



Water Resources ♦ Flood Control ♦ Water Rights

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June 12, 2012

Mr. Phillip Isenberg, Chairman
Delta Stewardship Council
980 9th Street, Suite 1500
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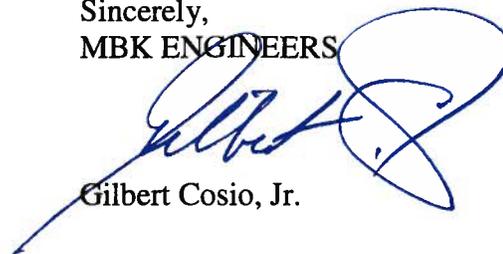
Dear Mr. Isenberg:

Enclosed are comments to Chapter 7 of the Delta Stewardship Council (Council) Sixth Staff Draft of the Delta Plan. I have kept our comments brief, however, I would echo some of the comments made to you by Dr. Robert Pike in his May 21, 2012 letter. Much of that is not repeated here.

Our main concern is in regard to the fact that the plan does not adequately evaluate the current levee system; and therefore, cannot possibly adequately address a levee improvement plan. The plan does not make its own evaluation; rather, it utilizes references that are either erroneous or outdated. The Council has a unique opportunity to combine, and critically evaluate, previous reports and develop a current evaluation of the levee system. However, it fails to come close by utilizing poor data. We would recommend reviewing the sections of the Delta Protection Commission's Economic Sustainability Plan concerning levees. We spent many hours with the authors of that report, helping them understand the difference between levees in the Delta. That report is not even referenced in this section. In addition, your staff and/or consultant do not appear to have solicited actual data from reclamation districts.

Thank you for consideration of our comments. If you would like to discuss them further, please call me at (916) 456-4400.

Sincerely,
MBK ENGINEERS



Gilbert Cosio, Jr.

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Comments to Chapter 7 of the Delta Stewardship Council Sixth Staff Draft Delta Plan

Page 250, Lines 8-18 – This paragraph deals with land subsidence. The paragraph tends to draw conclusions regarding the increased hydraulic stresses affecting levees. All of the references cited are non-engineers. We would recommend evaluation of this type be developed by a registered geotechnical engineer, with actual levee data, and not theoretical data, leading to hypothetical conclusions. The paragraph attempts to equate increasing hydraulic stresses and deepening of drainage ditches to levee instability; however, most ditches near the levee do not tend to be deepened because they are not drain ditches. They are either irrigation ditches, or ditches that drain the levee section and not the fields. Water is brought in from the levee side through a series of siphons and then runs through fields away from the levee; and therefore, when fields subside, the ditches that are deepened are not near the levee. In addition, a simple repair for this sort of phenomenon is to simply fill in the seep ditch, which is not necessarily required for levee stability.

Page 252 – This is a map of the Delta showing non-Project levees and State-Federal Project levees. The map is incorrect. It is referenced as part of a DWR 2009 report; however, the lines on the map indicating levees are erroneous. Somehow, levees are shown that do not exist. We would recommend not using this map.

Page 255, Lines 44-47 and Page 256, Lines 1-5 – This section describes 53 reclamation districts below HMP. It also describes 395 miles of Delta levees not meeting HMP. The most extensive study of the number of non-Project levees in the Delta was performed by the Delta Protection Commission (DPC) Economic Sustainability Plan that found approximately 537 miles of non-Project non-urban flood control levees. If 395 miles of these levees do not meet HMP, this report indicates that over 73%, which is not true. We warn that this data is erroneous and it appears that the staff and/or consultants used by DSC do not understand the levee system of the Delta and do not understand the DWR LiDAR report and its pages of caveats that render the results extremely rough and not adequate for the conclusions that this report seems to make. For instance, we used the same data, and after filling in blank spots where data are missing, found that 47% of non-Project non-urban levees exceed the PL-99 standard.

Page 259, Lines 37-39 – This section indicates that Project levees are eligible for Federal funding. It should also be noted that following passage of AB 360 (1996), Project levees became eligible to participate in the Delta Levees Subventions and Special Projects Programs.

Page 260, Lines 34-39 – This bullet point, under the Subtitle “Prioritizing State Investment in Levees”, indicates that for effectively prioritizing investments, the first step is to assess existing Delta levee conditions. We feel that this should be the role of the DSC. All these data are available to assess the current conditions. In addition, data are available to assess what the future conditions will be utilizing the existing allocated bond funds. By not doing this, the DSC does not adequately address what it is dealing with; and therefore, cannot possibly evaluate what kind of levee program should be included in the Delta Plan.

Page 260, Lines 40-45 – This bullet point, also under the Subtitle, “Prioritizing State Investment in Levees”, indicates that risk analysis method developed by the U.S. Army Corps of Engineers should be used. This process is extremely cumbersome, time consuming, and expensive. The DSC should evaluate how many miles of levee are subject to prioritization and determine whether it is worthwhile spending the time and effort to utilize this risk analysis method.

Page 270, Lines 34-39 – This paragraph, under the Subtitle, “Prioritize Flood Management Investment”, describes that “almost half of the Delta today does not even meet HMP”. This statement is simply not true. Again, the authors do not understand the levee system of the Delta. The data are available to provide correct data; and therefore, this should be corrected and the actual state of the Delta levees explained in detail. For assistance, the staff and/or consultants should use the DPC’s Economic Sustainability Plan as a reference. Our office met with the authors of the Economic Sustainability Plan several times to adequately educate them as to the levees in the Delta subject to HMP rehabilitation. However, this Plan does not even cite the DPC report as a reference.