MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS

FISHERIES DIVISION
JOB PROGRESS REPORT

STATE: MONTANA PROJECT TITLE: STATEWIDE FISHERIES INVESTIGATIONS

PROJECT NO: F-46-R-2 STUDY TITLE: SURVEY AND INVENTORY OF COOLWATER AND WARMWATER ECOSYSTEMS

JOB NO: V-c JOB TITLE: SOUTH CENTRAL MONTANA WARMWATER FISHERIES INVESTIGATIONS

PERIOD COVERED: JULY 1, 1988 THROUGH JUNE 30, 1989

JOB OBJECTIVES AND DEGREE OF ATTAINMENT

1.) To provide optimum conditions for walleye spawning and incubation on Bighorn Lake by implementing water-level control guidelines in cooperation with the Bureau of Reclamation during the April 15 - May 31 period.

A close working relationship was maintained with USBR personnel and water level controls were achieved during the spring within constraints imposed by power demand, water availability, and extremely low spring lake levels.

2.) To optimize water-level conditions in area irrigation reservoirs in order to enhance production of warm and cool-water species by formalizing and adopting water-level controls prior to the irrigation season in Lake Elmo, and other waters. (State funded).

No progress was achieved during this report period.

4.) To at least maintain the existing flow conditions in the Musselshell River by analyzing instream flow needs, and participating in the reservation process and pursuing other options which may supplement existing flows.

Formal application for instream flow water reservations for three reaches of the Musselshell River (Harlowton, Roundup and Mosby sections) and five tributaries (Careless Creek, American Fork Creek, Flatwillow Creek, Swimming Woman Creek and Big Elk Creek) were submitted to the Board of Natural Resources and Conservation.

5.) To maintain streambanks and channels in their present or improved conditions by administering existing laws.

Projects effecting stream habitat were dealt with through the Montana Stream Protection Act of 1963 (SPA) and the Natural Streambed and Land Preservation Act of 1975 (310). During FY89, five SPA's and ten 310's were processed for the lower Bighorn and Musselshell drainages.

6.) To maintain water quality at or above current levels as measured at U. S. Geological Survey water quality monitoring stations.

No significant water quality problems arose during this report period.

7.) To develop at least 30 producing bass ponds in the region that are open to public use, supporting at least 15,000 man-days of angling per year by 1992.

Fourteen ponds were stocked with 135,000 largemouth bass fry. This included six new ponds where bass had not been stocked in the past. This makes a total of 41 ponds in the region planted with LMB since 1985.

8.) To acquire two new access sites on the Yellowstone River downstream from Billings. (State funded).

Two new access sites (Morgan property and Ostrem property) were acquired on the Yellowstone River between East Bridge FAS and Captain Clark FAS.

11.) To convert marginal trout fisheries such as Glaston and Lebo Lake into productive warm and cool-water fisheries, and diversify the existing trout fishery at Cooney Reservoir by developing a two-story fishery supporting both walleye and trout.

Lebo Lake was stocked with 1,500 tiger muskie in the spring of 1988 and growth rates were monitored using trap and gill-nets. An additional 1,900 tiger muskie were stocked in Lebo Lake in 1989 and 2,800 were stocked into Glaston. Monitoring of the developing walleye fishery in Cooney Reservoir was conducted using trap-nets, gill-nets, seining and electrofishing.

13.) To monitor developing warm and cool-water fisheries and to make recommendations to enhance the forage base where necessary.

Monitoring indicated that no forage enhancement was needed currently.

14.) To create a smallmouth bass fishery in the lower Bighorn River capable of supporting 10,000 angler days of use per

year.

Unavailability of hatchery fish delayed attainment of this objective.

15.) To develop a walleye source in Bighorn Lake or Cooney Reservoir. (State funded).

A total of 10.7 million walleye eggs were collected at Bighorn Lake during April 1989 and 5 million fry were stocked back into the lake.

17.) To determine the amount of fishing effort expended and success rates for warm and cool-water species in the regions mixed-species fisheries by utilizing existing warden and parks division contacts in the field and supplementing with fisheries division follow-up where necessary. (State funded).

Approximately 450 angler hours were surveyed in FY89, but this program is not providing much usable data on the warm and cool-water fisheries within the region. A state-wide creel survey, such as is scheduled for next year, should provide a better method for collecting information on this fishery.

18.)To increase public awareness of the availability of warm and cool-water fishing opportunity and the resource that provides them. (State funded).

A bass pond database was maintained and used in directing the public to planted ponds.

SUMMARY

Objectives 3, 9, 10, 12, and 16 were not scheduled to be addressed during FY89. Objective 2 was delayed during FY89 because of a vacancy in this project which was not filled until April and because severe drought conditions made water-level controls unworkable due to heavy irrigation demands. Progress will be made during future years. Objective 14 was not achieved due to the unavailability of smallmouth bass. Smallmouth bass will be available for stocking in the lower Bighorn in FY90. Progress was achieved on all other objectives.