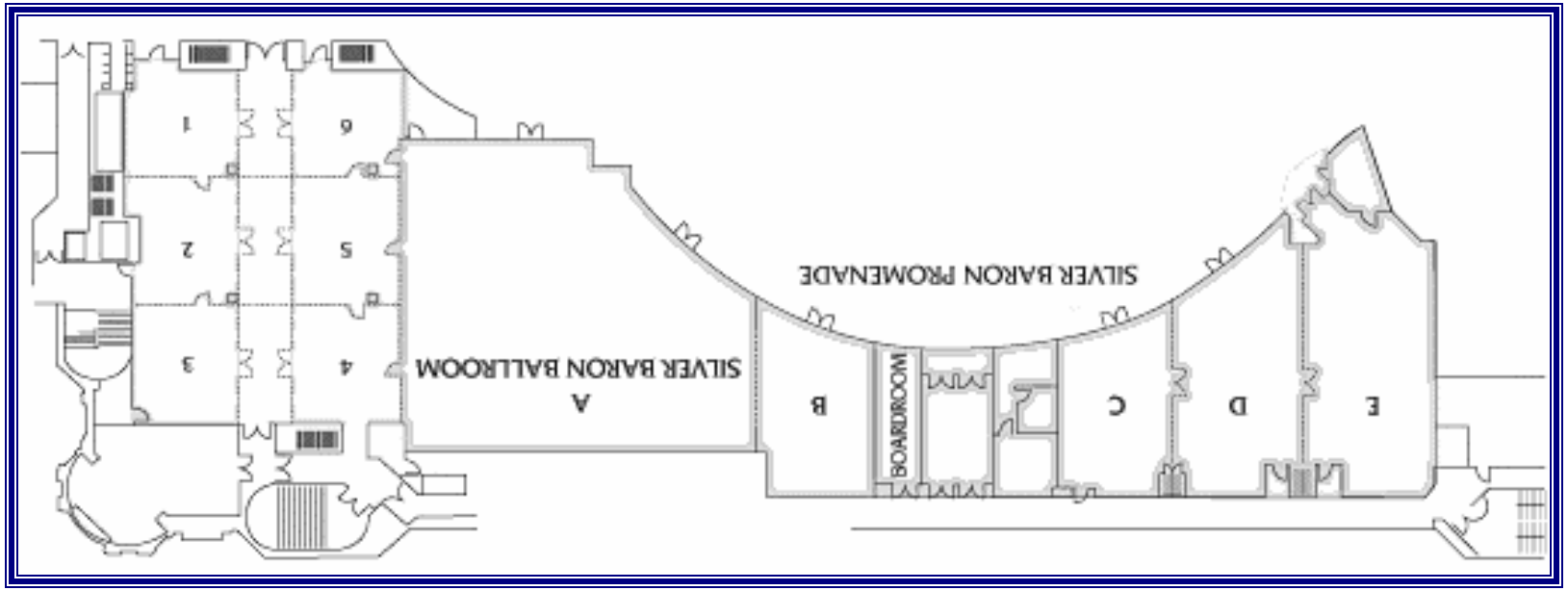
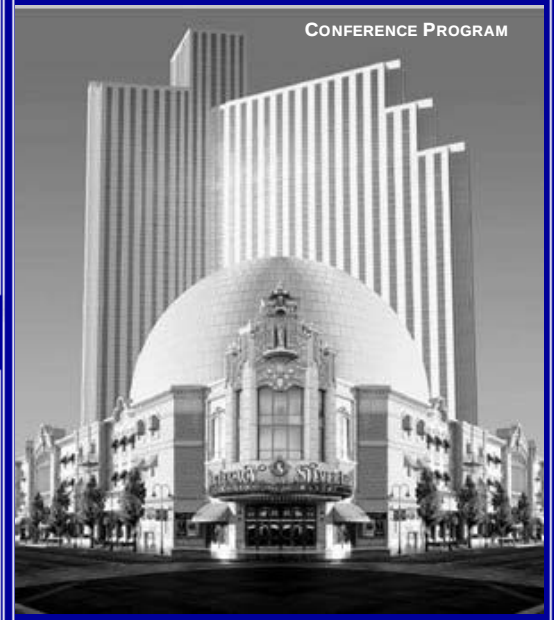


JOINT FEDERAL INTERAGENCY CONFERENCE
8th FISC
3rd FIHMC
2006

JOINT FEDERAL INTERAGENCY CONFERENCE
8TH FISC & 3RD FIHMC

INTERDISCIPLINARY SOLUTIONS FOR WATERSHED SUSTAINABILITY

SILVER LEGACY HOTEL
APRIL 2 - 6, 2006
RENO, NEVADA USA



JOINT FEDERAL INTERAGENCY CONFERENCE (8thFISC & 3rdFIHMC)

FORWARD

The Federal Interagency Sedimentation Conferences (FISC) began in 1947, and the Federal Interagency Hydrologic Modeling Conferences (FIHMC) began in 1998. These highly successful conferences, which together have produced over 1800 papers, are held jointly in 2006. The Joint Conference provides Federal and non-Federal scientists and managers from various disciplines the opportunity to discuss recent accomplishments and progress in research and on technical developments in the physical, chemical, and biological aspects of sedimentation and the development and use of models addressing surface water quality and quantity issues. The Joint Conference follows a mixed set of formats, including formal presentations, poster sessions, mini-workshops, and model demonstrations.

The Subcommittee on Hydrology (SOH) held the Federal Interagency Workshop on Hydrologic Modeling Demands for the 90's in Fort Collins, Colorado in 1993. That highly successful workshop was limited to Federal participants. Subsequent to that Workshop, the SOH decided to hold a broader series of conferences and to open it to all interested parties. The First and Second Federal Interagency Hydrologic Modeling Conferences were held in 1998 and 2002 in Las Vegas, Nevada, and covered models addressing surface water quality and quantity issues.

Federal Interagency Sedimentation Conferences (FISC) were held in 1947, 1963, 1976, 1986, 1991, 1996, and 2001. As a continuation of these highly successful conferences, the 8thFISC again provides an interdisciplinary mix of scientists and managers from government agencies, academia, and the business community to make professional presentations on recent accomplishments and progress in research and on technical developments related to sedimentation processes and the impact of sediment on the environment.

CONFERENCE SITE

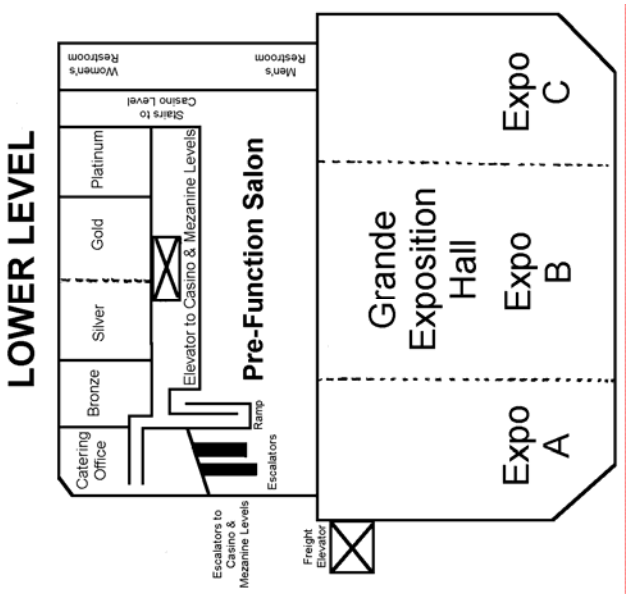
The Conference is held at the Silver Legacy Hotel and Casino in Reno, Nevada. Reno averages over 300 days of sunshine per year and features family recreation possibilities such as Lake Tahoe and the High Sierra mountains.

SPONSORS

The Federal Interagency Subcommittees on Hydrology (SOH) and Sedimentation (SOS).

SUBCOMITTEE ORGANIZATIONS

Association of State Floodplain Managers	
Agricultural Research Service	ARS
American Forests	
American Society of Civil Engineers	ASCE
Defenders of Property Rights	
Bureau of Land Management	BLM
Bureau of Reclamation	BOR
Colorado Water Resources Research Institute	CWRRI
Electric Power Research Institute	EPRI
Federal Emergency Management Agency	FEMA



POSTERS

TITLE	AUTHOR(S)
PRIMARY FACTORS AFFECTING WATER CLARITY AT SHALLOW WATER SITES THROUGHOUT THE CHESAPEAKE AND MARYLAND COASTAL BAYS	Julie M. Baldizar and Nancy B. Rybicki
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, Chase Barton
EAST CHICAGO SEDIMENT REMEDIATION DEMONSTRATION PROJECT	David F. Bucaro & Kirsten Buczak
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, 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
RECONNAISSANCE TECHNIQUE FOR RESERVOIR SURVEYS	Ron Ferrari and Kent Collins
ALLUVIAL FAN EROSION AND SEDIMENT INVESTIGATIONS USING THE HYDRAULIC MODELING TOOL FLO-2D	Joe Gasperi and John McClung
INTEGRATED RIVER MORPHOLOGY AND VEGETATION MODELING OF THE SACRAMENTO RIVER	Blair Greimann, Jennifer Bountry, Yong Lai, David Mooney, and Timothy Randle
SOIL EROSION ON CROPLAND IN THE UNITED STATES: STATUS AND TRENDS FOR 1982-2003	Carla A. Kertis, Thomas A. Iivari
U.S.GEOLOGICAL SURVEY PILOT STUDY RESULTS FOR PARTICLE SIZE DISTRIBUTION ANALYSES OF QUALITY ASSURANCE SAMPLES	Natalie Latysh
A FIVE-YEAR RECORD OF SEDIMENTATION IN THE LOS ALAMOS RESERVOIR, NEW MEXICO, FOLLOWING THE CERRO GRANDE FIRE	Alexis Lavine, Gregory A. Kuyumjian, Steven L. Reneau, Danny Katzman and Daniel V. Malmon
EVALUATION OF TECHNIQUES TO ESTIMATE SUSPENDED-SEDIMENT CONCENTRATIONS IN THE KANSAS RIVER	Casey J. Lee, Patrick P. Rasmussen and Andrew C. Ziegler
CHANNEL WIDTHS CHANGES ALONG THE MIDDLE RIO GRANDE, NM	Paula Makar, Tamara Massong, Travis Bauer
LANDSLIDE SEDIMENT PRODUCTION RATES IN THE MIDDLE FORK AND UPPER EEL RIVER BASINS, NORTHERN CALIFORNIA	Juan de la Fuenta, Alisha Miller, Don Elder, Robert Faust, William Snavely
SPATIAL PATTERNS OF SOIL EROSION AND DEPOSITION IN TWO SMALL, SEMI-ARID WATERSHEDS	M.A.Nearing, Akitsu Kimotol,Mary H. Nichols, Jerry C. Ritchie
GEOMORPHIC CHANGE AND CONTROLLING VARIABLES IN AN EPHEMERAL ALLUVIAL CHANNEL	M.H. Nichols, M. Nearing and B. Yuill
MONITORING COARSE SEDIMENT PARTICLE DISPLACEMENT USING A RADIO FREQUENCY IDENTIFICATION SYSTEM	Mary Nichols
MONITORING AGGRADATIONAL AND DEGRADATIONAL TRENDS OF THE MIDDLE RIO GRANDE, NM	Robert Padilla and Christi Young
NUMERICAL STUDY OF THE RESPONSE OF A RESERVOIR DEPOSIT TO SUDDEN DAM REMOVAL	Allesandro Cantelli, Miguel Wong, Gary Parker
THE USDA'S CONSERVATION EFFECTS ASSESSMENT PROJECT (CEAP)	Roberta Parry
LOWER CLEAR CREEK FLOODPLAIN REHABILITIATION PROJECT: GEOMORPHIC MONITORING OF PHASE 3A	Smokey Pittman, Graham Matthews

Federal Highway Administration	FHwA
Federal Energy Regulatory Commission	FERC
International Boundary and Water Commission	IBWC
National Hydrologic Warning Council	
National Park Service	NPS
National Science Foundation	NSF
National Weather Service	NWS
Natural Resources Conservation Service	NRCS
Office of Surface Mining Reclamation & Enforcement	OSMRE
Universities Council on Water Research	
US Army Corps of Engineers	USACE
US Environmental Protection Agency	USEPA
US Forest Service	USFS
US Geological Survey	USGS

ORGANIZING COMMITTEE for the Joint Federal Interagency Conference

Joint Conference Chair– G. Douglas Glysson, USGS
Operations Chair– Paula Makar, BOR
Proceedings Coordinator– Francisco Simoes, USGS
Poster/Demo Coordinator– Tom Donaldson, NWS
Logistics– Larry Schmidt, USFS (ret.)
Registration– Jeff Rieker, BOR
Exhibits– Joe Treadway, USGS
Short Course Coordinator– Jayantha Obeysekera, S. FL Water Mgt. District
Field Trip Coordinator– Gary Barbato, NWS
Publicity Coordinator– Christi Young, BOR

	3rdFIHMC	8thFISC
Chairs–	Don Frevert, BOR	Jerry M. Bernard, NRCS
Tech. Prog. Chairs–	George Leavesley, USGS	Jerry W. Webb, USACE
Co-chairs–	Steve Markstrom, USGS	Dina McComas, USACE
A/V Coordinators–	Roland Viger, USGS	Marie M. Garsjo, NRCS

EXHIBITS

Exhibits will be held in the Exhibit Hall as follows:

EXHIBIT HALL		Opens	Closes
Sunday (Grand Opening)	April 2	5:30pm	7:30pm
Monday	April 3	8:30am	6:45pm
Exhibitors' Reception		5:15pm	6:45pm
Tuesday	April 4	10:00am	3:30pm

A Grand Opening of the Exhibit Hall is planned for Sunday and will include a two-hour get acquainted reception in the Exhibit Hall from 5:30 pm to 7:30 pm. All Monday and Tuesday coffee breaks, poster sessions, and receptions will also be held in the Exhibit Hall to insure that participants have ample time to visit all the exhibits. A special Exhibitor's Reception is planned for Monday

INFORMATION/MESSAGE CENTER. Messages for participants at the Conference will be posted on the message board in the registration area. Messages may be directed to the Silver Legacy Hotel operator at 775-329-4777.

TRANSPORTATION. Transportation to the Silver Legacy Hotel may be obtained by commercial shuttle or taxicab. Complimentary airport limousine service is available from the airport to the hotel at approximately 30-minute intervals. One-way taxicab fare is about $20.

