CALIFORNIA WATER AND ENVIRONMENTAL MODELING FORUM

MINUTES OF THE STEERING COMMITTEE

For September 9, 2016

(This meeting was held at the UCD Watershed Science Center in Davis.)

Decisions	
Action Items	 Check how our By-Laws address our operating reserve – Executive Director Contact UCD to get their bill for the Metric Workshop – Executive Director Meet with DWR's webmaster to start preliminary work on the new website – Tariq and Kevin. Lock in the dates of March 20-22 at Lake Natoma Inn for our annual meeting – Executive Director. Send out the requests for speakers, moderators, and award nominations for the annual meeting – Executive Director Let Rich Satkowski know of any more suggestions we have for the upcoming California Water Modeling Action Plan and data and model development efforts - All
Parking Lot Items	(Located at end of minutes.)
Motions	 A motion was made to transfer \$5,000 from the general fund to the operating reserve. A motion was made to provide funds to get started on the new website

REFERENCES HANDED OUT:

- 1. Executive Director's report.
- 2. Minutes of the July 15 Steering Committee meeting.
- 3. Treasurer's Trial Balance
- 4. Workshop Status Report
- 5. Request for Ideas on Bay-Delta Plan Related Projects
- 1. **INTRODUCTIONS/DESIGNATION OF QUORUM** The meeting was opened by Josue. There were 9 persons in attendance, 6 persons on the phone, and 4 proxies. A quorum was declared.
- 2. EXECUTIVE DIRECTOR'S REPORT The written report contained information on financial matters, the annual meeting, workshops, and steering committee tasks. The CWEMF ad- hoc advisory committee to advise DWR on the role and criteria for use of models in evaluation of surface water and groundwater systems in DWR's Sustainable Groundwater Management Program (SGMA) has been formed. Elaine's comments related to the topics below are presented with those topics.
- 3. **SECRETARY'S REPORT** Some corrections to the minutes were discussed. A motion was made to accept the minutes as amended, and the motion was seconded and passed.

4. TREASURER'S REPORT –

- a. There is a total of about \$304,000 in our funds, consisting of \$248,000 in the general fund, \$16,000 in the peer review fund, and \$40,000 in the operating reserve.
 - b. Our tax forms for the year are in good order.
- c. We discussed increasing the operating reserve (rainy day fund). Since we had increased the compensation for the Executive Director recently, and we want the operating reserve to support that compensation, in addition to having reserve funds for the post office box, website, and web master, we should think about increasing our operating reserve. A proposal was made to transfer \$5,000 from the general fund to the operating reserve, the motion was seconded, and passed with 8 ayes and one abstention. (We should check how our By-Laws address our operating reserve.)

5. TECHNICAL WORKSHOPS

- a. **Metric Workshop** This 4-day workshop was held at UCD. 20 people attended. It was well supported by UCD IT personnel. The workshop went well. The main issue was that Metric needs lots of software. The program requires desktop computers, and UCD has 31 desktops. Use UCD for this workshop in the future. Metric requires up-front costs. Elaine will contact UCD to get their bill.
- b. **Natural Flows and Unimpaired Flows to the Delta** The DSP is planning on putting on this workshop. The CCWD would like to participate in the planning.
- c. **Discussion on State Cost Limits for Workshops** The state now has cost limits for workshops. The limit per agency is \$5,000 per class, or \$50,000 per year. This state cost limit does not include attendance at the CWEMF annual meeting. DWR may be able to have a service contract with CWEMF so as not to be limited by this state limit. There are still questions regarding how this state limit will apply.
- d. **SacWAM Workshop** This workshop is coming up. It is not a CWEMF workshop. The Delta Science Program is sponsoring this workshop. This workshop will be the roll-out of the SacWAM model. A peer review is needed for this model. SacWAM is based on the WEAP model. Another workshop may be given on the WEAP model

6. CWEMF WEBSITE UPDATE –

a. Tariq has met with the DWR webmaster (Xiaojun), and apparently there is no conflict of interest if the webmaster works on our website. Xiaojun's cost is about \$30-35 per hour. Tariq has also met with Kevin Long, who has made input into our website for the past few years. Tariq and Kevin will be meeting with Xiaojun soon. Xiaojun will be asked to make a skeletal version of a website. How can we all comment on this as it progresses? We will pay Xiaojun as he progresses. There was discussion that it may cost about \$250 for Xiaojun to get started on the skeletal version of the website and to make a plan and cost estimate for the entire work. This is to cover Xiaojun's costs until the next Steering Committee meeting. A motion was made, discussed, seconded, and passed with all ayes and one abstention to obligate the \$250 for Xiaojun to get started. There was some discussion on whether we needed a letter contract, a verbal go-ahead, or a handshake to obligate this money. No decision was made on how to initiate this contract. The current plan is to have Xiaojun develop the website and then use Xiaojun for technical assistance over time as needed.

- b. Kevin will remain as CWEMF webmaster. Kevin had the following comments on the upcoming web work:
- (1) We need to consider whether we want just one website, for desktops to access, or in addition another website for smartphones to also access.
 - (2) Do we want a Facebook page? The opinion today seemed to be that we do.
- (3) Continuous updating will be needed for workshops, photos, attendance, and for social media.
- c. It was mentioned that perhaps CWEMF might need a public affairs officer to do things like the above.

7. 2017 ANNUAL MEETING -

- a. Lake Natoma Inn is booking up fast for the Spring. Lake Natoma Inn told Elaine that the dates of March 20-22 and March 27-29 were available. These dates were discussed today in the light of when Spring break was and when final exams were. It was decided today that Elaine should try and lock in the dates of March 20-22 for our annual meeting.
- b. Elaine will send out the requests for speakers, moderators, and award nominations before our next Steering Committee meeting.
- c. Holly Canada will be contacting professors of several universities to let them know of our student participation activities.

