

Dans copy

February 3, 1998

Mr. Richard Denton  
Contra Costa Water District  
Post Office Box H20  
Concord, California 94524

Dear Mr. Denton:

Thank you for your letters dated October 6 and October 21, 1997. I apologize for the delay in responding. Although the issues you raised in these letters have been discussed among CALFED Bay-Delta Program, Contra Costa Water District, and Department of Water Resources staffs on several occasions since the letters were sent, I would like to take this opportunity to summarize my views on how CALFED should proceed.

As we move forward with modeling to support alternative evaluation and refinement we also have the opportunity to refine our modeling tools. One important element is the selection of a tool to efficiently emulate key Delta processes that provide DWRSIM with run-time guidance on allowable exports and required reservoir releases to meet Delta standards. Both the G-model and the Artificial Neural Network have demonstrated good performance in this role.

The DWRSIM model runs conducted over the past year have all relied on the G-model based on calibration to historic data. As a result, CALFED's water supply evaluations do not reflect the potential impact and benefits of changes in Delta channel geometry. It is our intent to correct this deficiency in the next refinement of alternative modeling. We could do so by developing new G-functions for the alternative Delta configurations, by using the Artificial Neural Network, or by doing both.

I am satisfied with the success of the G-model as implemented in our current set of model studies and appreciate both the efforts of Contra Costa Water District in developing this tool and your helpfulness throughout CALFED's modeling process. As a follow-up to the completed modeling, it would be very much appreciated if you would also provide a copy of the calibration and verification documentation for the G-model, which we would include as part of the technical appendices for the programmatic EIR/EIS.

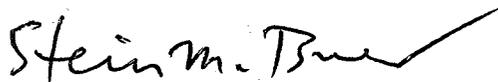
Although I am reluctant to contract directly for assistance in refining the G-model to reflect changes in Delta geometry, I would be pleased to explore options with you for further work in this area.

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The ANN also offers substantial promise as an efficient and flexible emulation tool. I have requested that DWR, with consultant support, move forward with trial implementation of this tool. The issues you have raised in your letter pertain directly to this trial implementation process and the merits of the G-model and the ANN approaches. Accordingly I provided copies of your letters to DWR's modeling staff as soon as I received them. The concerns you have raised suggest to me that we collectively have an excellent opportunity for collaboration on the implementation of this tool. In this way your concerns about data selection, training data, colinearity, and verification can be addressed during the trial periods. We look forward to working closely with you, your staff, DWR, and other interested entities as the development work proceeds. It is my understanding that you and Francis Chung have already taken steps to advance this collaboration.

If you have further questions or comments, please contact me at (916) 653-6628 or Dave Samson at (916) 653-9715.

Sincerely,



Stein M. Buer  
Chief, Technical Services Branch  
CALFED Bay-Delta Program

cc: George Barnes  
Sushil Arora  
Francis Chung  
Kamyar Guivetchi  
Ted Roefs  
Elizabeth Howard

bcc: Steve Yaeger  
Mark Cowin  
Dave Samson

SBuer:PBudzinski

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