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WILLIAM J. (BJ) MILLER
CONSULTING ENGINEER
PO BOX 5995
BERKELEY, CALIFORNIA 94705
(510) 644-1811
FAX: (510) 644-8278
bjmill@aol.com

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Lester,

I am reviewing a CalFed document distributed at a recent meeting. I am particularly concerned about several items, but I am writing now about one in particular.

The Section, "System Integrity," as with all past CalFed documents, strongly implies that the seismic threat to levee failure can be adequately addressed with a levee improvement - maintenance, subsidence reduction, and an emergency levee management plan. The data, which I have attached, suggest otherwise.

I have written to you and spoken at CalFed workshops and other sessions about this issue in fairly strong terms. I have made the point that the problem arises from the fact that **the soils underlying the levees and some of the levees themselves are comprised of liquefiable soils.**

If that is the nature of the problem, then the problem cannot be adequately addressed with levee improvement-maintenance, subsidence reduction, and an emergency levee management plan, not unless the levee improvements include replacing the liquefiable soils, an infeasible option.

If the levees rest on liquefiable soils, then, when liquefaction occurs, the levees are literally **resting on liquid**, and some of the levees themselves **become liquid**. This is an extremely serious problem!

When levees fail, the water rushing into islands can scour out 100 foot deep holes. I cannot imagine an emergency levee

management plan that could deal with the number of such failures that could be expected in the event of the predicted large earthquake. Of course, if the levees could be patched up, there is still the problem of how to flush out the salty water. And if you can accomplish all of that, you are still just waiting for the next large earthquake.

There are only two ways to adequately address this problem:

Move the primary Delta transfer system out of the area with liquefiable soils and above sea level and/or

Ensure that there is always enough water in storage in export areas to hold those water users over an extended Delta export outage.

I am aware of the political problems inherent in the points I am making, but I have always thought that the CalFed Program has an opportunity to educate people on issues such as these. In fact, I have seen that as one of the primary functions of the CalFed Program.

I hope you can find a way to deal more effectively with the true nature of this seismic threat.

Thanks,

B.J.
cc: Selected stakeholders

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