



## California Water and Environmental Modeling Forum

Promoting Excellence and Consensus in Water and Environmental Modeling

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October 25, 2012

State Water Resources Control Board  
P.O. Box 100  
Sacramento, CA 95812-0100



**Subject: CWEMF Assistance with Bay-Delta Plan Analytical Tools**

Dear Chair Hoppin and Members of the Board:

The California Water and Environmental Modeling Forum (CWEMF) appreciates the opportunity to participate in the State Water Resources Control Board (State Water Board) comprehensive review and update of the Bay-Delta Plan. CWEMF is a collaborative, non-partisan, non-profit organization whose mission is to increase the usefulness of models for analyzing California's water-related problems. CWEMF was formed in 1994, as suggested by the State Water Board in its 1991 Water Quality Control Plan for Salinity, because of disagreements over models used to establish salinity objectives for the Bay-Delta. CWEMF has remained actively engaged in water modeling since that time. Our members represent state and federal agencies, water purveyors, non-governmental organizations, academics, and consultants.

CWEMF can assist the State Water Board and other water policy processes in several ways:

- 1. Technical Workshops** – We organize and conduct technical workshops in which stakeholders and experts are brought together in a consensus-building environment to provide organized background information and discuss technical aspects of issues, such as the appropriate use of modeling tools, determine which models best answer particular questions, and identify data needs and model refinements.
- 2. Model Peer Reviews** – We conduct impartial reviews of models to document strengths and weaknesses, suggest improvements, and identify appropriate applications.
- 3. Modeling Plan** – CWEMF called for development of a strategic analysis framework in 2005 to help guide the development of databases and models to provide better quantitative information for a broad range of conditions. The CWEMF document could be the starting point for developing a modeling plan for the Bay-Delta system, and ultimately for water management in California.

CWEMF has a small operating budget, bolstered by many volunteer hours, to retain the independent nature of our mission. As such, we require modest funding to assist with these activities.

CWEMF recognizes that establishing flow standards for the Bay-Delta system is challenging. We would be happy to assist. The next page lists some documents and workshops by CWEMF that highlight the potential usefulness of our organization to the State Water Board and others. Our website ([www.cwemf.org](http://www.cwemf.org)) contains more information on CWEMF.

Sincerely,

A handwritten signature in black ink that reads "Elaine M. Archibald".

Elaine Archibald  
Executive Director

### Relevant CWEMF Documents

A Strategic Analysis Framework for Managing Water in California. 2005. Prepared by the CWEMF Ad hoc Committee on Long-Term Model and Data Development. Available at:

<http://www.cwemf.org/Pubs/StrategicFrameworkRpt.pdf>

CWEMF Peer Reviews. 2006. Available at: <http://www.cwemf.org/Pubs/CWEMFPeerReviews.pdf>

Investigation in Methods Used in the Integrated Groundwater and Surface-Water Model. 2002.

Prepared by the University of California Davis for CWEMF. Available at:

<http://www.cwemf.org/Pubs/IGSM-Investigation-10-30-02.pdf>

Protocols for Water and Environmental Modeling. 2000. Available at:

<http://www.cwemf.org/Pubs/Protocols2000-01.pdf>

Review of One-Dimensional Hydrodynamic and Transport Models. 2001. Available at:

<http://www.cwemf.org/1-DReview/default.htm>

Review Panel Report, San Joaquin River Valley CalSim II Model Review. 2006. Available at:

[http://science.calwater.ca.gov/pdf/calsim/calsim\\_II\\_final\\_report\\_011206.pdf](http://science.calwater.ca.gov/pdf/calsim/calsim_II_final_report_011206.pdf)

Water Temperature Modeling Review. 2000. Available at:

<http://www.cwemf.org/Pubs/BDMFTempReview.pdf>

### Relevant CWEMF Workshops

Ammonia/Nutrient Issues and Regulatory Oversight in the Delta. October 28, 2011. Information available at: <http://www.cwemf.org/workshops/NH3Brief2.htm>

Modeling Issues of the Delta. February 6, 2007. Information available at:

<http://www.cwemf.org/workshops/DeltaModelingIssuesWrkshp.pdf>

Overview of Delta Nutrient Water Quality Problems: Nutrient Load-Water Quality Impact Modeling.

March 25, 2008. Information available at: <http://www.cwemf.org/workshops/NutrientLoadWrkshp.pdf>

The Background and Technical Basis for the Biological Opinions. September 7, 2011. Information

available at: [http://www.cwemf.org/workshops/Tech\\_Briefing1\\_BO.htm](http://www.cwemf.org/workshops/Tech_Briefing1_BO.htm)

The Next DSM2 Calibration: Speak Out and Pitch In. December 14, 2006. Information available at:

<http://www.cwemf.org/workshops/DSM2CalibWrkshp/DSM2CalibrationWrkshp.pdf>

Towards Improving Modeling the Delta: Pilot Study at Fabian Tract. August 10, 2012. Information

available at: <http://www.cwemf.org/workshops/detaaworkshop.htm#Agenda>