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

JOB COMPLETION REPORT INVESTIGATIONS PROJECTS

State of <u>Montana</u>		
Project No. F-7-R-6		Name Northwestern Montana Fishery Study
Job No. I	,	Title Inventory of the Waters of the Project
Period Covered May 1. 1955 to Nov. 30. 1956		Area

Abstract:

Two streams and twenty one lakes were surveyed for chemical, physical and biological characteristics. Aerial photographs were taken and maps were made of 15 lakes. All data have been recorded on lake and stream survey cards.

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.

<u>Techniques:</u>

Widths, lengths, depths, and volumes were taken of streams and lakes surveyed. Samples of fish were taken by gill netting or by the electric shock method. Inlets to lakes were observed for spawning facilities. Aerial photographs were taken of lakes and these were pantographed.

Findings:

Two streams and 21 lakes were observed for physical characteristics. Aerial photographs were taken of 15 other lakes and maps were made of these lakes.

Terrace Lake was observed for species of fish present and for spawning facilities for trout. No fish were found in the lake and no spawning facilities were present, so this lake was recommended for an annual plant of cutthroat trout.

Chain of Lakes was observed and was found too shallow for fish life.

Loon Lake (Big Fork Area) was sampled and four species of rough fish were found. This lake is on the list for rehabilitation when public access becomes available.

Cedar Creek was observed for spawning facilities and many cutthroat trout fry were found in this stream.

Cedar Lake was sampled for trout populations and many were found.

Hidden Lake was found to be void of fish. No plantings of trout are recommended at this time as it is impossible to plant by airplane and no trails lead into the lake.

Little Woodward Lake was found to be deep enough to support fish life but none were found. It was recommended that no fish be planted in this lake at present.

Lang Lake was checked for fish and none were found. It was recommended for planting as soon as trout become available.

Lost Lake was found to have a good cutthroat trout population and many fry were observed in the outlet. Lower Fish Lake was found to have a sufficient cutthroat trout population and fry were observed in the inlet.

Mud Lake was deep enough to support fish life but no fish were present. It is not recommended for planting at this time due to inaccessibility.

Rainbow Lake was found to have a good cutthroat trout population and fry were found in the outlet.

Spruce Lake was found to be deep enough for fish but none were found. No plantings of trout are recommended at this time due to its inaccessibility.

Square Lake was found deep enough to sustain fish life but no spawning facilities were present. It was recommended for planting of cutthroat trout.

Upper Fish Lake has a good population of cutthroat trout and fry were found in both the inlet and outlet.

Woodward Lake was found deep enough to sustain fish life and an inlet stream that had all the requisits for trout spawning. This lake was recommended for planting.

Alvord Lake was sampled for fish populations and was found to contain trash fish.

Black Lake was tested and further tests need to be made to determine if trout can live in this highly alkaline water.

Frank Lake was surveyed and found to be devoid of fish and no spawning areas were observed. This lake was recommended for an annual plant of trout.

Kilbrennan Lake was sampled for a fish population and this lake gave the highest catch of trout per overnight gill net set than any other in the northwestern district.

Lower Spar Lake was found to have a fairly good game fish population.

Schoolhouse Lake was observed and found to have some game fish. No inlets or outlets were found on this lake.

Considerable time and effort was spent on Milnor Lake in attempting to obtain public access. The land has not been obtained as yet, but the Department will have access in about three months.

The following lakes have been photographed and work maps have been made of each: Lone Lake, Monroe Lake, Lower Thompson Lake, Middle Thompson Lake, Upper Thompson Lake, Loon Lake, Lynch Lake, Rainbow Lake, Tetrault Lake, McDonald Lake, Turtle Lake, Savage Lake, Crystal Lake, Horseshoe Lake and Milnor Lake.

Recommendations:

It is recommended that this study be continued as it is furnishing much needed information for the rehabilitation work that is anticipated.

Data and Reports:

The original data and reports are with the project leader in Kalispell and duplicate reports are filed in the Helena office.

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