
To: Russ Brown, Carl Chen, Randy Dahlgren, Alex Hildebrand, Bill Johnston, Charlie Kratzer (and USGS team), G. Fred Lee, Gene Lee, Peggy Lehman, Gary Litton, Lee Mao, Tom Quasebarth, Nigel Quinn, Will Stringfellow, Erwin Van Nieuwenhuysse
From: Barbara Marcotte, CBDA
Date: April 12, 2005
Re: Phase I screening of non-aeration linkages to D.O. conditions

This memo is an invitation for you to help with the Phase I screening process that will be used for all non-aeration linkages to dissolved oxygen (D.O.) concentrations in the Stockton Deep-Water Ship Channel (DWSC). Linkages from reference documents and those suggested by the public and stakeholders will be evaluated in a two phase screening process. The first phase, described below, will be used to limit the list of linkages that is ultimately screened. We would like to have your responses to those linkages you feel are within your expertise to respond to by May 10. Your responses, and those of your colleagues, will be tallied, summarized and sent to the Technical Working Group (TWG) prior to May 14, one week before the May 20 TWG meeting dedicated to this subject.

At the conclusion of the May 20 TWG meeting we hope to have a list of linkages that will be screened in Phase II. This meeting will serve as a forum to discuss those areas where there is disagreement about the scientific merit of the rating given. Based on the preliminary ratings, and the discussion at the TWG meeting, a summary report on the outcome of the Phase I process will be provided to the larger stakeholder group.

Each of the linkages retained for further screening will be evaluated further in Phase II. The criteria in Phase II will help provide additional information needed to prioritize those linkages for future studies or demonstration projects. More information will be provided on this in the future.

The results of the screening process will be made available to the public via the website (www.sjrdotmdl.org). This information should improve the quality of the applications for future proposal solicitations and result in better expenditure of funds.

Explanation of Rating Process

The categories of linkages are Loads, Flows and Channel Geometry. All linkages are presented in the accompanying spreadsheet (2004 04 DO Linkages.xls). Linkages are not actions but rather hypothesized connections that if acted upon would lead to improvements in the D.O. conditions in the DWSC. THIS IS NOT AN ATTEMPT TO EVALUATE SPECIFIC ACTIONS THAT WOULD AFFECT LOADS, FLOW, OR GEOMETRY OR TO FURTHER STUDY

THEIR FEASIBILITY. Each criterion will be rated 1 to 5 with 1 being very low and 5 being very high.

Phase I Questions

Knowledge of Connection to D.O. in the DWSC: This criterion rates how strongly existing science describes the linkage to D.O. conditions in the DWSC. This is not a rating of its importance to or impact on D.O. conditions.

Potential Value to D.O. Benefit: This criterion is to ascertain the impact of an action on the D.O. impairment in the DWSC. This criterion is divided into two fields – Theoretical and Existing knowledge. Under the *Theoretical* column, the key question is: how important could the linkage be to helping improve D.O. conditions? A rating of 5 indicates the linkage is theoretically important to solving the D.O. impairment in the DWSC. Under the column *Existing Knowledge*, a high rating indicates there is sufficient science supporting the rating from the *Theoretical* column. If you think there is little scientific knowledge to support the *Theoretical* rating, rate it low. The reviewer rating the linkage is encouraged to consider annual or seasonal conditions that might affect the importance of the linkage (e.g. water year type, temporal fluctuations).

Controllable: Can the linkage be implemented or controlled? Rate high if an action would be relatively easy to do and rate low if it would be nearly impossible to do. Do not take into account limitations such as political or legal issues at this time because they will be considered in Phase II.

Verifiable: This criterion rates the potential to gain verifiable results if an action was taken on the linkage. There are two parts to this criterion – local and DWSC. The first answers the question - can results be verified at the local level? Local is defined relative to an action that would be taken on a specific linkage, usually at the subwatershed or other geographic location. The second question asks – can a local action be tracked or modeled to an affect in the DWSC? The rater should keep in mind the strength of the measurement or technique used to verify the affect of the action. Verification could come from the use of computer modeling, downstream monitoring, or other methods. In some cases, actual measurements could be used to “verify” the results. In other cases computer modeling will be the only way to estimate the impact of the action on D.O. conditions in the DWSC. A Rating of 5 indicates the results are highly verifiable and a rating of 1 indicates it will be very difficult to verify the results of the action.

Synthesis and Summary of Phase I

Discussion at the May 20 TWG meeting will focus on providing a list of linkages for prioritization in Phase II. To do this, three lists of linkages will be developed:

linkages that are not appropriate for Phase II consideration, linkages that will be considered in Phase II, and ones that have a range of scientific support. We will also discuss how to proceed with prioritization in Phase II. All of this information will be made available for comment to the broader range of stakeholders, and input will be solicited on the process and prioritization of linkages via the website.