

EIA - 92-06

DEPARTMENT OF FISH, WILDLIFE AND PARKS
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ENVIRONMENTAL ASSESSMENT

Project Title: Replacement of bridge burned in Derby Fire with culvert on Elk Creek

Division/Bureau: Fisheries/Management

Program: Fisheries

Description of Project/Preferred Alternative: Sweet Grass County is proposing to replace the bridge over Elk Creek (T3S R13 E Sec 15 SW NE) that was damaged during the Derby Wildfire with a 40 ft long 8ft tall culvert. Elk Creek has live water and contains a rainbow and brown trout fish population. Replacing a bridge with a culvert can be problematic for fish passage. To mitigate the potential negative effects the county will be required to set the culvert at the grade of the stream so there is no drop at the inlet or outlet of the culvert and to bury the culvert a minimum of 18 in into the streambed to allow native sediments to deposit within the pipe. Approximately 80 ft of streambank including willows and native grasses will be disturbed during construction. Disturbed areas will be reseeded with native grasses following construction. Elk Creek is a known spawning stream for fish from the East Boulder River. Because of the circumstances surrounding the fire and post-fire rehabilitation, construction will occur after October 15th, which is generally not permitted because of the negative effects of generated sediment on spawning brown trout and their incubating eggs. The impacts of this work can only be partially mitigated through immediate construction prior to most brown trout spawning. However, it is essential to restore the stream crossing prior to spring when fire related flooding and debris flows, which could cause extensive erosion and damage, have the potential to occur.

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

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

POTENTIAL IMPACTS ON 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		

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
7. Access to & quality of recreational and wilderness activities				X		
8. Quantity & distribution of employment				X		
10. Demands for government services				X		
11. Industrial & commercial activity				X		
12. Demands for energy				X		
13. Locally adopted environmental plans & goals				X		
14. Transportation networks & traffic flows			X			3

Other groups or agencies contacted or which may have overlapping jurisdiction _____ Army Corps of Engineers

Individuals or groups contributing to this EA: Montana Department of Fish Wildlife and Parks

Recommendation concerning preparation of EIS: _____ No EIS required

EA prepared by : James Olsen

Date: October 17, 2006

COMMENTS

1. Removal of wetland grasses and other permanent vegetation from the location where the stream work is to be done will have a minor impact on terrestrial habitat. Additionally, work on the stream bed and banks with heavy equipment will disturb the soil and existing grasses and shrubs. Some woody vegetation along the stream will need to be removed to accommodate the bridge decommissioning and culvert installation, but the area will be reclaimed when the new crossing is complete. To mitigate these impacts, vegetation will be disturbed as little as possible and disturbed areas will be reseeded.
2. Turbidity may temporarily increase as a result of instream excavation to remove the old bridge, place the new culvert, and place the riprap around the inlet and outlet of the

culvert. However, these impacts should be minimal because the amount of stream bed that will be disturbed is relatively small and the project should not take longer than 1 day to complete. Elk Creek currently supports a fishery of brown and rainbow trout, and replacing a bridge with a culvert can be problematic for fish passage. To reduce potential impacts to the fishery the before mentioned precautions will be taken.

3. Traffic flows will be temporarily disrupted as a result of the demolition and reconstruction of the crossing. The road will be closed during construction. No ford or temporary bridge will be constructed

Review of Alternatives:

Alternative 1: No action

If the old bridge were left it would eventually fail, creating a safety hazard for motorists using the road. Once it failed traffic flows would be interrupted and the failed bridge may cause erosion and degradation of the existing aquatic habitat.

Alternative 2.

Another solution for the County would be to reinforce the existing bridge to extend its life, but this option is not feasible. Reinforcement occurred during the Derby Fire to accommodate heavy fire truck traffic. The current condition of the bridge makes reinforcement unsafe and only a temporary solution to the bridge problem at the site.

**APPENDIX A
PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST**

The 54th Legislature enacted the Private Property Assessment Act, Chapter 462, Laws of Montana (1995). The intent of the legislation is to establish an orderly and consistent process by which state agencies evaluate their proposed actions under the "Takings Clauses" of the United States and Montana Constitutions. The Takings Clause of the Fifth Amendment of the United States Constitution provides: "nor shall private property be taken for public use, without just compensation." Similarly, Article II, Section 29 of the Montana Constitution provides: "Private property shall not be taken or damaged for public use without just compensation..."

The Private Property Assessment Act applies to proposed agency actions pertaining to land or water management or to some other environmental matter that, if adopted and enforced without compensation, would constitute a deprivation of private property in violation of the United States or Montana Constitutions.

The Montana State Attorney General's Office has developed guidelines for use by state agency to assess the impact of a proposed agency action on private property. The assessment process includes a careful review of all issues identified in the Attorney General's guidance document (Montana Department of Justice 1997). If the use of the guidelines and checklist indicates that a proposed agency action has taking or damaging implications, the agency must prepare an impact assessment in accordance with Section 5 of the Private Property Assessment Act. For the purposes of this EA, the questions on the following checklist refer to the following required stipulation(s):

(List any mitigation/stipulations required, or note "None".)

None.

**DOES THE PROPOSED AGENCY ACTION HAVE TAKINGS IMPLICATIONS
UNDER THE PRIVATE PROPERTY ASSESSMENT ACT?**

- | YES | NO | |
|------------|-----------|--|
| _____ | ___X___ | 1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights? |
| _____ | ___X___ | 2. Does the action result in either a permanent or indefinite physical occupation of private property? |
| _____ | ___X___ | 3. Does the action deprive the owner of all economically viable uses of the property? |
| _____ | ___X___ | 4. Does the action deny a fundamental attribute of ownership? |
| _____ | ___X___ | 5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If the answer is NO , skip questions 5a and 5b and continue with question 6.] |
| _____ | _____ | 5a. Is there a reasonable, specific connection between the |

government requirement and legitimate state interests?

- | | | | |
|-------|--------------|-----|--|
| _____ | _____ | 5b. | Is the government requirement roughly proportional to the impact of the proposed use of the property? |
| _____ | <u> X </u> | 6. | Does the action have a severe impact on the value of the property? |
| _____ | <u> X </u> | 7. | Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally? [If the answer is NO , do not answer questions 7a-7c.] |
| _____ | _____ | 7a. | Is the impact of government action direct, peculiar, and significant? |
| _____ | _____ | 7b. | Has government action resulted in the property becoming practically inaccessible, waterlogged, or flooded? |
| _____ | _____ | 7c. | Has government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question? |

Taking or damaging implications exist if **YES** is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if **NO** is checked in response to questions 5a or 5b.

If taking or damaging implications exist, the agency must comply with Section 5 of the Private Property Assessment Act, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.