END OF YEAR PROJECT REPORT/JOB PROGRESS REPORT FY 92: JULY 1, 1991 - JUNE 30, 1992

Division <u>Fisheries</u>	Region 3	SBAS Project Number 3312
Project Title Southwestern	Montana Major	Rivers Investigation
Federal Aid Project Number _	F-46-R-5 (Job	#I-f)(if Federal Aid Project)
Date Project Started _07/01/9	1 Ending Date	06/30/92 (or indicate if ongoing)

A. List work <u>scheduled</u> to have been completed for this project (include performance standards from your FY 92 workplan). Write either "completed", "not completed", or "partially completed" beside each item listed to indicate work actually done last FY.

List tasks from workplan:

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.

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 trot 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.
- 11. Provide increased user access to Big Hole Rover between the Notch and Pennington Bridge. NOT COMPLETED.
- 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 delirious 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.
- 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. NOT COMPLETED.
- 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.
- 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. NOT COMPLETED.
- 7. Elevate public awareness of values of fishery. COMPLETED.
- B. Describe any variance between work scheduled and work completed and explain (i.e., problems incurred and resulting impacts to attainment of project objectives):

Yellowstone River Objective 7. No parcel of land has yet become available to purchase for a fishing access site on the reach of the Yellowstone River between Highway bridge 89 and Springdale.

Big Hole River Objective 10. No funding is yet available for a creel census and angler preference survey.

Big Hole River Objective 11. No parcel of land has yet become available to purchase for a fishing access site on the area between the Notch and Pennington Bridge.

Beaverhead River Objective 1. 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 during non irrigation periods.

Beaverhead River Objective 3. This dam has yet to be fitted with any hydroelectric generation facilities.

Gallatin River Objective 3. There has been no progress made relating to the sediment problem on Taylor or Sage Creek, except some fish population work on the Taylor Fork.

Jefferson River Objective 6. At this time no parcel of land has become available for purchase on the river at Kountz or Waterloo Bridge.

- C. Discuss impact(s) of project variance to DFWP programs (as related to objectives stated in the strategic plan, species plans, river plans or other long range documents). Also discuss any significant accomplishments of this project (state in terms of outputs produced if possible, i.e., recreation days, etc.)
 - Failure to the purchase of new fishing access sites on the Yellowstone, Big Hole and Beaverhead rivers at this time will reduce the opportunity to fish these high quality rivers and tend to concentrate fishing pressure in areas of access. Failure to meet the Beaverhead River Flow rate objective (1) will cause wild trout populations in the Beaverhead River to decrease thus decreasing the potential recreation levels. Failure to meet the sediment objective on the Gallatin River tributaries (Taylor Fork and Sage Creek) will reduce populations of wild trout in the Gallatin River and turbidity in the Gallatin river will reduce recreation potential.
- D. FINAL BUDGET STATUS (TOTAL cost of project...personal services, operations and other). Note any differences between SBAS end-of-fiscal year figures and individual records kept by the region.

Variance:

				(If project spending was as scheduled, put "on schedule". If spending
Project	Amount	Amount	Balance	was at variance with planned costs, describe.)
Number	Budgeted	Spent	of Funds	

\$131,585

<u>\$139,425</u>

<u>-\$7,840</u> On schedule

RECOMMENDED ACTION(S) to improve the effectiveness of this type of work effort in the future. E.

None

Prepared	by E. Rich	ard Vincent	Leken Ulnent	Date	8/27/92
	Supervisor		Moto.	Date	
Comments					