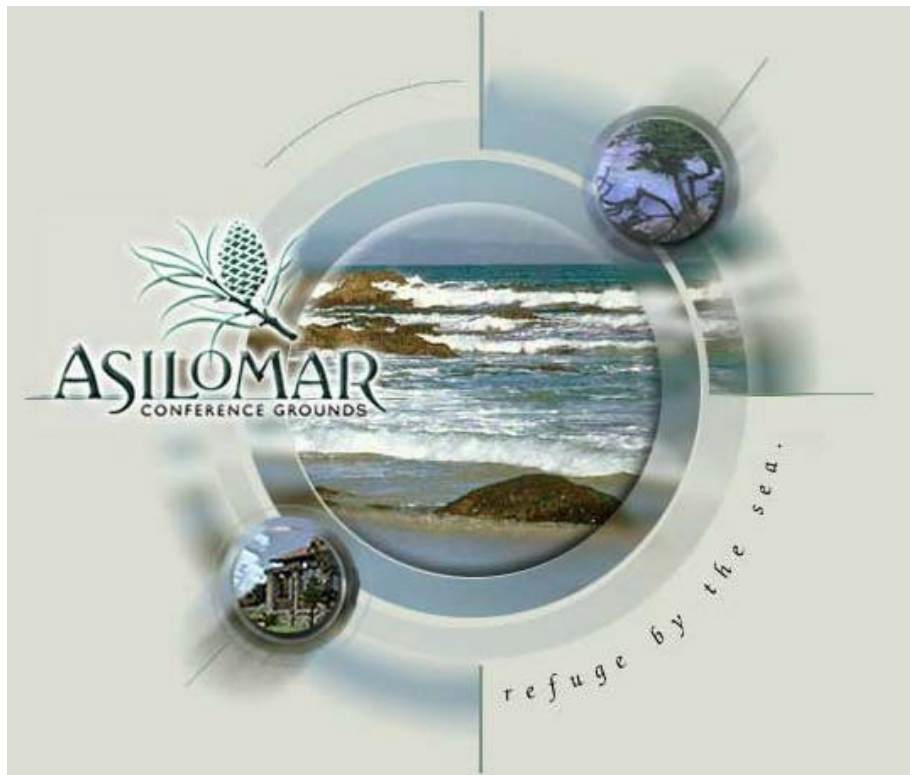




California Water and Environmental Modeling Forum

2005 Annual Meeting Agenda

“Water and Environmental Modeling to Support Decision Making”



March 1-3, 2005

Asilomar Conference Grounds
800 Asilomar Boulevard
Pacific Grove, California

California Water and Environmental Modeling Forum 2005 Annual Meeting Summary of Sessions

Tuesday, March 1, 2005

Time	Session	Moderator	Location
10:15 am-12:00 pm	1: San Joaquin Drainage and Recirculation via SANMAN	Nigel Quinn	Heather
	2: Water Rights and Availability Modeling I	Rich Satkowski	Curlew
12:00-1:00 pm	Lunch	---	Dining Hall
1:15-3:00 pm	3: Modeling of Water Transfers	Rob Tull	Heather
	4: 2004 DSM2 Developments and Applications	Parviz Nader	Curlew
3:00-4:00 pm	Registration	---	Social Hall
4:15-6:00 pm	5: Screening/Decision Support Tools	Armin Munevar	Heather
	6: Multi-Dimensional Model Applications	Ralph Cheng	Curlew
6:00-7:00 pm	Dinner	---	Dining Hall
7:00-10:00 pm	7: Reception I and Poster Session	Mike Deas	Heather
7:45-8:30 pm	Career Achievement Award / Presentation by Recipient	Rob Tull	
8:30-9:30 pm	Keynote: "TX Water Availability Modeling," Ralph Wurbs	Francis Chung	