SPOUSAL PROGRAMS. Directions and information on local attractions will be available at the registration area. Spouse registration is $40 and includes all refreshment breaks, receptions, and Wednesday dinner.

REGISTRATION

Conference Registration:	
$390	by March 1, 2006
$450	after March 1 and onsite

Registration Includes:

Conference Proceedings (8thFISC & 3rdFIHMC) on CD-ROM
Joint Conference Abstracts (printed)
Opening Reception: Sunday, Exhibit Hall, ***Grande Expo B***
Exhibitors' Reception, Posters-I: Mon., Exhibit Hall, ***Grande Expo B***
Model Demos, Posters- I I, Dinner: Wed., ***Grande Expo Hall***
All refreshment breaks

Registration Desk Hours *PLATINUM Room*				
Sunday	April 2	7:00 am	to	6:00 pm
Monday	April 3	7:30 am	to	5:30 pm
Tuesday	April 4	8:00 am	to	5:00 pm
Wednesday	April 5	8:00 am	to	5:00 pm
Thursday	April 6	8:00 am	to	1:00 pm

SPEAKERS' BREAKFASTS
A working breakfast will be served Monday through Thursday for each day's speakers:

Speakers' Breakfasts					
Monday	April 3	8:00 am	to	9:00 am	Silver Baron A
Tuesday	April 4	7:15 am	to	8:15 am	Grande Expo C
Wednesday	April 5	7:15 am	to	8:15 am	Grande Expo C
Thursday	April 6	7:15 am	to	8:15 am	Gold/Silver

This will be a full breakfast and all speakers, presenters of posters/models, session chairpersons, and audio/visual (A/V) assistants are requested to attend on the morning of the day of their presentation(s). They will be briefed on the day's activities. Speakers will coordinate their computer files with the A/V assistants before and during this breakfast meeting. Speakers are requested to attend this breakfast the day of their talks and to verify their arrangements with the session chairs and the A/V coordinator.

SPEAKERS' VIEWING ROOM: ***Boardroom***
The Boardroom is set up for speakers to view their presentation files and for session chairpersons and A/V assistants to meet with speakers.

PROCEEDINGS
The proceedings for this Joint Conference will be published on a single CD and will be provided upon registration at the conference. Each full registrant will receive one CD. Additional CDs are available for $25 each at the conference. A printed copy of the conference Abstracts will also be provided upon registration. Additional copies of Abstracts can be purchased for $20 each at the conference.

EXHIBITORS' RECEPTION
& POSTERS-I ***Grande Expo B***
Monday, April 3, 5:15pm to 6:45pm. A reception will be held in the Grande Exposition Hall after the close of Technical Sessions. Posters will be available for viewing, and authors will be available for discussion at that time

10:30am 3rdFIHMC THURSDAY 4/06/06

11D MODELING SOUTH FLORIDA-II ***SILVER BARON D***

Chair: Kenneth Tarboton
Co-Chair Alonso Griborio

10:30am *INTEGRATION OF CONTROL PROCESSORS IN THE REGIONAL SIMULATION MODEL(RSM) :* Jayantha Obeysekera, Joseph Park, and Randy VanZee
10:50am *CHALLENGES AND APPROACHES IN THE DEVELOPMENT OF A REGIONAL-SCALE, FIRST-PRINCIPLE, AND PHYSICS-BASED WATERSHED MODEL FOR SOUTH FLORIDA WATER MANAGEMENT AND ECOSYSTEM RESTORATION:* H.-P. Cheng, C. M. Hansen, C. A. Talbot, J.-R. Cheng, D. C. McVan, C. H. Tate, E. V. Edris, H.-C. Lin, M. A. Granat, and D. R. Richards
11:10am *INTEGRATED HYDROLOGICAL MODELLING FOR WATER MANAGEMENT IN SOUTHWEST FLORIDA:* E. Zia Hosseinipour
11:30am *HYDRODYNAMIC AND WATER QUALITY MODEL ARTHUR R. MARSHALL LOXAHATCHEE NATIONAL WILDLIFE REFUGE:* Alonso G. Griborio, Ehab A. Meselhe, Shankar Gautam, Jeanne C. Arceneaux, Emad H. Habib, and Michael G. Waldon

10:30am 3rdFIHMC THURSDAY 4/06/06

11E MODEL USE IN DECISION MAKING-II ***SILVER BARON 1-3***

Chair: Edie Zagona
Co-Chair Don Frevert

10:30am *MANAGING TVA'S HYDROPOWER SYSTEM USING RIVERWARE:* Suzanne H. Biddle and Timothy M. Magee
10:50am *MEETING THE NEEDS OF COLORADO RIVER STAKEHOLDERS: A NEW POLICY EVALUATION TOOL IN RIVERWARE & AN ANALYSIS OF COORDINATED RESERVOIR MANAGEMENT UNDER LOW RESERVOIR CONDITIONS:* Carly Jerla, Terry Fulp, and Edie Zagona
11:10am *STAKEHOLDER PARTICIPATION IN TARGET FLOW MODELING ON THE MIDDLE RIO GRANDE:* Marc Sidlow, Mike Roark, April Sanders, and Edie Zagona
11:30am *INNOVATIONS IN WATER SUPPLY MODELING FOR THE LOWER COLORADO RIVER AUTHORITY IN TEXAS:* Brad Vickers, Kris Martinez, Nadira Kabir, Richard E. Brown, and Ron Anderson

10:30am 3rdFIHMC THURSDAY 4/06/06

11F FLOODS-II ***SILVER BARON 4-6***

Chair: Baxter Vieux
Co-Chair Cameron Ackerman

10:30am *REGIONAL FLOOD FREQUENCY ANALYSIS ACCOUNTING FOR SPORADIC THUNDERSTORMS IN NORTH CENTRAL OREGON:* Henry Hu, Todd Bennett, Wilbert Thomas, Jr., and Joseph Weber
10:50am *PALEOFLOODS AND FLOOD FREQUENCY IN THE ARKANSAS RIVER BASIN NEAR PUEBLO, COLORADO:* John F. England, Jr., Jeanne E. Klawon, Travis R. Bauer, and Ralph E. Klinger
11:10am *DAM FAILURE ANALYSIS USING HEC-RAS AND HEC-GEORAS:* Cameron T. Ackerman and Gary W. Brunner
11:30am *DEVELOPMENT AND USE OF USACE-SWD FLOOD CONTROL HYDROPOWER ALGORITHMS IN RIVERWARE:* John Daylor, Jerry Cotter, Edie Zagona, and Nancy Hall

5:00pm All Short Courses end

5:00pm All Joint Conference activities end

10:30am 8thFISC THURSDAY 4/06/06

11A SEDIMENT YIELD & TRANSPORT-VI ***SILVER BARON C***

Chair: John Bartholic
Co-Chair Marty Teal

10:30am *ESTIMATING SEDIMENT YIELD IN THE SOUTHERN APPALACHIANS USING WCS-SED:* Paul Bolstad, Andrew Jenks, Mark Riedel, and James M. Vose

10:50am *RECONSTRUCTING RESERVOIR STRATIGRAPHY FROM HYDROLOGIC HISTORY AND SIMPLE TRANSPORT CALCULATIONS: ENGLEBRIGHT LAKE, YUBA RIVER, NORTHERN CALIFORNIA:* Scott A. Wright and Noah P. Snyder

11:10am *CHESTER MORSE LAKE OUTLET CHANNEL ALTERNATIVES EVALUATION:* Hans Hadley, Thomas R. Grindeland, and Dalong "Daniel" Huang

11:30am *SEDIMENT TRANSPORT RESEARCH IN SHALLOW OVERLAND FLOW:* M.J.M. Romkens, S.N. Prasad, S. Madhusudana Rao

10:30am 8thFISC THURSDAY 4/06/06

11B SEDIMENT & WILDLIFE HABITAT-II ***SILVER BARON E***

Chair: Bill Carey
Co-Chair Larry Schmidt

10:30am *USE OF AERIAL THERMOGRAPHY TO MAP EMERGENT RIVERINE SANDBARS:* Ashley K. Heckman, Paul J. Kinzel, and Jonathan M. Nelson

10:50am *MODELING OF SPECIAL HIGH-FLOW RELEASE ALONG PLATTE RIVER IN CENTRAL NEBRASKA:* Mohammed A. Samad and Timothy J. Randle

11:10am *THE IMPLICATIONS OF RECENT FLOODPLAIN EVOLUTION ON WILDLIFE HABITAT WITHIN THE MIDDLE RIO GRANDE, NM:* Paul Tashjian (FWS-Albuquerque, NM), Tamara Massong (Reclamation -Albuquerque, NM)

11:30am *SAFETY AND FISH PASSAGE FOR LOW-HEAD DAMS:* Aaron W. Buesing

10:30am 8thFISC THURSDAY 4/06/06

11C INSTRUMENTATION MONITORING ***SILVER BARON A***

Chair: Thad Pratt
Co-Chair Peter Brooks

10:30am *MONITORING THE EFFECTS OF SEDIMENTATION FROM MOUNT ST. HELENS:* Patrick S. Obrien, Alan D. Donner, and David S. Biedenharn

10:50am *MODELING SEDIMENT TRANSPORT DURING OVERBANK FLOW IN THE RIO PUERCO, NEW MEXICO:* Eleanor Griffin, J. Dungan Smith, Jason Kean, Kirk Vincent

11:10am *THE EFFECTS OF ENSO PHASE ON THE OCCURRENCE OF COARSE PARTICLE MOTION IN CALIFORNIA COASTAL STREAMS:* E.D.Andrews and Ronald C. Antweiler

11:30am *THE VALUE OF CONTINUOUS TURBIDITY MONITORING IN TMDL PROGRAMS:* Teresa J. Rasmussen, Andrew C. Ziegler, Patrick P. Rasmussen, and Thomas C. Stiles

MODEL DEMONSTRATIONS
POSTERS, AND DINNER ***Grande Expo Hall***

Model demos and Posters-II, Wednesday, April 5, 4:30pm–9:00pm. A 4½ hour session for computer models and technical posters is offered. A light dinner by stations will be served between 6:00pm and 7:30pm, during the demonstrations. See list of Poster Papers in the technical section of this program. Additional dinner tickets may be purchased for $25 each.

FIELD TRIPS

Note: field trips are subject to cancellation and refund in case of poor weather conditions or insufficient number of participants. A $25 fee will be charged if you cancel out of a field trip after March 15, 2006. ***NOTE: Field trips convene at Pre-Function Salon 15 minutes prior to departure.***

Sunday, April 2, 2006

"Lower Truckee River Operations for Restoration: Reno to Pyramid Lake": 9am-4 pm $40 including lunch. Registration by March 15 required for lunch. Presented by U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service, Nevada Department of Environmental Protection, Washoe County Department of Water Resources, The Nature Conservancy, and Chad Gourley, Geomorphologist. This tour will concentrate on the physical changes made to the lower Truckee River during the last century, along with resulting erosion, flooding, and water quality/quantity impacts. Some of the methods which have been and will be put into place to mitigate these impacts will be covered. Truckee River operations for water supply, flood control, restoration of cottonwoods and the threatened Lahontan Cutthroat Trout and rare/endangered Cui-Ui in Pyramid Lake will be discussed. Planned stops include: 1) Truckee River at Vista, where the history of the Vista Reefs impacts and subsequent removal will be explained. 2) McCarran Ranch, where the river restoration project carried out by The Nature Conservancy will be covered. 3) Derby Dam, which has a major impact on Truckee River flows and the resulting health of both the river and of Pyramid Lake below this point. 4) Cottonwood restoration area near Wadsworth, where the U.S. Fish and Wildlife Service will discuss the Variable Instream Flow Strategy to manage flows for fish migration, cottonwood recruitment and water quality/quantity impacts. 5) Marble Bluff Dam and Fish Passage Facility, where the Bureau of Reclamation will discuss how the dam has stopped the Truckee's headcutting upstream, and the Fish and Wildlife Service will describe the fish passage facility. While en route, key facilities, structures, and diversions along the way will be pointed out and their role in river operations explained.

"Lake Tahoe and Upper Truckee River Region: River and Reservoir Operations, Tahoe City to Reno": 9am-4 pm $40 including lunch. Registration by March 15 required for lunch. Presented by U.S. Geological Survey, U.S. District Court Water Master's Office, Truckee Meadows Water Authority, and the U.S. Bureau of Reclamation This tour will concentrate on the history of Lake Tahoe, the Truckee River and their complex operation for water supply, flood control, recreation, power generation, environmental concerns and the restoration of two endangered species of fish in Pyramid Lake. At Meeks Bay, glaciation which occurred in the Tahoe Region will be discussed. Stops will include Lake Tahoe Dam, the Truckee River gage below Lake Tahoe Dam, Meeks Bay, Donner Lake, Boca Dam, Stampede Dam, Gray Creek (viewpoint), and a tour of the Chalk Bluffs Water Treatment Plant in Reno. While en route, key facilities, structures, gages, and diversions along the way will be pointed out and their role in river operations explained.

"Restoring Ecological Integrity to the Carson River"; Carson River from Genoa to Dayton, NV Area: 10 am-4 pm. $40 including lunch. Registration by March 15 required for lunch. Presented by Dayton Valley Conservation District, Carson Valley Conservation District, Western Nevada Conservation and Development Office, Carson Water Subconservancy District, and The Nature Conservancy: Man-caused changes to the Carson River watershed since the 1850s due to agriculture and mining have caused major degradation to the river channel and watershed. The degraded state of the river exacerbated the damage caused by the major January 1997 flood, and considerable erosion and damage to the banks

and riparian areas again occurred. As a result, landowners sought erosion protection, habitat improvement and geomorphic restoration under various federal relief and state conservation programs. In addition, several Federal, State and local agencies formed a partnership to address erosion and sedimentation problems. This field trip will visit several sites on the Carson River from Genoa to Dayton, NV, where various restoration projects have been planned and implemented. The restoration projects, some ongoing since 1999, include geomorphic alterations to restore the function of the river and wetlands, as well as using combinations of vegetation and engineered structures and materials (bioengineering) to control erosion and sedimentation. These sites have served as classroom workshops and follow-up demonstration areas for various erosion control and habitat improvement treatments. *Lake*

Tahoe and Carson City Waterfall Burn Area: "Challenges of Limiting Sedimentation, Flooding and Debris Flows at Lake Tahoe and in the Carson City "Waterfall" Fire Burn Area Watershed" 10 am - 4 pm. $40, including lunch. Registration by March 15 required for lunch. Presented by: U.S. Geological Survey, Natural Resources Conservation Service, U.S. Forest Service, Federal Highway Administration, Desert Research Institute and others. Loss of Lake Tahoe water clarity continues to be a national issue. This field trip will highlight sedimentation programs, as well as sedimentation control and monitoring networks in place at Lake Tahoe. Those participating will also visit the 2004 Carson City Waterfall Fire burn area, where means of monitoring flows and of limiting sedimentation, flooding and debris flows will be discussed.

