STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY

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JUN 17 2015

Mr. Dan Ray, Chief Deputy Executive Officer
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980 Ninth Street, Suite 1500
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Investment Strategy Principles Comments

Dear Mr. Ray:

This is in regard to the Draft Delta Flood Management Investment Strategy Principles (Principles) document that was Agenda Item 11 at the May 28, 2015, Council Meeting.

Thank you for the opportunity to review and provide comments on the Principles. Staff from the FloodSAFE Environmental Stewardship and Statewide Resources Office and I have reviewed the document and developed comments in the attached memorandum.

If you have questions or need additional information, you may contact Erin Mullin, Project Engineer at (916) 653-3639, or Douglas Osugi, Manager of the Delta Knowledge Improvement Program at (916) 654-6274

Sincerely,

Dave Mraz, Acting Chief
FloodSAFE Environmental Stewardship and Statewide Resources Office

Attachment

GENERAL COMMENTS

Consider renaming the document "Delta Levee Investment Strategy Principles." It seems the law discusses levee investments, not flood management investments.

Page 1, Text in paragraph 2 – ***"The record of declining flooding damage and testimony to the Council reflects these improvements. But other alternatives to reduce flood risk have not been fully evaluated."***

We concur that the record and testimony brought before the Council supports that recent investments in Delta levees have contributed to a reduction in flood risk. Given that statement, it cannot be explained why, when taken as a whole, this "Principles document" seems to reject current practices, especially as they relate to State funding of maintenance on Delta levees. Although evaluation of other alternatives to reduce flood risk is important, establishing principles that reject current practices, however imperfect, in favor of unevaluated alternatives, is both risky and bad public policy.

Page 1, Text in paragraph 2 – ***"The record of declining flooding damage and testimony to the Council reflect these improvements. But other alternatives to reduce flood risk have not been fully evaluated."***

Risks to whom? Risk = Probability x Consequences. Levee improvements are working to reduce the probability of an event. Consequences can be limited to achieve the same reduction in risk.

Page 1, Text in paragraph 4 – ***"Modern science and engineering know of no way to eliminate all risk from flooding in the Delta."***

Revise this text to state that there is no way to economically eliminate all risk of flooding that is acceptable under current laws and expectations for the Delta.

COMMENTS ON: "AN IMPROVED STATE STRATEGY FOR FLOOD MANAGEMENT INVESTMENTS IN THE DELTA"

Page 1, Paragraph 8, first sentence – ***"The funds available for Delta flood management are not sufficient to significantly raise the level of protection throughout the estuary."***

Over time, and with regular State investments, flood protection throughout the estuary has already improved significantly and there is no evidence to support that that this trend could not continue. This statement contradicts statements in paragraph two where the author acknowledges the record and testimony that shows significant improvement in Delta levees under this "insufficient" funding level.

<u>Page 1, continuing to page 2, Paragraph 8, second sentence</u> – *"Currently available State money is about ten percent of current estimates of what is needed to significantly improve protection everywhere to the levels called for by local agencies and prior State plans."*

There is no State policy in place to "significantly improve protection everywhere" in the Delta, and we are not aware of any proposal to that effect. Neither does existing State policy endorse improvement of levees to any particular level just because it may be requested by local interests. Current practice is to use local knowledge to identify areas of critical need. Projects are then identified and vetted through a State evaluation process to verify a State interest and statewide benefits. Limited funding is targeted to the highest need under the State's current practices, and the result has been a dramatic reduction in flood events in the Delta.

Historic estimates of the total cost to achieve a satisfactory level of protection for the Delta have an implied "tolerable risk" and suffer from a failure to quantify this risk in readily understandable terms. The Council is trying to establish and communicate a "tolerable risk" that can be supported broadly. Until that task is complete, the Council should not adopt broad statements, such as made here, that the State has fiscally only 10 percent of what is needed. This estimate simply is not substantiated at this time. Under the new, tolerable risk approach, the State can only estimate funding needs after tolerable risks are quantified and the cost to improve infrastructure to achieve the level of protection necessary is estimated.

Is this the way to decide the "Appropriate Level of Flood Protection" in the Delta? It seems that there may be a more rational way to determine a supportable value. (What is "the minimum? HMP"? What is the maximum the State is willing to pay for? 192-82? 200-yr? What will the available funding support?)

