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Montana Fish, Wildlife & Parks

Region One
490 N. Meridian Road
Kalispell, MT 59901
(406) 752-5501
FAX: (406) 257-0349
Ref:DV093-04
June 17, 2004

To: Governor's Office, Attn: Todd O'Hair, PO Box 200801, Helena, 59620-0801
Environmental Quality Council, PO Box 201704, Helena, MT 59620-1704
*Dept. of Environmental Quality, Planning, Prevention & Assistance, PO Box 200901, Helena, 59620
*Dept. of Environmental Quality, Permitting Compliance, PO Box 200901, Helena, 59620-0901
Montana Fish, Wildlife and Parks: Director's Office – Reg Peterson; Fisheries Division - Karen Zackheim; Legal Unit - Brandi Fisher; Endangered Species Coordinator - Arnold Dude; Nongame Coordinator - Heidi Youmans; Native Species Coordinator, Fisheries - Robert Snyder; Kalispell FWP.
*Montana Historical Society, State Historic Preservation Office, PO Box 201202, Helena, 59620-1202
*Montana State Library, 1515 East Sixth Ave., Helena, 59620-1800
Jim Jensen, Montana Environmental Information Center, PO Box 1184, Helena, 59624
George Ochenski, PO Box 689, Helena, 59624
Wayne Hirst, Montana State Parks Foundation, PO Box 728, Libby, 59923
Montana State Parks Association, PO Box 699, Billings, 59103
Joe Gutkoski, President, Montana River Action Network, 304 N 18th Ave., Bozeman, 59715
Commissioner Mike Murphy, 2401 Recreation Road S, Wolf Creek, 59648
Sen. Aubyn Curtiss, PO Box 216, Fortine, 59918-0216
Rep. Rick Maedje, PO Box 447, Fortine, 59918-0447
Rep. Eileen Carney, PO Box 1193, Libby, 59923
Alliance for the Wild Rockies, PO Box 8731, Missoula, 59807
DNRC, Kevin Chappell, Ag & Grazing Mgmt. Bur., Trust Land Mgmt., PO Box 201601, Helena, 59620
Citizens for a Better Flathead, PO Box 771, Kalispell, 59903
*DNRC, Jon Dahlberg, 2250 Hwy 93 N, Kalispell, 59901
DNRC, Stillwater Forest, Bob Sandman, PO Box 164, Olney, 59927
Montana Wilderness Association, 43 Woodland Park Drive #9, Kalispell, 59901
Ecology Center, 801 Sherwood, Suite B, Missoula, 59802
Friends of the Wild Swan, Arlene Montgomery, PO Box 5103, Swan Lake, 59911
Jim Mann, Daily Inter Lake, 727 E. Idaho, Kalispell, 59901
Montana Ecosystem Defense Council, Will Snyder, 40 E. Main #3, Bozeman, 59715
Montana for Multiple Use, Peg Wagner, PO Box 3050, Columbia Falls, 59912
Tribal Historic Preservation Office, Confederated Salish and Kootenai Tribes, PO Box 278 Pablo, 59855
Janet Ellis, Montana Audubon Council, PO Box 595, Helena, 59624
Montana Wildlife Federation, PO Box 1175, Helena, 59624
Lincoln County Commissioners, 512 California Avenue, Libby, 59923
Glen Anacker, Trout Unlimited, PO Box 638, Kalispell, 59903-0638
U.S. Fish and Wildlife Service, 100 N Park, Ste 320, Helena, 59601
Pat & Blanche Flanagan, 1555 Grave Creek Road, Eureka, 59917
Leslie Turner, 830 Grave Creek Road, Eureka, 59917

Ladies and Gentlemen:

Fish, Wildlife & Parks, Region One, has prepared a draft Environmental Assessment for a bank stabilization and habitat restoration project tentatively planned to rehabilitate approximately 4,800 feet of Grave Creek southeast of

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Eureka in Lincoln County, Montana. A copy of the draft is enclosed for your review.

