

F-78-R-6
Statewide

MONTANA FISH WILDLIFE AND PARKS
Fisheries Division
Federal Aid Job Progress Report

Date: March 23, 2001

PROJECT TITLE: STATEWIDE FISHERIES INVESTIGATIONS
STATE TITLE: STATEWIDE TECHNICAL GUIDANCE
JOB TITLE: STREAMBANK PERMITTING TECHNICAL ASSISTANCE
PERIOD COVERED: JULY 1999 – JUNE 2000
PROJECT NUMBER: F-78-R6
JOB NUMBER: VII-D

ABSTRACT

During the period of this report ten consultants were under contract to assist regional biologists with activities related to the Natural Streambed and Land Preservation Act. Two of these consultants were available on an as needed basis to assist with particularly difficult hydraulic projects that require specialized professional expertise. The remaining eight consultants assisted regional fishery staff by performing permit related inspections, recommending permit conditions, and attending Conservation District (CD) meetings where permits are discussed. Consultants performed 189 permit inspections, attended 12 CD meetings, and provided specialized professional advice related to 7 hydraulic projects. The technical advice provided by consultants is a valuable supplement to our permitting program. Consultants improve our effectiveness at protecting fish habitat while lessening the ever-increasing workload experienced by area biologists.

OBJECTIVES

1. To provide qualified consultants who can assist area and regional biologists with routine project inspections, recommend permit conditions, and attend CD meetings.
2. To provide area and regional biologists, on an as needed basis, access to professionals with specialized expertise in hydraulics and engineering.

PROCEDURES

The Natural Streambed and Land Preservation Act passed by the 1975 legislature extends authority to county Conservation Districts for hydraulic projects proposed by private individuals, corporations, firms, partnerships, associations, or other private entities. Projects include such activities as stream crossings, (bridges, culverts, fords, pipelines, and cables) irrigation diversions (headgates, pumps, and diversions structures), streambank and channel stabilizations, mining and dredging, boat ramps, debris removal, and various fish habitat restoration treatments.

The law states that "it is the policy of the state of Montana that its natural rivers and streams and the lands and property immediately adjacent to them within the state are to be protected and preserved to be available in their natural or existing state and to prohibit unauthorized projects and in so doing to keep soil erosion and sedimentation to a minimum, except as may be necessary and appropriate after due consideration of all factors involved. Further, it is the policy of this state to recognize the needs of irrigation and agricultural use of the rivers and streams of the state of Montana and to protect the use of water for any useful or beneficial purpose as guaranteed by The Constitution of the State of Montana."

Because the law is administered by the CD's, biologists serve an advisory role in the permitting process. Site inspections occur for most projects and are conducted by an inspection team. The team consists of the CD supervisors (elected in each county), the applicant, and the area fishery biologist (or a designated consultant). Each team member, including the fishery biologist, submits written recommendations that may include approval, denial, or modification of the project. However, supervisors make the final decision.

In Montana most CD's rely heavily on the technical expertise of the fishery biologist or their consultant representative. Invariably, the biologist or consultant has more technical training in stream mechanics and hydrology than supervisors and has a better understanding of the possible effects of various types of projects on fish and their habitats. Recommendations include timing restrictions to prevent stream work during periods of spawning and incubation; restrictions on types of equipment that may be used and whether it can be used in-stream; requirements for erosion control and revegetation; requirements to prevent blockage of fish passage; requirements to mitigate for problems caused by the project that are discovered at a later date; requirements to wash equipment prior to entering a stream; requirements related to bridge spanning and culvert sizing and installation, requirements to prevent construction material from entering a stream; restrictions to prevent encroachment into the channel; restrictions to minimize or prevent turbidity; restrictions on types of construction materials used; restrictions to preserve natural stream function; and restrictions to prevent channelization, loss of stream length, or other undesirable channel modifications.

FINDINGS

During the 2000 Fiscal Year eight contractors completed 189 permit inspections and attended 12 Conservation District meetings. Additionally, two consultants were available to provide specialized professional advice on 7 hydraulic projects. Total cost of these services was \$15,286 for permit inspections and meetings and \$5,726 for professional advice. The cost for each permit inspection or meeting was about \$76 – a cost similar to what we would have spent had we conducted the inspection or attended the meeting ourselves. Professional advice averaged about \$800/project. In our opinion advice provided by consultants improved the quality of the projects involved and prevented impacts to aquatic resources that would otherwise have occurred.

The following table summarizes contractor activities during the fiscal year.

Contractor	Region(s)	Projects (meetings)	Hours	Miles	Cost/project or meeting
Permit inspections					
Johnson	1	49 (8)	114 ^a	1289	40.33
Domrose	1	21	42 ^a	194	48.00
Land & Water	2	9	26	261	93.33
Phinney	2	5	38	257	189.80
Drake	3	58(4)	125	1968	79.35
Love	3	28	85	2113	114.21
Haley	5	2	4	280	151.00
Tennant	5	17	57	515	104.12
TOTAL		189(12)	491	6877	AVE 76.05
Professional advice					
Water Consulting Inc.		5			526.80
Interfluve Inc.		2			1545.94
TOTAL		7			AVE 817.98

Variations in cost per inspection are related to geographic variations in contractor rates and travel time to conduct project inspections.

RECOMMENDATIONS

Consultants are a valuable addition to our stream-permitting program. Competent consultants are capable of serving on project inspection teams and providing professional level advice that helps eliminate or minimizes impacts of hydraulic projects on fish habitat. Additionally, consultants lessen the ever increasing workload experienced by many of our field biologists. Stream permitting is an essential component of our habitat protection efforts. Funding for this program should continue.

Prepared by: Glenn Phillips

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