

Memorandum

To : East Park Reservoir, Colusa County

Date: August 11, 1978

From : **Department of Fish and Game**

Subject: Limnological Survey

On August 2, 1978 a limnological survey was made of the subject water. Fathometer and snorkel transects were also made in the reservoir.

Maximum depth recorded on the subject date was 58 feet. Below is the temperature and dissolved oxygen profile at that location (off of dam).

<u>Depth</u> (ft.)	<u>Temp.</u> (°F)	<u>D.O.</u> (mg./l.)	<u>PH</u> (-logH ⁺)
0	82.0	8.2	6.8
5	80.5	3.2	
10	79.5	2.0	6.7
15	79.5	2.0	
20	75.0	1.5	
25	69.5	1.2	6.6
30	63.0	0.0	6.6
35	60.0	0.0	
40	60.0	0.0	
45	59.0	0.0	
50	59.0	0.0	
55	59.0	0.0	6.5
58	59.0	0.0	

Fathometer surveys showed numerous fish sitings at depths of 2 to 20 feet. Few fish were seen at the 20 to 30 foot depths and essentially no fish were picked up on the scope deeper than that depth. Characteristics of the fathometer trace are similar to those seen for TFS in Oroville, and I would guess them to be the same fish. All of these tracings occurred offshore at 15 to 25 foot depths.

Snorkel surveys of the littoral zone along the east side of the reservoir yielded no fish of any species. However, surveys along the west shore yielded large schools of RSF (schools of 55 to 68 fish), and large schools of LMB of two distinct age classes (5 to 6 inch and 8 to 10 inch fish). In approximately two miles

of shoreline along the west bank a total of 495 LMB of the two sizes were counted, along with 280 RSF. All of these fish were in excellent shape, vigorously feeding on Gambusia and utilizing the top 15 to 20 feet of littoral zone water. Obviously our 1978 plants of these species have survived to this point in time. No Ictalurids were visually sited during the survey, but two indications on the fathometer show bottom oriented fish in offshore locations, at depths of 35 to 40 feet. I do not rule out the possibility that bullheads or catfish are present (already) in this water.

R. Rawstron (G)

John I. Hiscox
Assistant Fishery Biologist
Region 2

JIH/jf

cc: R. Rawstron
R. Pelzman

P.S. Ictalurid fry observed July 5, 1978 by
Robert Rawstron.