agile and adaptable through activities such as technology evaluation, information synthesis, and more prominent outreach in the professional community.

John Gray noted that there will be a need for existing isokinetic samplers for many years, in part as "ground truth" for evaluating new sediment-surrogate technologies.

Larry Schmidt noted that the sediment measurement equipment development landscape has changed substantially. Historically, the focus was on development internal to the federal agencies dealing with sediment issues. Little if any work on standardized equipment was being done outside the federal sector. As things stand now, much more development work is occurring in universities, the private sector and federal agencies. To take full advantage of these efforts, the role of FISP needs to shift from internal research and development to that of setting goals and standards, coordinating development with partners, verifying performance, acting as an authoritative clearinghouse on sediment measurement technology, and facilitating interest in adapting promising technologies from all sources. FISP will face a significant leadership challenge in maintaining the standards and availability for current products while providing a newly focused agile leadership in the development of more efficient and effective sediment measurement technology. As part of this FISP should recognize the value of in-kind development activities occurring in other federal agencies and encourage coordinated development.

#4 Action (Motion Passed Unanimously): The Chair, SOS, is to advise the Technical Committee that the SOS supports development and standardization of the next generation of sediment analysis and measurement methodologies not only within the FISP and the USGS's Hydrologic Instrumentation Facility, but also among other Federal and non-federal organizations.

#5 Action (Motion Passed Unanimously): The Chair, SOS, should forward the paper, "Attributes for a Sediment Monitoring Instrument and Analysis Research Program," by J.R.Gray and G. D.Glysson (on-line at: http://water.usgs.gov/osw/techniques/sediment/sedsurrogate2003workshop/gray_glysson.pdf) for consideration in the Technical Committee's deliberations on the Action Plan referred to above.

FEDERAL INTERAGENCY SEDIMENTATION PROJECT (FISP): Steve Blanchard, Chief, USGS Office of Surface Water, phoned in from Italy to provide an update on relocation of the warehousing/test/evaluation/sales (generally the non-Research and Development parts of FISP) to the USGS Hydrologic Instrumentation Facility in Bay St. Louis, MS. The phone connection was truncated before Steve B. could finish; instead, Steve's subsequently written update provided on Oct. 3 follows:

Status report to the SOS of the move of the FISP fabrication, sales, warehousing, and calibration functions to the HIF.

"The Chief, USGS Office of Surface Water has discussed and met with the FISP and HIF management staff on many occasions during that past 9 months to implement the move of these FISP functions to the HIF. The move directly affects 2 FISP employees (Vaughan and Ward). A great deal of effort as been expended to find these individuals Federal jobs within the Vicksburg local commuting area. The Corps is in the process of hiring Ms. Vaughan. Efforts continue to find a position for Ms Ward.

The FISP and HIF staff have worked together to physically move most of the non-calibrated supplies and equipment to the HIF. This physical move took place during the last part of September. All involved are aware of the several issues raised by the Technical Committee related to the move and are 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 bookkeeping system, providing biannual financial reports on sales status from the HIF to the FISP, and developing a pricing mechanism for the FISP equipment that will yield income to the FISP for R&D activities and for technical support for sediment sampler users. The move will initially have the HIF selling the non-calibrated equipment and will gradually progress into having the HIF sell the calibrated equipment as they develop the expertise for performing the calibrations."

SANDIA NATIONAL LABORATORY (SNL):

Guest Scott James addressed the SOS regarding SNL's expanding capabilities in the field of fluvial-sediment measurement and monitoring, including their patented SEAWOLF and ASSET flumes, and Time Domain Reflectivity (TDR) stream monitoring. TDR monitoring includes stream stage, sediment scour and deposition, sediment concentration, and salinity. Scott J. indicated that TDR works well in a laboratory setting, and that SNL is transferring it to field settings.

John Gray suggested that SNL deploy their TDR stream monitoring technology along with one of the ~16 sites at which USGS is testing new sediment technologies as part fo the information USGS "Sediment SuperGage Program." Scott James indicated interest in this concept. SNL may become a member of the SOS.

8FISC/MODELING CONFERENCE:

John Gray received a request from Don Frevert, Chair of the ACWI's Hydrology Subcommittee to hold the 8th Federal Interagency Sedimentation Conference, and the 3rd Federal Interagency Hydrologic Modeling Conference, together in 2006. Doug Glysson cited a number of factors related to holding a combined conference, including cost savings to the Government and time efficiency.

