

END OF YEAR PROJECT REPORT/JOB PROGRESS REPORT

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Division Fisheries Region 3 SBAS Project Number 3312

Federal Aid Project Number Statewide Fisheries Investigations

Project Title Southwest Montana Major Rivers Investigation

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Study I Job F

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OBJECTIVES

Madison River Objectives

1. Maintain minimum flow >700 cfs at the Kirby gage below Quake Lake and >1100 cfs downstream from Ennis Dam. **COMPLETED.**
2. Maintain wild trout population >3000 age II and older trout/mile below Ennis Dam and determine effects of water temperature on catch rates. **COMPLETED.**
3. Maintain channel and streambanks in present or improved conditions. **COMPLETED.**
4. Maintain aesthetic quality of upper Madison River fishing experience. **COMPLETED.**
5. Maintain densities of wild trout >13 inches at >1200/mile between Quake Lake and McAtee bridge (catch and release section). **COMPLETED.**
6. Maintain densities of wild trout >13 inches at 1200 between Varney bridge and Ennis Lake with the opportunity of catching large size (>18 inches) brown trout. **COMPLETED.**
7. Attempt to disperse angler use in the Quake Lake to Ennis Lake reach. Continue to provide spatial

segregation for bank and boat anglers, where possible.
COMPLETED.

Yellowstone River Objectives

1. Reduce the magnitude of irrigation season dewatering in spawning tributaries during cutthroat trout spawning and incubation periods. **COMPLETED.**
2. Maintain channel and streambanks in present or improved condition. **COMPLETED.**
3. Maintain water quality and aesthetics of river. **COMPLETED.**
4. Maintain a catch rate of 0.5 fish/hr with trout population densities >1000 fish greater than 9 inches/mile and 50 cutthroat trout over 12 inches per mile. **COMPLETED.**
5. Increase cutthroat trout numbers in Yellowstone River. **COMPLETED.**
6. Provide increased opportunity to catch large trout in a reach of the Yellowstone River. **COMPLETED.**
7. Acquire a suitable fishing access site between Highway 89 and Springdale. **NOT COMPLETED.**

No parcel of land has yet become available to purchase for a fishing access site on this reach of the river.

Big Hole River Objectives

1. Insure, within hydrologic constraints, that flows do not fall below minimum of 300 cfs in reach I, 200 cfs in reach II, and 100 cfs in reach III of the Big Hole River. **COMPLETED.**
2. Maintain channel and streambanks of the Big Hole River in present or improved state of stability. **COMPLETED.**
3. Maintain stream sediment levels and flow regime at average current levels. **COMPLETED.**
4. Maintain fluvial grayling populations at a minimum of 40 age II and older fish per mile upstream from Pintlar Creek. **COMPLETED.**
5. Maintain brown trout populations in lower river (Glen Access to mouth) at densities >1000 age II and older fish/mile with limited numbers of rainbow trout. **COMPLETED.**

6. Maintain brown trout populations in lower, mid-river (Divide Creek to Glen Access) at densities >1000 age II and older fish/mile with limited numbers of rainbow trout. **COMPLETED.**

7. Maintain rainbow trout population in upper mid-river (Pintlar Creek to Divide) at densities >1300 age I and older fish/mile and brown trout densities at >200 age II and older per mile with limited numbers of fluvial grayling and brook trout. **COMPLETED.**

8. Maintain native, fluvial grayling populations at a minimum of 40 age II and older/mile in upper river (Headwaters to Pintlar Creek) and densities of age II and older brook trout at >400 per mile. **COMPLETED.**

9. Maintain numbers of large brown trout (>18") at densities >100 per mile and large rainbow trout (>15") at densities >100/mile in special regulation section (Divide to Melrose). **COMPLETED.**

10. Collect information on fishing pressure, harvest, catch rates, angler attitude and preference to assist in responsible management. **NOT COMPLETED.**

No funding is yet available to fund a creel census and angler preference study.