Please submit any questions or comments that you have by 5:00 p.m., July 18, 2004, to Fisheries Biologist Jim Dunnigan or Fish & Wildlife Technician Jay DeShazer, Montana Fish, Wildlife & Parks, 475 Fish Hatchery Road, Libby, MT 59923, or e-mail to jdunnigan@state.mt.us or jdeshazer@state.mt.us.

Sincerely,

Daniel P Vincent
Region One Supervisor

/ni
Enclosure

public draft

MONTANA FISH WILDLIFE & PARKS

GRAVE CREEK CHANNEL RESTORATION PROJECT

MEPA/NEPA CHECKLIST

PART I. PROPOSED ACTION DESCRIPTION

1. Type of Proposed State Action: Stream channel restoration

2. Agency Authority for the Proposed Action: Montana Fish, Wildlife & Parks

3. Name of Project: Grave Creek Channel Restoration Project (Phase II)

4. Name, Address and Phone Number of Project Sponsor (if other than the agency):

5. If Applicable:
   Estimated Construction/Commencement Date: August 1, 2004

   Estimated Completion Date:

   Final construction of the restoration project is expected to be completed by December 31, 2004. However, Montana FWP anticipates the potential for channel maintenance activities that may continue through December 31, 2006.

   Current Status of Project Design (% complete): 99%

6. Location Affected by Proposed Action (county, range and township):

   This project will be conducted on Grave Creek located approximately 12 miles south east of the town of Eureka within Township 38 North, Range 25 West, Sections 13 and 14, in Lincoln County (see attached vicinity map).

7. Project Size: Estimate the number of acres that would be directly affected that are currently:

	Acres		Acres
(a) Developed:		(d) Floodplain	22
residential	0		
industrial	0	(e) Productive:	
		irrigated cropland	0
(b) Open Space/Woodlands/Recreation	0	dry cropland	0
		forestry	0
(c) Wetlands/Riparian Areas	22	rangeland	0
		other	

8. Map/site plan: attach an original 8 1/2" x 11" or larger section of the most recent USGS 7.5' series topographic map showing the location and boundaries of the area that would be affected by the proposed action. A different map scale may be substituted if more appropriate or if required by agency rule. If available, a site plan should also be attached.

See Figures 1 & 2. Project plan view available upon request.

9. Listing of any other Local, State, or Federal agency that has overlapping or additional jurisdiction:

(a) Permits:

Agency Name	Permit	Date Filed/#

1. Montana Department of Environment and Water Quality, 318 Permit, pending
2. Army Corps of Engineers, 404 Permit, pending
3. Lincoln County Conservation District, 310 Permit, pending
4. Lincoln County, County Floodplain Development Permit, pending

(b) Funding:

Agency Name	Funding Amount
Montana Fish, Wildlife & Parks, 2004:	$90,000
Montana Fish, Wildlife & Parks, 2005:	$60,000

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

Agency Name	Type of Responsibility
N/A	

10. Narrative summary of the proposed action or project including the benefits and purpose of the proposed action:

The project site is located on property owned by Patrick and Blanch Flanagan and Leslie Turner, approximately 12 miles southeast of the town of Eureka, Montana, in Lincoln County (Figure 1).

Grave Creek is the most important bull trout (*Salvelinus confluentus*) spawning stream in the Tobacco River drainage. This stream also provides water for westslope cutthroat trout (*Oncorhynchus clarki lewisi*) habitat, agriculture, and other riparian-dependent resources. This stream is currently on the Montana Water Quality Limited Segment List as an impaired stream. The state of Montana has proposed that Grave Creek be a high priority for Total Mean Daily Load allocation (TMDL). Numerous reaches of the stream exhibit depositional features and associated lateral erosion. Past logging in the upper reaches of the drainage, livestock grazing practices, channelization, and other land management activities likely contributed to the instability of the channel. Grave Creek is currently unable to adequately transport stream flow and bedload supply and still maintain a stable channel. The project

site is a 4,800-foot, over-widened reach of the creek containing several mid-channel gravel bars and a severely eroding stream bank. The intent of the project is to:

1) *Reduce the sediment sources and bank erosion throughout the project area by incorporating stabilization techniques that function naturally with the stream and which decrease the amount of stress on the stream banks;*

2) *Convert the channelized portions of stream into a channel type that is self-maintaining and will accommodate floods without major changes in channel pattern or profile;*

3) *Use natural stream stabilization techniques that will allow the stream to adjust slowly over time and be representative of a natural stream system;*

4) *Improve fish habitat, particularly for bull trout, and improve the function and aesthetics of the river and adjacent riparian ecosystem; and*

5) *Reduce the effects of flooding on adjacent landowners.*

11. List of agencies consulted during preparation of the EA:

Lincoln County Conservation District, NRCS, US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office, Lincoln County Planning Department, and the Confederated Salish and Kootenai Tribes.

PART II. ENVIRONMENTAL REVIEW

1. Evaluation of the impacts of the Proposed Action including secondary and cumulative impacts on the Physical and Human Environment.

A. PHYSICAL ENVIRONMENT

1. LAND RESOURCES Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated*	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. **Soil instability or changes in geologic substructure?		X				
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil which would reduce productivity or fertility?			X			1-A
c. **Destruction, covering or modification of any unique geologic or physical features?		X				
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?			X			1-B
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		X				
f. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

2. AIR Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated*	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. **Emission of air pollutants or deterioration of ambient air quality? (also see 13 (c))		X				
b. Creation of objectionable odors?		X				
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		X				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		X				
e. ***For P-R/D-J projects, will the project result in any discharge, which will conflict with federal or state air quality regs? (Also see 2a)		X				
f. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Air Resources (Attach additional pages of narrative if needed):

* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

** Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

3. WATER Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated*	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. *Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?			X			3-A
b. Changes in drainage patterns or the rate and amount of surface runoff?			X			3-B
c. Alteration of the course or magnitude of floodwater or other flows?			X			3-C
d. Changes in the amount of surface water in any water body or creation of a new water body?		X				
e. Exposure of people or property to water related hazards such as flooding?		X				
f. Changes in the quality of groundwater?		X				
g. Changes in the quantity of groundwater?		X				
h. Increase in risk of contamination of surface or groundwater?		X				
i. Effects on any existing water right or reservation?		X				
j. Effects on other water users as a result of any alteration in surface or groundwater quality?		X				
k. Effects on other users as a result of any alteration in surface or groundwater quantity?		X				
l. ****For P-R/D-J, will the project affect a designated floodplain? (Also see 3c)			X			3-C
m. ***For P-R/D-J, will the project result in any discharge that will affect federal or state water quality regulations? (Also see 3a)			X			3-A
n. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Water Resources (Attach additional pages of narrative if needed):

* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

** Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

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4. VEGETATION Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?			X			4-A
b. Alteration of a plant community?		X				
c. Adverse effects on any unique, rare, threatened, or endangered species?		X				
d. Reduction in acreage or productivity of any agricultural land?		X				
e. Establishment or spread of noxious weeds?		X				
f. ****For P-R/D-J, will the project affect wetlands, or prime and unique farmland?		X				
g. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

** 5. FISH/WILDLIFE Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Deterioration of critical fish or wildlife habitat?		X				
b. Changes in the diversity or abundance of game animals or bird species?			X			5-A
c. Changes in the diversity or abundance of nongame species?		X				5-A
d. Introduction of new species into an area?		X				
e. Creation of a barrier to the migration or movement of animals?		X				
f. Adverse effects on any unique, rare, threatened, or endangered species?		X				
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?		X				
h. ****For P-R/D-J, will the project be performed in any area in which T&E species are present, and will the project affect any T&E species or their habitat? (Also see 5f)			X			5-B
i. ***For P-R/D-J, will the project introduce or export any species not presently or historically occurring in the receiving location? (Also see 5d)		X				
j. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

** Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

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B. HUMAN ENVIRONMENT

6. NOISE/ELECTRICAL EFFECTS Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Increases in existing noise levels?		X				
b. Exposure of people to serve or nuisance noise levels?		X				
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		X				
d. Interference with radio or television reception and operation?		X				
e. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

7. LAND USE Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		X				
b. Conflicted with a designated natural area or area of unusual scientific or educational importance?		X				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		X				
d. Adverse effects on or relocation of residences?		X				
e. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

** Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

8. RISK/HEALTH HAZARDS Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Risk of an explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?			X			8A
b. Affect an existing emergency response or emergency evacuation plan or create a need for a new plan?		X				
c. Creation of any human health hazard or potential hazard?		X				
d. ***For P-R/D-J, will any chemical toxicants be used? (Also see 8a)		X				
e. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

9. COMMUNITY IMPACT Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		X				
b. Alteration of the social structure of a community?		X				
c. Alteration of the level or distribution of employment or community or personal income?		X				
d. Changes in industrial or commercial activity?		X				
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?		X				
f. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

** Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

10. PUBLIC SERVICES/TAXES/UTILITIES Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Will the proposed action have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify:		X				
b. Will the proposed action have an effect upon the local or state tax base and revenues?		X				
c. Will the proposed action result in a need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		X				
d. Will the proposed action result in increased used of any energy source?		X				
e. **Define projected revenue sources		X				
f. **Define projected maintenance costs.			X			10-A
g. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

** 11. AESTHETICS/RECREATION Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?		X				
b. Alteration of the aesthetic character of a community or neighborhood?		X				
c. **Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report)			X			11-A
d. ***For P-R/D-J, will any designated or proposed wild or scenic rivers, trails or wilderness areas be impacted? (Also see 11a, 11c)		X				
e. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

** Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

12. CULTURAL/HISTORICAL RESOURCES Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. **Destruction or alteration of any site, structure or object of prehistoric historic, or paleontological importance?			X			12-A
b. Physical change that would affect unique cultural values?		X				
c. Effects on existing religious or sacred uses of a site or area?		X				
d. ****For P-R/D-J, will the project affect historic or cultural resources? Attach SHPO letter of clearance. (Also see 12.a)			X			12-A
e. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

SIGNIFICANCE CRITERIA

13. SUMMARY EVALUATION OF SIGNIFICANCE Will the proposed action, considered as a whole:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources that create a significant effect when considered together or in total.)			X			13-A
b. Involve potential risks or adverse effects which are uncertain but extremely hazardous if they were to occur?		X				
c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?		X				
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		X				
e. Generate substantial debate or controversy about the nature of the impacts that would be created?		X				
f. ***For P-R/D-J, is the project expected to have organized opposition or generate substantial public controversy? (Also see 13e)		X				
g. ****For P-R/D-J, list any federal or state permits required.						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Water Resources (Attach additional pages of narrative if needed):

* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

** Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

PART II. ENVIRONMENTAL REVIEW CONTINUED

2. Description and analysis of reasonable alternatives (including the no-action alternative) to the proposed action whenever alternatives are reasonably available and prudent to consider and a discussion of how the alternatives would be implemented:

   1. No Action Alternative

   If no action is taken, this segment of Grave Creek will remain unstable for many years. This ongoing instability will result in continued bank erosion, excessive sediment loading and the loss of fish habitat. Sediment loading adversely affects the project reach and stream reaches downstream of the proposed project. In addition, habitat for riparian-dependent wildlife will remain in a degraded condition. Recreational opportunities associated with fish and wildlife resources will remain reduced and aesthetics will continue to be impaired.

