

CASE STUDY REPORT #86
WHALE ROCK RESERVOIR
OLD CREEK

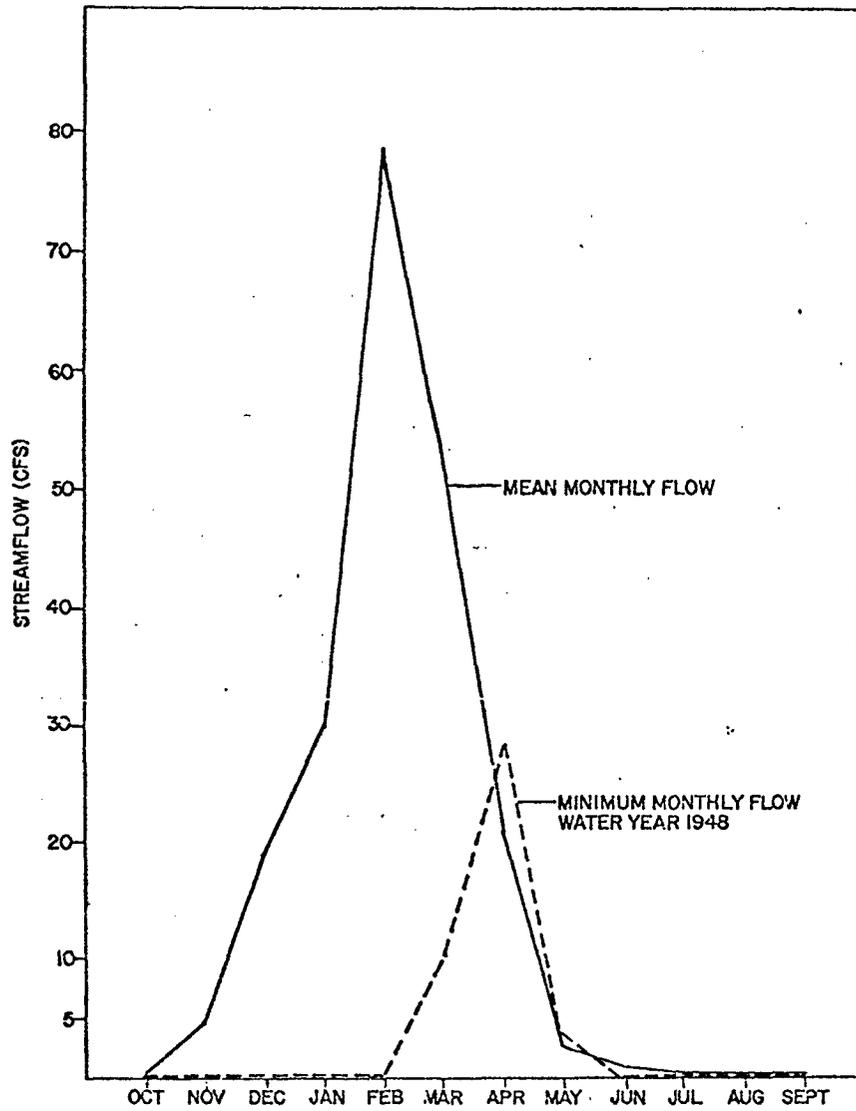
I. Project Description

The Whale Rock Dam site is located on Old Creek approximately one mile from the Pacific Ocean and one half mile east of Cayucos in San Luis Obispo County. The project was developed jointly in 1960 by the State of California Department of Water Resources and the City of San Luis Obispo. It has a maximum storage capacity of 40,000 acre-feet and a maximum surface area of 600 acres in a watershed of 21 square miles.

The principal water users are the California Men's Correctional Colony, California State Polytechnical University at San Luis Obispo, and the City of San Luis Obispo.

II. Pre-Project Conditions

Old Creek is an ephemeral stream that drains about 21 square miles of watershed lying on the westerly slopes of the Santa Lucia Mountain Range. Old Creek discharges directly to the ocean a short distance south of the community of Cayucos. The stream is fed largely by rainfall runoff; consequently, most of the runoff occurs during the four-month period from December through March (see Figure 1).



