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From: R. D. Beland
Subject: Upper Truckee River Erosion Control

Jan. 9, 1962

On December 5, 1962, I discussed with Almo Cordone the value of the Tahoe sport fishery as it relates to the lake's tributaries. The data that follow are very preliminary and for internal use only.

The Tahoe Project creel census was initiated in September 1960 on the California side only. During the March to August 1961 period, the census covered both sides of the lake. This was a very limited census due to the lack of personnel and equipment. In the 12 month census (Sept. 1960 - August 1961) it was estimated 5% of the total effort was compiled. A much more complete and accurate census was conducted in 1962 but the results have not been tabulated.

September 1960 - August 1961 Census

Checked 5,001 anglers
Fished 10,492 angler hours
Catch of 876 mackinaw
20 brown trout
364 unmarked RT
659 marked RT
5 kokanee
2 brook trout
2 cutthroat
36 whitefish

Of the 5,001 anglers checked, 1,190 were deepline anglers seeking mackinaw. Thus 3,811 anglers were seeking trout.

Of the 3,811 trout anglers 1,512 were topline anglers who were in fact seeking the wild rainbow of trophy size. However, these topline anglers did catch a known number of mackinaw, therefore 500 anglers were deducted, leaving a total of 1,000 anglers fishing for wild trout (very few marked trout were taken by the topline anglers). Added to this is the fishing effort of the dock and shore anglers that caught unmarked trout. This amounted to 700 anglers, so the grand total of effort directed towards wild trout spawned in the tributaries was about 1,700 anglers (same as angler days). This figure is then expanded by 20 as the census was believed to be 5% of the total fishing effort on the lake; thus we have a final figure of 34,000 angler days.

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Cordone has, by using maps and some field surveys, determined that there is about 44 surface acres of streams tributary to Lake Tahoe suitable for spawning (this is not all gravel) of which about 23 acres are found in the Upper Truckee River and its tributaries (2.4 in the tributaries). Thus 52% of the 34,000 angler days effort (17,680) was directed towards wild trout which were spawned in the Upper Truckee River.

If we assign a value of \$3 per angler day and capitalize at 4%, we arrive at a gross value of the Upper Truckee River to the Tahoe fishery of \$1,326,000.

This figure is of course a rough estimate based on very preliminary data. Not considered here is the value of resident stream fishery, nor has any value been predicted for this spawning habitat should the current Tahoe research project greatly improve the lake fishery by increasing the growth and survival of trout in the lake.

The \$3 per angler day value is a minimum value but is used here as it conforms with the federal interagency schedule. The wild trout fishery at Tahoe is basically a trophy fishery conducted under unique esthetic conditions. The size frequency of the wild trout in the catch is bimodal with one-half of the catch in the 5-13 inch size group and the other half in the trophy range of 14 to 22 inches.

From this we conclude \$1,326,000 (rounded to 1-1/3 million dollars) is a very conservative estimate of the worth of the Upper Truckee River. We are thus in a position to recommend to any interested agency or group the expenditure of considerable sums to assure the maintenance of this habitat as a spawning stream for the Lake Tahoe fishes.

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