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- Jerry Meral
- Hank Cowen
- Karla Nemeth
to suggest
action

September 26, 2011

John Laird, Secretary
Natural Resources Agency
1416 Ninth Street, Ste 1311
Sacramento, CA 95814

Jerry Meral, Undersecretary
Natural Resources Agency
1416 Ninth Street, Ste 1311
Sacramento, CA 95814

RE: HMP v. PL84-99 Non-Project Levees in the Delta

Gentlemen:

Undersecretary Meral will recall the discussions with Melinda Terry and myself at our July 20, 2011 meeting, at which Department of Water Resources Director Cowin was also present, about consistency determinations of PL84-99 Levee Standards with the Delta Plan being developed by the Delta Stewardship Council. I enclose a copy of the letter which I had previously addressed to Chairman Isenberg of the Delta Stewardship Council, copies of which were subsequently provided by Undersecretary Meral and Dale Hoffman Floerke of the DWR.

The subject matter addressed in the letter was later discussed at the Delta Stewardship Council meeting on August 26, 2011. Per the directions given by the Chairman of that meeting, I had a subsequent conversation with Joe Grindstaff, Executor Director of the DSC, in which we agreed upon appropriate language to be included in the next draft of the Delta Plan, to wit: "Efforts to obtain PL84-99 Levee Standards at a minimum shall be considered consistent with the Delta Plan unless lesser levels of levee protection have been established previously by the purchase of flood easements or similar binding commitments."

What prompts this letter are the comments upon the August draft of the Delta Protection Commission's Economic Sustainability Plan from the DWR that could undermine this agreed resolution and continue to subject efforts by levee districts in the Delta to improve their levees to Public Law 84-99 standards to consistency determination appeals before the Delta Stewardship Council. These specific comments are as follows and appear at page 13 of the DWR Comments in reference to page 39, paragraph 3, lines 3-7, of the August 9, 2011 Draft Economic Sustainability Plan: "While the text is reasonably correct when it states that in 1982 the Department and USACE agreed that the goal for Delta levees was the PL84-99 Levee Standard, the DWR has recently published its intent that the HMP

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geometry is now supported for all Delta islands. Levee improvement beyond this geometric standard will require economic justification.”

This statement of the DWR is presumably in reference to a document entitled “A Framework for Department of Water Resources Investments in Delta Integrated Flood Management dated February 14, 2011, Draft V3DHF and SMB.

The DWR submitted the Framework document to the Delta Stewardship Council without any discussion with your Delta Levees and Habitat Advisory Committee, or to the best of my knowledge, with any of the Delta “Stakeholders,” including the private engineering companies and attorneys that advise the levee districts in the Delta. The document was distributed to the Levee Committee but without any invitation for comment.

The Framework document indicates that is supported by a Technical Memoranda that was in preliminary draft at the time and again had not been released for public comment.

Pursuant to a request from Delta Protection Commission’s Executive Officer, a draft of the Technical Memoranda was made available informally for review (Staff Draft/Background Reference Memoranda, Delta Region, Integrated Flood Management, “Key Consideration and Statewide Implications,” July 2011). This Technical Memoranda provides a generally excellent analysis of Delta levee issues, including an accurate description of origins and purposes of the HMP levee configuration.

The HMP levee configuration was never intended to be a standard for flood protection beyond a demonstration of State financial support to reduce the incidence of threatened or actual levee failures in which Federal financial assistance was sought. The Technical Memoranda does not provide support for the elevation of the HMP levee configuration as a flood protection standard for non-urban, non-project levees in the Delta.

PL84-99 is the Federal Delta specific flood control standard for non-urban, non-project levees. Thus, for example, when the Delta Protection Act of 1992 (Public Code Section 21080.22, et. seq.) was created when the Delta Protection Commission provides for improvement and ongoing maintenance of the levee system in the Delta (Section 29704), the coordinated maintenance is defined to include the rehabilitation and reconstruction of levees to meet applicable standards of the USACE.

Furthermore, as previously noted in my correspondence to the Delta Stewardship Council, CALFED similarly adopted the PL84-99 Levee protection standard for non-urban, non-project levees in the Delta.

