

Memorandum

To : George Nokes,
Associate Fishery Biologist

Date: January 9, 1969

From: Department of Fish and Game

Subject: Arroyo Sausal Creek, Walker Creek Drainage, Marin County

This memo was prepared to answer your request for comments regarding Warden Giddings' proposal for Arroyo Sausal Creek. The proposal involves a water development project co-owned by Mr. Bonelli. File information regarding this development has been summarized as follows:

The Saula Jula Ranch (c/o Mr. B. Bonelli) made application for Water Rights and a Dam Permit in July of 1965. The project area is located approximately one mile upstream from the confluence with Walker Creek. The proposed dam was to be 48 feet high, create a reservoir covering 63 surface acres, and store a volume of 670 acre feet of water. The water application was filed for 1,04 c.f.s. by direct diversion and 870 acre feet per annum by storage. The proposed storage season was from January 1, through December 31 of each year. The purpose of water use was indicated as recreation, irrigation, domestic, and stock watering. Annual reservoir draw down was expected not to exceed 6 feet. At the time of application the owners intended to develop the area surrounding the reservoir into 20 to 40 acre ranches.

Pre-project investigation of the fishery resources of Arroyo Sausal Creek indicated that limited use was made of the stream by steelhead. The stream became dry or near so, every summer. Jack Allen wrote that the number of juvenile steelhead (fish-of-the-year) estimated to be present during his survey in 1959 was between 375 and 500, Later investigations have indicated similar stream conditions and numbers of fish. File information shows that yearling steelhead have never been found in this stream. Although investigators have reported conditions to be poor in Arroyo Sausal, the Walker Creek drainage is the second longest stream system in Marin County and was believed to have had fair sized runs of steelhead and silver salmon in past years. Poor stream conditions at the time of the water application were attributed to developments by man within the drainage, consisting chiefly of dairying, but also including road development and poor range practices. Stream side vegetation had been reduced and in many areas eliminated. Surveys conducted in the summer of 1966 indicated high water temperatures and dropping stream flows which would preclude survival of young fish during the summer-fall period.

The water application was protested and a hearing held. On the date of the hearing, June 22, 1966, the Department of Fish and Game withdrew protest of the application on the basis that investigations conducted since filing of

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the protest indicated fishery habitat had been markedly reduced in the drainage by watershed activities. It was concluded that the stream was of limited value for production of game fish. It was further written that the proposed project would have little or no detrimental effects upon salmon and steelhead.

The State Water Rights Board, under the date of September 22, 1966, issued to Soula Jula Ranch, a partnership, a permit to appropriate 0.5 c.f.s. and 870 acre feet per annum of waters of Arroyo Sausal Creek for use for domestic, irrigation, stockwatering, fire protection and recreational purposes.

No requirements were made under Fish and Game Code Sections 5900 through 6028 inclusive, as part of the dam application.

My comments regarding Warden Giddings' proposal are as follows:

1. Use of the reservoir as a nursery area for juvenile salmonids has merit. This concept is the subject of a pilot program in the Russian River system, and if successful, could be extended to the Walker Creek drainage.
2. The statement is probably true as indicated by the file data.
3. This statement is a possibility; however, we do not have guaranteed flows in Arroyo Sausal Creek. The Department withdrew protest of WA 22148. Jack Allen wrote in 1959 that a flow of 3 c.f.s. would be required in order to maintain a salmonid nursery area below the mouth of Arroyo Sausal Creek. This flow would require more water than the project is capable of storing and releasing.

No requirement was made pursuant to Fish and Game Code Section 5931 et. seq., regarding dam application 432, even though seven miles of stream habitat exist above the dam.

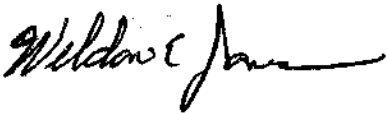
4. State Highway 1 borders Walker Creek in the tide water area, and without further investigation, I regard the statement of public access to be true.
5. I wonder if Mr. Bonelli would reconsider permission for the Department to use the reservoir if we required him to build at his cost, a fish way over his dam? I would think that any permission would have to be in the form of a long-term agreement,
6. I suspect Mr. Giddings is saying that the stream begins to dry up in April, or that if juveniles migrate to sea before the trout season opens, they would not be caught. I do not know when Arroyo Sausal or Walker Creek begin to lose hydraulic continuity; however, I would suspect that the peak of the downstream migration would extend from March through May. If so, many of the fish could become available to anglers during the trout season, I would not expect anglers to significantly reduce the numbers of downstream migrants.

7. Fish and Game does not have a guaranteed summer flow and it doesn't appear to me that a guaranteed summer-fall flow would be possible or probable. The file information indicates that it was doubtful if survival of salmonids in the area of stream located downstream from the dam would change under post-project conditions.

Netting of adults returning to the dam could become a costly venture as well as a burdensome task. If, however, fish passage is found to be justified, the Department should consider the possibility of requiring the landowner to provide the facilities.

8. Problems such as high water temperature or low concentration of dissolved oxygen during the summer, in the reservoir, could destroy the entire population. Further investigation of reservoir conditions should be undertaken before we commit ourselves to this program.

The Fishery Management Section has been looking for farm ponds that have potential as nursery area for rescued steelhead. I believe that the Saula Jula Ranch reservoir could be such an impoundment and is worthy of further investigation. It is believed that habitat conditions in this reservoir are not suitable for inclusion of silver salmon in this program.



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