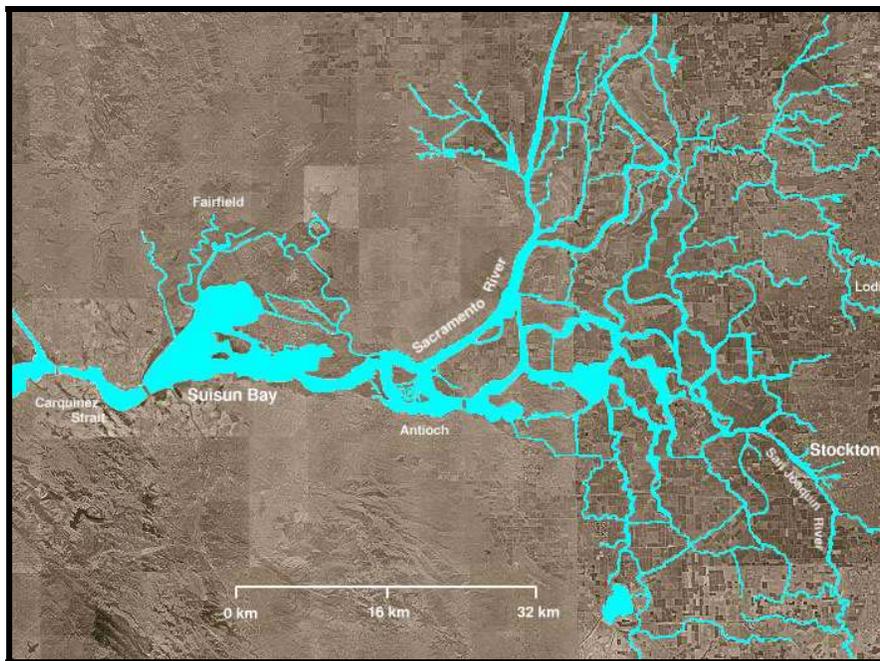




California Water and Environmental Modeling Forum

2009 Annual Meeting Agenda

“Droughts, Floods and In-Between: Modeling for a Changing Delta”



February 23-25, 2009

Asilomar Conference Grounds
800 Asilomar Boulevard
Pacific Grove, California



California Water and Environmental Modeling Forum 2009 Annual Meeting Summary of Sessions

Monday, February 23, 2009

Time	Session	Moderator	Location
10:15 am-12:00 pm	1: Delta Integrated Restoration and Water Supply Planning under Future Uncertainty - BDCP Modeling	Armin Munevar	Kiln
	2: Modeling for the California Water Plan Update 2009	Rich Juricich	Triton
12:00-1:00 pm	Lunch	---	Dining Hall
1:15-3:00 pm	3: 2008 Developments and Applications of CalLite	Nazrul Islam	Kiln
	4: WEAP Application to Analysis of Climate Change in the Central Valley	Andy Draper	Triton
3:00-4:00 pm	Registration I / Check-In	---	Social Hall
4:15-6:00 pm	5: CalSim 3.0 Development Updates	Hongbing Yin	Kiln
	6: Observed Data and Modeling for Climate Change	Jamie Anderson	Triton
6:00-7:00 pm	Dinner	---	Dining Hall
7:00-10:00 pm	7: Evening Program: Reception I	---	Kiln
7:30-8:30 pm	Keynote Speaker: Daniel Dooley, U.C. ANR, "The San Joaquin River Accord: How Did it Happen?"	Peter Vorster	

