



IN REPLY
REFER TO: 2-720

UNITED STATES
DEPARTMENT OF THE INTERIOR

BUREAU OF RECLAMATION

REGIONAL OFFICE, REGION 2
P. O. BOX 25H
SACRAMENTO, CALIFORNIA 95811
(TOWN AND COUNTRY AREA)

ADDRESS ALL
COMMUNICATIONS TO
THE REGIONAL DIRECTOR

MAR 19 1966

Colonel Robert E. Mathe
District Engineer
U. S. Army Engineer District, Sacramento
Corps of Engineers
P. O. Box 1739
Sacramento, California 95814

Dear Colonel Mathe:

For more than a year, your staff and mine, in cooperation with the U. S. Public Health Service and local interest, have been considering the need for and advisability of incorporating water quality control into the New Melones Project. This letter is to give you our views on this subject.

In our letter of September 1, 1964, which transmitted our hydraulic studies to the U. S. Public Health Service, copy of which was furnished to you, we said, "The study shows the releases required from quality at Vernalis not to exceed *sis*. This appears to us to be a one which is practical of attainment thing in our subsequent studies or in port of the Health Service would lead

In terms of water, incorporation of water quality will not effect the project's yield.

... we have evaluated the effects that the incorporation of the water quality objectives described in the Health Service report would have upon the conservation and power accomplishments of the Unit. These effects are very small.

In terms of water, incorporation of water quality will not effect the project's yield. The New Melones Unit will increase the yield of the Central Valley Project by about 285,000 acre-feet annually, regardless of whether or not quality control is included.

EXHIBIT "C"

In terms of its effects on power, the addition of water quality control to the New Melones Unit as a project function will reduce the power accomplishments which could be derived without quality control. This reduction results from two principal affects. First, the change in water release patterns will decrease slightly the head on the New Melones Powerplant during the critical dry period. Second, there will be an increase in future Central Valley Project pumping requirements caused by the routing of the quality releases into the Delta. We estimate that the annual equivalent of the power benefits foregone as a result of these effects over your 100-year period of analysis would be about \$38,400 annually.

I recommend that the following water quality objectives be incorporated into the New Melones Unit with the stipulation that, during its 50-year repayment period, these objectives will not require releases exceeding 70,000 acre-feet in any one year

"Water Quality Control Study, describes the need for and value provided by the New Melones 50-year repayment period such as 70,000 acre-feet for quality purposes in releases.

needed both in the Stanislaus and New Melones Reservoirs. This position is consistent

with the conclusion of the U. S. Public Health Service that "Water quality releases from New Melones storage project will contribute significantly to the solution of the overall pollution problem in the lower San Joaquin River but should not be considered as a complete solution of this problem".

Accordingly, I recommend that the following water quality objectives be incorporated into the New Melones Unit with the stipulation that, during its 50-year repayment period, these objectives will not require releases exceeding 70,000 acre-feet in any one year as shown in the Public Health Service's report: (1) To limit the total dissolved solids in the flows of the San Joaquin River at Vernalis to 500 parts per million on a mean monthly basis; and (2) To maintain a dissolved oxygen level of at least 5.0 milligrams per liter in the Stanislaus River.