Wednesday, March 2, 2005

Time	Session	Moderator	Location
7:30-8:15 am	Breakfast	---	Dining Hall
8:15-10:00 am	8: CWEMF Activities / Annual Business Meeting	Nigel Quinn	Heather
10:15 am-12:00 pm	9: Water Rights and Availability Modeling II	Rich Satkowski	Heather
	10: MIKE Model Applications	Jesper Kjelds	Curlew
	11: Integrated Surface Water and Ground Water Modeling	Tariq Kadir	Sanderling
12:00-1:00 pm	Lunch	---	Dining Hall
1:00-2:20 pm	12: Water Community Program Updates	Chuck Armour	Chapel
2:40-4:00 pm	13: IEP / CWEMF Joint Modeling Session	Rich Satkowski	Chapel
4:00-5:00 pm	Registration	---	Social Hall
4:15-6:00 pm	14: Advances in Biological Modeling for Fish	Zack Hymanson	Chapel
	15: 2004 CalSim-II Developments and Applications I	Lloyd Peterson	Heather
	16: Remote Sensing, LiDAR, and All That Jazz	Ralph Finch	Curlew
6:00-7:00 pm	Dinner	---	Dining Hall
7:00-10:00 pm	17: Reception II and Featured Speaker	---	Chapel
7:15-8:30 pm	Featured: "Chesapeake Bay Ecosystem," Edward Houde	Mike Chotkowski	

Thursday, March 3, 2005

Time	Session	Moderator	Location
7:30-8:15 am	Breakfast	---	Dining Hall
8:15-10:00 am	18: CA Long-Term Modeling Strategic Analysis	Jay Lund	Kiln
10:15 am-12:00 pm	19: CA Water Plan Update 2005 and Beyond	Rich Juricich	Kiln
	20: Flooding of Upper Jones Tract	Tara Smith	Acacia
12:00-1:00 pm	Lunch / Check-Out	---	Dining Hall
1:15-3:00 pm	21: 2004 CalSim-II Developments and Applications II	Sushil Arora	Kiln
	22: San Joaquin River Dissolved Oxygen TMDL Modeling	Russell Grimes	Acacia
3:15-5:00 pm	23: Restoration Modeling	Russ Brown	Kiln

Interagency Ecological Program Thursday-Friday, March 3-4, 2005 Sessions

Time	Session	Moderator	Location
8:15-10:00 am	South Delta Hydrodynamics and Fish Dynamic	Mike Chotkowski	Chapel
10:20 am-12:00 pm	X2 and Fish Population Relationships	Pat Coulston	Chapel
1:00-2:40 pm	The Confluence of Delta Smelt Science and Management	Bruce Herbold	Chapel
7:00-9:00 pm	Reception and Poster Session	Peggy Lehman	Fred Farr
Time	Session	Moderator	Location
8:10-10:00 am	Invasive Species	Lia McLaughlin	Chapel
10:20 am-12:00 pm	Lagniappe (A Little Something Extra)	Pete Smith	Chapel



2005 Annual Meeting Agenda

Version Date:
February 27, 2005

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

Session One: San Joaquin Drainage and Recirculation: A SANMAN Perspective

Moderator: Nigel Quinn (LBNL/USBR)

Location: Heather

Application of SANMAN: A San Joaquin River Salinity Management Spreadsheet Model, Paul Hutton (MWDSC)

2004 San Joaquin River Recirculation Experiment, Sharon McHale (USBR)

Real-Life and Real-Time Agricultural and Wetland Drainage, Nigel Quinn (LBNL/USBR)

Session Two: Water Rights and Availability Modeling I

Moderator: Rich Satkowski (CWEMF)

Location: Curlew

Water Rights and Flow Distribution Modeling Using ModSim
Leslie Stillwater (USBR)

Evaluation of SWRCB's Water Availability Methods in California's North Coast Ungaged Streams, Mike Mann (USBR)

12:00-1:00 p.m. — Lunch

(Note: Tuesday lunch is not included in the housing or registration fees, but can be purchased separately in the Social Hall.)



1:15-3:00 p.m.

Session Three: Modeling of Water Transfers

Moderator: Rob Tull (CH2M Hill)

Location: Heather

Decision Tools for Water Transfers, Brandon Goshi (MWDSC)

Water Transfers: Potential Approaches
and Complexities,
Brian Van Lienden (CH2M Hill)

Integration of Groundwater Monitoring
and Numerical Modeling in Assessing
Potential Impacts of Water Transfer
Programs, Pete Lawson (CH2M Hill)



Modeling Environmental Water Account Purchases, Nancy Parker (USBR)

Session Four: 2004 DSM2 Developments and Applications

Moderator: Parviz Nader (CA DWR)

Location: Curlew

DSM2 California Aqueduct Extension, Kyle Winslow (CH2M Hill)

Generating Water Quality and Climate Data at DSM2 Boundaries for Temperature
and Dissolved Oxygen Studies of the Delta, Hari Rajbhandari (CA DWR)

PTM Animations Illustrating the Flexibility of South Delta Permanent Barrier
Operations, Bijaya Shrestha (CA DWR)

Replacing Unformatted Data Storage in DSM2 Using HDF5,
Tawnly Pranger (CA DWR)

Model Steering, Eli Ateljevich (CA DWR)

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

4:15-6:00 p.m.