SHORT COURSES

Note: Short courses are subject to cancellation and refund if the number of registrants are not sufficient to cover the class. Non-conference attendees can register but will have a lower priority than those who register for the full conference. A $25 handling fee will be charged if a registration for a short course is cancelled after March 15, 2006.

Sunday, April 2, 2006

MIKE SHE/MIKE 11, **Silver Baron 1-2**, 9:00 am to 4:00 pm, $175 Instructor: E. Zia Hosseinipour, Principal Water Resources Engineer, DHI, Inc. Complex riverrine and wetland flow systems and the interactions between surface water, ground water and evapotranspiration processes require an integrated mathematical hydrologic and hydrodynamic modeling approach. This course will present an overview of the MIKE SHE modeling system (www.dhisoftware.com/mikeshe) developed by DHI. The software package comprising the hydrological model MIKE SHE and the river hydrodynamic model MIKE 11 enables a fully integrated, dynamic simulation of surface water and subsurface flow regimes. MIKE 11 includes a number of modules such as structure operations, sediment transport, and water quality in association with DHI's ECOLAB. The modeling system can be used to address a wide range of water management issues and, as a management tool, can be used to help in the restoration and preservation of wetlands and sensitive ecosystems. The modeling system is also frequently used to address and assess water demands and supply issues such as irrigation of agricultural crops and urban environments (lawns, golf courses, parks, etc. in water reuse to conserve freshwater sources for water supply). The modeling software is linked with GIS for database access, data management, post-processing and assimilation of the model results. The use of GIS also allows for advanced flood mapping to study flood patterns, flood duration and possible crop damage. A CD of course materials will be provided for later use. A certificate of attendance will be issued to all attendees with an 8-hour PDH for registered professionals (PE, PG, PH) for their annual registration renewal requirements.

Hydrologic Modeling Using GIS and the Watershed Modeling System (WMS). **Silver Baron 5-6**, 9:00 am to 4:00 pm, $125 Instructors: E. James Nelson, Professor, Brigham Young University; Colby Manwaring, Vice President, EMS-I Inc. The objective of this course is to present advanced tools for hydrologic model characterization and analysis. The course will cover the use of digital terrain data in watershed delineation and parameter extraction for hydrologic models. The creation and use of GIS data

8:30am 3rdFIHMC THURSDAY 4/06/06

10D MODELING SOUTH FLORIDA-I — ***SILVER BARON D***

Chair: H.-P. Cheng
Co-Chair Joseph Park

8:30am *SOUTH FLORIDA REGIONAL SIMULATION MODEL (SFRSM) IMPLEMENTATION: PROJECT MANAGEMENT ASPECTS:* Kenneth C. Tarboton, Patricia E. Fulton, Lehar M. Brion, Richard R. Miessau, Ronald S. Traver, Jorge M. Rivera, Mohamed Z. Moustafa, and Richard J. Sands

8:50am *MANAGEMENT SIMULATION ENGINE: A FLEXIBLE, HIERARCHICAL CONTROL ARCHITECTURE OF THE REGIONAL SIMULATION MODEL(RSM):* Joseph Park, Jayantha Obeysekera, and Randy VanZee

9:10am *MSE NETWORK: AN INTEGRATED DATABASE & STREAM FLOW NETWORK REPRESENTATION IN THE REGIONAL SIMULATION MODEL(RSM):* Michelle Irizarry , Joseph Park, Jayantha Obeysekera, and Randy VanZee

9:30am *TRANSPARENT DATA ACCESS AND FILTERING IN THE REGIONAL SIMULATION MODEL(RSM):* Randy VanZee, Joseph Park, and Jayantha Obeysekera

8:30am 3rdFIHMC THURSDAY 4/06/06

10E MODEL USE IN DECISION MAKING-I — ***SILVER BARON 1-3***

Chair: Edie Zagona
Co-Chair Stuart Stein

8:30am *CORPS WATER MANAGEMENT SYSTEM DECISION SUPPORT MODELING AND INTEGRATION:* William J. Charley and Thomas A. Evans

8:50am *A MODELING TOOL FOR EVALUATING RESERVOIR OPERATIONS IN THE MUSKINGUM BASIN:* Stuart M. Stein, Brett Martin, Karsten Sedmera, and Stephen R. Stout

9:10am *WATERSHED CONSERVATION MANAGEMENT PLANNING USING AGNPS:* Ronald L. Bingner and Fred Theurer

9:30am *THREE-DIMENSIONAL SEEPAGE ANALYSIS THROUGH FORDYCE DAM:* Samuel S. Lee and Sorab Panday

8:30am 3rdFIHMC THURSDAY 4/06/06

10F FLOODS-I — ***SILVER BARON 4-6***

Chair: John England
Co-Chair Wilbert Thomas

8:30am *ADVANCED HYDROLOGIC PREDICTION FOR EVENT-BASED AND LONG-TERM CONTINUOUS OPERATION:* Baxter E. Vieux and Jean E. Vieux

8:50am *HYDROLOGIC MODELING APPLICATIONS IN NATIONAL FLOOD INSURANCE PROGRAM:* Zhida Song-James

9:10am *AN EVALUATION OF THE VARIABILITY OF FLOOD FREQUENCY ESTIMATES GENERATED FROM A RAINFALL-RUNOFF MODEL:* Wilbert O. Thomas, Jr

9:30am *REAL-TIME FLOOD INUNDATION MAPPING IN NORTH CAROLINA:* Jerad D. Bales and Chad Wagner

10:00am BREAK *Grande Expo B*

10:30am Short Courses (see listings)

THURSDAY – MORNING

7:15am Speakers' Breakfast, *Gold/Silver*

8:30am 8thFISC THURSDAY 4/06/06

10A RESERVOIR SEDIMENTATION-II — ***SILVER BARON C***

Chair: Thomas Grindeland
Co-Chair Doug Curtis

8:30am *SEDIMENT CHEMISTRY IN THE COLORADO RIVER DELTA, LAKE POWELL, UTAH:* Robert J. Hart

8:50am *EFFECTS OF NON-AGRICULTURAL HUMAN ACTIVITY ON SEDIMENT QUALITY: A COMPARISON OF TRACE ELEMENT CONCENTRATIONS IN EIGHT SMALL RESERVOIRS:* Kyle Juracek and Andrew Ziegler

9:10am *SMALL ARTIFICIAL PONDS IN THE UNITED STATES: IMPACTS ON SEDIMENTATION AND CARBON BUDGET:* W.H. Renwick, R.O.Sleezer, R.W.Buddemeier, S.V.Smith

9:30am *MODELING SUSPENDED SEDIMENT AND WATER TEMPERATURE IN DETROIT LAKE, OREGON:* Annett B. Sullivan, Stewart A. Rounds, Mark A. Uhrich, and Heather M. Bragg, U.S. Geological Survey, Oregon Water Science Center, 10615 S.E. Cherry Blossom Drive, Portland, OR 97216

8:30am 8thFISC THURSDAY 4/06/06

10B SEDIMENT & WILDLIFE HABITAT-I — ***SILVER BARON E***

Chair: Jim Renthal
Co-Chair Nicholas Pinter

8:30am *ADAPTIVE MANAGEMENT CASE STUDIES FOR RIVER ENGINEERING AND RESTORATION PROJECTS ON THE MIDDLE RIO GRANDE, NEW MEXICO:* Mark S. Nemeth, Hydraulic Engineer, Albuquerque, NM; Kristi-Irene Smith, Hydraulic Engineer, Albuquerque, NM

8:50am *SPATIAL DISTRIBUTION OF IMPACTS TO CHANNEL BED MOBILITY DUE TO FLOW REGULATION, KOOTENAI RIVER, USA:* Michael Burke, Klaus Jorde, and Rohan Benjankar, Center for Ecohydraulics Research, University of Idaho, Boise, ID; John M. Buffington, Research Geomorphologist, USDA Forest Service, Rocky Mountain Research Station, Boise, ID; Jeffrey Braatne, Assistant Professor, College of Natural Resources, University of Idaho, Moscow, ID;

9:10am *QUANTITATIVE LINKAGES BETWEEN SEDIMENT SUPPLY, STREAMBED FINE SEDIMENT, AND BENTHIC MACROINVERTEBRATES IN THE KLAMATH MOUNTAINS, NORTHERN CALIFORNIA:* Matthew R. Cover, Christine L. May, William E. Dietrich and Vincent H. Resh

9:30am *FLOW-SED / POWER-SED – PREDICTION MODELS FOR SUSPENDED AND BEDLOAD TRANSPORT:* David L. Rosgen

8:30am 8thFISC THURSDAY 4/06/06

10C FARM BILL / CONSERVATION — ***SILVER BARON A***

Chair: Jerry Bernard
Co-Chair Daniel Meyer

8:30am *ASSESSING EFFECTS OF CONSERVATION AT THE WATERSHED SCALE:* Tom Drewes, Kelsi Bracmort, and Jerry Bernard

8:50am *ASSESSING THE NATIONAL EFFECTS OF CONSERVATION-FOR THE FIRST TIME (CEAP):* Robert L. Kellogg, Charles Rewa, and Diane Eckles

9:10am *EVALUATION OF THE IMPORTANCE OF CHANNEL PROCESSES IN CEAP-WATERSHED SUSPENDED SEDIMENT YIELDS:* Andrew Simon

9:30am *DETERMINATION OF SEDIMENT SOURCES ON THE CEAP BENCHMARK WATERSHEDS:* Christopher Wilson and Roger Kuhnle

will also be presented as related to hydrologic modeling. The Watershed Modeling System (WMS) is a comprehensive hydrologic modeling software that will be used in the course to accomplish the objectives above. The software allows rapid and accurate analysis of digital terrain data, GIS data, and hydrologic modeling parameters. The software will be used to build hydrologic models for flow prediction, hydrograph prediction, and flood inundation mapping. Course materials will be provided on CD to each participant.

Introduction to Integrated Surface/Subsurface Modeling with MODHMS. **Silver Baron C,** 9:00 am to 4:00 pm, $75 Instructor: Sorab Panday, Senior Director, Research & Development, HydroGeoLogic Inc. This course presents the theory and application of integrated surface and subsurface modeling using the MODHMS software. MODHMS is a physically based, spatially-distributed simulator for multi-scale applications of surface and subsurface flow and transport based on the popular MODFLOW framework. The hydrologic cycle is treated in a holistic approach with 3-D representation of the saturated / unsaturated subsurface system, 2-D vertically integrated representation of surface runoff, 1-D representation of rivers, streams, pipes, or other hydraulic features, and a node-link representation of small-scale features interacting with each other and with precipitation and evapotranspiration in a fully-coupled manner. The various physical and numerical aspects of MODHMS will be presented and its use with the ViewHMS pre- and post-processing system will be demonstrated. Application examples will be presented to demonstrate conceptualization and parameterization of integrated models and the various simplifications that may be made to reduce numerical burden.

Steam Restoration Design, **Silver Baron A**, 8:00 am to 5:00 pm, $75 Instructors: Jerry Bernard, National Geologist, USDA-NRCS, Conservation Engineering Division; Jon Fripp, USDA-NRCS National Design Construction, and ; Kerry Robinson, USDA-NRCS East National Technology Support Center; and Dave Rosgen, WILDLAND HYDROLOGY The USDA Natural Resources Conservation Service (NRCS) is currently developing a stream design guide which will be a companion to the 1998 interagency document, "Stream Corridor Restoration: Principles, Processes, and Practices". This comprehensive draft design guide, currently titled USDA-NRCS Stream Restoration Design Handbook, presents engineering assessment and design tools that are applicable to any stream restoration work, whether it primarily follows a natural stream restoration or is strictly a structural project. The basis for this short course will be this USDA-NRCS Stream Restoration Design Handbook, which is scheduled for release near the time of this work shop. Excerpts from this manual, which is currently in draft form, will be provided to the students. Although the importance of proper planning for stream restoration work will be stressed, the focus of this workshop will be on selected design tools and procedures from the draft USDA-NRCS Stream Restoration Design Handbook. Specific design tools and short example problems will be provided. The course will focus on the basics of design techniques which have been compiled from over 120 contributing authors and practitioners. The course is therefore of benefit to those who are or will become engaged in designing stream restorations.

Hydraulic and Sediment Transport Modeling of Rivers and Watersheds with GSTAR. **Silver Baron 3**, 9:00 am to 4:00 pm, $90 Instructors: Blair Greimann, Yong Lai, and David Mooney, U. S. Bureau of Reclamation The Bureau of Reclamation has developed several sediment transport tools for use in natural river systems. The course will give an introduction to three of these tools: SIAM, GSTAR-1D and GSTAR-W. SIAM (Sediment Impact Analysis Methods) is a reach-based geomorphic sediment budgeting tool to link sediment sources, sinks, and transport to channel adjustment and basin yield. SIAM computes sediment yields and locates areas of potential instability, identifies causes of geomorphic change distributed throughout a network, and tests potential solution strategies within watersheds of all sizes. GSTAR-1D (Generalized Sediment Transport for Alluvial Rivers - One Dimension) is a one-dimensional hydraulic and sediment transport model for use in natural rivers and manmade canals. It is a mobile boundary model with the ability to simulate steady or unsteady flows, internal boundary conditions, looped river networks, cohesive and non-

cohesive sediment transport, and lateral inflows. GSTAR-W (Generalized Sediment Transport for Alluvial Rivers and Watersheds) is an unsteady two-dimensional hydraulic, erosion and sediment transport model for watersheds with 1D or 2D channel networks or for river systems with floodplains. The goal of this course will be to familiarize the student with each model so that they will be able to choose the correct model for their application and to understand each model's capabilities and limitations. Participants may want to bring their own notebook computers if they would like to have hands-on experience with the software during the short course.