Tuesday, February 24, 2009

Time	Session	Moderator	Location
7:30-8:15 am	Breakfast	---	Dining Hall
8:15-9:15 am	8: CWEMF Activities / Annual Business Meeting	Tara Smith	Kiln
9:15-10:00 am	9: Pop-Up Talks I: 5-Minute Overviews of Modeling Work	Nigel Quinn	
10:15 am-12:00 pm	10: San Joaquin River Restoration Modeling I	Peter Vorster	Kiln
	11: 2008 DSM2 Developments and Applications	Tara Smith	Triton
12:00-1:00 pm	Lunch	---	Dining Hall
1:15-3:00 pm	12: San Joaquin River Restoration Modeling II	Peter Vorster	Kiln
	13: Hydrodynamic and PT Modeling for Delta Smelt	Pete Smith	Triton
3:00-4:00 pm	14: Pop-Up Talks II: 5-Minute Overviews of Modeling Work	Stacy Tanaka	Kiln
3:00-4:00 pm	Registration II	---	Social Hall
4:15-6:00 pm	15: Applications of Hydro-Meteorological Forecasting in Modeling Water and Environmental Management	Mike Tansey	Kiln
	16: Modeling the Delta: Three-Mile Slough Operable Gate in the Franks Tract Project	Marianne Guerin	Triton
6:00-7:00 pm	Dinner	---	Dining Hall
7:00-10:00 pm	17: Evening Program: Reception II	---	Kiln
7:45-8:30 pm	Hugo B. Fischer Award / Presentation by Recipient	Nigel Quinn	
8:30-9:15 pm	Career Achievement Award / Presentation by Recipient	Rich Satkowski	

Wednesday, February 25, 2009

Time	Session	Moderator	Location
7:30-8:15 am	Breakfast	---	Dining Hall
8:15-10:00 am	18: An Integrated Suite of Planning and Physical Process Models on the Sacramento River	Brian Van Lienden	Kiln
	19: Decision Analysis for the Delta: Modeling to Compare Water Export Strategies	Jay Lund	Triton
10:15 am-12:00 pm	20: Modeling Habitat Restoration in California	Mike Tansey	Kiln
	21: Overland and Underground Integrated Water Modeling	H. Morel-Seytoux	Triton
12:00-1:00 pm	Lunch / Check-Out	---	Dining Hall
1:15-3:00 pm	22: Modeling to Support Flood Emergency Operations	Michael Mierzwa	Kiln
	23: 2008 HydroGeoSphere Enhancements/Applications	George Matanga	Toyon

12:00-1:00 p.m. — Lunch

Note: Monday lunch is not included in the lodging or registration fees. A limited number of complimentary lunch tickets are available from CWEMF representatives. Alternatively, tickets may be purchased separately in the Social Hall at the registration counter.



1:15-3:00 p.m.

Session Three: 2008 Developments and Applications of CalLite

Moderator: Nazrul Islam (CA DWR)

Location: Kiln

Latest Updates on the CalLite Screening Model Development,
Nazrul Islam (CA DWR)

Analysis of Impacts of Climate Change using CalLite Simulations,
Richard Chen (CA DWR)

Sea Level Rise Impact on Delta Exports,
Sanjaya Seneviratne (CA DWR)

BDCP Water Management Screening Evaluations using CalLite,
Derya Sumer (CH2M Hill)

Session Four: WEAP Application to Analysis of Climate Change in the Central Valley

Moderator: Andy Draper (MWH Global)

Location: Triton

A Climate Driven Model of the Water Resources of The Sacramento and San Joaquin Hydrologic Regions: Model Structure and Data Inputs, Brian Joyce (SEI)

A Climate Driven Model of The Water Resources of The Sacramento and San Joaquin Hydrologic Regions: Hydrologic and Demand Response to Climate Change,
David Yates (UCAR)

Evaluating Statewide Climate Change Affects on California's Applied Water Demands,
David Groves (Rand Corporation)

Introducing Climate Change Considerations into Water Resource Planning in the Sierra Nevada: Case Studies from the CABY Watersheds, David Purkey (SEI)

3:00-4:00 p.m. — Registration I (Social Hall)

4:15-6:00 p.m.

Session Five: CalSim 3.0 Development Updates

Moderator: Hongbing Yin (CA DWR)
Location: Kiln

Overview of CalSim 3.0 Development, Hongbing Yin (CA DWR)

CalSim 3.0 System Representation - Demystifying the CalSim Schematic Andy Draper (MWH)

Discussion on CalSim 3.0



Session Six: Observed Data and Modeling for Climate Change

Moderator: Jamie Anderson (CA DWR)
Location: Triton

Observed Relationship between the Pacific Decadal Oscillation (PDO) Phase Shift and California's Short-term Droughts, Messele Ejeta and Jamie Anderson (CA DWR)

Comparison of Long-Term Planning Hydrology based on Different Blends of Instrumental Record, Paleoclimate, and Projected Climate Information, Levi Brekke (USBR)

Large Spatial Scale Water Temperature Modeling – Range-Wide Application to the Sierra Nevada, Stacy Tanaka (Watercourse Engr)

Climate Change and Hydrologic Uncertainty in Rainfall-Dominated Watersheds: A Texas Review, Armin Munevar (CH2MHill)

6:00-7:00 p.m. — Dinner

7:00-10:00 p.m.

