March 17, 1949

Mr. Clyde H. Larimer
District Attorney of Glenn County
Willows, California

Dear Mr. Larimer:

As noted in my letter of February 4, we requested our field men to investigate the advisability and feasibility of constructing fish screens at the outlets of East Park Reservoir, Colusa County, and Stony Gorge Reservoir, Glenn County. We have now received reports from them, and their preliminary findings are as follows:

In both reservoirs the outlets are located near the bottoms of the dams. Thus, through most of the season the water is withdrawn from the lowermost stratum of water, which is known technically as the hypolimnion and contains no oxygen and therefore no fish. On this basis alone we believe that any fish loss from the reservoirs is insignificant and that screens are not needed, even if they were feasible from an engineering standpoint.

Considering the engineering features, we would like to point out that the water is withdrawn through balanced "needle valves," which at Stony Gorge Reservoir are located under a head of 80 feet.

A second reason why we believe the loss of fish from these reservoirs to be negligible lies in the fact that the warm-water fishes in general, bass, bluegills, crappies, and others, tend to be non-migratory and usually resist an outflowing current.

It is our belief that the most important factor limiting game fish production in these reservoirs is the shortage of forage fish, which in turn is caused by the tremendous fluctuations in water levels. We are actively seeking a solution to this problem at several localities in the State, including East Park Reservoir.

We also plan to take further oxygen samples in Stony Gorge Reservoir near the outlets, in order to determine the depths to which fish are able to descend, and to make observations on the pool below the dam, to note possible escape of fish.

We sincerely appreciate your interest in this matter and you may rest assured that we shall take all steps possible to manage the fisheries of these reservoirs properly.

Very truly yours,

E. L. MACAULAY
Executive Officer

LS D
cc: A. J. Calhoun
H. A. Hanson
G. I. Murphy

Exec. Officer file
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