



# Montana Fish, Wildlife & Parks

March 25, 1999

3201 Spurgin Road  
Missoula, MT 59804

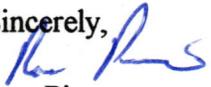
Environmental Quality Council  
Montana Department of Environmental Quality  
Montana Department of Fish, Wildlife and Parks  
Fisheries Division  
Endangered Species Coordinator  
Nongame Coordinator  
Missoula Office

Montana State Library  
MT Environmental Information Center  
Montana Audubon Council  
North Powell Conservation Service  
U.S. Army Corp of Engineers, Helena  
U.S. Fish and Wildlife Service, Helena  
Montana State Library, Helena  
Montana Department of Transportation, Helena  
State Historic Preservation Office, Helena  
Stan Bradshaw, Big Blackfoot Chapter of TU, P.O. Box 1273 Helena, MT 59624

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment for a Blackfoot Chapter Trout Unlimited project that will restore stream channel dimensions and fish habitat in an 1,100 foot section of **Kleinshmidt Creek** located near the town of Ovando. The section of stream covered in this EA will supplement an upstream restoration effort.

Please submit any comment that you have by 5 p.m., April 25, 1999 to the Montana Fish, Wildlife and Parks in Missoula at the address listed above. If you have any questions, please feel free to contact me at (406)444-2432.

Sincerely,  
  
Ron Pierce  
Fisheries Division

Powell

**SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT**  
**Montana Department of Fish, Wildlife & Parks**  
**Kleinschmidt Creek Fish Habitat Restoration Project**

**General Purpose:** This proposed project will restore fish habitat on approximately 1,100 feet of stream channel on Kleinschmidt Creek, a spring creek located near the town of Ovando. The project will supplement an additional 7,800 foot section of planned restoration efforts located immediately upstream. The combined projects will provide for a comprehensive restoration effort for the spring creek system. This project includes restoration of a functional riparian/wetland area.

**Location of Project:**

This project will be conducted on Kleinschmidt Creek near the town of Ovando within Township 14 North, Range 11 West, Section 6 in Powell County.

**II. Need for the Project:**

This is a cooperative multi-agency private-lands mitigation effort that will restore fish and wildlife resources to a degraded spring creek. Agencies and conservation groups participating in this effort include: Montana Fish, Wildlife & Parks (FWP), the Montana Department of Transportation (MDT), U.S. Fish & Wildlife Service (FWS), and groups such as the Big Blackfoot Chapter of Trout Unlimited and the Blackfoot Challenge. The Montana Department of Transportation (MDT) will provide a majority of the construction funding to this project based on MDT's need to secure compensatory wetland mitigation credits for anticipated highway construction impacts within Montana Watershed #2-Upper Clark's Fork River Basin.

Over the past several decades, Kleinschmidt Creek has been straightened by Highway 200, altered by a series of rock dams and has been intensively grazed. As a consequence, Kleinschmidt Creek is in severely degraded condition. Today, fish habitat is minimal in Kleinschmidt Creek; willows and the native fishery are essentially absent. Fish population sampling undertaken in 1998 reported low species richness, low densities of non-native salmonids (brook trout and brown trout present), very low densities of large fish and no native salmonids (westslope cutthroat trout and bull trout). Despite the degraded conditions of the channel and the poor condition of the fishery, the fundamental conditions exist for Kleinschmidt creek to provide for high quality habitat for fish. These conditions are a gravel channel bottom, stable streamflow, and relatively constant and cool water temperatures.

Kleinschmidt Creek is also a whirling disease positive stream, infecting juvenile fish in the lower reaches of the North Fork Blackfoot River and Blackfoot River downstream of the Kleinschmidt Creek confluence. Whirling disease-related investigations undertaken by the Montana State University and Montana Fish, Wildlife and Parks indicate the degraded condition of the stream contributes to elevated whirling disease infection levels in fish. The restoration project is

expected to moderate the effects of whirling disease by: 1) improving macroinvertebrate richness thereby increase competition and predation on *T. Tubifex*; 2) eliminating channel conditions that led to heavy accumulations of organic sediments; and 3) significantly reducing stream temperatures.