SHORT COURSES

Thursday, April 6, 2006

***EXCEL-LEnT*. Silver**. 10:30 am to 5:00 pm, $150. Instructor: Darrell G. Fontane, Professor, Colorado State University The EXCEL spreadsheet software is one of the most used software packages in water resources organizations. Yet most engineers and scientists use only a fraction of the spreadsheet's capabilities. This workshop is designed to teach you how to employ some of the features particularly useful in engineering and water resources analysis. The workshop will cover customized graphs, including dynamic and animated graphs, recording macros, using message and input boxes, custom user forms, and writing your own customized Visual Basic for examples of engineering spreadsheets for future reference and a set of the EXCELLEnT notes. This workshop is designed for average and above spreadsheet users. No previous programming experience with macros or Visual Basic for Applications is required. The workshop is hands-on, therefore participants must have their own notebook computer with EXCEL (version '97 or later) installed.

***Arc Hydro - Hydrologic Modeling with GIS.* Gold.** 10:30 am to 5:00 pm, $75, Instructor: Dean Djokic, Lead Developer, Arc Hydro, ESRI GIS as spatial data management and mapping technology provides strong foundation for support of hydrologic and hydraulic (H&H) analyses needed for floodplain mapping. This one-day workshop presents GIS technology and techniques that can be used for terrain analyses, hydrologic and hydraulic characteristics extraction, numerical model input and output, modeling process automation, and result mapping. HEC's GeoHMS and GeoRAS and USGS's StreamStats/NSS, each built upon foundation methodologies, data model, and toolset provided by Arc Hydro, form the modeling backbone for H&H analyses presented in this workshop. Besides GIS techniques, the workshop will present actual experiences in developing HMS, NSS, and RAS model inputs through use of GIS and in analyzing and mapping of model results. Utilization of GIS infrastructure for support of other H&H models will be discussed as well. Opportunities for GIS use in post-model analyses such as map production, flood damage estimation, and results dissemination will also be discussed.

HEC-HMS and HEC-GeoHMS. Silver Baron 5-6. 1:00 pm to 5:00 pm, $50 Instructors: William A. Scharffenberg (HMS), Research Hydraulic Engineer, and James Doan (GeoHMS), U.S. Army Corps of Engineers Hydrologic Engineering Center, Davis The Corps of Engineers Hydrologic Engineering Center's HEC-HMS program and its GIS companion product HEC-GeoHMS are widely used within the engineering community. GeoHMS, an ArcView and ArcGIS extension, is used for preprocessing of an HMS dataset. It allows users to visualize spatial information, document watershed characteristics, perform spatial analysis, delineate basins and streams, and construct an HMS basin file. HMS simulates the precipitation-runoff processes of a dendritic watershed. It provides a wide variety of mathematical models for representing the mass and energy fluxes of the hydrologic cycle: precipitation, evapotranspiration, snowmelt, infiltration, surface runoff, baseflow, channel routing, reservoirs and diversions among others. These model choices include girded and area-averaged methods for event or continuous simulation. This short course will provide an overview and sample application of HMS and GeoHMS.

***Accounting for Sediment Processes in Stream Analysis and Design.* Silver Baron B.** 10:30 am to 5:00 pm, $50 Instructors: David S. Biedenharn and Charles D. Little, Engineering Research Development Center, U.S. Army Corps of Engineers, Stanford A.

1:30pm 3rdFIHMC WEDNESDAY 4/05/06

9D PARAMETER ESTIMATION, CALIBRATION, AND SENSITIVITY ANALYSIS-III — ***SILVER BARON A***

Chair: John England
Co-Chair Lainie Levick

1:30pm *AUTOMATED GEOSPATIAL WATERSHED ASSESSMENT TOOL (AGWA): UNCERTAINTY ANALYSIS OF COMMON INPUT DATA:* L. Levick, D. P. Guertin, D.J. Semmens, and D.C. Goodrich

1:50pm *CALCULATING MODFLOW ANALYTICAL SENSITIVITIES USING ADIFOR FOR EFFECTIVE AND EFFICIENT ESTIMATION OF UNCERTAINTIES AND USE OF AQUIFER SENSITIVITIES FOR OPTIMAL OPERATION:* Amir Gamliel, and Maged Hussein

2:10pm *IMPROVEMENTS TO INTEGRATED HYDROLOGICMODELING IN THE TAMPA BAY, FLORIDA REGION: HYDROLOGIC SIMILARITY AND CALIBRATION METRICS:* Jeffrey Geurink, Ron Basso, Patrick Tara, Ken Trout, Mark Ross

2:30pm *MODELING UNCERTAINTY AND CODE VERIFICATION: QUANTIFYING THE ACCURACY OF MODELING CODES:* Maged Hussein

1:30pm 3rdFIHMC WEDNESDAY 4/05/06

9E WATER SUPPLY AND AVAILABILITY — ***SILVER BARON C***

Chair: Lauren Hay
Co-Chair Mark Riedel

1:30pm *CLIMATE SIGNALS FOR ENHANCED RUNOFF FORECASTING IN WESTERN U.S. REGIONS:* Levi Brekke, Jon Medina, David Raff, and Shaleen Jain

1:50pm *AN INTERAGENCY WORK TEAM'S PLAN FOR ASSESSING RISKS OF CLIMATE CHANGE ON MANAGEMENT OF CALIFORNIA'S WATER RESOURCES:* Jamie Anderson, Francis Chung, Levi Brekke, Michael Anderson, Dan Easton, Messele Ejeta, Michael Floyd, Roy Peterson, and Hongbing Yin

2:10pm *NORTH ATLANTIC OSCILLATION INFLUENCES ON CLIMATE VARIABILITY IN THE SOUTHERN APPALACHIANS:* Mark S. Riedel

2:30pm *NATIONAL IMPLEMENTATION OF AND ENHANCEMENTS TO THE STREAMSTATS WEB APPLICATION:* Kernell Ries

1:30pm 3rdFIHMC WEDNESDAY 4/05/06

9F SURFACE WATER / GROUND WATER MODELING-III — ***SILVER BARON E***

Chair: Jayantha Obeysekera
Co-Chair Aaron Byrd

1:30pm *SPATIAL AND TEMPORAL VARIABILITY IN STREAMBED FLUXES, LEARY WEBER DITCH, INDIANA:* Hedeff I. Essaid, John T. Wilson, and Nancy T. Baker

1:50pm *ESTIMATING RATES OF EXCHANGE ACROSS THE SEDIMENT/WATER INTERFACE IN THE MERCED RIVER, CA USING TEMPERATURE MODELING AND DIRECT MEASUREMENT:* Celia Zamora

2:10pm *MODELING STORM AND TILE DRAINS IN A MULTI-DIMENSIONAL HYDROLOGIC MODEL:* Aaron Byrd, Justin Niedzialek, and Fred L. Ogden

2:30pm *A REGIONAL ANALYTIC ELEMENT GROUNDWATER FLOW MODEL:* Dave Dahlstrom and Vern Rash

4:30pm to 9:00pm DEMOS and POSTERS-II, *Grande Expo B*
6:00pm to 7:30pm DINNER, *Grande Expo A & C*

1:30pm 8thFISC WEDNESDAY 4/05/06

9A RESERVOIR SEDIMENTATION-I — ***SILVER BARON D***

Chair: Tim Randall
Co-Chair Yong Lai

1:30pm *COMPARISON OF NUMERICAL MODELS APPLIED TO REMOVAL OF SAVAGE RAPIDS DAM NEAR GRANTS PASS, OREGON:* Jennifer Bountry, Yong Lai, Timothy Randle

1:50pm *TEMPORAL AND SPATIAL TRENDS IN SEDIMENT CHEMISTRY IMPOUNDED WITHIN A FLOOD CONTROL RESERVOIR: GRENADA LAKE, MS:* Sean J. Bennett, Fred E. Rhoton, ShuMin Hsu, and Carlos V. Alonso

2:10pm *ACOUSTIC PROFILING OF SEDIMENT ACCUMULATION IN THREE SMALL EROSION CONTROL RESERVOIRS IN NORTH MISSISSIPPI:*r Del Leary, Craig J. Hickey and Daniel G. Wren

2:30pm *SEDIMENTATION IN THREE SMALL EROSION CONTROL RESERVOIRS IN NORTH MISSISSIPPI:* Daniel G. Wren, Robert R. Wells, Christopher G. Wilson, Charles M. Cooper, Del Leary and Craig J. Hickey

1:30pm 8thFISC WEDNESDAY 4/05/06

9B GULLY EROSION-II — ***SILVER BARON 1-3***

Chair: Glen Miller
Co-Chair Robert Wells

1:30pm *TERMINATION OF GULLY PROCESSES, SOUTHEASTERN NIGERIA:* Peter P. Hudec, Frank Simpson, Enuvie G. Akpokodje and Meshach O. Umeneke

1:50pm *ASPECTS OF GULLY EROSION RELATED TO EMBANKMENT OVERTOPPING AND BREACH:* Greg Hanson and Darrel Temple

2:10pm *PIPE FLOW IMPACTS ON EPHEMERAL GULLY EROSION:* G.V. Wilson, R.J. Cullum, and M.J.M. Romkens

2:30pm *EPHEMERAL GULLY EROSION PROCESS AND MODELING ON THE LOESS PLATEAU IN CHINA:* Fen-li Zheng, Zhong-shan Jiang, and Min Wu

1:30pm 8thFISC WEDNESDAY 4/05/06

9C SEDIMENT SURROGATES-IV — ***SILVER BARON 4-6***

Chair: Kevin Knuuti
Co-Chair Doug Dixon

1:30pm *A COMPARISON OF TWO FIELD STUDIES OF ACOUSTIC BED VELOCITY: GRAIN SIZE AND INSTRUMENT FREQUENCY EFFECTS:* David Gaeuman and Colin D. Rennie,

1:50pm *USING HIGH RESOLUTION BATHYMETRIC DATA FOR MEASURING BED-LOAD TRANSPORT:* David D. Abraham and Roger Kuhnle

2:10pm *PASSIVE ACOUSTIC MONITORING OF COARSE BEDLOAD TRANSPORT ON THE TRINITY RIVER:* Jonathan Barton, Rudy Slingerland, Thomas B. Gabrielson, and Smokey Pittman

2:30pm *SEDIMENT TRACKING: A COMPLEMENTARY METHOD FOR MEASUREMENT OF SEDIMENT TRANSPORT IN RIVERS:* Kevin Black, Sam Athey, Peter Wilson

Gibson, Hydrologic Engineering Center, U.S. Army Corps of Engineers, Chester C. Watson, Colorado State University, and Colin R. Thorne, University of Nottingham. A simple, rigid approach to addressing channel rehabilitation projects is not available. There are too many variables that must be addressed for a one-size-fits all approach to channel modification activities. Because different river systems vary in geology, climate, ecology, hydrology, and hydraulics; methods utilized in one location may not be applicable to another location. A generalized systematic approach to addressing channel design has been developed to address the large variety of projects that may range from localized erosion problems that can be addressed using a simple reference reach methodology, to severe basin-wide problems that require a concentrated analysis and design effort. The objectives of this workshop are to introduce the methodology and procedures for accounting for sediment processes in the analysis and design of channel systems, with a particular emphasis on ensuring that sediment continuity be established on a regional basis. The utility of the newly developed Sediment Impact Assessment Model (SIAM) will also be demonstrated. The target audience for this workshop is personnel involved in channel restoration, sediment management, or any activities requiring the modification to channel systems. The following topics will be covered: The Channel Design Process, Sediment-related issues in stream analysis and design, Baseline Geomorphic Assessments, Introduction to SIAM, SIAM Case Study, and SIAM Application Workshop.

Overview on Collection of Fluvial-Sediment Data. **Silver Baron 1-2.** 1:00 pm to 5:00 pm, $75 Instructors: John R. Gray and G. Douglas Glysson, U.S. Geological Survey. This short course provides an overview of basic fluvial-sediment data-collection techniques with emphasis on fluvial-sediment concepts, sampler characteristics, and sampling techniques. Methods for collecting suspended-sediment data are emphasized, but overviews of bedload and bed-material data collection techniques are included. Basic requirements for collecting sufficient, useful sediment data, and considerations in data quality are also presented. The course is geared for professionals and technicians who will be, or are planning on, collecting sediment data. U.S. Geological Survey Techniques of Water- Resources Investigations Book 3, C2, "Field Methods for Collection of Fluvial Sediment" and several dozen additional technical resources will be provided on a CD-ROM. This short course is a synopsis of the full 5-day course, "Sediment Data Collection Techniques," offered annually by the U.S. Geological Survey in Castle Rock and Vancouver, Washington.

MONDAY – MORNING, April 3, 2006

8:00am Speakers' Breakfast, Silver Baron A

8:30am Pre-Conference BREAK, *Grande Expo B*

OPENING SESSION

9:30am, MONDAY 04/03/06 — *Grande Expo C*

Call to order	Doug Glysson, JFIC Chair
Welcome statement	John Keys, Commissioner, BOR
Thoughts on the 3rd FIHMC	Donald Frevert, 3rd FIHMC Chair
Thoughts on the 8th FISC	Jerry Bernard, 8th FISC Chair
Panel on Hurricane Katrina	
The Storm	Dave Reed, NWS
The Hydrology and Flooding	Jeff Harris, USACE
The Water Quality and Sediment	Charlie Demas, USGS
Hurricanes on the Gulf Coast: Biological Impacts and Landscape Change.	Greg Smith, USGS

Noon Lunch on your own

MONDAY – AFTERNOON

1:30pm 8thFISC MONDAY 4/03/06

1A SEDIMENT YIELD & TRANSPORT-I — ***SILVER BARON D***

Chair: Ted Yang
Co-Chair Ranvir Singh

1:30pm *DEVELOPMENT AND APPLICATION OF GSTAR-1D:* Jianchun Huang, Blair P. Greimann, and Travis Bauer

1:50pm *APPLICATION OF GSTAR-1D SEDIMENT TRANSPORT MODEL ON THE RIO GRANDE, NM – SAN ACACIA DIVERSION DAM TO ELEPHANT BUTTE RESERVOIR:* Christopher L. Holmquist-Johnson

2:10pm *BUREAU OF RECLAMATION AUTOMATED MODIFIED EINSTEIN PROCEDURE (BORAMEP) PROGRAM FOR COMPUTING TOTAL SEDIMENT LOAD:* David A. Raff and Chris Holmquist-Johnson

2:30pm *FRAMEWORK OF YEARLY STREAM SEDIMENT INPUT:* Aaron Byrd

1:30pm 8thFISC MONDAY 4/03/06

1B GEOMORPHOLOGY-I — ***SILVER BARON 1-3***

Chair: Janine Castro
Co-Chair Jennifer Bountry

1:30pm *BED FORMS IN THE LOW FLOW CONVEYANCE CHANNEL:* Drew C. Baird

1:50pm *PATH OF GRAVEL MOVEMENT IN A COARSE STREAM CHANNEL:* Kristin Bunte, John P. Potyondy, Steven R. Abt, Kurt W. Swingle

2:10pm *COMPARISON OF SEDIMENT-TRANSPORT AND BAR-RESPONSE RESULTS FROM THE 1996 AND 2004 CONTROLLED EXPERIMENTS ON THE COLORADO RIVER IN GRAND CANYON:* David J. Topping, David M. Rubin, John C. Schmidt, Joseph E. Hazel, Theodore S. Melis, Scott A. Wright, Matt Kaplinski, Amy E Draut, and Michael J. Breedlove

2:30pm *STREAMBANK STABILITY ASSESSMENT IN GRAZED RIPARIAN AREAS:* Mark S. Riedel, Kenneth N. Brooks and Elon S. Verry

1:30pm 8thFISC MONDAY 4/03/06

1C SEDIMENT RESEARCH-I — ***SILVER BARON 4-6***

Chair: Chris Knopp
Co-Chair Bob Goldstein

1:30pm *HOW INCIPIENT MOTION DETERMINATION JUDGMENT AFFECTS DIFFERENT PARAMETERS IN SEDIMENT TRANSPORT INVESTIGATION:* Muhammad Ashiq (Ph.D.) and John C Doering (Ph.D.)