PRE-PROJECT: OCTOBER 1935 - NOVEMBER 1951
 SOURCE: DEPARTMENT OF WATER RESOURCES

FIGURE 1
 STREAMFLOW CONDITIONS, OLD CREEK
 WHALE ROCK RESERVOIR

In most years, springs maintained a live stream that flowed into the ocean until late spring. In late summer and early fall flow to the ocean ceased for two or three months.

The lower sections of Old Creek did not support a fishery for the entire year, but juvenile steelhead were in the perennial reaches at higher elevations. During the winter months, substantial flows supported a steelhead spawning migration. No Department of Fish and Game record was found that indicated the size of the run. Correspondence from local residents indicated that the steelhead run was at times quite significant.

The upper sections of Old Creek maintained a flow throughout the year. Juvenile steelhead remained in these sections and provided a trout fishery, especially in isolated pools (Meyer, pers. comm.). No evidence of any other fishery was found in the records maintained by the Department of Fish and Game.

III. Project Development

Preliminary planning for the Whale Rock project was conducted by the State Division of Water Resources.

During the course of the initial investigations in 1956, the most pressing water problem in San Luis Obispo County was that of developing an additional water supply for the City of San Luis Obispo. It was found that existing water supplies would not meet the needs of the city in 1960. It was concluded

from these investigations that the most economical source of new water for the city would be Whale Rock Reservoir on Old Creek.

As a result of these investigations, the Whale Rock project was authorized by the California State Legislature for construction as a joint venture between the city and state. It is probably significant to the fishery that the bill appropriating money for this project was designated as an emergency measure.

The California Department of Fish and Game protested the water rights applications on the basis that the creek supported a steelhead trout spawning migration. However, the Department of Fish and Game did not have any knowledge of the run except that it did exist. Due to the lack of information and some indication that Old Creek was not maintaining a substantial fishery, no downstream flow releases were required in the water rights permit. The Whale Rock Reservoir was said to provide more fishery habitat than existed historically; subsequently, the Department of Fish and Game withdrew their original protest (Meyer, pers. comm.).

The State Department of Water Resources was designated as the design and construction agency. Construction started in 1958 and was completed in 1960.

IV. Post-Project

Whale Rock Dam completely impounds the runoff from the Old Creek watershed. Since the completion of the project in 1960, there have been no instream flow releases from the reservoir. The hydrology of the basin was misinterpreted; consequently, the reservoir has never filled (Pelgen, pers. comm.).

The Old Creek steelhead run was eliminated when flows to the ocean were reduced to zero. Whale Rock Reservoir presently supports a trout population that developed from remnants of the historic steelhead population. Because of its status as a municipal water supply reservoir, fishing is prohibited.

A major issue has developed over the potential fishery in the reservoir. A local interest group has formed the "Whale Rock Commission" which wishes to restrict access to Whale Rock Reservoir. The Department of Fish and Game and local sportsmen have taken the issue to court to obtain fishing access. However, the matter remains unresolved

V. Conclusion

Pre-project instream flows in Old Creek ranged from mean monthly flows of 80 cfs to 0 cfs (see Figure 1). Whale Rock Dam impounds the entire runoff in the Old Creek drainage.

The Department of Fish and Game protested the water rights application on the basis that Old Creek supported a substantial steelhead trout spawning migration. However, the Department of

Fish and Game did not have supporting data which described the historic steelhead trout fishery. No evidence was found that indicated the Department of Fish and Game conducted any field surveys to determine the extent of the steelhead run. The original protest was withdrawn.

The annual steelhead spawning migrations in Old Creek have disappeared. The primary reason for the loss of this anadromous fishery was the blockage of Old Creek by Whale Rock Dam and reduction of instream flows to 0 cfs at all times.

BIBLIOGRAPHY

Personal Communications

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References

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