Session Five: Screening/Decision Support Tools

Moderator: Armin Munevar (CH2M Hill)

Location: Heather



SANMAN: Decision Support for the DIP's San Joaquin River Salinity Management Plan, Paul Hutton (MWDSC)

Interactive Screening Model and the Exploration Process, Armin Munevar (CH2M Hill)

Testing Instream Flow Regimes with ECOSIM-W, Derek Hilts (USFWS)

Intelligent Screening Models and Connecting Models to Reality, Jay Lund (U.C. Davis)

Session Six: Multi-Dimensional Model Applications

Moderator: Ralph T. Cheng (USGS)

Location: Curlew

Flow, Salinity, Franks Tract, and the Delta: On-going Analysis of the Influence of Franks Tract on Delta Salinity, John DeGeorge, Richard Rachiele and Stacie Grinbergs (RMA)

Physical and Numerical Modeling of Bank Scour in the Sacramento River, Bassam Younis (U.C. Davis)

The Influence of Horizontal Momentum Diffusion on 3D Hydrodynamic Simulations in the Delta, Pete Smith (USGS)

Preliminary Modeling Results of Tidal Circulation in Hood Canal, Washington, Ralph T. Cheng (USGS)

6:00-7:00 p.m. — Dinner



7:00-10:00 p.m.

Session Seven: Evening Program

Moderators: Rob Tull (CH2M Hill) and Francis Chung (CA DWR)

Location: Heather

7:00-10:00 p.m. Reception I and Poster Session

Reception sponsored by CH2M Hill and CWEMF.

Poster session sponsored by Watercourse Engineering.

(Please see poster session titles at the end of this agenda.)

7:45-8:30 p.m. Presentation of the Career Achievement Award and Remarks by the Award Recipient

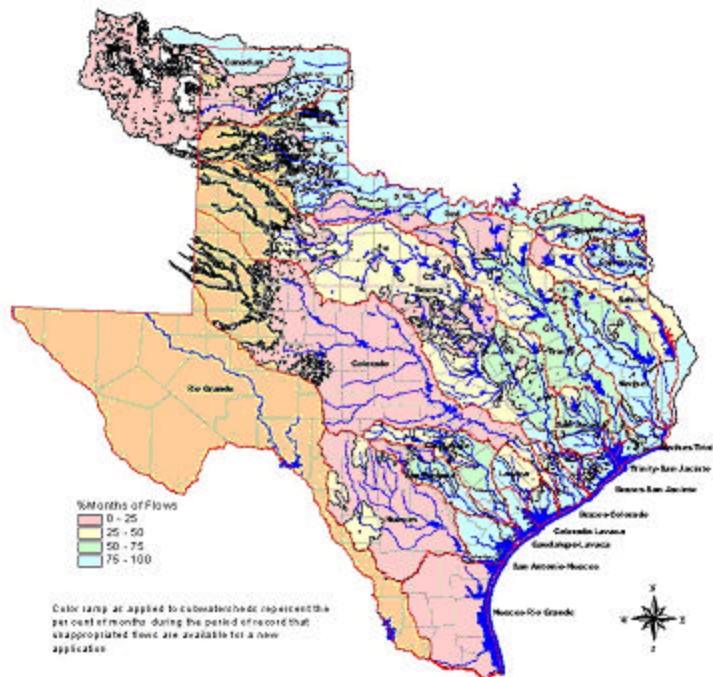
Presenter: Rob Tull (CH2M Hill)

8:30-9:30 p.m. CWEMF Keynote Speaker: Ralph Wurbs (Texas A&M University, Department of Civil Engineering)

Moderator: Francis Chung (CA DWR)



Texas Water Availability Modeling System: Institutional Dimensions of Modeling



7:30-8:15 a.m. — Breakfast

8:15-10:00 a.m.