   2. The Proposed Alternative

   The proposed alternative is designed to adjust the morphology of the channel, stabilize the stream banks by installing root wads, and restore the riparian vegetative community by planting riparian shrubs and trees, which will enhance the long-term stability of this section of Grave Creek. These activities would provide for greater channel stability and reduce sediment loading, resulting in increasing the quantity and quality of habitat for aquatic life. By increasing the stream length, the project will increase available habitat for bull trout and westslope cutthroat trout. Planting riparian vegetation along the stream margin would create more diverse habitat for riparian-dependent wildlife. This alternative would improve fish and wildlife habitat, aesthetics and water quality within the project area, and would be expected to increase trout populations in both Grave Creek, the Tobacco River, and potentially Koocanusa Reservoir.

3. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

   (This section provides an analysis of impacts to private property by proposed restrictions or stipulations in this EA as required under 75-1-201, MCA, and the Private Property Assessment Act, Chapter 462, Laws of Montana (1995). The analysis provided in this EA is conducted in accordance with implementation guidance issued by the Montana Legislative Services Division (EQC, 1996). A completed checklist designed to assist state agencies in identifying and evaluating proposed agency actions, such as imposed stipulations, that may result in the taking or damaging of private property, is included in Appendix A.)

PART III. NARRATIVE EVALUATION AND COMMENT

1. LAND RESOURCES

A. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil, which would reduce productivity or fertility.

Soils along the stream margin would be disturbed by project construction, but are expected to recover quickly following proposed revegetation efforts.

B. Changes in siltation, deposition, or erosion patterns that may modify the channel of a river or stream, or the bed or shore of a lake.

Overall, the project is expected to reduce long-term chronic bank erosion and increase channel stability and delivery of fine sediments within and downstream of the project area. Sediment delivery into the active stream channel during project construction will be minimized by performing the majority of the construction activities in the dry condition, and by using by-pass channels and through the construction of cofferdams.

2. AIR

The proposed action will have no adverse secondary and cumulative impacts on air quality near the project area.

3. WATER

A. Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen, or turbidity.

The overall long-term impacts of this project are expected to have substantial beneficial impacts to the aquatic and terrestrial life in Grave Creek. However, there may be short-term adverse impacts to aquatic life during the construction phase of this project. Short-term increases in turbidity will occur during project construction, especially when Grave Creek is routed into the newly constructed stream channel. 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. The channel to be constructed will be constructed in the dry whenever feasible to minimize increases in suspended sediment during construction. Following completion of new channel, temporary diversion dams would be removed and stream flow reactivated in the newly reconstructed channel. The project construction activities are not expected to impact temperature or dissolved oxygen within Grave Creek. This project has applied for a temporary turbidity exemption (318 Authorization) from the Department of Environmental Quality.

B. Drainage patterns and surface runoff.

The proposed project will create a stable, vegetated floodplain and should decrease the amount of surface runoff over the riparian area. This will decrease surface erosion rates within and downstream of the project area.

C. Alteration of the course or magnitude of floodwater or other flows.

Most of the current stream channel is in an aggraded condition and the majority of the floodplain is relatively non-vegetated and unstable. Constructing a properly functioning stream channel will facilitate the efficient transport of water and sediment during high stream discharges without substantial damage to the stream banks and floodplain areas. The proposed stream channel will reduce flood hazards by creating a properly functioning floodplain that will help dissipate the energy of floodwaters, and may allow the floodplain to retain more ground water. Increasing ground water in the riparian area may likely increase stream base flows and help to moderate summer water temperatures in Grave Creek during summer months.

4. VEGETATION

A. Change in the diversity, productivity, or abundance of plant species.

Riparian vegetation and cover would be disturbed during the period of construction. However, proposed revegetation efforts would act to mitigate these disturbances.