1:50pm *A REGIONAL PROTOCOL FOR EVALUATING THE EFFECTIVENESS OF FORESTRY BEST MANAGEMENT PRACTICES AT CONTROLLING EROSION AND SEDIMENTATION:* Roger Ryder, Colorado State University, Pamela Edwards, USDA Forest Service

2:10pm *FLOODS AND SEDIMENT YIELDS FROM RECENT WILDFIRES IN ARIZONA:* Daniel G. Neary, GeraldJ.Gottfried, Jan L. Beyers and Peter.F. Ffolliott

2:30pm *ESTIMATION OF SEDIMENT AND NUTRIENT LOADS FROM MIXED LAND USE WATERSHEDS IN THE UPPER MISSISSIPPI RIVER BASIN AND THE ROLE OF WETLANDS IN REDUCING THEM:* J.P.Schubauer-Berigan,W.B. Richardson,P.Hughes,L.Bartsch,J. Cavanaugh, R. Kreilling, M. Morrison

10:30am 3rdFIHMC WEDNESDAY 4/05/06

8D PARAMETER ESTIMATION, CALIBRATION, AND SENSITIVITY ANALYSIS-II — ***SILVER BARON A***

Chair: Thomas Nicholson
Co-Chair Yakov Pachepsky

10:30am *MODEL ABSTRACTION IN HYDROLOGIC MODELING:* Yakov Pachepsky, Andrey Guber, Rien van Genuchten, Thomas Nicholson, Ralph Cady, Jirka Šimunek, Timothy Gish, Diederik Jacques, and Craig Daughtry

10:50am *COMPARISON OF SIMULATION RESULTS USING SSURGO-BASED AND STATSGO-BASED PARAMETERS IN A DISTRIBUTED HYDROLOGIC MODEL:* Ziya Zhang, Victor Koren, Seann Reed, Michael Smith, and Fekadu Moreda

11:10am *COMBINED ESTIMATION OF HYDROGEOLOGIC CONCEPTUAL MODEL, PARAMETER, AND SCENARIO UNCERTAINTY:* Philip D. Meyer, Ming Ye, Shlomo P. Neuman, Mark L. Rockhold, Kirk J. Cantrell, and Thomas J. Nicholson

11:30am *UNCERTAINTY ANALYSIS AND HYDROLOGIC AND HYDRAULIC MODEL LINKAGE IN THE WATERSHED MODELING SYSTEM:* Christopher M. Smemoe, Ahmad Salah, and E. James Nelson

10:30am 3rdFIHMC WEDNESDAY 4/05/06

8E RIVER BASIN MANAGEMENT-II — ***SILVER BARON C***

Chair: Nancy Parker
Co-Chair Thomas Evans

10:30am *INTEGRATION OF RIVERWARE INTO THE CORPS WATER MANAGEMENT SYSTEM:* Thomas Evans, Bill Oakley, Jerry Cotter, and Edie Zagona

10:50am *WATER OPERATIONS MODEL DEVELOPMENT TO SIMULATE SURFACE-WATER AND GROUND-WATER INTERACTIONS:* D. Michael Roark

11:10am *THE LAND ATMOSPHERE WATER SIMULATOR (LAWS):* Michael Tansey

11:30am *ANALYSIS OF ALTERED HYDROLOGIC REGIME IN THE CLINTON RIVER:* Bruce Halverson, Rob Nairn, Alex Brunton, and James P. Selegean

10:30am 3rdFIHMC WEDNESDAY 4/05/06

8F SURFACE WATER / GROUND WATER MODELING-II — ***SILVER BARON E***

Chair: Jayantha Obeysekera
Co-Chair Cary Talbot

10:30am *AN INTEGRATED THREE-DIMENSIONAL SURFACE WATER AND GROUNDWATER MODEL TO SIMULATE HYDRODYNAMICS AND THERMAL AND SALINITY TRANSPORT:* Gour-Tsyh (George) Yeh, Hua Shan, Gordon Hu, and Tien-Shuenn Wu

10:50am *THE USACE TOOLBOX OF MODELS FOR MULTI-DIMENSIONAL SURFACE WATER-GROUNDWATER INTERACTION STUDIES:* Cary Talbot

11:10am *INTRODUCTION TO THE INTEGRATED HYDROLOGIC MODEL:* Jeffrey Geurink, Ken Trout, and Mark Ross

11:30am *AN INTEGRATED SURFACE SUBSURFACE MODEL IN WESTERN ORANGE AND SEMINOLE COUNTIES, FLORIDA:* Sorab Panday and Brian Mc Gurk

Noon Lunch on your own

10:00am BREAK *Grande Expo A*

10:30am 8thFISC WEDNESDAY 4/05/06

8A WATERSHED MODELING-VII ***SILVER BARON D***

Chair: Jorge Pagan
Co-Chair Chris Knopp

10:30am *PREDICTING WATERSHED IMPACTS OF FOREST FUEL MANAGEMENT WITH WEPP TECHNOLOGY:* William J. Elliot
10:50am *A GEOMORPHIC EVALUATION, WITH CALIBRATED HYDRAULIC AND HYDROLOGIC MODELING OF THE HOP BROOK WATERSHED IN MASSACHUSETTS:* Thomas Garday
11:10am *MULTIPLE APPROACHES TO ASSESSING THE IMPACT OF DAMS ON SEDIMENT DELIVERY IN THE ST. JOSEPH RIVER WATERSHED, MICHIGAN/ILLINOIS:* Rob Nairn, Alex Brunton, and Jim Selegean
11:30am *CUMULATIVE WATERSHED EFFECTS ANALYSIS WITH THE GEOSPATIAL INTERFACE FOR THE WATER EROSION PREDICTION PROJECT (GEOWEPP):* Dr. Chris S. Renschler and William J. Elliot

10:30am 8thFISC WEDNESDAY 4/05/06

8B GULLY EROSION-I ***SILVER BARON 1-3***

Chair: Daniel Meyer
Co-Chair Robert Wells

10:30am *IMPACT OF NON-ERODIBLE LAYER ON EPHEMERAL GULLY DEVELOPMENT:* Robert R. Wells, Lee Gordon, Sean Bennett, and Carlos Alonso
10:50am *STUDY OF THE EFFECTS OF LATERAL SEEPAGE FORCES ON TENSION-CRACK DEVELOPMENT, BANK-FAILURE DIMENSIONS AND MIGRATION OF EDGE OF FIELD GULLIES:* Andrew Simon and Robert R. Wells
11:10am *EVALUATION OF THE IMPACT OF EPHEMERAL GULLIES ON SEDIMENT LOADING WITHIN WATERSHEDS USING AGNPS:* Ronald L. Bingner, Fred Theurer, and Jim Stafford
11:30am *ASSESSING EPHEMERAL GULLY EROSION IN THE CHENEY LAKE WATERSHED USING GIS, REGEM AND THE ANNAGNPS MODEL:* Lyle Frees, Jeffery Neel, Kent McVay & Daniel Devlin

10:30am 8thFISC WEDNESDAY 4/05/06

8C SEDIMENT SURROGATES-III ***SILVER BARON 4-6***

Chair: Doug Norton
Co-Chair Roger Kuhnle

10:30am *CONTINUOUS IN-STREAM MONITORING TO ESTIMATE WATER-QUALITY CHARACTERISTICS AND SEDIMENT SOURCES IN THE LITTLE ARKANSAS RIVER, KANSAS:* Andrew C. Ziegler, Victoria G. Christensen, and Patrick P. Rasmussen
10:50am *REAL-TIME ANALYSIS OF CONCENTRATED FLUVIAL SUSPENDED SEDIMENTS:* Chris Konrad, Chuck Pottsmith, Ted Melis, and David Rubin
11:10am *PREDICTION OF GRAIN SIZE OF SUSPENDED SEDIMENT: IMPLICATIONS FOR CALCULATING SUSPENDED SEDIMENT CONCENTRATIONS USING SINGLE FREQUENCY ACOUSTIC BACKSCATTER:* Roger Kuhnle, Daniel Wren, and James P. Chambers
11:30am *USING ACOUSTIC BACKSCATTER TECHNOLOGY TO MEASURE SUSPENDED SEDIMENT CONCENTRATIONS IN IDAHO STREAMS:* Jon Hortness

1:30pm 3rdFIHMC MONDAY 4/03/06

1D WATERSHED MODELING-I ***SILVER BARON A***

Chair: Ann Banitt
Co-Chair Darius Semmens

1:30pm *THE DISTRIBUTED HYDROLOGIC MODEL INTERCOMPARISON PROJECT (DMIP): AN OVERVIEW OF PHASE 2:* Michael Smith, Victor Koren, Seann Reed, Ziya Zhang, Fekadu Moreda, Zhengtao Cui, Fan Lei, Shuzheng Cong, and Dong-Jun Seo
1:50pm *AUTOMATED GEOSPATIAL WATERSHED ASSESSMENT (AGWA): A GIS-BASED HYDROLOGIC MODELING TOOL FOR WATERSHED MANAGEMENT AND LANDSCAPE ASSESSMENT:* David Goodrich, Soren Scott, Mariano Hernandez, Shea Burns, Lainie Levick, Averill Cate, William Kepner, Darius Semmens, Scott Miller, and Phil Guertin
2:10pm *TOWARDS AN AUTOMATED TOOL FOR CHANNEL-NETWORK CHARACTERIZATION, MODELING, AND ASSESSMENT:* Darius Semmens, Scott Miller, and David Goodrich
2:30pm *AMC AND NRCS RAINFALL-RUNOFF MODELS:* Colin A. Niehus

1:30pm 3rdFIHMC MONDAY 4/03/06

1E INTER-AGENCY COLLABORATION ***SILVER BARON C***

Chair: Thomas Nicholson
Co-Chair Frank Geter

1:30pm *PARTNERING WITH FEDERAL AND NON-FEDERAL AGENCIES FOR HYDROLOGIC ENGINEERING MODEL DEVELOPMENT:* Darryl W. Davis
1:50pm *INTERAGENCY COOPERATION IN AN INTERNATIONAL PROGRAM: USACE-HEC HYDROLOGIC MODELING OF THE TIGRIS AND EUPHRATES IN SUPPORT OF USAID RECONSTRUCTION PROGRAM IN IRAQ:* Darryl W. Davis, Fauwaz U. Hanbali, and Matthew M. McPherson
2:10pm *FORECAST-COORDINATED OPERATIONS FOR THE YUBA-FEATHER RIVER RESERVOIR SYSTEM: INTERAGENCY COOPERATION:* Rob Hartman, David Ford, Art Hinojosa, Curt Aikens, Stu Townsley
2:30pm *THE USDA COLLABORATIVE SOFTWARE DEVELOPMENT LABORATORY (COLAB) PROVIDES A FLEXIBLE SYSTEM FOR FACILITATING INTER-AGENCY PROJECT DEVELOPMENT:* Frank Geter, Ken Rojas, and Olaf David

1:30pm 3rdFIHMC MONDAY 4/03/06

1F WATER QUALITY MODELING-I ***SILVER BARON E***

Chair: Michael Reddy
Co-Chair Scott Fant

1:30pm *DEVELOPMENT OF A DISTRIBUTED WATERSHED WATER QUALITY MODEL:* Billy E. Johnson and Terry K. Gerald
1:50pm *INTEGRATED MODELING OF WATERSHED AND STREAM WATER QUALITY:* Dalmo A. Vieira and Mustafa S. Altinakar
2:10pm *A FLEXIBLE AND EASY-TO-USE CONTAMINANT FATE/TRANSPORT MODEL FOR STREAMS:* Scott Fant and Mark Dortch
2:30pm *DEVELOPMENT OF A TMDL IMPLEMENTATION PLAN USING ANNAGNPS: A CASE STUDY:* Y. Yuan, R. L. Bingner, F. D. Theurer, and J. Boydstun

3:00pm BREAK *Grande Expo B*

3:30pm 8thFISC MONDAY 4/03/06

2A SEDIMENT YIELD & TRANSPORT-II — *SILVER BARON D*

Chair: John Potyondy
Co-Chair Glenn Miller

3:30pm *PREDICTING SEDIMENT DISCHARGE FROM FOREST ROADS: THE ROLE OF SURFACE RUNOFF AND RAINFALL INTENSITY:* Joseph R. Amann and Arne Skaugset

3:50pm *EROSION CONTROL IN COTTON PRODUCTION THROUGH THE USE OF ULTRA NARROW ROW:* R. F. Cullum, G. V. Wilson, J. R. Johnson, K. C. McGregor

4:10pm *HILLSIDE EROSION AND SMALL WATERSHED SEDIMENT YIELD FOLLOWING A WILDFIRE ON THE SAN DIMAS EXPERIMENTAL FOREST, SOUTHERN CA:* Peter M. Wohlgemuth

4:30pm *SIMULATION OF FLOOD FLOW AND SEDIMENT TRANSPORT ON ALLUVIAL FANS OF COACHELLA VALLEY, CALIFORNIA:* Andrey B. Shvidchenko, Brad R. Hall, and L. Joseph Howard, Rene A. Vermeeren and Cuong T. Ly