Session Eight: CWEMF Activities / Annual Business Meeting

Moderator: Nigel Quinn (CWEMF Convener / LBNL / USBR)

Location: Heather

- 8:15 Welcome — Nigel Quinn
- 8:20 Reports on CWEMF Model User Groups & Peer Reviews — Nigel Quinn
- 8:30 Report on CWEMF Workshops — KT Shum (Vice-Convener / EBMUD)
- 8:45 Executive Director's Report — Rich Satkowski (CWEMF)
- 9:00 Annual Business Meeting — Nigel Quinn

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

Session Nine: Water Rights and Availability Modeling II

Moderator: Rich Satkowski (CWEMF)

Location: Heather

Texas' Water Rights Analysis Program (WRAP) Modeling System,
Ralph Wurbs (Texas A&M University)

Modeling Klamath River Basin Water Rights Using CALSIM (WRIMS),
Nancy Parker (USBR)

Modeling of the Truckee River Operating Agreement Using RiverWare,
Mike Mann (USBR)

Session Ten: MIKE Model Applications

Moderator: Jesper Kjelds (Jones & Stokes)

Location: Curlew

Decision Support Tools for Assessing Impacts on Aquatic Species from
Hydroelectric Pulseflows, Jesper Kjelds (Jones & Stokes)

Selenium Contamination in the Delta-Mendota Canal
Parallel to the San Joaquin River, South of
San Francisco Bay, David Wood (DHI, Inc.)

Early Warning Systems and Modeling of Tsunamis,
David Wood (DHI, Inc.)



10:15 a.m.-12:00 p.m. – Continued

Session Eleven: Integrated Surface Water and Ground Water Modeling

Moderator: Tariq Kadir (CA DWR)

Location: Sanderling

Trends in Integrated Hydrologic Modeling,
Saqib Najmus (WRIME)

An Updated Hydrologic Model of California's
Central Valley Using MODFLOW-2000 with
the Farm Package,
Randall Hanson and Claudia Faunt, (USGS)



A New Sub-Domain Water Budgeting Post-Processor for IGSM2,
Emin Dogrul (CA DWR)

MODGRASS: Updated Ground-Water Flow Model of the Central Part of the
Western San Joaquin Valley, Charles Brush (USGS)

12:00-1:00 p.m. — Lunch

1:00-2:20 p.m.

Session Twelve: Water Community Program Updates

Moderator: Chuck Armor (IEP/CA DFG)

Location: Chapel

Interagency Ecological Program Update, Chuck Armor (IEP/CA DFG)

CA Water and Environmental Modeling Forum Update, Nigel Quinn (CWEMF)

CA Bay-Delta Authority Update, Zach Hymanson (CBDA)

CA Bay-Delta Authority Independent Science Board Update, John Melack (CBDA)

Long-Term Fish Monitoring Review, Paul Cadrett (USFWS)

Evaluating New Methods for Marking Delta Smelt,
Zak Sutphin (USBR) and Jerry Morinaka (CA DFG)

2:40-4:00 p.m.

Session Thirteen: IEP / CWEMF Joint Modeling Session

Moderator: Rich Satkowski (CWEMF)

Location: Chapel

California Long-Term Modeling Strategic Analysis Framework,
Jay Lund (U.C. Davis)

2004 Hydrodynamic Field Experiment in the Stockton Deep
Water Ship Channel, Jim Hensch (Stanford University)

Hydrodynamic Modeling of the Stockton Deep Water Channel,
Pete Smith (USGS)

Analysis of Flows Following the Jones Tract Levee Failure,
Cathy Ruhl (USGS)



4:00-5:00 p.m. — Registration (Social Hall)

4:15-6:00 p.m.

Session Fourteen: Advances in Biological Modeling for Fish

Moderator: Zack Hymanson (CA DWR)

Location: Chapel

Stage-Based Matrix Models for Delta Smelt: Simple Models with Complex
Implications for Management, Bill Bennett (U.C. Davis)

Building Models to Explore Variability in Sacramento Splittail Populations:
Fueling Biology via Floodplain Topography, Steve Culberson (CA DWR)

Winter Chinook Modeling: Insights into What is Driving Population Trends,
Steve Cramer (SP Cramer & Assoc.)

Cost-Effectiveness of Actions to Protect or Recover Chinook Salmon,
Rick Sitts (MWDSC)



4:15-6:00 p.m. – Continued

Session Fifteen: 2004 CalSim-II Developments and Applications I

Moderator: Lloyd Peterson (USBR)

Location: Heather

CalSim-II Peer Review of 2003 and the CalSim-III Development Plan,
Tariq Kadir (CA DWR)

CalSim-III: Key Features and Current Status, Tariq Kadir (CA DWR)

San Joaquin River Water Quality Module Ver1.00 for CalSim-II, Levi Brekke (USBR)

Common Assumptions: Technical Coordination Team and Plan Formulation
Common Model, Robert Leaf (CH2M Hill)

Session Sixteen: Remote Sensing, LiDAR, and All That Jazz

Moderator: Ralph Finch (CA DWR)