This Delta specific Federal levee protection standard is roughly equivalent to the comparable State standard in Bull. 192-82 which in actual practice has been near the equivalent of PL84-99.

This standard has been adopted by virtually every levee maintenance district in the Delta dealing with non-urban, non-project levees. The HMP levee configuration is properly considered a minimum preliminary levee construction stage to reach PL84-99 standards and to provide assurance of FEMA assistance during declared flood emergencies.

Your Delta Levees & Habitat Advisory Committee, at its meeting last Friday, requested that its regularly scheduled November meeting to be held on November 14, 2011, be devoted to a discussion of this issue with active participation by the Resource Agency and the Department of Water Resources with specific reference to the comments of the DWR on the Draft ESP quoted above as well as to the Draft Framework document itself.

As pointed out in my earlier correspondence to the DSC, avoiding the necessity of consistency determination appeals before the DSC for levee district efforts to reach PL84-99 levee standards will avoid unnecessary delays which could jeopardize the entire levee improvement program in the Delta because of limited work windows and limits upon available financing.

This meeting with Resources and DWR will constitute the first opportunity for the Levee Committee to discuss the Framework document and its Technical Memoranda with its authors.

Thank you very much for your consideration.

Yours very truly,

Thomas M. Zuckerman
THOMAS M. ZUCKERMAN *csf*

TMZ:csf

Enclosure

cc: Joe Grindstaff
Mike Machado
Dante J. Nomellini, Sr.
John Herrick
Melinda Terry
Chris Neudeck
Gil Cosio
Gil LaBrie

· DICTATED BY THE WRITER:
· SIGNED AND MAILED IN WRITER'S
· ABSENCE TO AVOID DELAY

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COPY

July 6, 2011

Phil Isenberg, Chair
Delta Stewardship Council
980 Ninth Street, Ste 1500
Sacramento, CA 95814

**RE: Are Efforts to Improve Delta Levees to PL 84-99 Standards
Consistent With the Delta Plan?**

Dear Phil:

My effort to address this issue with the DSC at its meeting on Thursday, June 23, 2011, albeit somewhat clumsy, provoked a seemingly negative reaction, bordering upon hostility, from you and other commissioners and staff. This letter is an effort to state the problem more clearly and to reach a more reasoned conclusion than what emerged at Thursday's session.

The problem deals with the potential necessity of the Council's consistency review of efforts by Reclamation Districts to improve existing levees in the Delta to the U.S. Corps of Engineers' PL84-99 agricultural standard, a long-standing goal of virtually every Reclamation District in the Delta¹, including those that have chosen to participate in the Delta Levees Subvention Program and the Special Projects Program. It is readily demonstrable that levee work accomplished to date under these programs has reduced incidents of catastrophic levee failure in the Delta dramatically. In fact, the only major failure of a Delta levee (other than those designed to "fail" under purchased flood easements) in the last dozen years (Jones Tract), occurred not because of high water.

¹ Indeed, the Reclamation Districts, as well as the State, are under a continuing obligation to maintain levees as a condition of the original swamp and overflow grants under the Arkansas Act of 1850 (9 U.S. Stats. At Large, p.519) from which titles were originally granted by the United States to California "to promote the speedy reclamation of the lands and thus invite to them population and settlement, thereby opening new fields for industry and increasing the general prosperity." See *Kimball v. Reclamation Fund Commissioners* (1873) 45 CAL. 394, 360.

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Although it is abundantly clear that PL84-99 levees are appropriate and consistent with the Delta Plan, confusion arises with prospective designation of existing agricultural areas for wetlands habitat or other types of ecological or recreational use, for which either "no specific goal" or "HMP" levees are deemed "acceptable" in Table 7-1 at page 141 of the Fourth Staff Draft. An implication arises that continuing efforts by Reclamation Districts to achieve the PL 84-99 levee standards might be deemed "inconsistent" if lands protected by the District levee were designated or reserved for future wetlands habitat or other types of ecological or recreational use elsewhere in the Delta Plan, or a related plan (such as the BDCP) eventually incorporated in the Delta Plan. Current versions of the Delta Plan, the BDCP and other planning processes include broad and extensive indications of intent to so designate many thousands of acres of currently farmed Delta lands, without evidence of financial ability to acquire and/or convert such lands to such purposes. In addition, it is likely that most, if not all, such converted lands will require PL 84-99 (or better) levees to protect the substantial public investment in such projects, as well as to continue to protect adjacent lands from prospective inundation from wave wash, burrowing animals and other causes. And even further, it is foreseeable that restoring historic flow patterns in the Delta will restore ecological functions in Suisun Bay and Marsh that these conversions are meant to replace, increasing the likelihood that the conversions will never occur.