Past livestock use within the proposed project area has removed most of the woody riparian vegetation and has resulted in the trampling of the stream banks causing an over widened and shallow channel. Currently, the degraded condition of the channel provides poor habitat for fish. Kleinschmidt Creek is a tributary to the North Fork of the Blackfoot River and restoration of this reach of stream would restore spawning and rearing habitat that would be expected to be used by trout residing both in the stream and in the river. This project will restore health of riparian and aquatic habitats and directly benefit fish populations and riparian-dependent wildlife species including bald eagles, which use the stream as a wintering area. This project will directly improve habitat conditions for bull trout and westslope cutthroat trout. Bull trout is a "threatened" species under the Endangered Species Act, and westslope cutthroat trout a "species of special concern" in Montana.

### **III. Scope of the Project:**

The project calls for channel restoration on approximately 1,100 feet of stream, and would include constructing a more narrow and deep channel and building point bars to increase channel sinuosity consistent with a C4-E4 Rosgen (1996) channel type. Newly created deep and narrow channel would provide holding water and cover for adult trout and would maintain lower instream sediment and lower stream temperatures than currently exist. Additional improvements would include the placement of wood on meander bend (rootwads, wood veins, footer logs) for bank stability and cover, trans-planting mature willow clumps, planting other shrubs within the riparian zone, and placing sod mats on newly excavated stream banks. In addition, wetland areas will be created within those portions of the old stream channel that are filled in to construct the new channel meanders and from borrow sites along the riparian corridor. Necessary livestock management changes will be implemented in the project area.

### **IV Environmental Impact Checklist:**

Please see attached checklist.

### **V. Explanation of Impacts to the Physical Environment:**

#### **1. Terrestrial and aquatic life and habitats**

Removing the perturbations of livestock grazing within the riparian zone and constructing a more narrow, sinuous and deep channel is expected to create a more diverse and healthy habitat for aquatic life. Expected improvements in aquatic habitat should enhance resident trout populations, increase the recruitment of trout to the North Fork of the Blackfoot River and serve as thermal refuge for Blackfoot River native fish. Native salmonids have not been recorded in the stream in recent sampling. Riparian dependent wildlife would also

be improved through the restoration of the riparian vegetative community. By reducing organic sediments, reducing stream temperatures and restoring stream biota, the project is expected to not only reduce habitat for *T. Tubifex* but also increase competition and predation on *T. Tubifex*. Reducing stream temperatures may also reduce Triactinomyxon production according to whirling disease experts in Montana.

## **2. Water quantity, quality and distribution**

Short-term increases in turbidity will occur during project construction although a strong effort will be made to control coarse sediment transport. To minimize turbidity, construction will occur during a low flow period and operation of equipment in the stream channel will be minimized to the extent practicable. A temporary-settling pond at the lower portion of the project will be constructed and used in combination with sediment filter mats. Permits obtained for this project will include 1) a 303a short term exemption from turbidity will be obtained from the Water Quality Bureau, 2) a 310 permit will be obtained from the local Conservation District, and 3) a 404 permit obtained from the Army Corps of Engineers. The project includes removing the perturbations of livestock grazing from within the riparian zone and restoring the riparian vegetative community would reduce the sediment contribution to downstream areas, thereby improving the overall quality of downstream waters.

## **3. Geology and soil quality, stability and moisture**

No effects on geology and soils are expected above the high water mark. Below the high water mark, the project is expected to create a more stable stream channel. Sediment removed from the channel would be placed on newly created point bars and re-vegetated to create riparian scrub/shrub and emergent wetland areas.

## **4. Vegetation cover, quantity and quality**

Riparian vegetation and cover would be improved by stabilizing the stream channel and by extensive revegetation efforts through planting of native trees, shrubs and grasses. It is anticipated that such woody species of shrubs and trees such as various willow species, alders, cottonwoods and red-osier dogwood.

## **5. Aesthetics**

Restoring a degraded reach of stream to a healthy and more natural stream environment would enhance aesthetics. The stream reach would be restored by using channel dimensions similar to those obtained from an undisturbed reach of stream and by re-establishing a healthy riparian vegetative community.

