

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-24-D-10

Name Central Montana Fishery Study

Job No. I

Title Statewide Lake and Stream Rehabilitation
Kolar Reservoirs

Period Covered: August 1957 to April 1958

Abstract:

Six hundred pounds of a fish toxicant commercially known as Fish Tox and fifty-five gallons of Pro-Noxfish was applied to Kolar Reservoir No. 1, several miles of McCarthy Creek and associated ponds and sloughs. White suckers were the predominant species of fish killed. Checks were made following treatment. No fish have as yet been found. Rainbow trout fry will be planted in May, 1958.

Objectives:

To remove the existing fish population from Kolar Reservoirs and associated waters located near Geyser in Judith Basin County so it can be restocked with rainbow trout.

Techniques Used:

Experimental gill nets were used to sample the reservoirs. Limited use of toxicants were used in the associated waters.

Treatment of the stream was accomplished by dragging sacks of the commercial product Fish Tox downstream. The main reservoir and several associated ponds and sloughs were treated with a liquid toxicant known commercially as Pro-Noxfish. It was applied by use of a spray boom mounted on the boat and by a hose submerged in the deeper portions of the reservoir.

In the flowing waters: streams, spring holes, etc. and ponds with springs arising from the bottom 600 pounds of Fish Tox was used. In the impounded water fifty-five gallons of Pro-Noxfish was used at a rate of one part per million.

Findings:

The original plans included fish removal from two reservoirs, Kolar Reservoir No. 1 and Kolar Reservoir No. 2. Because a reservoir washed out in the Arrow Creek drainage downstream from Kolar's Reservoir No. 2 removing an effective fish barrier the plans for rehabilitation of the No. 2 reservoir were discontinued.

The reservoir treated (Kolar Reservoir No. 1) covers approximately 11 acres and contains approximately 100-acre feet. A reservoir owned by the Great Northern Railway Co. upstream from the main reservoir containing approximately 7-acre feet and several other ponds and sloughs were also treated. The fish were killed out from approximately three miles of McCarthy Creek associated with the reservoirs and sloughs.

White suckers (Catostomus commersonnii) were the predominant fish killed in the reservoir. Less than fifty trout were observed in all of the rehabilitation most of which were killed in the reservoir. White suckers were also found in the stream and associated ponds and sloughs. Other fish killed were dace (Rhinichthys sp.), mountain suckers (Pantosteus sp.) and several species of minnows common to the area.

The application of toxicant was started on August 26, 1957 and completed on September 17, 1957.

Checks made in the stream sections following toxicant application and in the spring of 1958 have disclosed no fish present.

One gill net was set through the ice in Kolar Reservoir on December 4, 1957 and lifted January 9, 1958. Nothing was caught. A second net set on December 4, 1957 and lifted April 23, 1958 caught only crayfish.

Rainbow trout fry will be planted in the reservoir and stream during May 1958 at state expense.

Recommendations:	It is recommended that a follow-up investigational study be made on the rehabilitated waters in order to determine the success of establishing a fishable population by planting rainbow fry.
Data and Reports:	The original data and reports are in the fisheries office of the district headquarters in Great Falls.

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Date May 9, 1958