Doug Glysson and Jerry Bernard reported on their and Paula Makar's site visits to hotels in Reno, Nevada, and to Tunica, Mississippi. The only viable venues for the conference were considered to be in Reno and Las Vegas (by prior evaluation).

#6 Action: SOS recommends holding a joint conference if all details can be worked out. Priorities for venues and 2006 dates are in this order:

- 1. Silver Legacy, Reno; 3/8-17; 3/29-4/8; 5/3-12
- 2. Riviera, 6/23-30Las Vegas
- 3. Nugget, Reno 3/2-10

Doug Glysson will present this decision to Hydrology Subcommittee at their October 2003 meeting. If the Hydrology Subcommittee concurs, Doug Glysson will notify SOS, and proceed to negotiate with Silver Legacy Hotel on a contract to hold the meeting. No consensus was derived on the approximate dates for the joint conference.

Doug Norton noted that he recently had a CD mass-printed cheaply. The vendor contact is: ABVI Goodwill, Rochester, NY (http://www.abvi-goodwill.org/, 585-232-1111). His ABVI Goodwill contact is Joe Kells (585-697-5787).

TURBIDITY AND OTHER SEDIMENT SURROGATES WORKSHOP: Recommendations from the April 30-May 2, 2002, workshop are shown in the workshop final report at: http://water.usgs.gov/pubs/circ/2003/circ1250/, and in a summary report at: http://water.usgs.gov/osw/techniques/turbidity_blacksburg.pdf. These recommendations were submitted by Electronic Motion to the SOS on July 3, 2003, but the USGS requested that the vote be postponed until the next SOS meeting to enable full discussion on at least one of the recommendations (number 7). The recommendations were discussed in detail, and the outcomes are shown in *red* below.

#7 Action: The SOS will present to the ACWI the following resolutions on Workshop Recommendations (refer to the full text in one of the papers above):

- *1. Turbidity Definition: Accepted.*
- 2. New Turbidity Standard Method: Accepted with caveat to wait to see outcome of the ASTM turbidity standards currently in development.
- 3. Storage of Turbidity Data: Accepted. A working group to implement this recommendation was formed, to be headed by Doug Glysson, and to including a representative from USEPA, ASTM, and possibly HACH, Inc.
- 4. Retrospective Turbidity Comparisons: Accepted, but tabled until the working group formed for "Storage of Turbidity Data" (No. 3 above) provides their recommendation.
- 5. Technology Transfer and Communication: Accepted, predicated on available resources.
- 6. Stakeholder and Peer Review: Accepted, with intent to address this recommendation through the SOS Web Site and through focus group communications on the internet, such as through the sedimentation@yahoogroups.com group list.
- 7. Testing and Development Program for Instruments and Methods: *Accepted. This is being referred to the Technical Committee for consideration.*
- 8. Collection and Computation of Sediment-Surrogate Records: Accepted with caveat that those addressing this recommendation should be cognizant of ASTM's methods, and addressing each surrogate technique on its own merits
- 9. Technical Needs for Turbidity Measurements: Accepted.

RESIS-II (RESERVOIR INFORMATION SYSTEM): Jerry Bernard reported that the database, which contains data for about a century, remains without a formal sponsoring agency and lacks the mechanism for entering updated information and quality-assuring that information.

The issue of Homeland Security associated with locational information available on the PDF data sheets (section, township, and range; nearest U.S Post Office; and latitude-longitude) remains unresolved. If the publicly available NID includes this information, it is assumed that all RESIS-II information would be acceptable on-line.

It would seem to make sense to merge this database, to the extent possible, with the National Inventory of Dams (NID) database managed by the USACE.

John Gray noted that there is potential interest by the USGS in taking over RESIS-II if the USGS takes on a major project on "Water Availability" in the U.S. However, the earliest the full-blown project would start would be in 2005, and there are no guarantees that this will happen.

#8 Action: David Wingerd. will determine if the NID excludes locational information on section, township, and range; nearest U.S Post Office; and latitude-longitude. If it does not, he will investigate the potential for the USACE to become the administrator for RESIS-II. If the USACE declines to take RESIS-II, other Federal agencies are asked to consider becoming the databases's administrator.

HYDROLOGIC ENGINEERING CENTER RIVER ANALYSIS SOFTWARE (HEC-RAS): David Wingerd reported that HEC-RAS is the most popular of USACE software programs. It is being expanded to include simulations of lateral migration, improved armoring and sorting, improved erosion and deposition, and unsteady flow/sediment transport. Those interested in viewing David Wingerd's PowerPoint demonstration may obtain it from David or John Gray.

