

Memorandum

To : Fred McLaren, Resources Agency Technical
Advisory Committee on Lake Tahoe

Date: March 19, 1968

From : Department of Fish and Game, Region II

Subject: Upper Truckee River, El Dorado County

We understand that the proposed Lake Tahoe Airport Interim Master Plan has been reviewed by the Resources Agency Technical Advisory Committee and a decision reached to recommend opposing this plan at the next Agency meeting on March 20. We understand that Mr. Livermore wishes to have an example of the type of recommendations which would be made by this department in the event the plans are approved. Phil Baker mentioned that he discussed this with you on March 14 and that you asked for a letter summarizing our views. It should be recognized that the following recommendations are only tentative, since we were unable to present them to the Director for approval prior to sending them to you.

Our comments concern the airport plan and two proposed subdivisions adjoining it on the southeast and southwest end (Tahoe Paradise Unit 9 and the Kyburz property). Considered together, these plans involve potential realignment of about two miles of the Upper Truckee River. The Upper Truckee River has already suffered damage from natural erosion and previous man-caused activities over a period of many years. The last airport expansion in 1962 caused great damage to the stream at the north end of the runway. Therefore, these present plans will not be as harmful as they would be if the stream existed now as it did before the 1962 channel changes.

However, the Upper Truckee River is still the largest and most important spawning tributary to Lake Tahoe. We do not know how many trout spawn in the stream, but we believe important numbers of brown and rainbow trout do spawn in it each year. We have no data to show that trout produced in the stream make a contribution to the catch in Lake Tahoe, but again we believe that this contribution is significant in the total catch. The stream provides 3,400 to 4,000 angler days of good fishing during the summer for naturally produced trout supplemented by 6,000 catchable-sized rainbow which are planted at various access points. For these reasons we believe that the stream deserves serious attention to protect present uses and preserve them for the future.

We are concerned with three major goals; rehabilitation and maintenance of the fishery habitat, control of erosion, and continued angler access to the stream. The following recommendations are designed to meet these goals:

1. Preserve the same length of stream in the relocated section upstream from the airport as it exists now. This should be done by providing meanders in the relocated stream course. Meanders tend to develop pools and riffles and retard velocity.
2. Protect the relocated streambanks from erosion by lining them with rock riprap of at least 6-inch diameter stones. Maintain a bank slope of no more than 1 vertical to 2 horizontal (1:2). Protection should accommodate about 300 cubic feet per second (99 percentile flow).
3. Require the relocated channel design including rock protection to be constructed so that water velocity will never exceed a maximum of 7 feet per second at any point. Higher velocities might erode even protected slopes.
4. No unprotected soil channels. Soils in the Upper Truckee floodplain consist of well-bedded clays interspersed with beds of sand, silt, and gravel at levels several feet from the surface. Just below the top layer of sod are fine materials - silt and sand - that are very easily eroded away even at low velocities.
5. Avoid concrete slabs, concrete facings, grouted banks, or sheet pilings. These materials cause a loss of production of fish food organisms and provide little if any fish habitat - cover and resting areas. Their sterile appearance would detract from the natural beauty and charm of the Lake Tahoe Basin.
6. Exclusion of live stock from streambank area.
7. Provide an easement for conservation purposes and for fishing access similar to the easements granted by the El Dorado County Planning Commission for Tahoe Paradise Units 60 and 61 and Country Club Estates Unit 3 essentially as follows:

"An easement be dedicated along the Upper Truckee River for use by the public for fishing purposes only, and by the County, State, and Federal, and other public agencies, for improvement of drainage, flood control and preservation of fish habitat for a minimum of 10 feet from the mean high water line; no fences or other private structures shall be erected in this easement and no removal of gravel, sand, or rock to be allowed, and the continuation of good conservation practices to be followed."

Robert D. Montgomery
Regional Manager

JHM/lk

cc: Mr. Ford Ford; Deputy Director; Phil Baker