8. BAY-DELTA PLAN PROJECTS

- a. Rich Satkowski of the SWRCB presented the following information on the current work on the State Water Board's (Board) Bay Delta Plan:
 - The Board is in the process of developing and implementing amendments to the 2006 Bay-Delta Plan.
 - The Board's existing Analytical Tools Workshop Expert Panel has said that the Board can make better use of modeling, that the State needs a plan for Delta-related modeling, and that model and data development are too important for one agency to handle.
 - The Board will form and utilize a five-person Independent Modeling Expert Panel to advise on modeling issues related to the Bay-Delta, and to develop a California Water Modeling Action Plan using a community development approach that encourages and facilitates cooperative data and model development efforts. The Independent Modeling Expert Panel will summarize their findings on these topics in a written report to the State Water Board and the Delta Science Program (DSP).
 - The California Water Modeling Action Plan will guide the long-term development of databases and models used to manage water in California including future Bay-Delta Plans and drought planning.
 - The Independent Modeling Expert Panel will review modeling questions from the Board and provide responses in writing.
- b. CWEMF is being asked to assist in the inputs to and review of the California Water Modeling Action Plan and in the data and model development efforts. An important part of the Board and DSP's efforts will be how to define "independent". The C.V.s of potential independent experts are being gathered by the DSP.

- c. In today's Steering Committee meeting we discussed the following topics that might be of consideration as input to the California Water Modeling Action Plan:
- (1). Establishment of Official Modeling Data Sets For example, set up an "official" data set for flow and salinity in the Delta that modelers from various agencies and consultant groups can easily find and access, without having to repeat searches over and over for different modeling efforts. Ensure that adequate QA/QC procedures were used in collecting this data. Expand beyond small data sets so as to include all data that can be useful to modelers. Have this data adequately housed at some agency. In many current cases we have "data and model silos" where modelers and data collectors don't talk to each other. Not to be a static repository.
- (2). <u>Establishment of Water Body Modeling and Data Information Center</u> For example, take the Stanislaus River. The Information Center would tell what data exists and where it is located, what models have been used and by whom, what applications were made, and who to contact. Not to be a static repository.
- (3). <u>Revising Modeling Protocol's Document</u> Bring this up-to-date if needed. One change needed is a new title page with CWEMF name replacing BDMF.
- (4). <u>Dimensionality</u> Considerations need to be given for when 1-D, 2-D, and 3-D models are needed. This can depend upon channel geometry, flowrates, thermal and salinity stratification occurring, and other parameters. CWEMF has been considering writing a white paper on this topic for flows and salinity in the Delta.
- (5). <u>Interrelationship between Hydrodynamics and Fishery</u> What parameters need to be in models that reflect the fishery? What factors affecting a fishery are not in the models? How can hydrology data be used for fishery? Fish may respond to things that don't come out of a model, such as floodplain conditions.
- (6). <u>Better Modeling Support to Policy Makers</u> Get policy makers and modelers in a room so as to determine what policy makers need. How to break silos down. What data and models do we need to obtain to answer the policy makers questions.
- (7). <u>Emerging Issues</u> Determine what the future more complex issues and questions coming up are. What models do we have, or are needed to be developed, for these issues?
- (8). Nutrient Modeling for the Delta There is lots of nutrient input into the Delta from agricultural drainage. Lots of data has been collected over the years, but much has not yet been synthesized. The regional WQCB is in the process of establishing nutrient objectives for the Delta. A modeling effort may be needed to address nutrients over the long term.
- (9). <u>Return Flows</u> Improved estimates are needed for return flows, water usage, and percolation in Delta modeling. More gages would be helpful in modeling water use and return flows in key inner areas of the Delta. Some farmers may have their own data that would be helpful if obtained.
- (10). <u>Formatting Stored Data</u> Consider formatting stored data so that it can be fed right into models without the need to re-format it. It seems that some areas in Europe are doing this.
- (11). <u>Proofing Model Results (Retrospective)</u> Back check past modeling predictions against what actually occurred for some key situations to see how well the model predictions were, so as to determine how much credibility can be put into the models for future similar situations.

Let Rich know if we have more suggestions.

9. **MODEL USER GROUPS** – A brief summary was given.

10. **OTHER BUSINESS** – Josue described some of things he learned at the recent International Association of Great Lakes Research annual meeting in Toronto. Industry had a heavy component in the meeting, and vendors had a demonstration area. There were about 1,000 attendees. It is interesting to note that modelers and biological scientists all belong to this one organization.

11. **NEXT STEERING COMMITTEE MEETING** – November 18.

12. **ADJOURN** – 12:15 pm.

Respectfully Submitted George Nichol, Secretary, CWEMF

ATTENDANCE

Josue MedellinConvenerUCDElaine ArchibaldExecutive DirectorCWEMFTariq KadirVice-ConvenerDWRBen BrayPast ConvenerEBMUD

Stacy Tanaka Treasurer Watercourse Engineering
George Nichol Secretary Retired (Corps/SWRCB)

Rich Satkowski SWRCB
Anne Huber ICF
Paul Hutton MWD

Proxies: Fred to George, Holly to Paul, Hubert and Mike to Josue.

On Phone: Kevin Long, Yuan Liu, Marianne Guerin, Jobaid Kabir, Tara Smith, Fred Lee

Parking Lot Items	 Multi-Year Budget – Prepare a draft. Peer Review Process - Development of peer review administrative process.
	 Investment Policy - Development of investment policy. Financial Transparency - Determine how best to show our financial transparency to outsiders.