SOS WEB SITE: The pilot SOS web site to be developed by Thad Pratt, USACE, was not available for SOS committee review. Glysson reported that the ACWI part of the SOS web site is being maintained by the USGS under the URL at: http://water.usgs.gov/wicp/.

Jim Robinson has a support person on his staff ready to work with Thad Pratt on the pilot web site.

#9 Action: Jim Robinson should contact Thad Pratt to move forward on developing a new SOS web site.

Doug Norton noted that the SOS should be cognizant of USEPA's evolving "Compendium of Sediment Information" when it becomes available.

Jerry Bernard noted that the sedimentation@yahoogroups.com group EMAIL list is still active, and that he will add David Wingerd and Scott James to the list.

#10 Action: At the next SOS meeting, each agency should be prepared to provide a 10-minute presentation on sediment and ancillary information available on their web site.

<u>CONSERVATION EFFECTS ASSESSEMENT PROGRAM (CEAP) UNDER THE FARM BILL</u>: Mark Weltz reported that the Office of Management and Budget (OMB) contacted NRCS 9 months ago with a request for a program to quantify the concentration reductions (in milligrams/Liter) for selected constituents based on best management practices. USEPA was approached in a similar manner by OMB related to non-point source pollution.

Jerry Bernard is leading the overall watershed assessment studies portion of the CEAP project. Twelve ARS research watersheds are currently included, which will assess the effects of conservation programs on the quality of soil and water, and water quantity.. Additional watersheds will be added in FY04 with special emphasis on the effects of farm bill conservation programs on wildlife habitat, air quality, carbon sequestration, etc., USDA-CSREES will be partnering with NRCS, EPA, FSA, and possibly USGS in selecting additional watersheds for evaluating the effects of conservation, as part of CSREES's competitive grants program.

USDA and ARS are looking for partners in this program.

DEVELOPING WATER QUALITY CRITERIA FOR SUSPENDED AND BEDDED SEDIMENTS: Doug Norton provided a handout by the title above. The document describes an effort to gain a review and recommendations from the USEPA Science Advisory Board (SAB) on the best scientific approaches for developing the subject water-quality criteria. This document and other materials related to the SAB consultation are available at: http://www.epa.gov/science1/panels/epecsabspanel.htm Sediment criteria, by which waters are monitored, determined as impaired, and listed for TMDL development and restoration, are developed primarily by states with EPA guidance under the Clean Water Act. The new sediment criteria development effort is highly

relevant to the SOS focus on monitoring technologies and should be of interest to all agencies represented; SOS insights are likewise valuable to the EPA effort.

Bill Swietlik, Doug Norton's co-representative from EPA on the SOS, has the lead on this effort. Doug Norton proposes to submit this as an agenda item for full discussion at the next SOS meeting, possibly with Bill Swietlik presenting.

LIST OF MEETINGS RELEVANT TO THE SOS: It was observed that various meetings of potential relevance to the SOS are planned but not fully advertised within the SOS.

#11 Action: A list of planned meetings should be submitted to the SOS Chair for posting on the web.

<u>APPENDIX A: ATTENDEES</u>: The following attended the SOS' September 24, 2003, meeting. The full membership list is available at http://water.usgs.gov/wicp/sedmin.html.

SOS Representatives and Alternates:

- Host David Wingerd, USACE (representative)
- G. Douglas Glysson, USGS (alternate)
- Jerry Bernard, NRCS (representative)
- Ted Yang, USBR (representative)
- Mark Weltz, ARS (representative)
- Larry Schmidt, FS (alternate)

APPENDIX B: MEETING HANDOUTS (and source):

- Jim Robinson, IBWC (representative)
- John R. Gray, USGS (representative)
- Doug Norton, USEPA (representative)

Guests:

- Barry Glaz, ARS (guest)
- Scott James, Sandia National Lab (guest)

