

ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife and Parks
Monture Creek FAS road protection Project

General Purpose: At the Monture Fishing Access Site (FAS), approximately 150' of Monture Creek is eroding laterally at an accelerated rate due stream bank disturbance caused by vehicle, foot and boat trailer traffic. This erosion threatens to capture the Monture FAS road in the near future. This instability is simultaneously causing aggradation (island formation) and widening of the channel (Dave Rosgen, personal communication). Within this area of bank disturbance (immediately west of the island), the accretion has widened the bankfull channel to a width of 82-112' for the disturbed site compared to a reference width of 74' within a similar channel bedform. Past attempts to armor the bank with riprap have generally failed to stabilize the channel. Monture Creek is now within 8' of the road. If lateral movement of this stream bank is not addressed soon, Monture Creek is expected to capture the road, compromise access and/or result in a more expensive repair.

The project objective is to protect the Monture FAS road in a manner consistent with natural channel stability, normal habitat forming processes while avoiding hard bank armoring (riprap) techniques.

Upon completion of this restoration project, the project site will be managed in a manner consistent with shrub development and bank stability. Vehicle and trailer access will be limited by placing large boulders along the margin of the project site.

I. Location of Project: This project will be conducted at stream mile 2.2 on Monture Creek. The project site is located approximately four mile west of the community of Ovando within Township 15 North, Range 13 West, Sections 22d in Powell County.

II. Need for the Project: One goal of the project is to continue to provide bank anglers and campers access to a high quality recreational site. This project will allow for the continuation of this use.

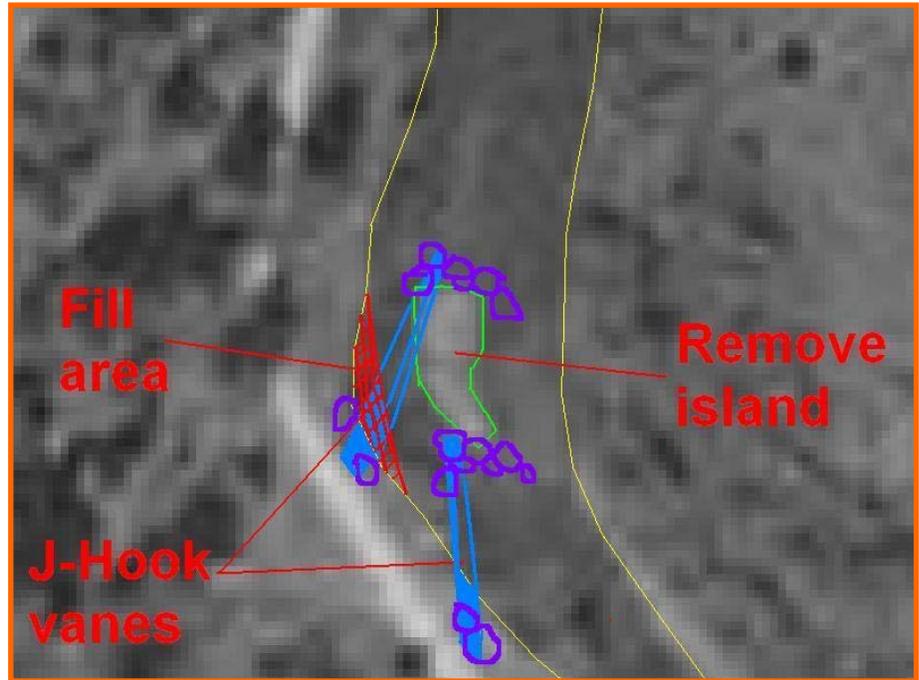
III. Scope of the Project:

The project site includes 150' of streambank on the west side of Monture Creek where a pair of J-hook vanes at the site in order to relieve high shear stress along a weakened

bank (Dave Rosgen, personal communication). The plan incorporates two log vane structures (with 2 two logs each) that extend 1/3 bankfull width into the channel at an angle from the bank of 20°. As noted in the



diagram, rocks will then extend another 1/3 of bankfull width forming the “J” shape. The log vanes will slope 4-7° from bankfull elevation and will be embedded into both the bank and substrate. Rock (~one yard each) will secure vanes in place (design criteria from Rosgen 1996). The island now located at the base of a riffle will be modified to a “run” bedform and will extend to an existing pool bedform. These excavated to a depth not to exceed the reference condition of next downstream pool. Cuts and fill within the bankfull channel will balance, resulting in no net change in bankfull channel capacity. Fill will be placed along the west (left) channel margin in the form a “bankfull bench”. Construction of the bench will narrowing this widened section of channel to a “reference” width of 74’. The bench will be vegetated with shrub and sod mats taken from a riparian area site west of the road. These woody plants will help provide long-term stability at the site. The project requires approximately 20 (one yard each) boulders and 4 large (~50’ x 36” dbh) trees.



IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

The project will reduce erosion; provide a higher level of shade and complexity to the channel and generally a healthier environment for aquatic life by restoring natural channel dimensions and processes at the site.

2. Water quantity, quality and distribution.

Short-term increases in turbidity will occur during project construction. To minimize turbidity, water will be diverted around the project site. Operation of equipment in the active stream channel will be minimized to the extent practical. Narrative conditions required to meet short-term water quality standards and protect aquatic biota (318 authorization) will be incorporated. An FWP 124

and Section 6 bull trout permit will be pursued and the U.S. Army Corp of Engineers will be contacted for requirements needed to meet the federal Clean Water Act (404 permit).

3. Geology and soil quality, stability and moisture.

Soils along the margin of the newly constructed channel would stabilize quickly following proposed re-vegetation efforts. All disturbed sites will be seeded with native grasses to minimize future erosion.

4. Vegetation cover, quantity and quality.

Some riparian vegetation from the borrow would be disturbed during the period of construction although existing riparian shrubs will be selectively used and the site protected to the extent possible. The channel would take advantage of existing bank shrubs and re-vegetation of the stream banks would result in an overall improvement to the aquatic environment and riparian community of Monture Creek.

5. Aesthetics.

The aesthetics of the site are currently impaired due bank disturbance, erosion and riprap. In the short term, aesthetics would be adversely affected due to ground disturbance and the presence of heavy equipment. However this disturbance is expected to last only a few days. In the long term, aesthetics would be enhanced with the restoration of the site.

6. Unique, endangered, fragile, or limited environmental resources

Monture Creek supports several salmonids including westslope cutthroat trout (a *species of special concern*) and bull trout (a *threatened* species under the *Endangered Species Act*). Restoration of the site is expected to improve habitat conditions for both species at a very local scale. Timing of the project will minimize impacts to these and other species.

9. Historic and archaeological sites

The project will include a cultural survey under the guidance of the State Historical Preservation Office. The project will not begin until a cultural clearance is granted.

VI. Explanation of Impacts on the Human Environment.

13. Locally adopted environmental plans & goals

The techniques have been implemented through western Montana and are consistent with habitat restoration methods for wild trout, including bull trout under local, state and federal recovery plans.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, this section of Monture Creek will remain unstable and fish habitat degraded. Monture Creek will erode into the FAS road. Access will be a portion of the FAS will be lost and other (hard) techniques will likely be pursued in the future. Habitat for riparian dependent wildlife also will remain in a degraded condition. Fish and wildlife resources will remain reduced and aesthetics will continue to be impaired.

2. The Proposed Alternative

The proposed alternative will improve stream bank stability while providing improved fish habitat and greater channel complexity. This alternative also will provide natural channel stability while allowing the public to recreate at the FAS.

VIII. Environmental Assessment Conclusion Section

1. Is an EIS required? No.

We conclude from this review that the proposed activities will have a positive impact on the physical and human environment.

2. Level of public involvement.

Prior to implementation, the project will involve several permitting agencies. These will include Department of Environmental Quality 318 authorization, U. S Army Corps of Engineers 404 permit, a cultural resource survey, as well as Montana Fish Wildlife and Parks 124 and Section 6 bull trout permits. The EA also will be published on Montana Fish, Wildlife and Parks web page (fwp.mt.gov) for public comment.

3. Duration of comment period? 30 days

Public comment will be accepted through 5 P.M. on August 20, 2006.

4. Person responsible for preparing the EA.

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ENVIRONMENTAL ASSESSMENT

Project Title Monture Creek Fishing Access Site Road Repair Project

Division/Bureau Fisheries Division

Description of Project See above.

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Terrestrial & aquatic life and habitats			X			X
2. Water quality, quantity & distribution			X			X
3. Geology & soil quality, stability & moisture			X			X
4. Vegetation cover, quantity & quality			X			X
5. Aesthetics			X			X
6. Air quality				X		
7. Unique, endangered, fragile, or limited environmental resources			X			X
8. Demands on environmental resources of land, water, air & energy				X		
9. Historical & archaeological sites					X	X

POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Social structures & mores				X		
2. Cultural uniqueness & diversity				X		
3. Local & state tax base & tax revenue				X		
4. Agricultural or industrial production				X		
5. Human health				X		
6. Quantity & distribution of community & personal income				X		
7. Access to & quality of recreational and wilderness activities				X		
8. Quantity & distribution of employment				X		
9. Distribution & density of population & housing				X		
10. Demands for government services				X		
11. Industrial & commercial activity				X		
12. Demands for energy				X		
13. Locally adopted environmental plans & goals			X			X
14. Transportation networks & traffic flows				X		

Other groups or agencies contacted or which may have overlapping jurisdiction US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office

Individuals or groups contributing to this EA David Rosgen, Montana Fish, Wildlife and Parks

Recommendation concerning preparation of EIS No EIS required.

EA prepared by: Ron Pierce
Date: July 19, 2006
