

**Agenda Item: 8-9**  
**Meeting Dates: December 8 and 9, 2004**

**ANNUAL JOINT MEETING WITH BAY-DELTA PUBLIC ADVISORY  
COMMITTEE**

**INDEPENDENT SCIENCE BOARD REPORT**

**TO:** Gary Hunt, Chair California Bay-Delta Authority  
**FROM:** Thomas Dunne, Chair, Independent Science Board  
**DATE:** November 19, 2004  
**RE:** Update from the Independent Science Board

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This report provides an update on recent activities of the California Bay-Delta Authority's Independent Science Board (ISB).

The ISB is currently focusing its efforts on six issues:

1. Analysis of innovative technologies and data management systems for Monitoring of the Bay-Delta hydrologic system.

The Board has begun to review the feasibility of extending and improving methods for monitoring the condition of land and waters in the Bay-Delta. It is expected that the current systems for monitoring water quality and ecosystem conditions can be extended and designed for easier data retrieval and integration. The Board will explore the possibility of establishing an Observation and Forecasting Technical Panel of experts in this field.

The Board received a briefing from Randy Brown (retired from the California Department of Water Resources) about past efforts to establish a coordinated monitoring and assessment program (CMARP) for Calfed. They also were briefed by Professor Antonio Baptista of the Oregon Health & Science University on an integrated system for monitoring and modeling that he has developed for the Columbia River Estuary. Professor Baptista explained how the system is serving the needs of various agencies for documenting and forecasting various characteristics in support of biological surveys and water quality management.

Board members are reviewing existing monitoring efforts in Calfed to assess the extent to which the current network provides adequate

information for planning, regulation, and assessment of ecosystem change.

2. Potential uses of mathematical modeling for anticipating some large-scale issues that could affect the Calfed program.

The Board is exploring the possibility of organizing a workshop with the California Water Environmental Modeling Forum (CWEMF) in the Fall of 2005 to explore use of modeling in anticipating whether increased pumping capacity can provide more flexible approaches to water quality management and enhancement of ecosystem function. Additionally, the ISB will work with the Water Management Science Board to clarify assumptions and projections for water supply, water demand and pumping under changing landscape conditions such as climate change, and 8,500 cfs scenario.

3. Exploring the potential for improving integration of four environmental water programs.

During the November meeting, a subcommittee met with staff from ERP and USFWS to discuss current efforts to integrate of the EWA and ERP, including EWP. Discussion involved members of the EWA Panel and was timed to occur following the EWA Panel review. ISB identified areas of concern regarding coordination of upstream and downstream water needs and potential organizational ambiguities. ISB plans to continue investigations regarding program integration focused on broader questions of environmental water management including coordination with CVPIA water and questions related to the science foundation of decision making.

4. Analysis associated with delta levee stability and recommendations for future research needs;
5. Advice regarding the Delta Improvements Package (DIP) (see June ISB memorandum to the Authority); and
6. Assistance with developing a template for evaluating Performance Measures

The ISB has developed a workplan for 2005 (Attachment 1) providing a timeline depicting when the above topics will be considered during the upcoming year.

The next ISB meeting will be held February 22-23, 2005. General discussion topics will include:

- Reports from various ISB subcommittees including performance measures, levees, environmental water;
- Reports from individual board members and staff on monitoring, modeling, science program review; and
- Informal presentation on the goals and methods of the Vernalis Adaptive Management Program (VAMP) as an example of an integrated environmental water program.

Members of the Authority and the public are welcome and encouraged to attend.

Attachment 1 – 2005 ISB Workplan

Attachment 2 – Timeline