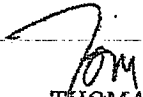
Although it is likely that consistency determinations will eventually be positive in such cases, delay is the enemy of progress in flood protection in the Delta. In a post-flood scenario, any significant delay in repair of a failed levee (such as might occur in a consistency determination) multiplies the damage and repair cost. In pre-flood conditions, Reclamation Districts are working with limited funds and available specialized equipment in very narrow work windows. Progress lost by missing an annual work window is never regained.

The solution to this dilemma is to make clear in the Delta Plan that work to achieve PL 84-99 Agricultural Standards levees in the Delta is consistent with the Plan, not requiring further review for that purpose. The avoided delay will be invaluable. This should have the additional salient effect of deferring inverse condemnation claims resulting

from findings in a consistency proceeding that levee construction to PL 84-99 standards is inconsistent with possible future wetlands or recreational uses.

Contrary to statement made by others during my presentation on the 23rd, this suggestion is not made to prevent orderly conversion of agricultural lands to wetlands or recreation usage once competent projects are determined, designed and funded, nor should it provide a rationale for no longer funding the Delta Levee Subventions and Special Projects Programs whose continued existence is essential to achieving the stated goals of environmental recovery, or more reliable water supply and preservation of the Delta.

Yours very truly,



THOMAS M. ZUCKERMAN

TMZ:csf

cc: Joe Grindstaff

Department of Water Resources
Delta Levees Program Primer

Water Code Sections 12300-12318 and 12980-12995.

Background

The Delta is a unique place defined by its ecological value as the transitional ecosystem from fresh to salt water and by its extensive network of levees. The levee network includes about 350 miles of project (State Plan of Flood Control) levees and 750 miles of non-project levees that function as a system. These levees are owned and maintained by a variety of entities within the Delta and responsibility for the proper function of this system is distributed among State, federal and local agencies. These levees define a network of interconnected channels that border a collection of islands and tracts, with many of the protected land areas near or below sea level. Virtually all assets and attributes of the Delta depend upon this levee network for flood protection.

The State of California has a significant interest in the benefits provided by Delta levees. In addition to providing flood management for farms, homes, and habitat, the Delta levees serve to protect water quality and to provide conveyance for municipal, industrial, and irrigation water to other parts of the State. The conveyance and preservation of export water quality alone protects the product of the State's multi-billion dollar investment in the State Water Project.

Questions about how to manage the Delta resources in a sustainable manner are receiving a great deal of attention, and have for many years. As large scale planning efforts such as the Bay Delta Conservation Plan, the DSC's Delta Plan and the Central Valley Flood Protection Plan proceed, the Department of Water Resources (Department) will continue to use available funds and resources to improve integrated flood management and preserve the physical characteristics of the Delta "essentially in their present form" to the extent feasible. (CWC 12981)

Unfortunately, Delta levees are vulnerable to failure from many mechanisms. They can fail during high flood flows into the Delta, from high tides and waves, from earthquakes, and from undetected weaknesses (such as animal burrows). Furthermore, future changes such as sea level rise, improvements to upstream flood control facilities, or increases in flood inflows to the Delta due to, climate change, land subsidence, and other stressors that increase the chance of levee failures. Since many of the Delta lands protected are near or below sea level, when a levee fails it is very difficult and expensive to recover the island after it floods.

Due to the characteristics of the Delta and a variety of factors, most of the lands within the Delta (especially within the primary zone) will continue to face a higher risk of flooding than areas within many floodplains upstream of the Delta. This is an important fact to consider when making land use decisions that affect the Delta.