## **7. Unique, endangered, fragile, or limited environmental resources**

Bull trout a "threatened" species under the Endangered Species Act and westslope

cutthroat trout an "species of special concern" in Montana both inhabit the North Fork Blackfoot River. However, fish sampling in 1998 in the Kleinschmidt Creek did not record the presence of these species. We anticipate no direct short or long-term impacts to these species resulting from the project but rather direct long-term benefits resulting from the project. For bull trout Section 6 ESA consultation will occur however prior to the project. The benefits include restoring potential spawning and rearing areas, and restoring thermal refuge for both species. Other species found in the general area which may fall into this category include bald eagle, grizzly bear, common loon, black tern and Columbian sharptailed grouse. With the exception of the bald eagle, the project area does not provide habitat or potential habitat for the remaining species. The bald eagle uses the project area as a wintering area. This project, which will be completed during the summer months is expected to benefit the bald eagle over the long-term by restoring the fish population. Therefore, as the Kleinschmidt Creek project is currently designed, it is **"Not Likely to Adversely Affect"** any endangered species found within the general area of the project.

#### **9. Historic and archaeological sites**

The proposed project will likely require an individual Army Corp of Engineers (COE) 404 permit. Therefore, an archaeologist with the Montana Department of Transportation will survey the project area and ensure compliance with the federal historic preservation regulations. The project will not begin until a cultural clearance is granted.

**VI. Explanation of Impacts on the Human Environment:**

**7. Access to & quality of recreational activities**

It is anticipated that restoration of this reach of Kleinschmidt Creek would improve spawning and rearing habitat and, as a result, would provide greater recruitment to the North Fork of the Blackfoot River. The recreational fishery in Kleinschmidt Creek and the North Fork of the Blackfoot River would be improved because of improved habitat and increased recruitment.

**VII. Discussion and Evaluation of Reasonable Alternatives:**

**1. No Action Alternative**

If no action is taken, this reach of Kleinschmidt Creek will remain degraded, fish populations will remain low and recruitment to the North Fork of the Blackfoot River will remain marginal. In addition, habitat for riparian dependent wildlife will remain in a degraded condition due to overgrazing by livestock along the stream corridor. Recreational opportunities associated with fish and wildlife resources will remain reduced and aesthetics will continue to be impaired. Whirling disease resulting from the degraded stream environment will continue to impact Blackfoot River fisheries downstream of the Kleinschmidt Creek confluence.

**2. The Proposed Alternative**

The proposed alternative is designed to restore a more narrow, sinuous and deep stream channel and enhance salmonid habitat. These activities would restore the riparian vegetative community and create more diverse habitat for aquatic life and riparian dependent wildlife. This alternative would improve fish and wildlife habitat, improve aesthetics, improve water quality, moderate the effects of whirling disease, and increase recruitment of salmonids to the North Fork of the Blackfoot River.

**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**

The proposed project was reviewed and supported by the public agencies including the Montana Fish, Wildlife and Parks, U. S. Fish and Wildlife Service, the North Powell Conservation District, Montana Department of Transportation and the Big Blackfoot Chapter of Trout Unlimited. The Environmental Assessment (EA) is being distributed to all individuals and groups listed on the cover letter. The EA will be published on the Montana Electronic Bulletin Board.

**3. Duration of comment period? 30 Days**

Public comment will be accepted through 5 P.M. on April 25, 1999.

**4. Persons responsible for preparing the EA document.**

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Headquarters Region 2 - Missoula Office  
Montana Dept. of Fish, Wildlife & Parks  
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(406) 542-5532

MONTANA DEPARTMENT OF FISH, WILDLIFE & PARKS  
 3201 Spurgin Road, Missoula, MT 59804  
 (406) 542-5532

ENVIRONMENTAL ASSESSMENT

**Project Title:** Kleinschmidt Creek Fish Habitat and Wetland Restoration Project

**Division/Bureau:** Montana Dept. of Fish, Wildlife & Parks

**Description of Project:** The project is being proposed to restore stream channel dimensions, restore degraded wetlands and create fish habitat on a 1,100 foot degraded reach of Kleinschmidt Creek, a spring creek located near the town of Ovando.

**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			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		
14. Transportation networks & traffic flows				X		

Other groups or agencies contacted or which may have

overlapping jurisdiction: North Powell Conservation  
District, USEWS, Army Corp of Engineers, Department of  
Environmental Quality

Individuals or groups contributing to this EA: Land and Water  
Consulting, Inc., Montana Fish, Wildlife and Parks, Montana  
Natural Heritage Program and Marilyn Marler, consultant for the  
U.S. Fish & Wildlife Service, U.S Fish and Wildlife Service

Recommendation concerning preparation of EIS: No EIS  
required. EA prepared by: Ron Pierce of FWP

Date: March 25, 1999