3:30pm 8thFISC MONDAY 4/03/06

2B GEOMORPHOLOGY-II — *SILVER BARON 1-3*

Chair: Paul Pedone
Co-Chair Kelsi Bracmort

3:30pm *GEOMORPHIC RESPONSE TO A DAM FAILURE IN THE DEAD RIVER WATERSHED, MICHIGAN: INTEGRATION OF EMPIRICAL AND ANALYTICAL TECHNIQUES IN A GIS FRAMEWORK:* Alex Brunton, Rob Nairn and Jim Selegean

3:50pm *TEMPORAL VARIATIONS OF SCOUR AND FILL PROCESSES AT SELECTED BRIDGE SITES IN ALASKA:* J.S.Conaway

4:10pm *GEOMORPHIC CONTEXT FOR HISTORICAL DETERMINATION OF SEDIMENT SOURCES, TRANSPORT, AND DEPOSITION IN THE BAD RIVER WATERSHED, BAD RIVER RESERVATION, WISCONSIN:* Faith A. Fitzpatrick, Kirsten A. Cahow-Scholtes, and Marie C. Peppler

4:30pm *A RIVER EVOLUTION OF ADJACENT STABLE AND UNSTABLE URBAN WATERSHEDS IN SAN JOSE, CALIFORNIA:* Brett Jordan, W.K. Annable, C.C. Watson

3:30pm 8thFISC MONDAY 4/03/06

2C SEDIMENT RESEARCH-II — *SILVER BARON 4-6*

Chair: John Gray
Co-Chair Gardner Bent

3:30pm *THE ISOKINETIC STREAMLINED SUSPENDED SEDIMENT PROFILING LISST-SL – STATUS AND FIELD RESULTS:* Y.C. Agrawal and H.C. Pottsmith

3:50pm *FISP'S SUITE OF FEDERALLY APPROVED SUSPENDED-SEDIMENT / WATER QUALITY COLLAPSIBLE-BAG SAMPLERS:* Broderick Davis

4:10pm *A TIDALLY- AVERAGED SEDIMENT TRANSPORT MODEL OF THE SAN FRANCISCO BAY, CALIFORNIA:* Megan A. Lionberger, David H. Schoellhamer, Jon Leatherbarrow, and Kris May

4:30pm *A UNIFIED APPROACH FOR RIVER MORPHOLOGY, SEDIMENT TRANSPORT, AND EROSION STUDIES:* Chih Ted Yang

8:30am 3rdFIHMC WEDNESDAY 4/05/06

7D PARAMETER ESTIMATION, CALIBRATION, AND SENSITIVITY ANALYSIS-I — *SILVER BARON A*

Chair: Thomas Nicholson
Co-Chair Brian Skahill

8:30am *USE OF REGULARIZATION AS A METHOD FOR WATERSHED MODEL CALIBRATION:* Brian E. Skahill and John Doherty

8:50am *USE OF REMOTELY SENSED SNOW COVERED AREA IN WATERSHED MODEL CALIBRATION FOR THE SPRAGUE RIVER, OREGON:* Lauren E. Hay, George H. Leavesley, and Martyn P. Clark

9:10am *EVALUATION OF ENSEMBLE WATER-SUPPLY FORECASTS USING MULTIPLE PARAMETER SETS FOR THE UPPER KLAMATH BASIN, OREGON AND CALIFORNIA:* John C. Risley and Lauren E. Hay

9:30am *CALIBRATION OF HYDROLOGIC EMPIRICAL METHODS FOR ESTIMATING THE FLOOD PEAK IN THE UROMIA LAKE WATERSHED IN IRAN:* Ali Akbar Jamali and Seyed Ali Ayyoubzadeh

8:30am 3rdFIHMC WEDNESDAY 4/05/06

7E RIVER BASIN MANAGEMENT-I — *SILVER BARON C*

Chair: William Charley
Co-Chair Nancy Parker

8:30am *CALSIM APPLICATIONS IN THE KLAMATH RIVER BASIN:* Nancy Parker

8:50am *MODELING THE OHIO RIVER: NOT JUST FOR FLOODS ANYMORE:* Deborah H. Lee and Stanley M. Wisbith

9:10am *MULTIDIMENSIONAL MODELING OF THE LOWER MISSISSIPPI RIVER:* Ehab A. Meselhe, Emad Habib, Alonso G. Griborio, Shankar Gautam, John A. McCorquodale, and Ioannis Y. Georgiou

9:30am *RESERVOIR OPERATIONS MODELING WITH HEC-RESSIM:* Joan D. Klipsch and Thomas A. Evans

8:30am 3rdFIHMC WEDNESDAY 4/05/06

7F SURFACE WATER / GROUND WATER MODELING I — *SILVER BARON E*

Chair: Jayantha Obeysekera
Co-Chair Steve Markstrom

8:30am *SIMULATING FLOW AND CONTAMINANT TRANSPORT IN INTEGRATED SURFACE-SUBSURFACE FLOW SYSTEMS: MODEL APPLICATIONS AT MULTIPLE CATCHMENT SCALES:* E.A. Sudicky1, J.P. Jones, J.-M. Lemieux, Y.-J. Park, D. Colautti and R.G. McLaren

8:50am *FULLY-INTEGRATED SURFACE AND SUBSURFACE MODEL FOR CONJUNCTIVE ANALYSIS OF WATER SUPPLY RELIABILITY, WATER QUALITY AND ECOSYSTEM HEALTH:* G.B. Matanga, L. Gessford, K. E. Nelson, D. DeMarco E. Sudicky, R. Therrien, S. Panday, and R. McLaren

9:10am *GSFLOW—A BASIN-SCALE MODEL FOR COUPLED SIMULATION OF GROUND-WATER AND SURFACE-WATER FLOW—PART A CONCEPTS FOR SURFACE-WATER FLOW WITH THE U.S. GEOLOGICAL SURVEY PRECIPITATION-RUNOFF MODELING SYSTEM:* S.L. Markstrom, R.S. Regan, R.G. Niswonger, D.E. Prudic, and R.J. Viger

9:30am *GSFLOW—A BASIN-SCALE MODEL FOR COUPLED SIMULATION OF GROUND-WATER AND SURFACE-WATER FLOW—PART B CONCEPTS FOR MODELING SATURATED AND UNSATURATED SUBSURFACE FLOW WITH THE U.S. GEOLOGICAL SURVEY MODULAR GROUND-WATER MODEL:* R.G. Niswonger, D.E. Prudic, S.L. Markstrom, R.S. Regan, and R.J. Viger

WEDNESDAY – MORNING

7:15am Speakers' Breakfast, *Grande Expo C*

8:30am 8thFISC WEDNESDAY 4/05/06

7A WATERSHED MODELING-VI — ***SILVER BARON D***

Chair: Drew Baird
Co-Chair Jeff Bradley

8:30am *WATERSHED SIMULATION WITH AN ENHANCED DISTRIBUTED MODEL:* Yong G. Lai, Ph.D.
8:50am *ANNAGNPS: ACCOUNTING FOR SNOWPACK, SNOWMELT, FREEZING AND SOIL FREEZE-THAW:* Daniel S. Moore, Fred D. Theurer, Ronald L. Bingner
9:10am *WASH LOAD / BED MATERIAL LOAD CONCEPT IN REGIONAL SEDIMENT MANAGEMENT:* David S. Biedenharn, Colin R. Thorne, Chester C. Watson
9:30am *ONE-DIMENSIONAL MODELING OF INCISION THROUGH RESERVOIR DEPOSITS:* Blair Greimann, Victor Huang

8:30am 8thFISC WEDNESDAY 4/05/06

7B DAM REMOVAL / REHABILITATION — ***SILVER BARON 1-3***

Chair: Bill Jackson
Co-Chair Janine Castro

8:30am *GEOMORPHIC RESPONSE OF RIVERS TO DAM REMOVAL: NEW INSIGHTS FROM FLUME EXPERIMENTS AND FIELD STUDIES:* Gordon E. Grant, Gregory Stewart, and Chris Bromley
8:50am *SEDIMENT DYNAMICS POST DAM REMOVAL: STATE OF THE SCIENCE AND PRACTICE:* Laura Wildman, Cassie Klumpp, Blair Greimann, James MacBroom, Martin Doyle, Yantao Cui, Rollin Hotchkiss
9:10am *NATURAL RESOURCES CONSERVATION SERVICE WATERSHED REHABILITATION IN OKLAHOMA – A GEOLOGICAL PERSPECTIVE:* Glen B. Miller
9:30am *NUMERICAL SIMULATION OF CHANNEL ADJUSTMENT OF THE KALAMAZOO RIVER FOLLOWING THE REMOVAL OF TWO LOW-HEAD DAMS BETWEEN OTSEGO AND PLAINWELL, MICHIGAN:* Eddy J. Langendoen and Robert R. Wells

8:30am 8thFISC WEDNESDAY 4/05/06

7C SEDIMENT SURROGATES-II — ***SILVER BARON 4-6***

Chair: Thad Pratt
Co-Chair Larry Freeman

8:30am *A METHOD FOR COMPARING THE LISST 100 TO THE USGS PIPETTE METHOD FOR SUSPENDED SEDIMENT PARTICLE SIZE ANALYSIS IN THE MARINA SEDIMENT LAB, U.S. GEOLOGICAL SURVEY, CALIFORNIA WATER SCIENCE CENTER:* Lawrence A. Freeman
8:50am *USE OF AN ADCP TOCOMPUTE SUSPENDED SEDIMENT DISCHARGE IN THE TIDAL HUDSON RIVER, NY:* Gary R. Wall, Elizabeth Nystrom, and Simon Litten
9:10am *CALCULATION OF SUSPENDED SEDIMENT AT GAGING STATIONS:* Jason Kean and Dungan Smith
9:30am *CROSS-SECTIONAL PROGRESSION OF APPARENT BEDLOAD VELOCITIES:* Terry A. Kenney

3:30pm 3rdFIHMC MONDAY 4/03/06

2D WATERSHED MODELING-II — ***SILVER BARON A***

Chair: Darius Semmens
Co-Chair Matthew Fleming

3:30pm *WATERSHED ENVIRONMENTAL HYDROLOGY (WEHY) MODEL:* M.L.Kavvas, Z.Q.Chen, N.Ohara1, L.Liang, C. Dogrul, M.L.Anderson, J.Y.Yoon, J.Yoshitani, K.Fukami, T.Matsuura
3:50pm *NEW MODELING CAPABILITIES IN HEC-HMS APPLIED TO THE MILL CREEK BASIN:* Matthew Fleming and Jeff Harris
4:10pm *GSSHA WATERSHED MODELING FOR THE EAU GALLE RIVER BASIN, WI:* Ann.M.Banitt
4:30pm *MODELING WETLANDS IN A MULTI-DIMENSIONAL HYDROLOGIC MODEL:* Aaron Byrd, Fred L. Ogden, Robbie Jenkins, Justin Niedzialek, and E. James Nelson

3:30pm 3rdFIHMC MONDAY 4/03/06

2E OBSERVATION AND INSTRUMENTATION — ***SILVER BARON C***

Chair: Claudia Scheer
Co-Chair Thomas Jackson

3:30pm *THE HYDROS AND SMOS SATELLITES: GLOBAL SOIL MOISTURE MAPPING:* Thomas J. Jackson and Dara Entekhabi
3:50pm *REMOTE SENSING FOR ANNAGNPS TO DEVELOP A METHOD OF CROP TYPE IDENTIFICATION WITH MULTI-TEMPORAL LANDSAT:* James Coss, Kevin Czajkowski, and Ling Yao
4:10pm *APPLICATION OF AN EXPERIMENTAL AIRBORNE LASER SCANNER FOR SURVEYING BRAIDED RIVER CHANNELS:* Paul J. Kinzel, C. Wayne Wright, and Jonathan M. Nelson
4:30pm *USING RADAR TO MEASURE REAL-TIME STREAMFLOW:* John Fulton and Joe Ostrowski

3:30pm 3rdFIHMC MONDAY 4/03/06

2F WATER QUALITY MODELING-II — ***SILVER BARON E***

Chair: Michael Reddy
Co-Chair Billy Johnson

3:30pm *WATER QUALITY MODELING OF THE CHESTER RIVER BASIN:* Sung-Chan Kim and Carl F. Cerco
3:50pm *DEVELOPMENT OF A DISTRIBUTED SOURCE CONTAMINANT TRANSPORT MODEL FOR MILITARY INSTALLATIONS:* Billy E. Johnson and Zhonglong Zhang
4:10pm *MODELING BRACKISH AQUIFER STORAGE RECOVERY WITH THE WASH123D NUMERICAL MODEL:* S. M. England, H.-P. Cheng, G. T. Stevens, E. V. Edris, and C. J. Brown
4:30pm *CE-QUAL-W2 ANIMATIONS OF RESERVOIR CASE STUDIES – LESSONS LEARNED:* Merlynn Bender

5:15pm to 6:45pm Exhibitors' Reception, Poster Session-I *Grande Expo B*

TUESDAY – MORNING

7:15am Speakers' Breakfast, *Grande Expo C*

8:30am 8thFISC TUESDAY 4/04/06

3A SEDIMENT YIELD & TRANSPORT-III — ***SILVER BARON C***

Chair: Chester Watson
Co-Chair Dennis Richards

8:30am *SEDIMENT TRANSPORT COMPUTATIONS WITH HEC-RAS:* Stanford Gibson, Gary Brunner, Steve Piper and Mark Jensen
8:50am *IMPLEMENTATION OF THE SEDIMENT IMPACT ASSESSMENT MODEL (SIAM) IN HEC-RAS:* Stanford A. Gibson and Charles D. Little Jr.
9:10am *SEDIMENT INVESTIGATION AND STABLE CHANNEL DESIGN FOR THE LOWER MUD RIVER* : Martin J. Teal and Phillip A. Anderson
9:30am *SEDIMENT IMPACT ANALYSIS FOR THE LOWER THAMES FLOOD STRATEGY STUDY:* Ian M. Tomes, Oliver P. Harmar, and Colin R. Thorne