Session Seven: Evening Program

Moderator: Peter Vorster (Bay Institute)
Location: Kiln

7:00-10:00 p.m. Reception I

Reception sponsored by CWEMF and CH2M Hill.
Note: The Poster Session planned for this evening has been canceled.

7:30-8:30 p.m. Keynote Speaker: Daniel Dooley, University of California Vice-President for Agriculture and Natural Resources, "The San Joaquin River Accord: How Did it Happen?"



7:30-8:15 a.m. — Breakfast

8:15-9:15 a.m.

Session Eight: CWEMF Activities / Annual Business Meeting

Moderator: Tara Smith (CWEMF Convener / CA DWR)

Location: Kiln

- 8:15 Introduction — Tara Smith (CWEMF Convener, CA DWR)
- 8:25 Report on CWEMF Model User Groups — Nigel Quinn (LBNL/USBR)
- 8:30 Report on CWEMF Workshops — Paul Hutton (Vice-Convener/MWDSC)
- 8:35 Executive Director's Report — Rich Satkowski (CWEMF)
- 8:45 Annual Business Meeting — Tara Smith
 - Declaration of a Quorum
 - Business Reports
 - Officer Elections
 - 2009 CWEMF Activities
 - Other Business



9:15-10:00 a.m.

Session Nine: Pop-Up Talks I

Moderator: Nigel Quinn (LBNL/USBR)

Location: Kiln

Five-minute overviews summarizing California water and environmental modeling work using a maximum of five PowerPoint slides per speaker. To sign up for a talk, please contact the moderator or the CWEMF.

10:15 a.m.-12:00 p.m.

Session Ten: San Joaquin River Restoration Modeling I

Moderator: Peter Vorster (Bay Institute)

Location: Kiln

- San Joaquin River Restoration Program Overview, David Mooney (USBR)
- Restoration Operations in CalSim, Walter Bourez and Dan Easton (MBK Engineers)
- Managing Restoration Releases in Real-Time, Jeffrey Payne (MWH)
- Ecosystem Diagnostics and Treatment Modeling for Fisheries Management in the San Joaquin River, Chip McConnaha (JSA)

10:15 a.m.-12:00 p.m. (Continued)

Session Eleven: 2008 DSM2 Applications and Developments

Moderator: Tara Smith (CA DWR)

Location: Triton

Update of DSM2 User Group Activities, Tara Smith (CA DWR)

Out of the Mokelumne: Analysis of Factors Influencing Travel Time to the San Joaquin River Using PTM, Marianne Guerin (RMA)

Real-time DSM2 Simulation: Update 2009, Alan Ng (CA DWR)

South Delta Barrier Operations Analysis Using DSM2 Simulations, Amardeep Singh (CA DWR)

12:00-1:00 p.m. — Lunch

1:15-3:00 p.m.

Session Twelve: San Joaquin River Restoration Modeling II

Moderator: Peter Vorster (Bay Institute)

Location: Kiln

SRH-1D Mobile Boundary Modeling Capability and Application to SJJRP, Blair Greimann (USBR)

SRH-1DV Modeling Vegetation Response to Dam Reoperations, Lisa Fotherby (USBR)

SRH-2D Model Capability and Future Development, Yong Lai (USBR)

SRH-2D Application to SJRRP, Karim Abulaban (CA DWR)

Session Thirteen: Hydrodynamic and Particle-Tracking Modeling for Delta Smelt

Moderator: Pete Smith (USGS-Retired)

Location: Triton

Use of a Particle Tracking Model to Determine the Advective or Dispersive Nature of the Delta, Vamsi K. Sridharan (Stanford University)

Particle Modeling of Adult Delta Smelt with Behavior based on EC and Turbidity Distributions, John DeGeorge (RMA)