Location: Curlew

Use of High Resolution Imagery and Pattern Recognition Software for Moist
Soil Plant Mapping in San Joaquin Valley Wetlands, Josephine Burns (LBNL)

Automated Crop Mapping for Water Needs Assessment from LANDSAT Imagery,
Michal Koller (USBR)

Delta Bathymetry Mapping with Four Beam ADCPs: Tools, Techniques and Tradeoffs,
Aaron Blake (USGS)

LiDAR Coverage of Delta, Marsh, and Bypass, Gary Darling (CA DWR)

Other Bathymetry Data, Storage, and Visualization, Ralph Finch (CA DWR)

6:00-7:00 p.m. — Dinner

7:00-10:00 p.m.

Session Seventeen: Evening Program

Moderator: Mike Chotkowski (USBR)

Location: Chapel

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

7:15-8:30 p.m. IEP Featured Speaker: Edward D. Houde
(University of Maryland Center for Environmental Science)

Ecosystem-Based Approaches to Fisheries Management in Chesapeake Bay



7:30-8:15 a.m. — Breakfast

8:15-10:00 a.m.

Session Eighteen: California Long-Term Modeling Strategic Analysis Framework

Moderator: Jay Lund (UC Davis)

Location: Kiln

Introduction and Background

Long-Term Modeling Committee Report

Panel Discussion on Next Steps

Roundtable Discussion and Next Steps



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

Session Nineteen: California Water Plan Update 2005 and Beyond

Moderator: Rich Juricich (CA DWR)

Location: Kiln

California Land and Water Use Database and Web Portal, Scott Matyac (CA DWR)

Water Portfolios: Coordinating the California Water Plan Update with CALSIM, Todd Hillaire (CA DWR)

Quantified Scenarios of 2030 CA Water Demand, David Groves (Pardee RAND)

Beyond California Water Plan Update 2005, Rich Juricich (CA DWR)

Session Twenty: Flooding of Upper Jones Tract

Moderator: Tara Smith (CA DWR)

Location: Acacia

Water Quality Assessment of the Jones Tracts Floods, Robert J. DuVall, Richard S. Breuer and Dan Otis (CA DWR)

RMA Flow and Salinity Modeling of the Jones Tract Breach, Filling, and Repair, John DeGeorge (RMA)

The Impact of Jones Tract on Urban Drinking Water Supplies: As Simulated by DSM2, Michael Mierzwa (CA DWR)

12:00-1:00 p.m. — Lunch / Check-Out

1:15-3:00 p.m.

Session Twenty-One: 2004 CalSim-II Developments and Applications II

Moderator: Sushil Arora

Location: Kiln

CalSim-II Model Sensitivity Analysis Study,
Hongbing Yin, Shengjun Wu and Messele Ejeta (CA DWR)

Water Resource Integrated Modeling System (WRIMS),
Clay Booher, Ryan Wilbur and Tom Pruitt (CA DWR)

Enhanced ANN Model for CalSim-II
Applications, Shengjun Wu (CA DWR)

CalSim-II Allocations Module for State Water
Project Simulation, Ryan Wilbur (CA DWR)

CalSim-II Hydrological Data Extension
of Recent Historical Period,
Messele Z. Ejeta (CA DWR)



**Session Twenty-Two: Modeling and Science Support for the San Joaquin River
Dissolved Oxygen TMDL**

Moderator: Russ Grimes (Jones & Stokes)

Location: Acacia

Oxygen Transfer Model Development and Applications to Designing an
Aeration Facility, Steve Seville (Jones & Stokes) and April Gu (HDR Engineering)

Testing the Performance of the Port of Stockton (USACE) Aeration Device,
Megan Robinson (Jones & Stokes) and Gary Litton (University of the Pacific)

San Joaquin River Water Quality Modeling: Upstream through the Deep Water
Ship Channel, Andrew J. Thuman (HydroQual, Inc.)

Evidence for Modeling Nitrification in the San Joaquin River as a Two-Step Process,
Gary Litton (University of the Pacific)

3:15-5:00 p.m.

Session Twenty-Three: Restoration Modeling

Moderator: Russ Brown (Jones & Stokes)

Location: Kiln

Battle Creek Restoration Modeling of Flow, Temperature and Fish Abundance,
Russ Brown (Jones & Stokes)

Salton Sea Restoration Plan: Modeling Issues, Doug Osugi (CA DWR)

Solutions for Restoring Yosemite's Hetch-Hetchy Valley,
Spreck Rosekrans (Environmental Defense)

