State of California

Memorandum

To : Francis Chung, Chief
Delta Modeling Section
Department of Water Resources
1416 Ninth Street
Sacramento, California 95814

Date: MAR 23 1995

270

Thomas Howard

Thomas Howard, Chief
Bay-Delta Unit

From : **STATE WATER RESOURCES CONTROL BOARD**
901 P Street Sacramento, CA 95814
Mail Code G-8

Subject: REQUEST FOR DWRDSM STUDIES

The purpose of this memorandum is to request the Department of Water Resources' (DWR) assistance in estimating water quality conditions in the Delta under the standards of the December 1994 draft Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (draft Plan).

On February 23, 1995, the State Water Resources Control Board conducted a hearing to solicit comments on the draft Plan and accompanying environmental report. Among the comments received from hearing participants are concerns regarding: (1) the potential impacts on water quality in the central Delta due to the Delta Cross Channel gate closure and increased San Joaquin River flow standards in the draft Plan; and (2) the water quality needs for irrigation and leaching in months not covered by the agricultural standards in the draft Plan.

Consequently, we are requesting that studies be conducted using the DWR Delta Simulation Model (DWRDSM) to estimate year-round water quality conditions in the Delta. A base case study and a draft Plan study should be conducted using outputs from DWRSIM studies 1995c6b-MONTERY-412 and 1995c6b-SWRCB-409m, respectively. These DWRSIM studies were conducted earlier by the DWR to estimate water supply impacts of the draft Plan. As necessary, assumptions used to model the base case and draft Plan DWRSIM operations should be used for the DWRDSM studies. Please include a discussion of these and other DWRDSM major assumptions and operational criteria, along with a brief model description, when transmitting the results of the studies.

For the base case and draft Plan DWRDSM studies, we are specifically interested in obtaining average monthly salinity (as electrical conductivity in millimhos per centimeter) and maximum, minimum, and average monthly flow (in cubic feet per second) for water years 1987 through 1992 at the following locations:

(1) Sacramento River at Emmaton;
(2) San Joaquin River at Jersey Point;
(3) San Joaquin River at San Andreas Landing;
(4) South Fork of the Mokelumne River at Terminous;

(5) San Joaquin River at Prisoners Point;
(6) San Joaquin River at Buckley Cove.
(7) San Joaquin River at Brandt Bridge site;
(8) Old River near Middle River;
(9) Old River near Tracy Road Bridge; and
(10) San Joaquin River at Vernalis;

Please provide the flow outputs in tabular forms, and the salinity outputs in both tabular and graphical forms. Tabular outputs should be in ASCII or other Lotus 1-2-3 compatible formats. We would appreciate receiving the requested information as soon as possible. Your staff has indicated that this would be no later than April 28, 1995.

Thank you for your consideration of this request. Please contact me at (916) 657-1873 if you have any questions.