One of the Department roles is to administer the Delta Levees Flood Protection Program as authorized by the Water Code Sections 12300 thru 12318 and 12980 thru 12995. This is a grants program that works with more than 60 reclamation districts in the Delta and Suisun Marsh to maintain and improve the flood management system and provide protection to investments in the Delta including water supply, habitat, and agriculture. The program, through its two major components; Delta Levees Maintenance Subventions Program (Subventions) and Delta Levees Special Flood Control Projects (Special Projects), works with the local agencies to maintain, plan and complete levee rehabilitation projects. Under California Water Code Section 12314, the Program must fully mitigate the unavoidable habitat impacts of each Project and ensure that the Program results in net long term habitat improvement in the Delta. Additional responsibilities under the Delta Levees Program are in support of the levee system and habitat development; improve the flood fight capability of the Delta through planning, cooperative efforts, encouraging the development of emergency response plans for each Delta island, and conduct studies and contract efforts necessary for program purposes.

Most of the significant levee investment in the Delta is accomplished through the Special Projects Program which was established in 1988 by Senate Bill 34. It continues to operate under subsequent legislation that extended the grant authority and provided funding for the program. Originally authorized to address flooding on the eight Western Delta Islands and in the towns of Thornton and Walnut Grove, in 1996, the Program was expanded to include the entire Delta and to portions of Suisun Marsh (CWC Section 12311). Today, many more Local Agencies in the Delta are eligible to apply for funding assistance from the Special Projects Program.

The State, through both the Department's Subventions and Special Projects Programs, has invested over \$200 million in flood control and Habitat Projects carried out by Local Agencies in the Delta. With the passage of Proposition 1E and Proposition 84, the money available for levee projects in the Delta has significantly increased.

Framework

The Department has stated its approach to determining its role for participating in investments to improve integrated flood management in the Delta as protecting defined State interests. The primary State interests related to integrated flood management (IFM) in the Delta can be described as:

- Helping to provide appropriate levels of flood protection.
- Provide more reliable water supply for California
- Protecting, enhancing and restoring the Delta ecosystem.
- Helping to preserve Delta As Place.

Subject to available funding, The Department intends to consider the following principles when making IFM investments in the Delta Area:

- Provide benefits for multiple areas of State interests.
- Preserve opportunities for priority actions identified in BDCP, CVFPP and others.
- Give preference to projects that provide the highest benefits considering economics and ecosystem.
- Use existing programs and develop new programs that encourage protection restoration and enhancement of ecosystem function.
- Regularly determine and publish DWR priorities.
- Leverage DWR investments with federal and local cost sharing.
- Benefits should exceed State contributions.

Interim Guidelines

In January 2009, the Department published the Interim Guidelines for Providing Funding to Local Agencies in the Delta ("Interim Guidelines") for expenditure of Propositions 1E and 84 funds. Those Guidelines governed work authorized in Fiscal Year 2008-09.

To update the guidelines to comply with new Department policies, Staff then prepared Near-Term Guidelines to represent the next phase in the Guidelines process and govern Special Projects expenditure of funds during budget years 2009-2010 and 2010-2011. Project funding is based on available State funds released to the Department by the State Controllers Office (Budget).

The Near-Term Guidelines implement several important DWR goals, including, but not limited to

- protecting statewide interests through raising most delta levees to HMP at a 90% cost share;
- protecting life and infrastructure through other levee improvements, such as selectively funding construction of levees that offer advanced (PL 84-99) levels of protection;
- funding studies and research that help to characterize the Delta levees, deepen the Department's understanding levee stability issues, or further the goals of subsidence reversal;
- funding habitat mitigation and enhancement Projects to benefit the Delta ecosystem and statewide interests; and
- funding subsidence reversal work.

Delta Levee Standards

The Figure below illustrates levee geometry for various levee standards that could be applied in the Delta. The Department's intent is to invest in the Delta in a strategic manner; that is to first achieve compliance with the HMP standard throughout the Delta, without requiring an economic justification for cost-sharing in projects designed to help achieve HMP. State investments beyond that required to achieve HMP will be required to demonstrate that benefits (economic or other) justify the additional State investment. The Department has developed a draft Framework for this investment strategy (FloodSAFE - A Framework for Department of Water Resources Investments in Delta Integrated Flood Management) in early 2011. The Department is in the process of finalizing the accompanying Technical Memorandum for this Framework.

Delta Levee Standards