The revegetation plan will consist of the following components:

1) Root stock vegetation with Vextar tubing
2) Dormant pole plantings
3) Whole shrub and sod transplants
4) Willow sprigs
5) Broadcast seed application

Approximately 2,330 individual containers consisting of black cottonwood, thin-leafed alder, sandbar willow, geyer willow, and red osier dogwood (or a combination of several of these species) along with 4,670 dormant pole plantings and willow sprigs will be planted on the reconstructed stream banks and floodplain areas. Additionally, mature shrubs and sod transplants will complement the revegetation effort in areas of high shear stress (i.e., meander bends). Finally, a broadcast seed application will be applied to all disturbed areas to facilitate cover in the project area.

5. FISH/WILDLIFE

A. Changes in the diversity or abundance of game and nongame animals or bird species.

The current condition of the riparian habitat within the project area has limited value to either game or nongame wildlife species due to the unstable nature of the stream channel that migrates laterally on a semi-annual basis. The regular migration of the stream channel within the active floodplain limits the success of riparian vegetation. This project will stabilize the stream channel and help establish a functioning shrub and coniferous/deciduous riparian community. Montana FWP anticipates that these changes will have a benefit to both game and nongame wildlife species in the long-term.

B. Terrestrial and aquatic life and habitats.

By stabilizing the existing channel we expect to create a healthier habitat for aquatic life by reducing sediment input, stabilizing the stream bed, creating pools, and providing overhead cover. Improvements in the aquatic habitat should enhance both resident trout populations in the stream and migrant populations from the Koocanusa Reservoir. Habitat for riparian-dependent wildlife would also be improved by enhancing the riparian vegetative community through the planting of native riparian shrubs along the stream margin. Project benefits will complement those generated by previously completed and by future restoration projects located on reaches downstream from this project.

List of ESA species located in or near project area:

	COMMON NAME	SCIENTIFIC NAME	STATUS	RANGE – MONTANA
1.	Gray Wolf	Canis lupus	E	Forests; Western Montana
2.	White Sturgeon	Acipenser transmontanus	E	Bottom dwelling; Kootenai River (Kootenai River population)
3.	Grizzly Bear	Ursus arctos horribilis	T	Alpine/subalpine coniferous forest; Western Montana
4.	Bald Eagle	Haliaeetus leucocephalus	T*	Forested riparian; statewide
5.	Water Howellia	Howellia aquatilis	T	Wetlands; Swan Valley, Lake and Missoula Counties
6.	Bull trout	Salvelinus confluentus,	T	(Columbia River basin and St. Mary - Belly River populations) West of Continental Divide in Clark Fork, Flathead, Kootenai river basins;- cold water rivers & lakes
7.	Canada lynx T	Lynx canadensis	T	Western Montana - montane spruce/fir forest (contiguous U.S. population)
8.	Spalding's Campion	Silene spaldingii	(Proposed T)	Upper Flathead River drainage and Tobacco Valley - open grasslands with rough fescue or bluebunch wheatgrass

Notes:

* On July 6, 1999, the bald eagle was proposed for removal from the Federal List of Endangered and Threatened Wildlife. The bald eagle remains protected as a threatened species until delisting is final.

6. NOISE/ELECTRICAL EFFECTS

The proposed action will have no adverse secondary and cumulative impacts on the human environment.

7. LAND USE

The proposed action will have no adverse secondary and cumulative impacts on the land use in the project area.

8. RISK/HEALTH HAZARDS

A. Risk of an explosion or release of hazardous substances in the event of an accident or other forms of disruption.

Contractors will be required to have emergency oil spill clean-up equipment on the project site during project implementation.

9. COMMUNITY IMPACT

The proposed action will have no adverse secondary and cumulative impacts on the local community.

10. PUBLIC SERVICES/TAXES/UTILITIES

A. Project maintenance costs.

We have budgeted10% of the total project cost for potential maintenance for this project. Maintenance needs are typical after bed materials sort in the channel during post project bankfull or greater water discharges.

