MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS

FISHERIES DIVISION
JOB PROGRESS REPORT

STATE: MONTANA **PROJECT TITLE:** STATEWIDE FISHERIES INVESTIGATION

PROJECT NO: F-46-R-7 **STUDY TITLE:** SURVEY AND INVENTORY OF COLDWATER STREAMS

JOB NO: I-B, **JOB TITLE:** WEST CENTRAL MONTANA COLDWATER STREAM INVESTIGATIONS

PROJECT PERIOD: JULY 1, 1993 THROUGH JUNE 30, 1994

OBJECTIVES AND DEGREE OF ATTAINMENT

JOB OBJECTIVES:

1. Ensure within legal and hydrologic constraints that flows in trout stream do not fall below 1975-1985 averages.

The Blanchard Creek water lease in the Blackfoot River drainage was finally completed. Stream restoration projects in Dick, Chamberlain, Gilbert, and Rock Creek have all significantly improved stream flows through the low flow periods. Cooperative projects with private landowners improving irrigation systems have been the main mechanism of success.

2. Maintain existing trout populations at or above the current densities in 5 to 10 test streams.

Trout populations were determined in several smaller tributary streams in the Bitterroot and Blackfoot River drainage. Population densities have remained below expected levels in several test streams. Long term drought and below average stream flows in most of the drainage appears to be negatively impacting trout populations.

3. Maintain 100% of the region's stream banks and channels in their present or better condition.

Stream bank and channel alteration permits submitted for Hydraulic Notices under the Stream Protection Act and 310 permits under the Natural Streambed and Land Preservation Act were responded to during the year. Seven conservation districts' 310 permits were reviewed during the year and recommendations were made to protect fish habitat. Violations of these permit processes were reviewed and mitigation efforts designed and implemented. Statewide forest practices were reviewed on a random sample of logged areas with a statewide BMP audit team.

4. Maintain water quality at current or improved conditions as

reported in the 1986 Montana 305(b) Water Quality Report to the U. S. Environmental Protection Agency.

Development projects detrimental to maintenance of water quality in Rock Creek, the Clark Fork, the Bitterroot, the Blackfoot River and all their tributaries were reviewed and permit conditions were recommended where necessary to protect water quality for trout. Violations of water quality standards that were observed were documented and reported to the Water Quality Bureau.

Cooperative landowner/agency/Trout Unlimited projects aimed at improving water quality are in various stages of completion throughout the Clark Fork River basin.

5. Maintain fish populations and habitat in streams affected by resource development at levels at least as good as current status.

Plum Creek, Champion, and USFS timber sales were reviewed for various fish habitat preservation concerns. We participated in interagency meetings for preservation of fish habitat on Rock Creek, Bitterroot, Blackfoot, and the Clark Fork River. Special efforts are being directed toward species of special concern such as westslope cutthroat and bull trout to insure compatibility with new and old resource developments.

6. Implement the Bitterroot River/Painted Rocks Water Management Plan and provide minimum instream flows at Bell Crossing consistent with the plan and water availability.

Flows were maintained above 100 cfs at Bell crossing throughout the low flow period with the help of reservoir releases from Painted Rocks reservoir. Water releases continued according to the water management plan.

7. Maintain genetically pure WsCt populations with population structures at least as diverse as presently exists.

No kill fishing seasons were established in the Blackfoot and Bitterroot River drainage to protect westslope cutthroat stocks. More time will be necessary for complete evaluation of the success of the regulation changes.

8. Develop a voluntary catch and release program for westslope cutthroat trout in rivers and streams to maintain genetically pure populations at least at current levels wherever they exist.

Voluntary catch and release request published in the Montana Fishing Regulations and an on-going education effort at public presentations.

9. Maintain bull trout populations at least at current levels.

Implemented a region-wide closure on the keeping of bull

trout. All recorded fish samples in the waters of region 2 by USFS, BLM and MTDFWP were documented in a database. The samples were located on maps, geographically referenced, and the presents or absents of major fish species identified. Historical and current distribution of bull trout was identified in a geographic information system. A cooperative long-term bull trout study was initiated under the "Bring Back the Natives" program of the BLM, USFS, Trout Unlimited, and the Montana Power Company. The focus of the study is large fluvial bull trout in the Clark Fork, Blackfoot, and Rock Creek.

10. Increase the number of trout over 14 inches long in Rock Creek population to at least 200 per mile.

No management actions taken to directly change population structure. Trout population estimates completed in the spring of 1992 indicate major downward trends in the juvenile segment of the Rock Creek rainbow population. Poor juvenile numbers in Rock Creek appear to be the result of low flows in Rock Creek that have been far below average. Low juvenile numbers appear to be adversely affecting recruitment to the larger size classes.

11. Conduct creel census and trout population monitoring according to the Rock Creek fisheries management plan.

Special regulations were imposed on float anglers to reduce bank and float angler conflicts. A creel census is in progress on Rock Creek during the summer/fall 1992 season.

12. Maintain the combined number of wild rainbow and brown trout 14 inches and larger in the Darby section of the Bitterroot River at 100 per mile and in the Tucker section at 160 per mile. Maintain rainbow standing crop of 300, of all sizes, in the Poker Joe section downstream from Stevensville.

Bitterroot River trout populations were sampled and field work is in progress.

13. Determine the extent of fry loss to irrigation ditches in key spawning tributaries in the Bitterroot. Determine time period during which ditches pose the greatest threat to migrating fry.

Field work is still in progress on this objective.

14. Increase the number of rainbows 12 inches and larger in the Johnsrud section of the Blackfoot River to at least 300 per mile.

Implemented a 3 trout limit with a 12 inch maximum size limit on brown and rainbow trout in the Blackfoot River drainage. Population samples completed in spring, 1992 indicate some improvement toward this goal.

15. Maintain trout populations at least at current levels in the Blackfoot River upstream form Johnsrud Park.

Implemented special creel limits and habitat improvement programs throughout the Blackfoot River drainage.

16. Work with landowners and sportsman groups to improve habitat for trout in Blackfoot River tributaries and the mainstem of the river.

Designed and solicited funding of habitat improvement projects throughout the Blackfoot River drainage. Contacted landowners for alteration in land management practices on key spawning tributaries. Seven habitat improvement projects have been completed, five are in progress, and ten more are in planning stages. Designed and solicited additional funding for remote sensing of riparian and river habitat in the Blackfoot River drainage. The remote sensing data will provide monitoring functions for non-point pollution sources as well as a greatly enhanced capability to classify stream and riparian habitat.