8:30am 8thFISC TUESDAY 4/04/06

3B GEOMORPHOLOGY-III — ***SILVER BARON E***

Chair: Robert Padilla
Co-Chair Bill Jackson

8:30am *INTEGRATING TWO SEDIMENTATION RATE METHODS TO DETERMINE CHANNEL ADJUSTMENT RATES:* Laura L. Keefer, Richard A. Cahill, Richard L. Allgire
8:50am *EFFECTS OF REGULARLY REVERSING ENERGY GRADIENTS ON SEDIMENT TRANSPORT IN A TIDAL WETLAND SYSTEM:* Kevin Knuuti
9:10am *RECENT CHANNEL INCISION AND FLOODPLAIN EVOLUTION WITHIN THE MIDDLE RIO GRANDE, NM:* Tamara Massong, Paul Tashjian, and Paula Makar
9:30am *TEMPORAL AND SPATIAL VARIABILITY IN ROOT-REINFORCEMENT OF STREAMBANKS: ACCOUNTING FOR GEOTECHNICAL PROPERTIES AND MOISTURE:* Natasha Pollen and Andrew Simon

8:30am 8thFISC TUESDAY 4/04/06

3C SEDIMENT RESEARCH-III — ***SILVER BARON A***

Chair: Mathias Römkens
Co-Chair Mark Weltz

8:30am *REGEM: THE REVISED EPHEMERAL GULLY EROSION MODEL:* Lee Gordon, Sean Bennett, Fred Theurer, Ron Bingner, Carlos Alonso
8:50am *SEDIMENT INVESTIGATIONS IN THE VICINITY OF THE OLD RIVER COMPLEX, LOUISIANA: RED RIVER ABOVE OLD RIVER OUTFLOW CHANNEL:* Nina J Reins and Tonja L. Koob
9:10am *AN APPARATUS FOR BED MATERIAL SEDIMENT EXTRACTION FROM COARSE RIVER BEDS IN LARGE ALLUVIAL RIVERS:* Michael Bliss Singer, Stacy Cepello, and Adam Henderson
9:30am *ANALYZING SEDIMENT YIELDS IN THE CONTEXT OF TMDL'S:* Mary Ann Madej, Randy Klein, Vicki Ozaki & Tom Marquette

3:30pm 3rdFIHMC TUESDAY 4/04/06

6D WATERSHED AND RIVER SYSTEM MODELING PROGRAM-III — ***SILVER BARON D***

Chair: Merlynn Bender
Co-Chair Jeff Rieker

3:30pm *WATER ACCOUNTING IN THE TRUCKEE BASIN RIVERWARE MODEL:* Jeff Boyer
3:50pm *HYDROLOGIC FORECASTING IN THE TRUCKEE-CARSON RIVERWARE SYSTEM:* Mike Mann; Presented by Tom Scott
4:10pm *SIMULATING OPERATIONS IN THE TRUCKEE-CARSON RIVERWARE SYSTEM:* Shane Coors
4:30pm *DECISION SUPPORT FOR WATER QUALITY RELEASES ON THE TRUCKEE RIVER:* Jeffrey D. Rieker

3:30pm 3rdFIHMC TUESDAY 4/04/06

6E MODELING SYSTEMS-II — ***SILVER BARON 1-3***

Chair: David Goodrich
Co-Chair Christopher Dunn

3:30pm *INTEGRATING HYDROLOGIC MODELS AND SPATIAL DATA IN A DISTRIBUTED INTERNET APPLICATION:* Averill Cate, Jr., David C. Goodrich, and D. Phillip Guertin
3:50pm *NRCS GEO-HYDRO – HYDROLOGIC MODEL GIS INTERFACE:* William Merkel and Su Liu
4:10pm *THE DEVELOPMENT OF A SOFTWARE INTEGRATION TOOL FOR WATERSHED STUDIES – THE HYDROLOGIC ENGINEERING CENTER'S WATERSHED ANALYSIS TOOL (HEC-WAT):* Christopher N. Dunn
4:30pm *HYDROLOGIC MODELING SYSTEM (HEC-HMS): NEW FEATURES FOR URBAN HYDROLOGY:* Matthew J. Fleming and William A. Scharffenberg

3:30pm 3rdFIHMC TUESDAY 4/04/06

6F RIVER ENVIRONMENT AND AQUATIC ECOSYSTEMS-IV — ***SILVER BARON 4-6***

Chair: Mark Riedel
Co-Chair Terry Kenney

3:30pm *MODELING STREAM CHANNEL ADJUSTMENT TO WOODY VEGETATION:* Sean J. Bennett, Weiming Wu, Carlos V. Alonso, and Sam S. Y. Wang
3:50pm *VERIFICATION OF AN UNCALIBRATED TWO-DIMENSIONAL HYDRAULIC MODEL WITH VELOCITY AND REMOTE IMAGERY:* Terry A. Kenney
4:10pm *THE TRINITY RIVER RESTORATION PROGRAM:* Andreas Krause
4:30pm *SEDIMENT TRANSPORT MONITORING DURING A CONTROLLED FLOW RELEASE IN THE TRINITY RIVER, CALIFORNIA:* Smokey Pittman and Graham Matthews

3:30pm 8thFISC TUESDAY 4/04/06

6A WATERSHED MODELING-V — *SILVER BARON C*

Chair: Martin Teal
Co-Chair John Potyondy

3:30pm *EVALUATING SEDIMENT PROCESSES, AND TRANSPORT PROCESSES IN THE UPPER YUBA RIVER WATERSHED, CALIFORNIA:* Jennifer A. Curtis, Lorraine E. Flint, Charles N. Alpers, and Scott A. Wright

3:50pm *EFFECTS OF CLIMATE ON FLOW AND SEDIMENT TRANSPORT IN THE UPPER YUBA RIVER BASIN, NORTHERN SIERRA NEVADA:* Lorraine E. Flint, Joel R. Guay, Alan L. Flint, and Jennifer A. Curtis

4:10pm *MODELING SYSTEMS FOR SEDIMENT MANAGEMENT AND BMP EVALUATION IN LARGE GREAT LAKES TRIBUTARY WATERSHEDS:* Theresa Possley, Alex Brunton and Rob Nairn and Jim Selegean

4:30pm *DEVELOPMENT OF UPPER BOUNDARY CONDITIONS FOR A WATERSHED MODEL IN THE UPPER YUBA RIVER BASIN, NORTHERN SIERRA NEVADA:* Alan L. Flint and Lorraine E. Flint

3:30pm 8thFISC TUESDAY 4/04/06

6B STREAM RESTORATION-II — *SILVER BARON E*

Chair: Jeff Bradley
Co-Chair Ted Yang

3:30pm *RESTORATION OF LOWER LAS VEGAS WASH – UPPER DIVERSION WEIR:* Chris Bahner, Gerry A. Hester, Dr. Syndi J. Dudley

3:50pm *SIAM,SEDIMENT IMPACT ANALYSIS METHODS, FOR EVALUATING SEDIMENTATION CAUSES AND EFFECTS:* David Mooney

4:10pm *RIO SALADO (SALT RIVER) HABITAT RESTORATION - LOW FLOW CHANNEL DESIGN:* Dennis L. Richards and Glenn Mashburn

4:30pm *JUDY'S BRANCH, ILLINOIS REHABILITATION PLAN:* Chester C. Watson, David S. Biedenharn and Moosub Eom

3:30pm 8thFISC TUESDAY 4/04/06

6C SEDIMENT SURROGATES-I — *SILVER BARON A*

Chair: Gardner Bent
Co-Chair David Topping

3:30pm *DEVELOPMENT OF AN ACOUSTIC SUSPENDED SEDIMENT MONITORING SYSTEM:* Daniel E. Kleinert, Daniel Wren, Chris Smith, James Chambers

3:50pm *ESTIMATION OF PARTICLE SIZES FOR A RANGE OF NARROW SIZE DISTRIBUTIONS OF NATURAL SANDS SUSPENDED IN WATER USING MULTI-FREQUENCY ACOUSTIC BACKSCATTER:* Christopher K. Smith, Daniel Wren, James P. Chambers

4:10pm *HIGH-RESOLUTION MONITORING OF SUSPENDED-SEDIMENT CONCENTRATION AND GRAIN SIZE IN THE COLORADO RIVER IN GRAND CANYON USING LASER-DIFFRACTION INSTRUMENTS AND A THREE-FREQUENCY ACOUSTIC SYSTEM:* David J. Topping, Theodore S. Melis, Scott A. Wright, and David M. Rubin

4:30pm *COMPARISON OF SUSPENDED-SEDIMENT LOAD ESTIMATES USING A TURBIDITYAND SUSPENDED-SEDIMENT CONCENTRATION REGRESSION AND THE GRAPHICAL CONSTITUENT LOADING ANALYSIS SYSTEM (GCLAS):* Mark A Uhrich and Heather M Bragg

8:30am 3rdFIHMC TUESDAY 4/04/06

3D WATER QUALITY MODELING-III — *SILVER BARON D*

Chair: Michael Reddy
Co-Chair Josh Linard

8:30am *USE OF A GEOGRAPHIC INFORMATION SYSTEM TO ADD A SPATIAL COMPONENT IN WATER-QUALITY MODEL VARIABLES TO ESTIMATE ATRAZINE LOADING IN MORGAN CREEK, MARYLAND:* M.E. Wieczorek and D.M. Wolock

8:50am *THE WATER, ENERGY, AND BIOGEOCHEMICAL MODEL (WEBMOD): A TOPMODEL APPLICATION DEVELOPED WITHIN THE MODULAR MODELING SYSTEM:* R.M.T. Webb, J.I. Linard, and M.E. Wieczorek

9:10am *RAINFALL-RUNOFF MODELING TO COMPARE HYDROLOGICAL PROCESSES GOVERNING SOLUTE TRANSPORT IN AN AGRICULTURAL WATERSHED IN MARYLAND:* J.I. Linard, D.M. Wolock, R.M.T. Webb, and M.E. Wieczorek

9:30am *STATISTICAL EXTRAPOLATION OF RECHARGE RATES AND SOLUTE FLUXES WITHIN FIVE AGRICULTURAL WATERSHEDS:* Richard M.T. Webb, Randall Bayless, Tracey Connell Hancock, Joshua I. Linard, Michael Wieczorek, Bernard T. Nolan, Jack Barbash, and Richard Healy

8:30am 3rdFIHMC TUESDAY 4/04/06

3E WATERSHED MODELING-III — *SILVER BARON 1-3*

Chair: David Ford
Co-Chair George Leavesley

8:30am *WATERSHED MODELING OF MUSTANG CREEK, CALIFORNIA, USING THE SOIL AND WATER ASSESSMENT TOOL (SWAT):* Dina Saleh

8:50am *ADAPTIVE WATERSHED MODELING TOOLS TO SUPPORT ECOSYSTEM MANAGEMENT:* George Leavesley, Jim Chew, Roland Viger, Christine Turner, Richard Zirbes, and Zack Bowen

9:10am *DEVELOPMENT OF AN INTEGRATED PHYSICAL AND ENGINEERING HYDROLOGIC MODEL OF THE RIO GRANDE:* Douglas P. Boyle, Ramon Naranjo, Steven L. Markstrom, and George H. Leavesley

9:30am *HYDROLOGICAL MODELLING IN THE GERA CATCHMENT – MULTI-SCALE INVESTIGATIONS IN A MESOSCALE CATCHMENT:* Peter Krause, Frank Base, Ulrike Bende-Michl, Manfred Fink, Wolfgang-Albert Flügel, Bjorn Pfenning, Douglas P. Boyle, and Steven L. Markstrom

8:30am 3rdFIHMC TUESDAY 4/04/06

3F RIVER ENVIRONMENT AND AQUATIC ECOSYSTEMS-I — *SILVER BARON 4-6*

Chair: Laurel Saito
Co-Chair Jerad Bales

8:30am *AUTOMATED PROCEDURES FOR COMPUTING WHOLE-STREAM METABOLISM:* Jerad Bales and Mark Nardi

8:50am *SPARROW MODELS OF FISH COMMUNITY METRICS:* Richard A. Smith, Richard B. Alexander, Gregory E. Schwarz, Daren M. Carlisle, and Michael R. Meador

9:10am *DEVELOPMENT AND USE OF NEW ROUTINES IN CE-QUAL-W2 TO BLEND WATER FROM MULTIPLE RESERVOIR OUTLETS TO MEET DOWNSTREAM TEMPERATURE TARGETS:* Stewart A. Rounds and Annett B. Sullivan

9:30am *A TWENTY-YEAR HISTORY OF ENVIRONMENTAL MODELING IN CHESAPEAKE BAY:* Carl.F.Cerco

10:00am BREAK *Grande Expo B*

10:30am 8thFISC TUESDAY 4/04/06

4A SEDIMENT YIELD & TRANSPORT-IV — *SILVER BARON C*

Chair: Mark Weltz
Co-Chair Kevin Knuuti

10:30am *PERFORMANCE OF BED LOAD TRANSPORT EQUATIONS IN MOUNTAIN GRAVEL-BED RIVERS: A RE-ANALYSIS:* Jeffrey J. Barry, John M. Buffington, John G. King, and Peter Goodwin

10:50am *PREDICTABILITY OF BEDLOAD RATING AND FLOW COMPETENCE CURVES FROM BED ARMORING, STREAM WIDTH AND BASIN AREA:* Kristin Bunte, Steven R. Abt, Kurt W. Swingle

11:10am *RADIONUCLIDE AND RARE EARTH ELEMENT TRACERS OF EROSIONAL PROCESSES ON THE PLOT SCALE:* A.P.Stubblefield, C. Fondran,M.E.Ketterer,G.Matisoff,P.J.Whiting

11:30am *DREDGED MATERIAL MANAGEMENT IN A WATERSHED CONTEXT: SEEKING INTEGRATED SOLUTIONS:* Craig Vogt, Barry Holiday, Elizabeth Kim and Molly Madden

10:30am 8thFISC TUESDAY 4/04/06

4B GEOMORPHOLOGY-IV — *SILVER BARON E*

Chair: Dennis Richards
Co-Chair Lisa Fotherby

10:30am *MORPHOLOGIC EVOLUTION IN THE USGS SURFACE WATER MODELING INTERFACE:* Jonathan Nelson, Richard McDonald, and Paul Kinzel

10:50am *CHANNEL MIGRATION MODEL FOR MEANDERING RIVERS:* Timothy J. Randle

11:10am *ENVIRONMENTALLY SENSITIVE GRAVEL BAR SCALPINGN:* Frank Reckendorf

11:30am *COMPUTATIONAL MODEL FOR THE DEVELOPMENT OF SEDIMENT PLUGS IN ALLUVIAL RIVERS:* Craig B. Boroughs, Ph.D, P.E.; Steven R. Abt, Ph.D., P.E.; Drew Baird, Ph.D., P.E.

