

Memorandum

To : Chief of Operations

Date: June 8, 1976

From : Department of Fish and Game - Region 1

Subject: Operation of Benbow Dam Counting Station

Since the late 1930s the Department has maintained a fish counting station at Benbow Dam. Originally, the dam was owned by Mr. Benbow and was constructed for power generation. Later, the dam was acquired by the State and has been operated as part of the park system of the Department of Parks and Recreation. No power has been generated since the early 1950s.

The dam is equipped with two fish ladders with a fish counting facility on the south ladder. Until the season of 1972-73, all fish were usually forced to use the ladder with the counting station, except on occasions when that ladder was inoperable. Sample counts were then made at the north ladder. Beginning in 1967, the station was closed at the end of February, as an economy measure. The number of fish passing the station from March 1 on was then estimated to be 1/3 of the run to that date. Beginning with the 1972-73 season, both ladders were left open on a 24-hour per day basis, with counting confined generally to the period of 8:00 a.m. to 5:00 p.m. Prior to this time, the counting station was closed in the evening, with the counter checking it prior to retiring, and passing any accumulated fish before closing the station for the night. He again checked for accumulated fish immediately upon arising and passed any fish before his duties began officially at 8:00 a.m. The reason for the change was public pressure - some people felt that many fish were being held up at night, thus delaying their migration. Some people also felt the north ladder was more efficient at passing fish and they were very vocal in their efforts to have it in continual operation. Test runs of 24-hour operations showed only a small portion of fish were migrating at night. The north ladder was more efficient at passing fish only at a very restricted water level, but this usually occurred when the water was clear, and people could easily observe the fish activity at the ladders.

We have been working for the last several years to obtain either better ladders or modification of the dam to allow unrestricted passage of fish over the dam. All efforts in these directions have met with frustration--and appear to be headed in this direction for the foreseeable future.

The cost to the Department to maintain the status quo is considerable. We have continued to maintain the counting facility, since we know that this assures fish passage over the dam. Passage would not be assured, if someone was not immediately available

File:
J. F. L. R., Humboldt Co.

REF 90505

to regulate the water flow through the ladder during the wide fluctuations in water level that occur during and after storms. For this reason, and the added reason of reduced vandalism to the ladder, we have placed a camper trailer at the dam and have 24-hour per day coverage from about November 1 through February 28. The following table summarizes the expenditures in manpower and vehicle mileage for the past five seasons:

<u>Counting Season</u>	<u>FC Hours^{1/}</u>	<u>Days</u>	<u>Vehicle-^{2/} Miles</u>	<u>Seasonal^{3/} Aids Man Mo.</u>
1971/72	407 ^{4/}	51	6,630	6
1972/73	220	27	3,510	6
1973/74	219	26	3,380	6
1974/75	144	19	2,470	6
1975/76	<u>208</u>	<u>26</u>	<u>3,380</u>	<u>6</u>
Average	240	30	3,874	6

In addition, in 1974/75, \$97.91 and in 1975/76, \$168.06 were spent for miscellaneous supplies and maintenance. Comparable costs for prior years are not available in the Eureka office but would probably be within the above range. Charges for electricity and telephone are not included in the above. Emergency maintenance work required the additional services of an Associate Fishery Biologist for three days and an Assistant Fishery Biologist for four days in the 1974/75 season and three days of an Assistant Biologist in 1974/75, plus travel expenses. This was the result of three major storms, which deposited several feet of silt in the ladder and forebay. One storm each year occurred in March, when the station was "closed".

Fish and Game Code, Article 2, Section 5935 reads: "The owner of any dam upon which a fishway has been provided shall keep the fishway in repair and open and free from obstructions to the passage of fish at all times."

The Department of Fish and Game has been subsidizing the Department of Parks and Recreation for several years. With our present financial condition, we believe that the entire operation of Benbow Dam should be the responsibility of Parks and Recreation. The counts of fish migrating over the dam are not as meaningful as they used to be, so if no counts were made, we would not be out much. The savings from not operating this station would allow over \$4,000 to be used more productively elsewhere in the Region. This would also allow us to use the travel trailer in other areas where housing is extremely difficult to find for short term projects. Minimum current expenditures at Benbow are in excess of \$4,500 annually, as shown on the following table. We can save nearly \$4,000, if the facility is operated by Parks and Recreation.

1/ From attendance reports and log books.

2/ Based on one 130-mile round-trip per day.

3/ Based on one full-time and one part-time seasonal aid (for relief).

4/ Extra time needed for required safety work and constructing helicopter pad.

June 8, 1976

<u>Present Expenditures at Benbow</u>		<u>Proposed Parks and Recreation Operation</u>	
Fish Culturist		80 Hours <u>1/</u> (coord.)	\$480
240 Hours @ \$6.00	\$1,440		
Seasonal Aids		None	---
6 Man Months @ \$2.54	2,440		
Vehicle		1,300	160
3,874 @ \$0.12	465		
Electricity and phone	<u>?</u>	None	<u>---</u>
	\$4,345		\$640

1/ Ten trips annually for coordination of operation with Parks and Recreation.

I propose that the Department of Fish and Game turn over the entire operation of the fish ladder to the Department of Parks and Recreation effective July 1, 1976. Since the counting of fish would not be necessary, we would dismantle and remove the counting house and woodshed, remove the trailer and dismantle the "cabana" adjacent to the trailer. The cable car would be turned over to Parks and Recreation for their use, since it is the only access to the dam from mid-October to Memorial Day.

An alternative would be for Parks and Recreation to buy or replace the 19½ foot camper trailer we keep there for our use. It is necessary for someone to be present when the river is rising or falling to keep the fish ladder operational. This is done by regulating the flow of water through the ladder. If too high flow occurs, the ladder becomes inoperable. If the river drops, so the flow through the ladder is cut off, the forebay fills with silt and debris, sometimes requiring as much as three or four days work by three or four people to restore the flow through the ladder.

R. J. O'Brien
Regional Manager

cc: AFB

bcc: Bailey
LaFaunce