CALIFORNIA WATER AND ENVIRONMENTAL MODELING FORUM

Draft MINUTES OF THE STEERING COMMITTEE

For September 12, 2003

(This meeting was held at the Solano Irrigation District in Vacaville.)

I. SUMMARY

A. ACTION ITEMS

- **RWQCB 5 Dissolved Oxygen Workshop** Nigel and the ED will be in contact with the Regional Board on a potential workshop.
- **NMFS Salmon Workshop** The ED will check if the salmon and steelhead group can come to Asilomar for a presentation, or to Sacramento for a workshop.
- **Asilomar Speaker** John Williams will check if Eldridge Morrow can speak at Asilomar.
- **Fish Movement** Tara will contact Wim to get his ideas on fish movement as a potential workshop.
- **Fitting Models Together** Tara will contact UCD student on status of this.
- U.S. EPA QA Document for Modeling The ED will get an electronic copy of this and put it on the Forum's web site.
- **ED Duties** The ED is to put together a draft list of what his duties should be. All can email him suggestions before the next meeting.
- Asilomar Presentation Evaluations Form and Asilomar Facilitator Guideline
 Form All reviews and be prepared to comment at next Steering Committee
 meeting.
- **TMDL Topics** George to poll the SWRCB's TMDL Roundtable to see what topics they might suggest for a workshop.
- B. **MOTIONS PASSED OR TABLED** None. But at the next meeting the Steering Committee is scheduled to vote on the ED's duties.

C. REFERENCES HANDED OUT

- Executive Directors Report
- Upcoming Technical Workshops
- CWEMF Officer Duties
- Proposal for Funding from the Bay-Delta Science Consortium (for User's Groups)
- Asilomar Presentation Evaluation

- Asilomar Facilator Guidelines
- Salmon Recovery Science Review Panel Report
- California Water Plan Update 2003 Workshop Agenda for Sept. 25, 2003
- Chapter from the California Water Plan, entitled "Ch. 3.6: Next Steps for Using Analytical Tools Including Short-Term and Long-Term Work Plan"

II. MINUTES

- 1. **INTRODUCTIONS AND WELCOME** The meeting was opened with 12 persons in attendance, and 4 proxies held. A quorum was declared.
- 2. **SECRETARY'S REPORT** The minutes of the last meeting were unanimously approved.
- 3. **EXECUTIVE DIRECTOR'S (ED) REPORT Funding Proposal** The ED has made a funding proposal to CALFED, to help us in our support of model user's groups. We should hear back from CALFED on this by mid-October. **Asilomar** The ED had his preliminary Asilomar planning meeting on July 24. The IEP will not be going to Asilomar in 2004, instead going to a meeting hall on Feb. 17-18 in Lodi. The IEP would like a Forum person to go to Lodi to give them an update of Forum activities. **Analytical Tools Workshop** This workshop on DWR's analytical tools for the California Water Plan will be on Sept. 25. **North Coast Stream Workshop** Sonoma Count W.D. would like to postpone the workshop until 2004. **Dissolved Oxygen Workshop** A D.O. workshop may be held. RWQCB 5 may do their own peer-reviews of the dissolved oxygen models being used for the SJR at Stockton, and they may want a workshop on dissolved oxygen also. The ED has contacted Mark Gowdy there. Nigel and the ED will be in further contact with Mark. **Web Site** Our new web site has been counting the number of inquiries it has been receiving, and this has shown good interest in the Forum's activities.

4. ANNUAL MEETING UPDATE -

- a. **Possible Three Day Meeting** We have placed a deposit for our normal two days at Asilomar. If we decide definitely on going to three days (noon of first day to noon of third day) we will send additional deposit. The problem of the State budget in supporting travel was discussed. Some discussion ensured. It appears that if a State employee is a speaker he has a better chance of traveling, so possibly we should try to involve as many as possible as speakers or poster presenters. Or, what received even more interest, was to work things out so that State employees would not have to stay on the third day. The third day could be special, and be dedicated to such things as the meetings of model User's Groups, having a presentation by the Salmon Recovery Science Review Panel, and other special meetings.
- b. **NMFS** It was also mentioned that NMFS has a Science Advisory Council for salmon and steelhead, with a group that meets regularly. Their Year 2000 report dealt

with models and a number of parameters. Possibly they could come to Asilomar, to discuss their problems. See their December 2000 report. Can we invite them? Possibly for a break-out session. Contact is Steve Meadley. Would NMFS briing them in? An alternative is to have this as a workshop in Sacramento. Add their web to our web site. Rich will check. Rich will develop a laundry list of questions to ask related to this topic.

