

Proceedings of the

EIGHTH Federal Interagency Sedimentation Conference

**April 2–6, 2006
Reno, Nevada USA**



**Sponsored by the Subcommittee on Sedimentation
(a subcommittee of the Advisory Committee on Water Information)**

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**PROCEEDINGS
OF THE
EIGHTH FEDERAL INTERAGENCY
SEDIMENTATION CONFERENCE (8thFISC)**

April 2 – 6, 2006

RENO, NEVADA

Subcommittee on Sedimentation

Agricultural Research Service (ARS)
American Society of Civil Engineering (ASCE)
Army Corps of Engineers (USACE)
Bureau of Land Management (BLM)
Bureau of Reclamation (USBR)
Colorado Water Resources Institute
Electric Power Research Institute (EPRI)
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Federal Highway Administration (FHWA)
Forest Service (USFS)
Geological Survey (USGS)
National Park Service (NPS)
Natural Resources Conservation Service (NRCS)
Office of Surface Mining Reclamation and Enforcement (OSMRE)
Universities Council on Water Resources

PREFACE

These proceedings of the Eighth Federal Interagency Sedimentation Conference contain over 190 technical papers. This conference is sponsored by the Subcommittee on Sedimentation, which is chartered under the Advisory Committee on Water Information. The ACWI and all of its subcommittees function according to the requirements of the Federal Advisory Committee Act, which encourages nonfederal participation. Member agencies of the Subcommittee on Sedimentation, as shown above, are therefore a mix of Federal agencies and non-federal organizations.

The enclosed technical papers document scheduled oral presentations and poster sessions. The proceedings have been prepared in advance of the conference so that all papers could be available to conference participants.

The Subcommittee has organized seven previous interagency sedimentation conferences:

1st	1947	Denver, CO	4th	1986	Las Vegas, NV
2nd	1963	Jackson, MS	5th	1991	Las Vegas, NV
3rd	1976	Denver, CO	6th	1996	Las Vegas, NV
		7th	2001	Reno, NV	

The first four meetings were conferences involving federal agencies only: papers and discussions were given only by the staff of the agencies on the Subcommittee and by individuals engaged in cooperative sedimentation work with the agencies. Beginning with the Fifth and continuing through with the 8th FISC, however, a limited number of technical papers are being presented by nonfederal agencies in order to capture the full spectrum of sedimentation issues that relate to the condition of natural resources and their management.

The 8th FISC was held in conjunction with 3rd Federal Interagency Hydrologic Modeling Conference under the umbrella of the Joint Interagency Sedimentation Conference, with the theme “Interdisciplinary Solutions for Watershed Sustainability.” It brings together professionals and others from (1) the federal government, (2) state and local agencies, (3) universities, (4) the private sector, and (5) international organizations. Since 1946, the Subcommittee on Sedimentation has focused on interagency coordination.

Organizing Committee for the 8th FISC		
Chairman:	Jerry M. Bernard	USDA-NRCS
Technical Program		
Committee Chair:	Jerry W. Webb	USACE
Presentations:	Marie M. Garsjo	USDA-NRCS









Organizing Committee, Joint Federal Interagency Conference

















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Larry Schmidt, Local Contact, US Forest Service (retired)
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Jayantha Obeysekera, Short Course Coordinator, South Florida Water Mgt. Dist.
Roland Viger, Computer/AV Equipment Coordinator, US Geological Survey
Christi Young, Publicity Coordinator, US Bureau of Reclamation

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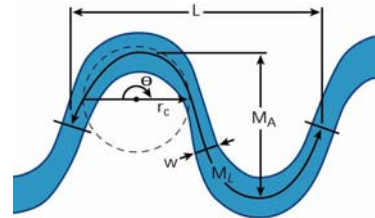
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GEOMORPHOLOGY








L meander wavelength
 M_L meander arc length
 w average width at bankfull discharge
 M_A meander amplitude
 r_c radius of curvature
 θ arc angle








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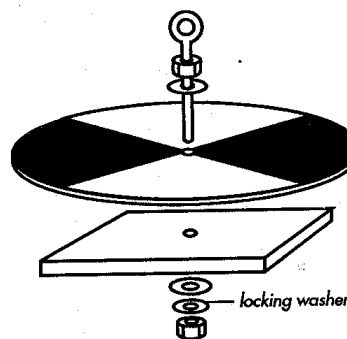
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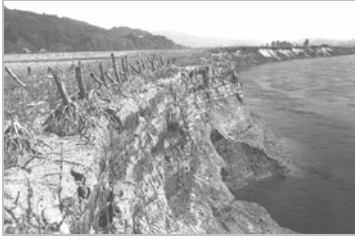








