

CALIFORNIA WATER AND ENVIRONMENTAL MODELING FORUM

# MINUTES OF THE STEERING COMMITTEE

For March 16, 2007

(This meeting was held at the Contra Costa Water District Office in Concord.)

Decisions	
Action Items	<ul style="list-style-type: none"><li>• Real Time Modeling – Ted Swift and Peter Vorster will start looking into the possibility of a future session at Asilomar on this topic.</li><li>• DSM-2 Peer Review (Particle Tracking or entire model.) - Tara and Steve will follow up</li><li>• Strategic Analysis Framework Letter to CalFed – Tara.</li><li>• Modeling Protocols Scope of Work – KT and Rich</li><li>• IWFM Review assistance proposal – Nigel to prepare a scope and proposal, assisted by Hubert and George Matanga</li><li>• Fishery Models – Steve will work with CWEMF to make a list of models, and prepare an outline of a possible workshop.</li><li>• CALSIM-II – Michael will talk to Sushil on the possibility of making the Common Assumptions public.</li></ul>
Parking Lot Items	
Motions	

REFERENCES HANDED OUT:

1. Executive Directors Report
  2. Workshop Status Report.
  3. Draft Strategic Analysis Framework letter to CalFed Science Program.
  4. 2007 Asilomar Annual Meeting Comments.
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## MINUTES

**1. INTRODUCTIONS/DESIGNATION OF QUORUM** – The meeting was opened with 11 persons in attendance, and 3 proxies. A quorum was declared.

**2. EXECUTIVE DIRECTORS REPORT** – Much of the Executive Director's report are incorporated into the minutes below by category.

**3. SECRETARY'S REPORT** – The minutes for the Jan. 26, 2006 meeting were approved.

**4. TREASURER'S REPORT** – \$16,000 is in the Peer Review Fund.

## 5. 2007 ANNUAL MEETING –

a. **Attendance.** There were 153 CWEMF participants at Asilomar, from 48 organizations. Of these, 72 were new members.

b. **Students** - There were 12 students (2 CSUSJ, 2 UCSC, 5 UCD, 1 Cal, 2 COE): let's make sure we contact CSUMB too. It was suggested that we try to subsidize 30 students next year: this would cost us \$120 each at hostel times 30 students = \$3,600. Most present agreed this would be good. Get the word out early. It was mentioned that five federal agencies and universities have a new program to involve students in science: this may include modeling.

c. **Finances** – There was \$20,444 taken in, and the expenses were \$10,384, so the net was a positive \$10,056.

d. **Future Reservations at Asilomar** – A reservation request has been submitted for 2008 and 2009.

e. **Overlapping with IEP** – We are back to Tuesday through Thursday at Asilomar, so we can have more of an overlap with the IEP.

f. **Time in the Sun** – It was mentioned that it would be nice to have a block of time sometime during the week to enjoy the ocean and the sun. Some discussion ensued, but no decision was made. One may have to resort to the time-honored way, which is to sneak off and miss a session of less interest to the person.

g. **Overlapping of Related Sessions** – A discussion ensued as to how to prevent related sessions to occur at the same time. For example, if DSM sessions, CALSIM sessions, and groundwater sessions are at the same time, there are many people who are interested in all three and therefore have to miss sessions of interest to them. It was mentioned that a future guide will be to try to at least have the core sessions of each at separate times. There is an attempt to have the surface water and groundwater sessions at the same time, as different people are normally involved in each. The problem arises that DSM and CALSIM are both in the surface water group.

h. **Real-Time Modeling** – This is growing in use. This would make project operations and reservoir releases more efficient. The question arose as to whether this is the right time for real time modeling. Ted Swift volunteered to get involved. Is the question real time modeling, or real time analysis? Project operators, who would be the beneficiaries of real time modeling, have not been coming to Asilomar. (The question arose as to whether they been resistant to this?) Let's invite them (i.e. Paul Fujitani). Is real-time modeling using steady-state conditions, or daily time steps. Real time modelers/analysts and project operators have to start getting together. Peter Vorster is interested in this topic.

i. **Sensitivity Analyses** – Speakers should include these in their talks.