10:30am 8thFISC TUESDAY 4/04/06

4C TURBIDITY / SEDIMENT SOURCES-I — *SILVER BARON A*

Chair: Allen Gellis
Co-Chair John Gray

10:30am *OVERVIEW OF SELECTED SURROGATE TECHNOLOGIES FOR CONTINUOUS SUSPENDED-SEDIMENT MONITORING:* John R. Gray and Jeffrey W. Gartner

10:50am *TURBIDITY SENSORS TRACK SEDIMENT CONCENTRATIONS IN RUNOFF FROM AGRICULTURAL FIELDS:* S. M. Dabney, M. A. Locke, R. W. Steinriede

11:10am *A NEW SENSOR FOR TURBIDITY AND SEDIMENT ANALYSES IN NATURAL WATERS:* Stuart Garner

11:30am *IMPACT OF THE ROSEWOOD CREEK RESTORATION PROJECT ON SUSPENDED SEDIMENT LOADING TO LAKE TAHOE: PRE-MONITORING AND YEAR 1:* Rick Susfalk

1:30pm 3rdFIHMC TUESDAY 4/04/06

5D WATERSHED AND RIVER SYSTEM MODELING PROGRAM-II — *SILVER BARON D*

Chair: Donald Frevert
Co-Chair Mark Mastin

1:30pm *COMPARISON OF SIMULATED RUNOFF IN THE YAKIMA RIVER BASIN, WASHINGTON, FOR PRESENT AND GLOBAL CLIMATE-CHANGE CONDITIONS:* Mark Mastin and Warren Sharp

1:50pm *UPPER RIO GRANDE WATER OPERATIONS REVIEW AND EIS:* April Sanders, Valda Terauds, and Nabil Shafike

2:10pm *ADVANCED DECISION SUPPORT MODELING WITH URGWOM AND THE ET TOOLBOX:* Steven Bowser

2:30pm *SHORT-TERM REAL TIME FORECAST MODEL IN THE UPPER COLORADO RIVER TRIBUTARY BASINS:* Shane Coors

1:30pm 3rdFIHMC TUESDAY 4/04/06

5E MODELING SYSTEMS-I — *SILVER BARON 1-3*

Chair: David Goodrich
Co-Chair Olaf David

1:30pm *OBJECT MODELING SYSTEM – A MODELING PLATFORM:* Olaf David and Laj Ahuja

1:50pm *AN COMMON PROGRAMMING FRAMEWORK FOR DISTRIBUTED HYDROLOGIC MODELING RESEARCH: AN OVERVIEW OF THE ARCHITECTURE:* Zhengtao Cui, Victor Koren, Fekadu Moreda, , and Michael Smith

2:10pm *U.S. ARMY CORPS OF ENGINEERS UTILIZATION AND MANAGEMENT OF HYDROLOGIC MODELS:* James D. Barton and Robert A. Bank

2:30pm *UNIFYING HYDROINFORMATIC TECHNOLOGIES FOR THE US ARMY CORPS OF ENGINEERS:* Robert M. Wallace, David R. Richards, and Steven L. Ashby

1:30pm 3rdFIHMC TUESDAY 4/04/06

5F RIVER ENVIRONMENT AND AQUATIC ECOSYSTEMS-III — *SILVER BARON 4-6*

Chair: Stewart Rounds
Co-Chair Eddy Langendoen

1:30pm *INTERDISCIPLINARY MODELING FOR AQUATIC ECOSYSTEMS CURRICULUM DEVELOPMENT WORKSHOP:* Laurel Saito and Heather Segale

1:50pm *A COMPREHENSIVE STREAM-RIPARIAN CORRIDOR MODEL TO STUDY THE IMPACT OF RIPARIAN BUFFERS ON CHANNEL AND EDGE-OF-FIELD PROCESSES: SIMULATION OF STREAMBANK HYDROLOGY:* Eddy J. Langendoen, Andrew Simon, Natasha Pollen, Randall G. Williams, and R. Richard Lowrance

2:10pm *ANALYSIS OF AQUATIC HABITAT SUITABILITY USING A DEPTH-AVERAGED 2-D MODEL:* Weiming Wu, Zhiguo He, Sam S. Y. Wang, and F. Douglas Shields, Jr.

2:30pm *CREATION OF SHALLOW WATER HABITAT FOR MISSOURI RIVER RECOVERY:* Daniel Pridal

3:00pm BREAK *Grande Expo B*

TUESDAY – AFTERNOON

1:30pm 8thFISC TUESDAY 4/04/06

5A SEDIMENT YIELD & TRANSPORT-V — ***SILVER BARON C***

Chair: Ranvir Singh
Co-Chair Mathias Römkens

1:30pm *A FARM SEDIMENT TRAP AND POND IN COLUSA COUNTY, CA:* Jack Alderson
1:50pm *USE OF MONITORING DATA TO EVALUATE WATERSHED MANAGEMENT PRACTICES IN A MIXED-LAND USE WATERSHED IN NORTHERN IDAHO:* K. Ostrowski, J. Boll, E.S. Brooks, J. Newson
2:10pm *PRELIMINARY SEDIMENT BUDGETS FOR FOUR WATERSHEDS AT KINGS RIVER EXPERIMENTAL WATERSHED IN SOUTHERN SIERRA NEVADA:* Sean Eagan, Dr. Carolyn Hunaker, Abbey Korte, Sarah Martin, and Dr. Lee McDonald
2:30pm *CALIBRATION OF THE WATBAL SEDIMENT AND WATER YIELD MODEL CLEARWATER NATIONAL FOREST:* Dick Jones, and Rick Patten

1:30pm 8thFISC TUESDAY 4/04/06

5B STREAM RESTORATION-I — ***SILVER BARON E***

Chair: Janine Castro
Co-Chair Blair Greimann

1:30pm *RIVER RESTORATION USING A GEOMORPHIC APPROACH FOR NATURAL CHANNEL DESIGN:* David L. Rosgen
1:50pm *THE HYDRAULICS OF BENDWAY WEIRS:* C. I. Thornton, D. C., Baird, S. R., Abt ,and R. S. Padilla
2:10pm *RESEARCH, COORDINATION, AND OPEN-SOURCE MODELS TO IMPROVE STREAM RESTORATION PRACTICE:* Peter R. Wilcock and Gary Parker
2:30pm *EMPIRICAL AND ANALYTICAL APPROACHES FOR STREAM CHANNEL DESIGN:* F. Douglas Shields, Jr. and Ronald R. Copeland,

1:30pm 8thFISC TUESDAY 4/04/06

5C TURBIDITY / SEDIMENT SOURCES-II — ***SILVER BARON A***

Chair: John Gray
Co-Chair Allen Gellis

1:30pm *IDENTIFYING SOURCES OF FINE-GRAINED SUSPENDED-SEDIMENT FOR THE POCOMOKE RIVER, AN EASTERN SHORE TRIBUTARY TO THE CHESAPEAKE BAY:* Allen C. Gellis, Jurate M. Landwehr,
1:50pm *THE IMPACT OF AGRICULTURAL EROSION PROCESSES UPON $\delta^{15}N$, $\delta^{13}C$ AND C / N SIGNATURES OF ERODED SOIL:* J. F. Fox and Dr. Thanos Papanicolaeu
2:10pm *THE USE OF TURBIDITY SENSORS IN MONITORING SEDIMENT LOADS FOLLOWING WILDFIRE:* Sandra E. Ryan, Mark K. Dixon, and Kathleen A. Dwire
2:30pm *TURBIDITY MEASUREMENTS FOR DETERMINATION OF SEDIMENT SOURCE AND RETENTION IN RIVER AND MARSH ENVIRONMENTS:* A. P. Stubblefield, J. E. Reuter, E. W. Larsen, M. I. Escobar, C. R. Goldman

10:30am 3rdFIHMC TUESDAY 4/04/06

4D WATERSHED AND RIVER SYSTEM MODELING PROGRAM-I — ***SILVER BARON D***

Chair: Merlynn Bender
Co-Chair Edie Zagona

10:30am *OVERVIEW OF THE WATERSHED AND RIVER SYSTEMS MANAGEMENT PROGRAM:* Donald Frevert and Harry Lins
10:50am *DEVELOPMENTS IN RIVERWARE FOR WARSMP APPLICATIONS:* Edie Zagona and David Neumann
11:10am *THE MODULAR MODELING SYSTEM (MMS): A TOOLBOX FOR WATER- AND ENVIRONMENTAL-RESOURCES MANAGEMENT:* Steve Markstrom, George Leavesley, and Roland Viger
11:30am *HYDROLOGIC DATABASE(HDB): DEVELOPMENTS AND USE:* Andrew Gilmore

10:30am 3rdFIHMC TUESDAY 4/04/06

4E WATERSHED MODELING-IV — ***SILVER BARON 1-3***

Chair: Richard Webb
Co-Chair William Merkel

10:30am *DESIGN RAINFALL DISTRIBUTIONS BASED ON NOAA 14 VOLUMES 1 AND 2 DATA:* William Merkel, Helen Fox Moody, and Quan D. Quan
10:50am *FIXED AND MIXED-EFFECTS MODELS FOR MULTI-WATERSHED EXPERIMENTS:* Jack Lewis
11:10am *COMPREHENSIVE WATERSHED ASSESSMENT IN AN URBANIZING AREA—A STUDY DESIGN:* David L. Rus
11:30am *MODELING FOR COMBINED SEWER STORAGE RESERVOIRS AND TUNNELS IN CHICAGO METROPOLITAN AREA:* David Kiel

10:30am 3rdFIHMC TUESDAY 4/04/06

4F RIVER ENVIRONMENT AND AQUATIC ECOSYSTEMS-II — ***SILVER BARON 4-6***

Chair: Laurel Saito
Co-Chair Richard McDonald

10:30am *ALTERED DYNAMICS OF KOOTENAI RIVER WHITE STURGEON SPAWNING HABITAT AND FLOW MODELING:* Gary Barton, Richard McDonald, Jonathon Nelson, Charles Berenbrock, Mary Donato, Peter VanMetre, and Barabra Mahler
10:50am *MODELING HYDRAULIC AND SEDIMENT TRANSPORT PROCESSES IN WHITE STURGEON SPAWNING HABITAT ON THE KOOTENAI RIVER, IDAHO:* Richard McDonald, Gary Barton, Jonathan Nelson, and Vaughn Paragamian
11:10am *TWO-DIMENSIONAL MODELING TO EVALUATE SHALLOW WATER HABITAT ON THE MISSOURI RIVER:* Paul Boyd
11:30am *HYDROECOLOGICAL MODELING OF THE LOWER MISSOURI RIVER:* Harold E. Johnson III, Robert B. Jacobson, and Aaron J. Delonay

Noon Lunch on your own

April, 2006 Time	2nd Sunday		3rd Monday	4th Tuesday	5th Wednesday	6th Thursday
am	Exhibit Hall open 5:30pm to 7:30pm *(Grande Expo B)*		Exhibit Hall opens 8:30am *(Grande Expo B)*	Exhibit Hall opens 10:00am *(Grande Expo B)*		
7:15			Speakers Breakfast, *Silver Baron A (8:00am)*	Speakers Breakfast, *Grande Expo C*	Speakers Breakfast, *Grande Expo C*	Speakers Breakfast, *Gold/Silver*
8:30	SHORT COURSES Stream Restoration Design (8am-5pm, Silver Baron A) MIKE SHE/MIKE 11, 9am-5pm, Silver Baron 1-2) GSTAR (9am-5pm, Silver Baron 3) WMS (9am-5pm, Silver Baron 5-6) MODHMS (9am-5pm, Silver Baron C)	FIELD TRIPS Lower Truckee (9am-4pm) Upper Truckee (9am-4pm) Carson River (10am-4pm) Waterfall Burn Area (10am-4pm) *NOTE: Field trips convene at Pre-Function Salon 15 minutes prior to departure*	Preconference Break, *Grande Expo B, Exhibit Hall*	Technical Session 3 8thFISC: A-D; 3rdFIMC: E-F	Technical Session 7 8thFISC: A-D; 3rdFIMC: E-F	Technical Session 10 8thFISC: A-D; 3rdFIMC: E-F
9:00						
9:30			Opening Session, *Grande Expo C*			
10:00				Break, *Grande Expo B, Exhibit Hall*	Break, *Grande Expo A*	Break, *Pre-Function Salon*
10:30				Technical Session 4 8thFISC: A-D; 3rdFIMC: E-F	Technical Session 8 8thFISC: A-D; 3rdFIMC: E-F	Technical Session 11 8thFISC: A-D; 3rdFIMC: E-F S.C.-EXCEL-LEnT (10:30am-5:00pm, Silver) S.C.-Stream Analysis & Design (10:30am-5:30pm, Silver Baron B) S.C.-Arc Hydro (10:30am-5:00pm, Gold)
11:00						

JOINT FEDERAL INTERAGENCY CONFERENCE SCHEDULE

Afternoon Time	2nd Sunday		3rd Monday	4th Tuesday	5th Wednesday	6th Thursday
noon	Lunch on your own	Lunch (if pre-reg.)	Lunch on your own	Lunch on your own	Lunch on your own	Lunch on your own
1:00	SHORT COURSES (Cont'd)	FIELD TRIPS (Cont'd)				S.C-Collection of Fluvial Sediment Data (1pm-5:pm, Silver Baron 1-2)
1:30			Technical Session 1 8thFISC: A-D; 3rdFIMC: E-F	Technical Session 5 8thFISC: A-D; 3rdFIMC: E-F	Technical Session 9 8thFISC: A-D; 3rdFIMC: E-F	S.C-HEC-HMS (1pm-5pm, Silver Baron 5-6)
2:30						
3:00			Break, *Grande Expo B, Exhibit Hall*	Break, *Grande Expo B, Exhibit Hall*		
3:30			Technical Session 2 8thFISC: A-D; 3rdFIMC: E-F	Technical Session 6 8thFISC: A-D; 3rdFIMC: E-F (Exhibit Hall closes, 3:30pm)		
4:30					Demos and Posters-**II**, *Grande Expo B* (ends 9pm)	
5:00			Exhibitors Reception, Poster Session-**I** *Grande Expo B (5:15pm-6:45pm)*		Dinner, served 6:00 to 7:30pm, *Grande Expo A and C*	*(All Conference functions end 5:00pm)*
5:30	Opening Reception, *Grande Expo B (5:30-7:30pm)*					