11. AESTHETICS/RECREATION

A. Access to & quality of recreational activities.

Montana FWP anticipates that the stabilization of 4,800 feet of Grave Creek would improve overall aquatic habitat and, as a result, would enhance native westslope cutthroat trout and bull trout populations within Grave Creek. Migrant bull trout populations from Lake Koocanusa may also be enhanced. Consequently, the recreational fishery in Grave Creek and potentially Koocanusa Reservoir may be expected to improve. Fishing access is provided to the public by permission from the landowners.

12. CULTURAL/HISTORICAL RESOURCES

A. Historic and archaeological sites.

The proposed project will require an individual Army Corp of Engineers 404 permit. Therefore, the State Historic Preservation Office has been contacted to determine the need for compliance with the federal historic preservation regulations. The State Historic Preservation Office recommended a cultural survey. The site was surveyed in 2000 by a USF&WS archaeologist. The cultural survey revealed no cultural resources on the natural and cultural landscape of the project area and its environment.

13. SUMMARY EVALUATION OF SIGNIFICANCE

A. Cumulative Effects.

The proposed project if implemented would represent the third stream restoration project completed on the lower 3.5 miles of Grave Creek in the last 3 years, and is the second phase of a long-term effort to restore the lower 3 miles of Grave Creek. The total net impact of this project in conjunction with the earlier completed projects and potential future projects on lower Grave Creek are expected to have long-term positive and beneficial trends with regard to bank erosion, westslope cutthroat trout and bull trout habitat complexity and diversity, water temperature, and streamside vegetation.

There are also agreements in place with the landowners to implement better riparian management practices and riparian grazing guidelines to decrease further degradation to the riparian vegetation and stream banks. This along with the restoration efforts should show positive effect for the entire system.

PART IV. EA CONCLUSION SECTION

1. Based on the significance criteria evaluated in this EA, is an EIS required (YES/NO)? If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action.

Montana Fish, Wildlife & Parks concluded that an EIS is not required for the implementation of this project. Montana Fish, Wildlife & Parks further concludes from the information presented in this document that the proposed activities will have a positive impact on the physical and human environment.

2. Describe the level of public involvement for this project if any and, given the complexity and the seriousness of the environmental issues associated with the proposed action, is the level of public involvement appropriate under the circumstances?

The proposed project is being sponsored by the Kootenai River Network (KRN) with funding contributions from Montana Fish, Wildlife and Parks, US Fish and Wildlife Service Partners for Wildlife, US Fish and Wildlife Service Private Stewardship Grant Program, Montana Department of Environmental Quality, Lincoln County Resource Advisory Committee and two landowners (Patrick Flanagan and Leslie Turner). This section of Grave Creek has been designated as a navigable river, and therefore project implementation will require a land use license/easement issued by the Montana Department of Natural Resources and Conservation (DNRC). The Environmental Assessment (EA) is being distributed to all individuals and groups listed on the cover letter. The EA will be posted on the Fish, Wildlife & Parks Web site at fwp.state.mt.us.

3. Duration of comment period, if any. Date when comments are due. Mail or e-mail address to send comments.

There will be a 30-day public comment period from June 17 through July 18, 2004. Comments will be accepted through 5:00 p.m. on July 18, 2004. Please address questions or comments to Fisheries Biologist Jim Dunnigan or Fish & Wildlife Technician Jay DeShazer at the address, telephone number, or e-mail addresses below.

4. Name, title, address, and phone number of the person(s) responsible for preparing the EA:

Jim Dunnigan, Fisheries Biologist
Jay DeShazer, Fish & Wildlife Technician III
Libby Area Office
475 Fish Hatchery Road
Libby, Montana
406-293-4161
jdunnigan@state.mt.us
jdeshazer@state.mt.us

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 OR STIPALTIONS 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.]
__X__	_____	5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
__X__	_____	5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
_____	__X__	6. Does the action have a severe impact on the value of the property?
_____	__X__	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.]
_____	__X__	7a. Is the impact of government action direct, peculiar, and significant?
_____	__X__	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?
_____	__X__	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.