j. **Integrated Regional Management Planning** – Consider having a future session on this subject.

k. **Fish Models** – How can we help the IEP on this? Let's see if we can get Wim to talk to us on the problems and possibilities of fish models, and perhaps a CWEMF member can talk to the IEP on this. CalFed would be interested in this action.

l. **DSM-2 Peer Review** – It was mentioned that the CalFed Science Review Group wants a peer review of the particle tracking component of DSM-2. This is because when fishery agencies use DSM-2 in their fish movement predictions, and write journal articles of their results, the articles are rejected from the literature because the model used has had no peer review done on it. The IEP Science Review Group feels that it can do the

peer review, but would need coordination with CWEMF. The question arose as to whether there is a difference between what a journal editor would consider a peer review of a fish model used for population dynamics and what a CWEMF peer review would cover for the types of models we are involved with (i.e. hydrodynamics). Should CWEMF/CalFed Science Review Group do a joint review? It was mentioned that such a peer review should cover all aspects of DSM-2, not just the particle tracking portion. Again, the question arose as to how do we relate what we do for peer reviews versus what journal editors want for peer reviews.

**6. STRATEGIC ANALYSIS FRAMEWORK LETTER TO CALFED SCIENCE PROGRAM** – CWEMF is preparing to send its Strategic Analysis Framework, which shows the goals of CWEMF, to CalFed along with a cover letter explaining how CWEMF might be able to assist CalFed on their modeling needs. This is being done at the suggestion of Dr. Jeff Mount, as CalFed is starting to prepare its own Strategic Plan now and it would be good for them to know of the modeling assistance that CWEMF could offer. This letter should be addressed to Mike Healy and Joe Grindstaff, with cc to Dr. Mount. Dr. Mount thinks that modeling will be increased in usage by CalFed.

CalFed is starting to undergo its own strategic planning process, and now would be a good time to synchronize the CalFed and CWEMF strategic plans. Have several people from CWEMF sign the letter, in addition to Tara, such as KT, Jay, Paul, etc., in order to show a good cross-section of agencies behind the letter. Consider starting the letter with “it has been brought to our attention by Dr. Jeff Mount and Steve Culberson”. Tara will send out a new draft. One big question CWEMF has to ask itself before sending the letter is whether it has the manpower to provide the support that the letter is suggesting. Can CalFed provide funding to CWEMF to do some of the work? CalFed is now in the process of trying to get a modeler (staff position) in its Science Program, for liason with modelers.

**7. MODELING PROTOCOLS** – There is interest in updating this 2000 document. Rich proposed using CWEMF funding to hire a consultant to do selected tasks in the update. A few names were mentioned who are well-qualified candidates for the job. KT and Rich will work on the Scope of Work and present in the next meeting. There is general agreement that matching funds from other agencies should be sought, both for fiscal reasons and to elevate the visibility and interest in the document. This update and further developments of the Strategic Analysis Framework Report will proceed concurrently and in coordination with CalFed. Compared to other similar documents such as USBR and U.S. EPA QA manuals, the Modeling Protocols Report is more focused on the issues specific to California water management, the Central Valley and the Delta in particular.

**8. TECHNICAL WORKSHOPS** –

- a. WARMF – coming up.
- b. Database – coming up.
- c. Hetch Hetchy – How reliable were the modeling results? Letters to participants have been sent out. Have heard back from all. The Irrigation Districts have not modeled, but would participate. San Francisco must participate to have a viable workshop. The water supply, power production, water quality analyses, filtration

requirements, and their associated costs are all concerns. Discuss the water supply reliability with and without Hetch Hetchy, considering the effects of population and climate change and flood risks and flood management options. Hold off on date selection for now.

- d. SJV-2 – Speakers have been selected, but a convenient time for all has not been found yet. Someone mentioned including nitrates in the workshop. Carolyn Burrow and Steve Phillips of the USGS Sac State have been working on recharge and effect of riparian habitat in removing nitrate.
- e. DSM-2 – Delay to late summer or fall.
- f. Shared Vision – MOU with USACE. Gaming, Bulletin 160.
- g. Biological/Ecological Modeling – This would be detailed conceptual modeling. Involve Calfed. Lisa will send details to Paul.
- h. SJR Restoration Plan – To cover how the existing data can be put into models. Wait a month to see what five agencies come up with. Discuss water temperature models, conceptual models, sediment transport models, geomorphic models, Discuss daily time steps in the models.
- i. CALSIM III – An educational workshop.
- j. Middle River – Russ Brown idea on putting the SJR flow down Middle River.

