

MONTANA DEPARTMENT OF FISH & GAME  
FEDERAL AID IN FISH RESTORATION SECTION  
HELENA, MONTANA

JOB COMPLETION REPORT  
INVESTIGATIONS PROJECTS

State of Montana

Project No. F7R8

Name Northwest Montana Fishery Study

Job No. I

Title Inventory of Waters of the Project Area

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

Abstract: Twenty three lakes were surveyed for chemical, physical and biological characteristics. Aerial photographs were taken of twenty lakes and fifteen lakes were sampled for fish populations. Also, three lakes were surveyed in preparation for rehabilitation.

Objectives: The purpose of this project is to determine the physical, chemical and biological characteristics of the waters of highest importance to the total recreational fisheries picture of the project area, and where practicable, to obtain estimates of existing or potential fisherman use.

Techniques Used: Samples of fish were taken by gill netting. Inlets to lakes were observed for spawning facilities. Aerial photographs were taken of lakes and work maps constructed. Depths were determined with the use of the echo sounder.

Findings: The following lakes were sampled for fish populations: Big Picnic Lake, Black Lake, Crystal Lake, East Jewel Lake, Foy Lake, Frank Lake, Handkerchief Lake, Little Picnic Lake, Milnor Lake, North Jewel Lake, Rainbow Lake, Sophie Lake, South Jewel Lake, Twin Lake No. 1, and Twin Lake No. 2.

Aerial photographs were taken of the following lakes: Big Beaver Lake, Boyle Lake, Burgess Lake, Dog Lake, Dollar Lake, Fish-Trap Lake, Handkerchief Lake, Holland Lake, Lauri Lake, Little Beaver Lake, Lone Pine Reservoir, Lower Stillwater Lake, Murray Lake, Rainbow Lake, Skyles Lake, Smith Lake Rearing Pond, Spencer Lake, Upper Dry Fork Reservoir, Upper Stillwater Lake, and Wall Lake.

Volumes were calculated for the following lakes: Loon Lake, Tetrault Lake, and Twin Lakes.

The following lakes were surveyed for various physical, biological and chemical characteristics: Big Picnic Lake, Black Lake, East Jewel Lake, Frank Lake, Handkerchief Lake, Jim Lake, Little Picnic Lake, North Jewel Lake, South Jewel Lake, Spring Lake, Twin Lake No. 1, Twin Lake No. 2, and eleven unnamed lakes.

Public fishing access was obtained on Sophie Lake, Crystal Lake and Flathead Lake.

Information collected before the 6" x 9" lake and stream data cards were made was taken from the files and placed on survey cards. All information collected was placed on two sets of 6" x 9" survey cards, one set retained at district headquarters and the other forwarded to the Helena office.

Recommendations: It is recommended that this study be continued as it is furnishing much needed data for the rehabilitation work that is anticipated and also for sound recommendations on plantings of fish.

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Approved by George D. Holton

Date April 17, 1959