



CALFED
BAY-DELTA
PROGRAM

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P. Joseph Grindstaff,
Director

State Agencies

The Resources Agency:

Department of Water Resources

Department of Fish and Game

Delta Protection Commission

Department of Conservation

San Francisco Bay Conservation and
Development Commission

California State Parks

The Reclamation Board

California Environmental
Protection Agency:

State Water Resources Control Board

California Department of Food
and Agriculture

California Department
of Health Services

Federal Agencies

Department of the Interior:

Bureau of Reclamation

Fish and Wildlife Service

Geological Survey

Bureau of Land Management

US Army Corps of Engineers

Environmental Protection Agency

Department of Agriculture:

Natural Resources Conservation Service

Department of Commerce:

National Marine Fisheries Service

Western Area Power Administration

October 5, 2009

Donald R. Glaser, Regional Director
Mid-Pacific Regional Office
Bureau of Reclamation
Federal Office Building
2800 Cottage Way
Sacramento CA 95825-1898

Dear Mr. Glaser:

The CALFED Science Program convened an independent panel of five distinguished experts in August to review the Two Gates Fish Protection Project. The panel reviewed a July 16, 2009 summary document and technical appendices, posted on our Science Program website (http://www.science.calwater.ca.gov/events/reviews/review_2gates.html), and participated with project proponents in an August 6, 2009 public workshop. The review panel report is attached.

The review panel was asked to focus on the scientific issues of the project, especially the scientific basis of the project design and the monitoring and assessment program to evaluate project success. The panel did not evaluate non-scientific aspects of the project, nor did they recommend for or against its implementation.

The review panel is complimentary to the overall strategy used to develop the project. Strengths include 1) the coupled use of hydrodynamic, sediment transport (turbidity), and fish transport/behavior models, 2) the opportunity to conduct a truly large-scale adaptive management experiment, and 3) the integration of modeling with project design. Other positive attributes are linking the project to existing scientific knowledge and capacity in the Delta, a forward looking way to distribute project data and information, and the reversibility of the project if unseen consequences result.

Concerns of the review panel include 1) lack of a clear statement of project goals, 2) issues with completeness and formulation of the delta smelt behavioral model, and 3) lack of a mechanistic relationship between turbidity and smelt behavior. Other concerns focused on the needs for better substantiation and quantification of the RMA hydrodynamic model reliability and uncertainty and

improved design of fish/turbidity interaction studies. The panel also notes that an adaptive management framework and operational structure are lacking and are critical for project success.

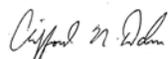
The panel makes six recommendations:

- 1) project goals should be clarified and stated explicitly,
- 2) a rigorous adaptive management plan including decision process needs to be formulated,
- 3) there must be ongoing commitment for monitoring, analysis and synthesis of results,
- 4) the delta smelt behavior model and sampling program must be strengthened,
- 5) assessment of potential impacts to other species should be improved, and
- 6) involve the CALFED Science Program to aid in the process.

In the summary/conclusions section, the panel recommends eight precautionary steps to take if the decision is made to proceed with the project. The review panel recommendations provide a means to build upon existing strengths and shore up weaknesses of the Two Gates Fish Demonstration Project.

We hope that you find this report useful. We are pleased that we were able to provide this service. If you have any questions about the report or the process used to produce the report, please contact Rebecca Fris at (916) 445-5031.

Sincerely,



Clifford N. Dahm
CALFED Lead Scientist

Attachment

Cc: Mike Chotkowski, Bureau of Reclamation
Dan Castleberry, US Fish and Wildlife Service
Maria Rea, National Marine Fisheries Service
Carl Wilcox, Department of Fish and Game
Kathy Kelly, Department of Water Resources
Randall Neudeck, Metropolitan Water District