11. Provide increased user access to Big Hole River between the Notch and Pennington Bridge. **NOT COMPLETED.**

No parcel of land has yet become available to purchase for a fishing access site on the area between the Notch and Pennington Bridge.

12. Provide increased acreage of public land in Big Hole River Corridor. **COMPLETED.**

13. Keep Big Hole River management current with angler needs and expanding recreational demand. **COMPLETED.**

14. Mitigate or eliminate deleterious effects of planned developments in the fishery of the Big Hole River including water quality and quantity and aesthetic values. **COMPLETED.**

Beaverhead River Objectives

1. With hydrologic constraints, seek to obtain minimum non irrigation season releases of 250 cfs from Clark Canyon Dam and maintain minimum flows of 150 cfs in the river downstream from Barretts. Maintain stable spawning season flow releases. **NOT COMPLETED.**

Due to a prolonged drought there has been insufficient water in Clark Canyon Reservoir to maintain flows of 250 cfs from the dam or to maintain flows of 150 cfs in the river downstream from Barretts Diversion during the non irrigation period.

2. Eliminate gas bubble trauma in Beaverhead River trout populations. **COMPLETED.**

3. Insure that operation of proposed hydroelectric generator does not alter flow regimes or temperatures of discharge and utilize hydrogeneration to eliminate gas supersaturation problems. **COMPLETED.**

This dam has yet to be fitted with any hydroelectric facilities.

4. Maintain densities of >250 brown trout 18" and larger/mile and >150 rainbow trout 18" and larger/mile above Henneberry. Maintain densities of >1000 age II and older brown trout and >600 age I and older rainbow trout per mile above Henneberry. **COMPLETED.**

5. Collect population information for lower Beaverhead River (downstream from Barretts) to assist in management decisions. **COMPLETED.**

6. Maintain or increase numbers of rainbow trout in river upstream from Barretts. **COMPLETED.**

7. Collect information on fishing pressure, harvest, catch rates, angler preferences and attitudes to assist in managing for high quality angling experience. **COMPLETED.**

8. Increase angler use of Beaverhead River downstream from Barretts in an effort to decrease use of upper river. **COMPLETED.**

9. Keep Beaverhead River management current with anglers needs and expanding recreational demand. **COMPLETED.**

10. Maintain channel and streambanks in present or improved state of stability. **COMPLETED.**

Gallatin River Objectives

1. Maintain channel and streambanks in present or improved condition. **COMPLETED.**

2. Mitigate and reduce irrigation season dewatering in Gallatin River. **COMPLETED.**

3. Decrease magnitude of sediment and turbidity from Taylor Fork and Sage Creek. **NOT COMPLETED.**

There has been no progress made in reducing the sediment problem on either stream except some baseline fish population estimates completed for the Taylor Fork.

4. Maintain wild trout populations of >2500 age II and older fish per mile upstream from Gallatin Gateway. **COMPLETED.**

5. Determine potential of establishing a large trout management area between the mouth of the Canyon and Gallatin Gateway. **COMPLETED.**

Jefferson River Objectives

1. Insure, within hydrologic constraints, that flows do not drop below 550 cfs at the Three Forks gage. **COMPLETED.**

2. Maintain channel and streambanks in present or improved state of stability. **COMPLETED.**

3. Increase numbers of rainbow trout to >200 age I and older/mile. **COMPLETED.**

4. Maintain densities of .450 age II and older brown trout/mile from the mouth to Boulder River and >600 age II and older brown trout/mile between the Boulder and the head of the river. **COMPLETED.**

5. Increase recreational use of the Jefferson River. **COMPLETED.**

6. Acquire additional access sites at Kountz Bridge and Waterloo Bridge. **COMPLETED.**

7. Elevate public awareness of values of fishery. **COMPLETED.**

Prepared by E. Richard Vincent Date 9/15/93

Regional Supervisor Richard Vincent

Date 9/17/93