#### 9. PEER REVIEW –

- a. **Brochure** – A limited printing of the Peer review brochure has been made and included in the registration materials of the annual meeting. This initial printing includes nice photos of nature scenery in California. Additional pictures of (or related to) previous (and upcoming) peer reviews administered by CWEMF are sought to complement the photos in the first printing. Anyone with relevant photos and/or comments on the initial printing should forward them to Rich Satkowski. The target date to have the brochure finalized for final printing is mid-April.
- b. **IWFM Review** – Tariq and Sushil are following up on the discussion at the annual meeting. They are drafting the framework and format of the review. The emphasis will be on the algorithm of IWFM, and whether specific applications will also be reviewed is yet to be determined. Nigel will work with DWR on the scope and prepare a specific proposal. Hubert and George Matanga express interest to be involved in the process. Potential joint sponsorship with CALFED Science and/or other agencies will be discussed when the draft proposal is completed
- c. **Fishery models review** – Rich explored the possibility of a review of existing models related to fishery originally proposed by Rich Sitts of MWD. The focus would be on salmon and Delta smelt. Derek Hiltz supports an overview of available models in the Central Valley, e.g. the Cramer model. For its San Joaquin operations and planning, USBR is addressing the major ecosystem processes and has identified some needs for quantitative modeling. It appears that CALFED Science and IEP have not performed a comprehensive review in this area, and Steve offers two reasons: that not many well established models are available to warrant a review, and the number of experts in this area is limited. In the annual EWA reviews, a number of individual process models were consulted, but no models simulating overall population dynamics are available. Steve suggests that he could work with CWEMF to come up with a list of models and prepare an outline of a

possible workshop to scope out the subject area. A joint workshop with CALFED Science could be of interest as it is in the process of preparing a State of Science Report. Michael Healey and Wim Kimmerer are the contacts.

- d. **Particle Tracking Model** – CALFED Science is pursuing different possibilities of reviewing the DSM2 module. The motivation is not because of any specific shortcoming but to gain more confidence in the increasing importance in the model's many applications. Tara will explore the possibilities with Steve Monismith (Stanford), a key proponent of the review.

#### 10. **MODEL USER GROUPS** –

- a. **DSM2** – Tara reports that a number of improvements on the database will be incorporated in the summer on the IEP DSS web site. Further improvements on the BDAT site are also planned.
- b. **CALSIM II** – The group has not met since August due to the organizers' work load. Volunteers to coordinate the effort are needed. It was noted that the Common Assumptions effort does not serve the entire membership of the user group as many of its proceedings are not open to the public. Michael will talk to Sushil to address this issue.
- c. No reports on IWFM or MIKE user groups.
- d. It was mentioned in passing that there is interest in a WEAP user group

11. **OTHER BUSINESS** – Rich reports that the presentations in the annual meeting will be posted by April 1.

#### 12. **ADJOURNED** – 2:30 PM

Respectfully Submitted  
George Nichol, Secretary, CWEMF

#### ATTENDANCE

Tara Smith	Convener, DWR
Rich Satkowski	Executive Director, CWEMF
Paul Hutton	Vice-Convener, MWDSC
George Nichol	Secretary, CWEMF
K.T. Shum	Past Convener, EBMUD
Steven Culberson	CalFed Science Program
Hubert Morel-Seytoux	Hydrology Days/Consultant
Marianne Guerin	CCWD
George Matanga	USBR
Michael Tansey	USBR
Peter Vorster	The Bay Institute
Derek Hilts	US FWS
Diana Jenson	David Ford (on the phone)

Proxies: Gordon Thrupp, John Headlee, Dan Easton, Nigel Quinn,  
Jay Lund, Lisa Holm, Rob Tull