

MONTANA STATE DEPARTMENT OF FISH AND GAME
 FEDERAL AID IN FISH RESTORATION SECTION
 Helena, Montana

Job Completion Report
 Development Project

State of Montana

Project No. F-211-D-17

Name Central Montana Fishery Study

Job No. IV

Title Statewide Lake and Stream Rehabilitation, Eureka Reservoir

Period Covered: October 1, 1958 to April 30, 1959

Abstract: On October 9, 1958, Eureka Reservoir in Teton County, was treated with seventy-five gallons of rotenone emulsives. The Teton Canal Company cooperated with the Fish and Game Department by drawing the lake down to approximately two hundred and twenty-five acre feet of water. Common suckers (*Catostomus* sp.) were the principal species killed. Efforts will be made to establish a fishable population by plantings of rainbow trout fingerlings.

Objectives: To remove or decimate as completely as possible the existing fish population from Eureka reservoir, Teton County, Montana. As soon as the water is considered free of toxicant, efforts will be made to establish a fishable population of rainbow trout.

Techniques Used: On October 9, 1958, Eureka reservoir was treated with seventy-five gallons of rotenone emulsives.

The emulsion was pumped with a hand pump from the supply barrels to supply tanks mounted in a seventeen foot boat.

Application was accomplished by pumping water from the stern of the boat with a motor driven unit and adding toxicant into the suction side of the pump.

Findings: The Teton Canal Company assisted in the fish restoration plan by drawing the reservoir down to approximately two hundred and twenty acre feet of water.

The project documents were written in the early part of October, 1958. An attempt was made to coordinate the actual rehabilitation work and to accomplish the objectives of the documents after the probable effective date of the project. It developed that this was not possible in this instance. The lake was drawn to a low level and the toxicant applied before the effective date of the project. Waiting would have increased the cost because treatment of more water would have been necessary.

Suckers (Catostomus sp.) were the predominant species killed. Rainbow trout Salmo gairdnerii were the only game fish of consequence killed. Sculpins, Long-nosed dace and other small fish common to the drainage were observed among the dead fish.

Approximately two miles of stream and connecting canal were treated with one hundred twenty pounds of the commercial product, Fish Tox.

Efforts will be made to establish a fishable population by planting of rainbow trout fingerlings.

Recommendations: none

Data and Reports: The original data and reports are in the fisheries office of the Fish and Game District Headquarters in Great Falls.

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Date December 15, 1959