- Draft agenda
- Summary of electronic motions, May 9-July 3, 2003 (included in these minutes).
- Draft matrix of outcomes from the SOS-sponsored, "Sediment Monitoring Instrument and Analysis Research Workshop," Sept. 9-11, 2003, Flagstaff, Arizona (available from John Gray upon request).
- Perspectives from Technical Committee Chairman on progress in developing an action plan for the research and development functions of the Federal Interagency Sedimentation Project (EMAIL fromTechnical Committee Chair John Potyondy, available from John Gray on request).
- Minutes of the March 17, 2003, meeting of the SOS (on-line at: http://water.usgs.gov/wicp/sos final minutes March-17-2003.pdf).
- "Attributes for a Sediment Monitoring Instrument and Analysis Research Program," by J.R. Gray and G.D. Glysson (online at: http://water.usgs.gov/osw/techniques/sediment/sedsurrogate2003workshop/gray_glysson.pdf.
- "Synopsis of Outcomes from the Federal Interagency Workshop on Turbidity and Other Sediment Surrogates," by J.R. Gray and G.D. Glysson (on-line at: http://water.usgs.gov/osw/techniques/turbidity_blacksburg.pdf.
- "The National Resources Inventory Conservation Effects Assessment Project (NRI-CEAP)" (Mark Weltz).
- "Developing Water Quality Criteria for Suspended and Bedded Sediments (SABS)" (Doug Norton)
- "Soil and Sediment Transport Lab" (Scott James)

APPENDIX C: SUMMARY OF SOS ELECTRONIC MOTIONS BETWEEN MARCH 17 AND SEPTEMBER 24, 2003:

The motions are edited to render them concise without loss of meaning or intent; outcomes of the motions are shown in red.

<u>1. ELECTRONIC MOTION 5/9/2003A, BY J.R.GRAY</u>: The SOS agrees to use the communications protocol as described in the attached May 9, 2003, memorandum from SOS Chair John R. Gray as an acceptable means for between SOS meetings. *Motion Passed Without Dissension.*

2. ELECTRONIC MOTION 5/9/2003B, BY J.R.GRAY: The SOS agrees to postpone its next meeting until after the next ACWI meeting. The first choice is a day during the week of September 22-26. Membership is asked to provide their availability that week or as soon as possible thereafter, giving availability through November 14, 2003. Location of meeting will not change pending input from Jerry Webb. *Motion Passed Without Dissension*.

<u>3. ELECTRONIC MOTION 5/9/2003C, BY J.R.GRAY</u>: The SOS approves the draft minutes as they appear at: http://water.usgs.gov/wicp/sos_march_minutes_4_18_2003.pdf. *Motion Passed Without Dissension*. <u>4. ELECTRONIC MOTION 5/9/2003D, BY G.D. GLYSSON</u>: The SOS accepts the Doug Glysson's general recommendations to visit potential 8FISC venues in Tunica, MS, and Reno, NV, potentially accompanied by one or more members of the 8FISC leadership team. *Motion Passed Without Dissension*.

5. ELECTRONIC MOTION 5/9/2003E, BY J.R.GRAY: All SOS agencies will provide nominations for the positions of 8FISC General Chair, Technical Program Chair, and Operations Chair, to the SOS Chairman, by May 30, 2003. *Motion Passed Without Dissension*.

<u>6. SOS ELECTRONIC MOTION 5/23/2003, BY J.R. GRAY</u>: The SOS agrees to sponsor, without requirement for funding or other resources, the interagency Sediment Monitoring and Analyses Research Workshop, September, 2003. *Motion Passed Without Dissension.*

7. ELECTRONIC MOTION 6/6/2003, BY G.D.GLYSSON AND J.R. GRAY: The SOS accepts the following 8FISC leadership nominations: *Motion Passed Without Dissension*.

- Conference Chair: Jerry Bernard, NRCS
- Operations Chair: Paula Makar, USBR
- Technical Program Chair: (Jerry Webb, USACE, was selected after the motion deadline)
 Short Course Coordinator: Jim Robinson, IBWC
- Conference Consultant: Doug Glysson, USGS

8. ELECTRONIC MOTION 7/3/2003, BY G.D.GLYSSON AND J.R. GRAY:

The SOS accepts the following recommendations from the Turbidity and Other Sediment Surrogates Workshop, April 30-May 2, 2002, Reno, NV (see the paper above for the full text of each recommendation). Options are to vote "aye" or "nay" on all 9; to vote separately on each one. It should be noted that voting either way does not constitute an obligation on any SOS member organization. *The USGS requested that a vote on this motion be postponed until the September 24, 2003 meeting; see these meeting minutes for a resolution on the eight elements of this motion*

APPENDIX D. SUMMARY OF SOS WORKING GROUPS, FALL, 2003:

- Technical Committee of the FISP (standing workgroup, leadership rotates annually, currently FS chairs committee)
- 8TH Federal Interagency Sedimentation Conference/3rd Federal Interagency Modeling Conference (disbands after the 2006 conference. Glysson and Bernard 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).