c. Ideas For Sessions -

- Informal poster session
- Pop-up talks (for all sessions, or a break-out session of its own: typically a speaker would have 2 slides and take 5 minutes, and give a quick sketch of what he is working on. This allows lots of new information to be presented in a very short time. Lisa suggested that those interested in being pop-up speakers could contact a facilitator and do the necessary coordination.)
- John Williams will check if Eldridge Morrow will be able to be the evening speaker.
- Flow and water temperature
- Transfer session (Rob volunteered)
- TMDL session (workshop, or at Asilomar)
- Artificial neural network (possibly Ralph Finch)
- South Delta
- Brainstorming for Delta modeling needs over the next ten years.
- Theme: Last Ten Years of CWEMF. Also consider adding what is expected for CWEMF for the next ten years, possibly discussing participation with the California Water Plan.
- Economic modeling?
- Demand modeling
- Biological Model Users Group
- What biologists are currently doing in modeling.
- Quality Assurance (possibly contact John Fields of USBR)
- Legal aspects of modeling (contraints, flows decreed, how flows are ramped up, groundwater extraction that draws surface flows, Joe Sax.)
- DWR and USBR are spending lots of time on allocation give their staffs a chance to discus.
- GIS interface with CALSIM
- Smaller time-step modeling (i.e. daily with American River)
- Risk and uncertainty in allocation of operations, like for WAPA, to forecast their generations or pay a fine. Projecting generation. (Lloyd is interested.)
- Wetland modeling and TMDL issues.
- Groundwater session, including IGSM-2 and DHI.
- DSM-2 session on South Delta, Delta storage, operations, and North Delta use.
- Estuarine ecology team on USGS modeling (Pete Smith extension, particle movement). Wim is doing particle tracking of fish movement. Tara will call Wim to get his biological ideas on this.
- How models all fit together, by UCD student Tara will check.

- CALSIM review panel aftermath, long-term needs, economic needs.
- CALAG economic aspects, drainage: are models diverging rather than converging?
- Rock Slough II (Lisa)
- CUWA's effort for winter run shinook salmon model.
- Conflicts in Delta between ecosystem goals and water quality goals.
- MWQI real-time model for California Aqueduct.
- Agencies with projects come and talk about their models.
- Carriage water impacts.
- Delta Cross-Channel / Through-Delta Facility.
- Other methods than using inflows and exports for controlling Delta salinity intrusion, such as tide gates, control of Delta circulation, Franks Tract, etc.
- Ag drainage
- Colorado River topics, such as using ag models to help in the restoration of the Salton Sea.
- Modeling uncertainty (John Dougherty may be able to come back)
- Climate change
- Geomorphic modeling (Phil Williams Assoc., Peter Baker)
- LANDSAT is being used to identify crops in Colorado: is this of interest in the Central Valley? Remote sensing.

5. TECHNICAL WORKSHOPS -

a. Past Workshop(s)

DWR Annual Flow and Salinity Methodology – Held on August 19. About 40 people attended (only about a quarter of which is from DWR), at least twice the number of people working on Delta flow and salinity modeling. Four presentations (no web cast) went from 9 to 3:30. Hot-off-the-press annual report handed out in the meeting. Planning for next year (format, etc.)? Yu Min (DWR) will provide presentations to Rich Satkowski.

b. Scheduled Workshop(s)

Bulletin 160 (Sep 25) – Needs update on what is expected of the Forum – a formal report, verbal comments, etc.

CALSIM II Training (Oct 21-24) – Close to 30 registrations so far. Sushil and Peterson will decide on whether to include a preliminary peer-review report (sponsored by the CALFED Science Program) presentation by Jay Lund. Possibility of starting a users' group may be discussed in workshop.

Climate Change (November 21) – Agenda includes a section on quantification of water supply impacts. Nigel is working on putting together other sections of workshop.