Hydrodynamic and Particle Tracking Simulations in Clifton Court Forebay, Michael MacWilliams (River Modeling)

Delta Smelt Distribution and Entrainment Estimates from 3D Particle Tracking with Vertical Migration Behavior, Edward Gross (Bay Modeling)



3:00-4:00 p.m. — Registration II (Social Hall)

Session Fourteen: Pop-Up Talks II

Moderator: Stacy Tanaka (Watercourse Engr)

Location: Kiln

Five-minute overviews summarizing California water and environmental modeling work using a maximum of five PowerPoint slides per speaker. To sign up for a talk, please contact the moderator or the CWEMF.



4:15-6:00 p.m.

Session Fifteen: Applications of Hydro-Meteorological Forecasting in Modeling Water and Environmental Management

Moderator: Mike Tansey (USBR)

Location: Kiln

Forecasting 14- and 90-Day Evapotranspiration for California's Central Valley, David Yates (UCAR)

Integrating Seasonal and Daily Forecasts of Agricultural Water Demands into the Central Valley Project Allocation Process, Brian Joyce and Chuck Young (SEI)

Resource Applications for Forecasts Ranging from Daily to Seasonal, Michael Anderson (CA DWR)

Forecasting Pacific Coast Ocean Conditions Affecting Salmonid Survival-Based on ENSO and PDO Indices, Michael Tansey (USBR)

Session Sixteen: Modeling the Delta: Three-Mile Slough Operable Gate in the Franks Tract Project

Moderator: Marianne Guerin (RMA)

Location: Triton



Three Mile Slough Gate Operations: Implications for Delta Hydrodynamics and Water Quality, John DeGeorge and Richard Rachiele (RMA)

Franks Tract-Water Operations Model (FT-WOM): Analyzing and Redefining System Water Operations, Walter Bourez (MBK Engineers)

Modeling Adaptive Gate Operations to Protect At-Risk Fish Species with RMATRK, Marianne Guerin (RMA)

6:00-7:00 p.m. — Dinner

7:00-9:00 p.m.

Session Seventeen: Evening Program

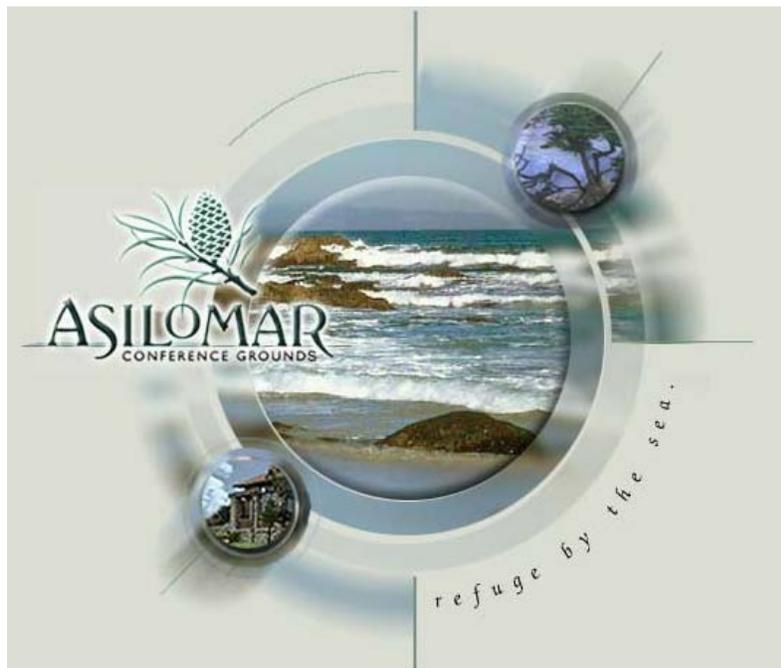
Moderator: Nigel Quinn (LBNL/USBR)

Location: Kiln

7:00-10:00 p.m. Reception II

8:00-8:45 p.m. Presentation of the Hugo B. Fischer Award and Remarks by the Award Recipient

8:45-9:30 p.m. Presentation of the Career Achievement Award and Remarks by the Award Recipient



7:30-8:15 a.m. — Breakfast

8:15-10:00 a.m.

