



**CALFED  
BAY-DELTA  
PROGRAM**

1416 Ninth Street, Suite 1155  
Sacramento, California 95814

**(916) 657-2666**  
FAX **(916) 654-9780**

July 14, 1997

Byron Buck, Executive Director  
California Urban Water Agencies  
Dan Nelson, Executive Director  
San Luis & Delta-Mendota Water Authority  
455 Capitol Mall, Suite 705  
Sacramento, CA 95814-4406

Dear Byron and Dan:

Thank you for your June 13, 1997 letter regarding CALFED's approach to analyzing alternatives. You provided specific suggestions regarding how the alternative evaluation should proceed. Subsequent to receipt of your letter, which included an attached memorandum from the Ag/Urban Technical Team to the Ag/Urban Policy Group, also dated June 13, Stein Buer of my staff discussed the suggestions in detail with David Briggs, Contra Costa Water District. Based on a careful review of your suggestions and the subsequent discussion between Mr. Buer and Mr. Briggs, I believe that we share essentially the same vision as to how the evaluation should proceed, although we might disagree about specific modeling assumptions. Nevertheless, this might be a good opportunity to summarize for you the progress of our system modeling efforts.

In its efforts to model potential storage and conveyance alternatives, CALFED focused initially on developing the analytical tools which could evaluate the various combinations of storage and conveyance components. Substantial effort has been devoted to development of DWRSIM, spreadsheet post-processing tools, and DWRDSM (including recalibration based on recent UVM data). Concurrently we have worked with CALFED agencies and stakeholders to develop consensus on modeling assumptions for existing conditions, future no project conditions, and for the various alternatives. To get the evaluations underway, CALFED staff proposed a set of assumptions which would serve as the first approximation of the no project conditions, which were called the "benchmark" assumptions, to indicate that they serve simply as a basis for comparative analysis.

As DWRSIM development has advanced, a series of model runs were completed for individual storage and conveyance alternatives, including dual Delta conveyance, north of Delta off stream storage, aqueduct storage, south of Delta groundwater storage, including sensitivity evaluations with individual and combinations of facilities (North of Delta groundwater storage and in-Delta storage components are still under development). The results have been posted to the net as well as documented in "*Status Reports on Technical Studies for the Storage and Conveyance Refinement Process*" (March 20, 1997, workshop handout).

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**CALFED Agencies**

**California**

The Resources Agency  
Department of Fish and Game  
Department of Water Resources  
California Environmental Protection Agency  
State Water Resources Control Board

**Federal**

Environmental Protection Agency  
Department of the Interior  
Fish and Wildlife Service  
Bureau of Reclamation  
Department of Commerce  
National Marine Fisheries Service

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CALFED's spreadsheet post processing tool has been used to conduct sensitivity evaluations for north of Delta off stream storage and aqueduct storage. These evaluations have examined the impacts of storage capacities, allocation of capacity between environmental and ag/urban uses, restrictions on diversion from the Sacramento River to off stream storage, and reservoir operational strategies. The results have been documented in two volumes, "*Status Reports on Technical Studies for the Storage and Conveyance Refinement Process, Evaluation of Upstream of Delta Off-Stream Storage and South of Delta Off-Aqueduct Storage Using the CALFED Post-Processing Spreadsheet Operations Model*, May 9, 1997", and a second report which focused on "*Combined Environmental -- Agricultural and Urban Water Supply Evaluation*", May 12, 1997.

CALFED recognizes the need for fully integrated system and Delta modeling in order to properly evaluate the relationship between water supply, water quality, facilities, and operating criteria. However, in order to develop a preliminary understanding of the major hydrodynamic and water quality effects of altering Delta conveyance characteristics, CALFED proceeded with a series of DWRDSM evaluations in which the various CALFED alternatives were examined with the same hydrologic inputs. The results of these studies have been documented in "*Status Reports on Technical Studies for the Storage and Conveyance Refinement Process*" (March 20, 1997, workshop handout) and "*Draft Progress Report, Delta Simulation Model Studies of CALFED Alternatives 1A, 1C, 2B, 2D, 2E, 3E*" (June 25, 1997).

In response to concerns by USBR and USGS staffs that the currently used version of DWRDSM did not accurately describe instantaneous velocities and current Delta geometric characteristics, CALFED launched a recalibration effort, initially focused on DWRDSM1 (Suisun Marsh Version). Recently collected UVM data and all available channel geometry data were used to complete the recalibration. The results have been documented in "DSM1 Suisun Marsh Version Recalibration, June 25, 1997.

Although the results of these preliminary modeling efforts are currently being used as the basis for CALFED's programmatic impact evaluation, we hope to complete a fully integrated set of modeling evaluations in time for the alternative selection process in the fall. Two tasks need to be completed prior to getting this more refined set of modeling runs underway. First, we need to decide on how to address CVPIA implementation in our modeling, even though the resolution of that process among stakeholders will likely take a substantial period of time. Second we need to complete coding changes which would allow us to model Ecosystem Restoration Program Plan targets. Our current schedule calls for launching the new DWRSIM-DSM studies in late July.

We have also completed pre-feasibility level evaluations of various storage and conveyance components (23 completed, in draft form) and initiated the economic benefits

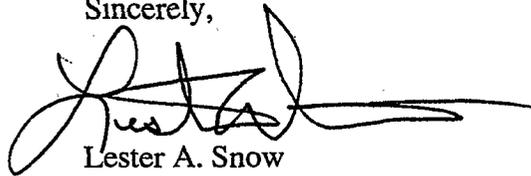
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evaluations which are linked to the DWRSIM system evaluations. Our goal is to provide CALFED agencies and stakeholders with fairly preliminary, but comparable hydrologic, hydrodynamic, engineering, and economic information for the alternative evaluation and selection process.

If you have any questions or comments regarding our current activities and proposed direction, please feel free to call me at (916) 657-2666 or Stein Buer at (916) 653-6628.

Sincerely,

A handwritten signature in black ink, appearing to read "Lester A. Snow", with a long horizontal flourish extending to the right.

Lester A. Snow  
Executive Director