TMDLs – status?

c. Workshop(s) postponed

Water Supply Modeling in California's North Coast Streams – The Sonoma County Water Agency is interested in having the Forum sponsor this workshop, supported by SCWA. It is tentatively scheduled for August in Santa Rosa, and would cover the Russian and Eel Rivers. A Russian River math model is included. Six speakers are lined up. The Forum would be facilitating. Put on hold because of concerns of SCWA. Target date: 2004.

Modeling for CEQA/NEPA – The focus is to flesh out what stakeholders are looking for and to what extent could modelers/models provided the information. CALFED has declined to be a co-sponsor. Put on hold, KT will work on this ASAP (when his workload allows).

d. Future possibilities

Uncertainty In Surface and Groundwater Modeling (PEST) – An extension of the workshop held in April 2003. Dr. John Doherty from Australia will be in California in February 2004, possibly speaking in Asilomar. Another workshop tentatively set for April 2004.

Carriage Water – DWR CART has performed new simulations using both DSM2 and ANN. Among others, EBMUD is studying these results. It's possible that there are enough new findings to warrant a workshop.

- 6. CALIFORNIA WATER PLAN ANALYTICAL TOOLS PARTICIPATION The DWR's analytical tools can consist of data, models, GIS, etc. The workshop will be on Sept. 25, and Forum members will attend to give their perspective on these tools, at the invitation of DWR. The DWR will give an overview of their plan for the future, and ask for responses from participants. The Forum members present will respond in writing with suggestions on the analytical tools needed for the future. This involvement is an opportunity for the Forum to carry forth with its mission. A preliminary review of the development schedule shows it to be fast-moving. Forum members will stay for one hour after the Sept. 25 presentation to put together their thoughts and draft a preliminary response. Prior to the workshop Rich will ask Kamiar and Gena if they have a list of questions they would like addressed by the Forum.
- **7. SYSTEM RESOURCE MODEL DEVELOPMENT PROPOSAL** For the above analytical tools and related to the long-term work of the California Water Plan, the benefits of common architecture for models and databases for Delta models was discussed. Creating modules that can fit into different models would be a benefit. These modules would have similar protocols, interfaces, and databases. This issue is heading for a white paper.
- 8. **IGSM-2 USER GROUP** About 20 people showed up at last weeks IGSM-2 User's Group. The value of user groups was mentioned, in that a year or two ago there was a contentious problem between IGSM-2 users, and these problems have been resolved

through the work of the Users Group. Sponsoring such users groups is a good use of the Forum. The IGSM-2 Users Group is now meeting on a monthly time step, but future meetings may become more frequent. Currently the Users Group is working on the time step issue, and the development of new features for the model.

- 9. **PEER REVIEW** We have some money available for peer reviews. There was some discussion on what our next peer review might be. Does CUWA have a need? Region 5 WQCB may be doing their own peer review on a dissolved oxygen model for the San Joaquin River near Stockton. Can we download the 1985 Tetra Tech dissolved oxygen report onto our web site? The U.S. EPA has a QA plan for math models, and we should get this and put it on our web site. Should we consider 3-D models for peer review?
- 10. **OTHER BUSINESS** The officers duties of the Forum were discussed. The Vice-Convenor is now acting as chair for the technical workshops. The Past Convenor gives out the Fischer Award and the Lifetime Achievement Award. We now have a Web-Master. The Officer Duty list needs to be expanded to include what the Executive Director does. Rich has been delegated to do this. E-mail any suggestions to Rich on what his duties should be. We will vote on these duties for the Executive Director at the next Steering Committee meeting. Have this list of duties for the Executive Director in place by the annual meeting at Asilomar. The Treasurer (Lisa) has obtained the Quicken accounting software, and will have a treasurer's report by next meeting. Thee is about \$60-70 K in the general fund.
- 11. **NEXT MEETING DATE** Next meeting is Nov. 20 at CCWD.

Respectfully Submitted George Nichol, Secretary, CWEMF

ATTENDANCE

Nigel Quinn
Rich Satkowski
Lisa Holm
George Nichol
Tara Smith
K.T. Shum
Rob Tull
Jay Lund
Lloyd Peterson
Hubert Morel-Seytoux
Mike Deas

John Williams

Proxies: Headlee, Baker, Thrupp, Vorster

Convenor, LBNL/USBR Executive Director, SWRCB

Treasurer, CCWD Secretary, SWRCB

DWR
EBMUD
CH2M-Hill
UCD
USBR
Hydroprose

Watercourse Engineers

Consultant