<u>Page 2, Paragraph 1, first sentence</u> – *"A levees investment strategy in which "all priorities are important" and "everyone is equally entitled" is unaffordable and unlikely to promote effective flood protection TO THOSE AREAS MOST IMPORTANT TO STATEWIDE INTEREST."*

DWR has recommended priorities for Subventions and CVFPB has accepted them. The priorities recognize the limitation on State funding and place the highest priority on the actions most important to achieve State objectives in Water Code 12311 (protection of public benefits including roads, utility lines and other public facilities, urbanized areas water quality....) 12981 (Agriculture, recreational assets, fisheries; the physical characteristics of the Delta should be preserved essentially in their current form)

Page 2, Paragraph 1, second sentence – ***"Spreading inadequate funding thinly throughout the Delta cannot address the serious flood risks to people, property, and State interests in the Delta."***

Current practices use local knowledge to identify areas of critical need. Projects are identified and then vetted through a State evaluation process to verify a State interest and statewide benefits. Current practices are not simply "spreading funding thinly" in some arbitrary manner.

COMMENTS ON: "PRINCIPLES TO GUIDE STATE FLOOD MANAGEMENT INVESTMENTS IN THE DELTA"

Page 2,item 1 – ***"Local governments and reclamation districts must stop urbanizing the Delta or invite rejection of Delta subvention requests from the State."***

See the definitions of State interests in Water Code in 12300 and 12900

Page 2,item 2 – ***"Local governments and reclamation districts must stop urbanizing the Delta or invite rejection of Delta subvention requests from the State."***

The Program does not promote urbanization of the Delta. Evaluation of eligibility for Subventions is currently established by the Water Code and the Subventions guidelines that are approved by the Central Valley Flood Protection Board. It may be necessary to change the Water Code to change Subventions eligibility criteria.

Another consideration to reduce risk could be requiring independent flood insurance for each structure built in the flood plain after a specified date. This will limit the consequences side of the risk reduction equation.

Page 2, item 3 – ***"State investments should emphasize rehabilitation of levees to improve safety, rather than subsidizing routine maintenance that is landowners' responsibility."***

The cost of routine maintenance is the responsibility of all beneficiaries to the levees. Current Water Code identifies a clear State interest, making the State a beneficiary. (see Ca Water Code §§ 12980 and 12310 et. seq.) Local interests are also contributors to levee maintenance through LMAs. Rehabilitation without subsequent protection of State investments through maintenance could result in the complete loss of the investments and is not fiscally sound policy. Furthermore, expecting landowners and/or LMAs with a known inability to pay to protect State

investments is unsound policy and likely to lead to increased failures of Delta levees rather than increased flood protection.

The most cost effective investment in existing critical structures is for maintenance of existing facilities to be certain they continue to perform as designed. By contributing to Delta Levee maintenance, the State is protecting its own interests in the critical infrastructure located on the islands and in the channels. To remove this subsidy would return us to the philosophy of the State prior to the failure of Brannan Island in 1972 when the export water supply was shut down for several weeks and 500,000-acre-feet of fresh water was used (unsuccessfully) to freshen the Delta.

Page 2, item 4 – ***"The State share of levee improvements should reflect the State interests at stake."***

The existence of a State interest in Delta Levees is stated in CA Water Code §§12981 -12983 . The degree of investment that the State chooses to make in improving and maintaining the levees is currently established by the cost-share formulas established in the Water Code, and more importantly, by the legislature's annual funding commitment to existing Delta Levee Programs.

Proposed adjustments to the percent cost-share that is paid by the State concerning Delta levee projects requires a change in the Water Code. Before proposing changes to the Water Code for this purpose, the Council should undertake an economic study to support any adjustments in keeping with the Council's tenet of using best available science to support policy decisions.

This is a laudable concept; however, there are legislative hurdles to overcome. Work with the DPC.

Page 2, item 5 – ***"State flood management investments to protect major urban development remain the first priority."***

There are programs within DWR that are focused on protection of urban areas (Flood Projects Office - Urban Flood Programs) and others with a primary interest to protect assets of Statewide interest (FESSRO-Delta Flood Protection Program).

Page 2, item 6 – ***"Water contractors and other water users who benefit should pay for these levees' improvement."***

Qualify that water contractors/others should pay in proportion to the benefit they receive from levee improvements and maintenance.

Again, a laudable concept; however, there are legislative hurdles to overcome. Work with the DPC.

Page 2, item 7 – ***"And the practical fact is that a reliable supply of water is only possible when the Delta ecosystem is significantly improved."***

This principle restates the co-equal goals for the Delta and could be eliminated or improved.

