

State: Montana Title: Southwest Montana Fisheries Study  
Project No: F-9-R-35 Title: Inventory and Survey of the  
Job No.: I-b Waters of the Big Hole,  
Beaverhead and Ruby River  
Drainages

Project Period: July 1, 1986 through June 30, 1987

Report Period: July 1, 1986 through June 30, 1987

### OBJECTIVES AND DEGREE OF ATTAINMENT

1. To determine spring or fall trout population estimates in at least two sections of the Big Hole River and one section of the Ruby River. Spring brown trout population estimates were made for the Maiden Rock, Melrose and Hog Back sections of the Big Hole River. Fall rainbow trout population estimates were made for the Jerry Creek, Maiden Rock and Melrose sections of the Big Hole River. A spring brown trout estimate was calculated for the Sailor section of the Ruby River. Data will be presented in a subsequent progress report.
2. To monitor daily discharge and water temperatures at one location on the Big Hole River. Daily flow and thermal data have been collected at the USGS Gage site near Melrose, Montana and will be presented in a subsequent progress report.
3. To assess the effect of special angling regulations on the trout population of one section of the Big Hole River. Spring brown and fall rainbow trout population estimate data have been collected and analyzed for the Maiden Rock section and compared with data from the Melrose section of the Big Hole River. The data will be presented in a subsequent progress report.
4. To mitigate or enhance habitat alterations due to agricultural, residential, mining and industrial development. A total of 79 stream alteration projects were inspected during the project period. Under the Montana Natural Streambed and Land Preservation Act of 1975, 20 projects through the Beaverhead Conservation District and 16 projects through the Ruby Valley Conservation District were inspected. An additional 43 projects were inspected under the Stream Protection Act of 1963.

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