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P. Joseph Grindstaff,  
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#### 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

August 5, 2008

To: John Kirlin, Executive Director  
Delta Vision Blue Ribbon Task Force

From: Cliff Dahm, Lead Scientist  
CALFED Science Program

Subject: Proposed Science Programs for Delta Vision Strategic Plan

You have received two proposed Science Programs for consideration for incorporation into the Delta Vision Strategic Plan (DVSP). One proposed Science Program comes from Mike Healey in consultation with staff of the CALFED Science Program, and the second proposed Science Program comes from Jeffrey Mount and Judy Meyer for the CALFED Independent Science Board (ISB). The Mike Healey plan calls for a California Delta Center for Science in Public Policy and the ISB plan calls for a Delta Science Program. Both plans contribute substantially to action items 1.5 and 1.6 in the second staff draft (July 12, 2008) of the DVSP. In addition, the two proposed Science Programs would be crucial contributors to action 5.2 (resolving export effects on net Delta transport), action 6.2 (minimizing methylmercury production), action 6.3 (reducing export effects upon fish), action 7.1 (improving collection of baseline water diversion and use data), and action 8.1 (modeling tools for Delta hydrodynamics and water management). The Science Programs also would address the best way forward to minimize ecosystem stress from diversion, conveyance, and storage systems (strategy 9) and the necessary science for the efficacy of shifting export diversion timing to wetter periods (action 9.2) and shifting diversions away from sensitive habitats (action 9.3). Finally, the DVSP also mentions establishing a research entity within the Science Program to conduct research and development on new levee designs (action 12.2). There is much commonality between the two plans and a few differences. This memo highlights the similarities and differences.

Major common themes in the two Science Programs are found in the key or core functions, some areas of the organizational structure, and program review and assessment. Major common themes are:

- Improved data management – There is considerable scientific information about the California Delta. Both plans call out the need for a substantive effort in the areas of data management, sustaining long-term databases, and better access and visual display of data.
- Enhanced science communication – Science results from the Delta need to be more effectively communicated to broader and more diverse audiences. Communications need to be multimedia with policymakers, lawmakers, water managers, and the interested public in the loop.
- Targeted scientific research to inform policy– Both plans call for interdisciplinary and cross-institutional research on identified scientific topics of concern. Peer-review selection of the best possible science is emphasized.
- Adaptive management support – Both Science Plans call for staff with the expertise to provide guidance and tools for applying adaptive management. High-quality science, coordinated monitoring with performance evaluation and early detection of status and trends, and multiple types of modeling are critical for the support of successful adaptive management.
- Science integration and coordination – Science integration and coordination among state and federal agencies, stakeholders and universities is a critical effort identified in both plans.
- Assessment and synthesis – Both plans call for the distillation of knowledge from Delta research and monitoring and incorporation into assessment reports and discussion papers readily understood by the Council and agency decision makers.
- Independent scientific peer review– Scientific programs, projects, and products and emerging scientific problems require independent review and scrutiny. The Science Plans both recommend independent peer review as the foundation for this function.
- Stable, sustained, and reliable funding – A successful long-term and responsive Science Program requires stability in funding and movement away from boom and bust support. A statutory exemption to allow efficient and timely contractual agreements with independent scientific experts also is crucial.
- Oversight Board – Both plans call for a Delta Science and Engineering Board to conduct annual reviews of all science aspects of Delta water and ecosystem management.
- Lead Scientist and Science Program Director – Overall scientific leadership for the Science Program should come from an independent Lead Scientist appointed by the California Delta Ecosystem and Water Council. Fiscal and administrative aspects of the Program should be handled by a Director.

There also are a few differences between the two Science Plans. The primary differences are found in the organization and scope of the two science plans. The main distinguishing differences are:

- Lead scientist – The ISB plan asserts that the lead scientist be employed by the Council with long-term tenure and full authority over program priorities, budget and staffing. The plan put forth by Mike Healey calls for a rotating appointment of 2-3 years duration for the lead scientist to ensure a fresh scientific perspective with employment by the US Geological Survey (or possibly University of California) to ensure the needed independence.
- Science Program staff – The ISB plan designates a director reporting to the lead scientist and supervising four deputy directors, each responsible for one programmatic outcome function. The plan from Mike Healey calls for a director working jointly with the Lead Scientist to manage the Science Program. The director supervises program managers responsible for staff in each program area. Healey's plan also calls for deputy lead scientists, similar to the Interagency Ecological Program Lead Scientist, responsible for leading scientific aspects of specific core activities.
- Funding and prioritizing Delta science - The ISB plan calls for substantial authority for overall prioritization and funding of science and monitoring activities within the Delta. The Science Plan from Mike Healey calls for authority for setting priorities and funding for Science Program activities and the research funded by the Program.

Both Science Plans are comprehensive and well thought out. Both would produce a vigorous and responsive scientific enterprise to support and inform policy in the Delta. If you wish, I would be pleased to discuss either or both plans with you and the staff preparing the DVSP at your convenience.

cc: J. Grindstaff  
CALFED Deputy Directors  
IEP Directors and Coordinators  
BDCP Steering Committee