This land, alongside the levees, is privately owned, subject to the interests of private citizens. The Delta Levees Program and others with legislated mandates to develop ecosystem services are working with private owners to provide proper incentives necessary to obtain their concurrence on ecosystem projects. There are problems with the current system.

Page 2, item 8 – ***"These include the bypasses and project levees of the State Plan of Flood Control, the proposed Paradise Cut Bypass recommended in the Delta Plan, and other non-project levees whose contributions to State interests are demonstrate."***

As the levees and bypasses upstream of the Delta are improved, more water will be accelerated into the Delta, creating a backwater in the Delta. All (1,100 miles of) Delta levees will be subjected to this increased water level. It may be appropriate for DSC to conduct a cumulative effects analysis of upstream improvements in order to judge the need to incorporate mitigation (for higher Delta stage) into upstream projects.

Page 3, item 9 – ***"Impacts to the Delta's unique values matter."***

Define what is included in "unique values". If it is agriculture, that is not unique. If it is small communities, that is not unique. What is "unique" about the Delta?

Page 3, item 10 – ***"Landowners have no entitlement to State funding of repair, improvement, or maintenance of non-project levees."***

Proposal solicitations for Special Projects include specific requirements that define the clear statewide interests to be served in a proposal. Each application is evaluated to determine that applicants meet the intent of the PSP. DWR believes the intent of this principle is met.

Page 3, item 11 – ***"The Delta needs a Flood District and it must charge all beneficiaries, including railroads, electrical and telecommunication utilities, gas and oil infrastructure, commercial shippers, and the numerous water conveyance systems that cross the Delta."***

There are provisions in CWC to develop a Flood Maintenance Area (Sect 12878)

Page 3, item 12. ***"State investments in the Delta's flood management system must consider post-flood."***

Within the Emergency Response organizations, there are methods to consider the level of DWR's recovery effort for specific island damage. In a nutshell, DWR will work with local interests to flood fight until a breach occurs. Then DWR will use models to evaluate the State's interest to recover the island, coordinate with private interests, and evaluate political needs to determine the appropriate actions to take in recovery. These actions may vary between "do nothing" and "participate with private interests on full recovery to protect State interests".

COMMENTS ON: "FURTHER GUIDANCE FOR DEVELOPING A STATE STRATEGY FOR FLOOD MANAGEMENT INVESTMENT IN THE DELTA"

Page 3, item 2. ***"Measurably reducing threats to the levees' integrity, such as those posed by flood flows, earthquakes, seepage, or sea level rise, should be the objective of the Delta Levee Investment Strategy's recommendations."***

Risk = Probability x Consequence. By limiting your evaluation to "levee integrity" you are focusing on only one half of the equation.

Page 3, item 3. ***"Multi-benefit proposals should rank higher than single purpose funding requests. Eco-system improvements, for instance, should be a principal reason for the state to fund a project. Currently, habitat effects are often viewed as a burdensome issue of mitigation for flood control."***

Within the Delta Levees Program there is a mandate to achieve ecosystem enhancement. Many of the projects highlighted in the Delta as ecosystem projects are the result of this programmatic mandate. The other flood management program does not have this mandate or authorization to use State funding for ecosystem services in excess of mitigation. If you want to effect this policy, you need to work with the legislature to expand the requirements and authority of these other programs. (This is not a Flood Management problem; it is a legislative authorization problem.)

Maintaining and improving the Delta's levees and resources of major statewide significance are the principal reason to fund projects under the Delta Levees Program. CA Water Code Section 12311 mandates that the Delta Levees Special Project program have, as it primary purpose, the protection of discrete and identifiable public benefits. Water Code Section 12981 mandates that funds in the Delta Levees Subventions program be used to maintain and improve the Delta's levees to protect the Delta's physical characteristics to fund levee work that would promote agricultural and habitat uses in the Delta consistent with resources that are of major statewide significance. Water Code §§ 12314 and 12987 mandate that proposed expenditures be consistent with a net long-term habitat improvement program and have a net benefit for aquatic species in the delta.

<u>Page 3, item 4.</u> ***"Flood risks to farmland and legacy communities must be considered as investment priorities are developed. Public access for fishing and recreation should be considered in reviewing proposals for funding levee improvements."***

Again, proposal solicitations for Special Projects include specific requirements that define the clear statewide interests to be served in a proposal. Each application is evaluated to determine that applicants meet the intent of the PSP. DWR believes the intent of this principle is met.

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