

CALFED BAY-DELTA PROGRAM

Office Memorandum

Date: September 12, 1996
To: Rick B.
From: Victor *UMP*
Subject: Affected Environment Technical Report Reviews

One concern I have regarding the Hydrodynamics report is the section on Entrainment in Delta Exports and Diversions. I agree the entrainment effects presented are understandable, but there are also other factors such as population and habitat values which are not presented. Some of the effects such as the "entrainment risk decreases as the distance from the exports increases" don't require much, if any, analysis to arrive at. This section is based on the assumption of equal distribution of vulnerable organisms within the flows entering the Delta. I suggest this section receive more scrutiny prior to wider distribution.

In general the level of detail of the technical reports is less than a technical person may be satisfied with, and the structure of the documents does not provide a clear understanding of the purpose. A non-technical person may not be able to follow the present layout of the information provided. For example: In the hydrodynamics report, basic information regarding effects of operations and physical constraints of the Delta are intermixed and general information on flows is at the end of the document with more specific "technical details" provided at the beginning. I suggest a "layered" or "tiered" approach of providing general information followed by increasing level of detail in subsequent sections. This could mean simply reorganizing the current sections such as beginning with the Delta Channel Flows section, followed by Delta Inflows and Source Tracking of Delta Inflows, Delta Outflows, and finally Outflow effects.

I suggest the following approach with increasing level of detail for each section as desired:

Provide a general description of the channel configurations such as provided on page 17 of the report. Include description of operational decisions which influence these flow pathways such as reservoir releases and operation of the DCC and Suisun Salinity Marsh Control Gates. Example - The Montezuma Slough Salinity Control Gate is operated to be open during the ebb tide and closed on the flood tide to protect water quality with the Suisun Marsh. Delta outflow is reduced during low periods of Delta outflow when the gates are operating as flow enters Suisun Marsh through Montezuma Slough. Another example - The Delta Cross Channel is operated to provide additional flows through the

Central Delta to maintain in-delta water quality and provide flows for export purposes. The portion of Sacramento River flow diverted decreases with increasing River flow because of respective channel configurations of the River and the Cross Channel including flood control constraints.

The next section could provide the channel geometry in Table 1 or this section could actually be left out since there are numerous documents which could be referenced which provide much more detailed information.

The following section would be the Delta Inflows and include how reservoir and hydrologic cycles influence the inflow pattern. For example, the current description identifies how the average Yolo Bypass inflow of 4,450 cfs, but fails to provide the caveat that in most years there is no Yolo Bypass inflow thus significantly reducing this figure (The graph does illustrate the point, but the text needs to be more clear on operational issues even though they may be covered in great detail in the Water Supply Facilities and Operations Report.)

The next section of Tidal Flows would be at a general level of detail and could possibly be coupled with the previous section. My preference (see final suggestion) would be to use graphics (schematics) to illustrate the narrative description, but not include the geometry information which could be provided in the second section or referenced material depending on the level of detail desired for the report.

The last section would combine the Delta Outflow Effects and Source Tracking of Historical Delta Inflows. The last section expands on the information provided in the Delta Inflows section and the Outflow Effects section is focused on salinity intrusion which results from the existing physical and operational information provided in the previous sections.

There are many pieces of general information contained in the report, but it seems lost in the detail. This is one reason for providing increasing levels of detail within each section and as the report progresses. For example, page 23 clarifies how Yolo Bypass flow contributions are small because Sac. River and San Joaquin River flows are high at the same time bypass flows exist which should be provide to the reader early on as the foundation for further understanding of the subsequent material.

A final suggestion (although it requires extensive effort will provide a more valuable document) is to provide more graphical information along with text. For example: the current report includes narrative description of simulated flows identified in Table 2. Although Figure 2 provides summarized average flow information, additional figures adjacent to the narrative can be detailed more clearly and assist in clarifying the information presented. This information can also be expanded to provide additional detail if desired.

I understand that these suggestions may not be able to be incorporated within the time constraint to provided, however, I strongly suggest we consider them in the development of future work products. In addition, I have suggestions for using existing resource agency support to improve future workproducts. This is contradictory of my sense for providing a "reality" check of our documents, but I believe we can work around that issue.

I have provided specific comments on the subject reports and provided those to Ray McDowell. If you have any questions or would like to discuss any of my comments, please see me.

cc: Steve
Ray ✓