MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS

FISHERIES DIVISION

JOB PROGRESS REPORT

State : Montana

Project Number: F46R4
Job Number: II-c

Project Title: Statewide Fisheries Investigations
Study Title: Survey and Inventory of Cold Water Lakes
Job Title: Southwest Montana Cold Water Stream Investigations
Period Covered: July 1, 1990 through June 30, 1991

JOB OBJECTIVES

1. Increase late summer and fall reservoir pool in Ruby Reservoir (post-irrigation levels) to provide greater amount of aquatic habitat.

   Worked with Ruby Valley water users and SCS to formulate a reservoir management plan using predicted water availability. In order to make these water availability predictions more accurate, a low evaluation Snotel moisture measurement site was installed in the drainage.

2. Insure that land uses do not adversely affect lake water quality or tributary stream spawning habitat.

   Comments were made on U.S.F.S. timber sales and grazing allotments in critical areas where it affected reservoir or tributary stream spawning habitat. Cooperative project with the USFS to reduce grazing impacts and plan channel rehabilitation of Cliff Lake spawning tributaries. Initiated Wade Lake spawning channel project. Evaluation of Hyalite Reservoir spawning runs being carried out (Grayling and cutthroat).

3. Collect necessary information to properly manage mountain lake fisheries as time and funding allows.

   Some mountain lakes within the region were surveyed with results appearing in a future report.

4. Maintain catch rates at an acceptable level for mountain lake cutthroat fisheries.

   A total of 36 mountain lakes were stocked by helicopter regionwide during this report period.

5. Maintain wild rainbow trout fishery in Hidden Lake sustaining 1000 angler days/year with catch rates of ≥0.5 fish/hour. Maintain densities reflected in average sample of ≥20 fish per 125 foot floating gill net set.

   Floating gill nets were set in Hidden Lake to evaluate the population of wild rainbow trout. Data will be included in a future report.

6. Maintain fishery of Elk Lake sustaining 4000 angler days/year with catch rates of 0.5 fish/hour. Maintain densities reflected in average sample of ≥18 cutthroat trout per 125 foot gill net set with opportunity to catch trophy grayling.

   Gill nets were set in Elk Lake to evaluate the cutthroat trout and grayling fishery. Data will be included in a future report.

7. Maintain wild rainbow and brown trout fishery in Ruby Reservoir sustaining 4000 angler/year with catch rates of 0.5 fish/hour and rainbow densities reflected in average samples of ≥18 fish per 125 foot gill net set.

   Gill nets were set in Ruby Reservoir to determine trend data for the wild rainbow and brown trout population. Data will be included in a future report.

8. Develop a consistent rainbow trout fishery with opportunities to catch edible size yellow perch in Dailey Lake.

   Gill nets were set in Daily Lake to determine densities of rainbow trout and yellow perch. A creel and pressure census was conducted on the lake during the report period. Data will be included in a future report.

9. Introduce Eagle Lake strain rainbow trout to Haypress Lake and establish population as a brood source for further introductions.

   This project was abandoned due to difficulty of access.

10. Manage Culver pond as a trophy brook trout fishery with the opportunity of catching brook trout >18 inches.

    Gill nets were set in Culver Pond to evaluate the number and sizes of brook trout present. Data will be included in a future report.

11. Manage McDonald Pond as a trophy rainbow trout fishery, with the opportunity of catching rainbow trout >18 inches.

    Gill nets were set in McDonald Pond to determine the number and sizes of the wild rainbow trout population. Data will be included in a future report.

12. Provide opportunity for catching trophy size cutthroat trout in selected mountain lakes of the region.

    The mountain lake stocking program is being adjusted to a per acre basis to reduce problems with overstocking which leads to small fish.

Prepared by: Richard Oswald, Brad Shepard, Ron Spoon and Wade Fredenberg.

Date: August 23, 1991.