Session Eighteen: An Integrated Suite of Planning and Physical Process Models on the Sacramento River

Moderator: Brian Van Lienden (CH2M Hill)

Location: Kiln

Introduction to the Integrated Suite of Models, Mike Tansey (USBR)

Sacramento River Analysis using the Common Assumptions Common Model Package, Robert Leaf and Brian Van Lienden (CH2M Hill)

A Daily Time Step Planning and Operations Model of the Upper Sacramento River, Chandra Chilmakuri and Brian Van Lienden (CH2M Hill)

Temperature Analysis Using the Upper Sacramento River Water Quality Model, Mike Tansey (USBR)

Sediment Transport and Geomorphology Responses to Changes in Flow Regulation on the Sacramento River, Blair Greimann (USBR)

Session Nineteen: Decision Analysis for the Delta: Modeling to Compare Water Export Strategies

Moderator: Jay Lund (UC Davis)

Location: Triton

Risk-Based Decision Analysis for Delta Levees, Robyn Suddeth (UC Davis)

Agricultural Effects of Delta Management, Josue Medellin (UC Davis)

Variability and Complexity in Delta Ecosystems, John Durand (UC Davis)

Economic Costs of Treating Delta Waters for Urban Uses, Wei-Hsiang Chen (UC Davis)

Delta Solutions Research Program, Jay Lund (UC Davis)



10:15 a.m.-12:00 p.m.

Session Twenty: Modeling Habitat Restoration in California

Moderator: Mike Tansey (USBR)

Location: Kiln

Three Examples of Modeling on the Trinity River - Water - Gravel - Adult Populations, Rod Wittler (USBR)

An Integrated Hydro-Biological Model for Simulating Cottonwood Seedling Establishment on the Sacramento River, Charles Young (SEI)

Modeling Effects of Sacramento River Flows on Riparian Habitat and Vegetation Survival, Blair Greimann (USBR)

Modeling Hydrodynamics, Morphology, and Habitat in Response to Restoration Alternatives for Elkhorn Slough, Matthew Brennan (PWA)

Session Twenty-One: Overland and Underground Integrated Water Modeling

Moderator: Hubert Morel-Seytoux (Hydroprose Consulting Int.)

Location: Triton

Simulation of Cutbacks in Surface Water Supply in Butte County, Brian Heywood (CDM)

Application of Sub-timing and Sub-Gridding Schemes in an Integrated Surface and Subsurface Numerical Model, Mary Kang and Don DeMarco (HydroGeoLogic) and George Matanga (USBR)

The Conductance Factor in Asymmetrical Stream-Aquifer Interaction, Hubert Morel-Seytoux (Hydroprose Consulting Int.)

12:00-1:00 p.m. — Lunch / Check-Out



1:15-3:00 p.m.

Session Twenty-Two: Modeling to Support Flood Emergency Operations

Moderator: Michael Mierzwa (CA DWR)

Location: Kiln

Setting the Baseline: Central Valley Flood Hydrology Study,
John High (USACE) and Nathan Pingel (David Ford Consulting Engineers)

Modeling & Mapping Overview of the Central Valley Floodplain Evaluation
& Delineation Program, Glenn McPherson (PBS&J)

Dancing Fast in Real-Time – Forecast Coordinated Operations on the Feather
and Yuba Rivers, Matt Zidar (GEI Consultants)

All Along the Watchtower: Overview of Daily Federal-State River Forecasts,
Michael Mierzwa (CA DWR)

Session Twenty-Three: 2008 HydroGeoSphere Developments and Applications

Moderator: George Matanga (USBR)

Location: Toyon

HydroGeoSphere: Ongoing Model Enhancements and Applications in Reclamation's
MP Region, George Matanga (USBR)

Predicting Stream Temperatures in a Fully-Integrated Surface/Subsurface Model,
Young-Jin Park (Univ. of Waterloo)

Linking HydroGeoSphere and CalSim, C. Mary Kang (HydroGeoLogic)

HydroGeoSphere Application for Integrated Analyses of Mountainous Regions,
Young-Jin Park (Univ. of Waterloo)



Delta photos courtesy of the California Department of Water Resources