

M e m o r a n d u m

To : Mr. Tom Howard
State Water Resources Control Board
901 P Street
Sacramento, California 95812-0100

Date : October 19, 1994

From : Department of Fish and Game

Subject : Department of Fish and Game Water Quality Recommendations for Suisun Marsh.

During your October 13, 1994 workshop, we requested your Board to adopt Suisun Marsh Preservation Agreement standards as part of the current water quality control plan revision. This memorandum provides written documentation and clarification of our requests.

We recommended that the SWRCB adopt both the normal and deficiency standards outlined in the Suisun Marsh Preservation Agreement. Normal standards outlined in the Agreement are the same as those mandated by D-1485 which were based on studies conducted by DFG in the 1960s and 1970s on the salinity tolerance of selected plants typical of a brackish marsh system. The deficiency standards allow for higher salinity standards in Suisun Marsh in years following a dry or critical year, a dry year following a year in which the Four Basin Index was less than 11.35, or the second consecutive dry year following a critical year. While the Department endorses adoption of the SMPA standards it does not concur with the interpretation of how the deficiency standards, once invoked are terminated. We recommend that the Board adopt the use of the water year classification described in Footnote 2 of Table II of D-1485 as they apply to Agriculture, Municipal and Industrial standards. The Department based its acceptance of the deficiency standards and their effects on plants and wildlife on the frequency of deficiency periods resulting from this classification.

The Department is concerned about appropriate salinity standards for tidal wetlands within and around Suisun Bay. Salinity standards put in place by D-1485 were based on salinity tolerance of brackish marsh species found in diked seasonally flooded wetlands; however, at the time standards were set, little attention was paid to the appropriateness of salinity standards for tidal wetlands. DFG would encourage studies to determine what standards are appropriate for both the diked and tidal wetlands around Suisun Bay.

We endorse the concept of a water master to provide more consistent and efficient water management practices in the marsh. Effective water management practices are critical to the acceptability and workability of the SMPA standards for the long term maintenance of seasonally flooded wetlands. If wetland managers continue to utilize ineffective water management practices lower channel water salinities may be required to meet management objectives.

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Finally, operation of the Montezuma Slough Salinity Control Structure is critical to meeting the SMPA standards from October through May. The board should endorse its use and should recommend its operation beginning September 1 to reduce the salt load applied to seasonal wetlands during initial fall ponding in early October. Operation of the control structure also benefits to wetland managers from January through May by providing high quality water to leach salt from the soil and provide optimal growing conditions for brackish marsh vegetation.

This concludes DFG's recommendations to the board regarding standards for Suisun Marsh. If you have any questions or comments please feel free to call me or Mr. Frank Wernette of my staff at (209) 948-7800.

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