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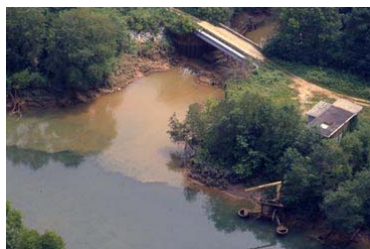
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FARM BILL / CONSERVATION		
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ASSESSING EFFECTS OF CONSERVATION AT THE WATERSHED SCALE	Tom Drewes, Kelsi Bracmort, and Jerry Bernard	
ASSESSING THE NATIONAL EFFECTS OF CONSERVATION- FOR THE FIRST TIME (CEAP)	Robert L. Kellogg, Charles Rewa, and Diane Eckles	
EVALUATION OF THE IMPORTANCE OF CHANNEL PROCESSES IN CEAP-WATERSHED SUSPENDED SEDIMENT YIELDS	Andrew Simon	
DETERMINATION OF SEDIMENT SOURCES ON THE CEAP BENCHMARK WATERSHEDS	Christopher Wilson and Roger Kuhnle	

INSTRUMENTATION MONITORING


























Title	Author(s)	Paper
MONITORING THE EFFECTS OF SEDIMENTATION FROM MOUNT ST. HELENS	Patrick S. Obrien, Alan D. Donner, and David S. Biedenharn	
MODELING SEDIMENT TRANSPORT DURING OVERBANK FLOW IN THE RIO PUERCO, NEW MEXICO	Eleanor Griffin, J. Dungan Smith, Jason Kean, and Kirk Vincent	
THE EFFECTS OF ENSO PHASE ON THE OCCURRENCE OF COARSE PARTICLE MOTION IN CALIFORNIA COASTAL STREAMS	E.D.Andrews and Ronald C. Antweiler	
THE VALUE OF CONTINUOUS TURBIDITY MONITORING IN TMDL PROGRAMS	Teresa J. Rasmussen, Andrew C. Ziegler, Patrick P. Rasmussen, and Thomas C. Stiles	

POSTERS PRESENTATIONS AND COMPUTER DEMONSTRATIONS



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EQUATIONS FOR ESTIMATING BANKFULL-CHANNEL GEOMETRY AND DISCHARGE FOR STREAMS IN THE NORTHEASTERN UNITED STATES	Gardner C. Bent	
MULTI-DISCIPLINED APPROACH ON THE UPPER QUINAULT RIVER GEOMORPHIC STUDY, 18 KM REACH UPSTREAM OF LAKE QUINAULT	Jennifer Bountry, Lucy Piety, Ed Lyon, Tim Randle, Tim Abbe, Galen Ward, Kevin Fetherston, Bill Armstrong, Larry Gilbertson, and Chase Barton	
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COMPARISON BETWEEN CONCEPTUAL PHYSICAL MODEL OF RESERVOIR SEDIMENTATION AND A 3D NUMERICAL MODEL	Omid Reza Safiyary and Amin Chegenizadeh	

EFFECTS OF THE 1997 FLOOD ON THE KLAMATH NATIONAL FOREST, NORTHERN CALIFORNIA: LESSONS LEARNED & IMPLICATIONS TO FUTURE FOREST MANAGEMENT	Juan de la Fuente, Don Elder, and Alisha Miller	
TURBIDITY THRESHOLD SAMPLING: INSTRUMENTATION AND METHODS	Rand Eads and Jack Lewis	
THE CHALLENGES OF SAMPLING SUSPENDED SEDIMENT IN A MOBILE CHANNEL WITH HIGHLY DYNAMIC TRANSPORT	Rand Eads	
PRELIMINARY SEDIMENT BUDGETS FOR FOUR WATERSHEDS AT KINGS RIVER EXPERIMENTAL WATERSHED IN SOUTHERN SIERRA NEVADA	Sean Eagan, Carolyn Hunaker, Abbey Korte, Sarah Martin, and Lee McDonald	
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