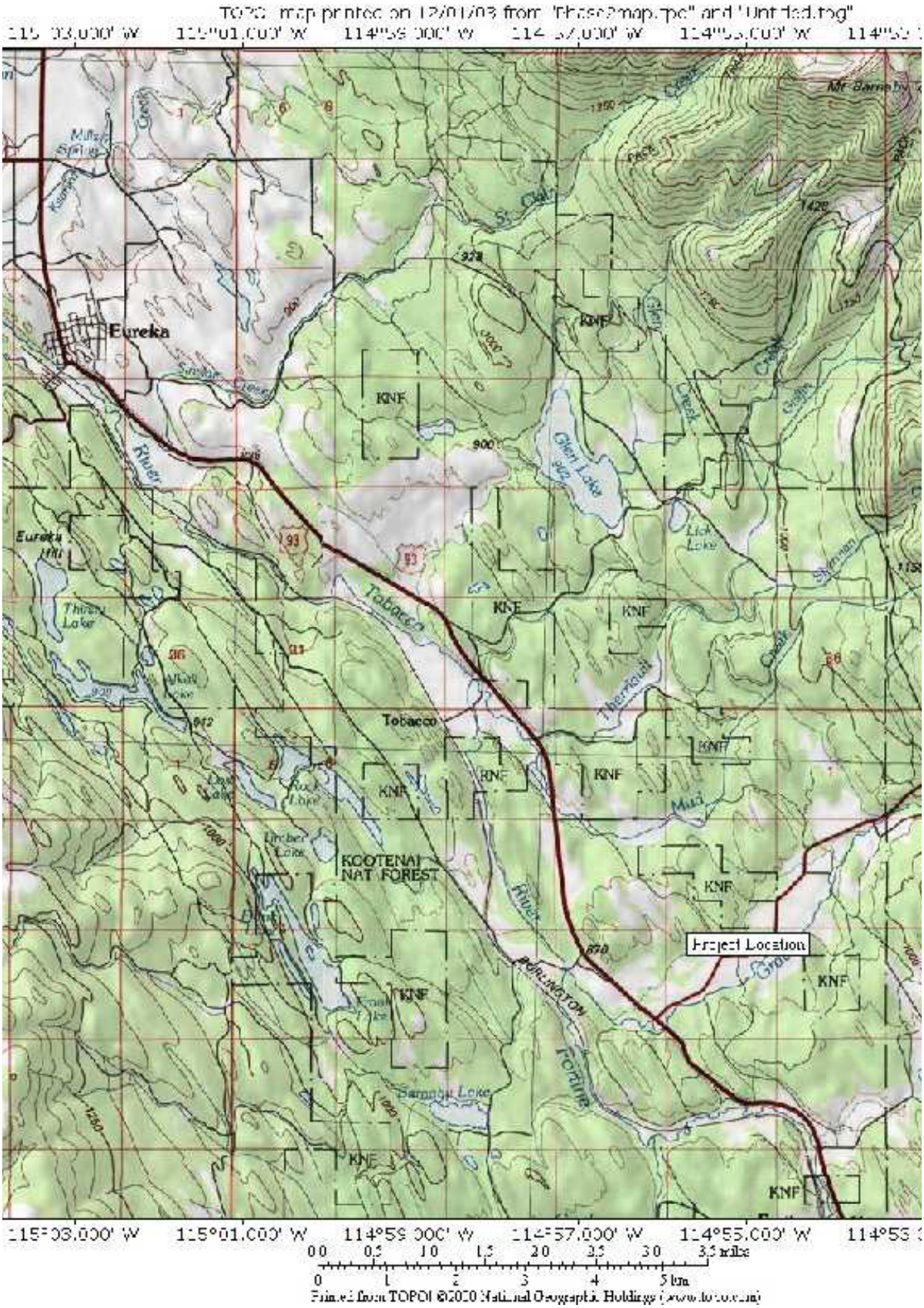

Figure 1. General vicinity map of Grave Creek Phase II Stream Restoration Project.

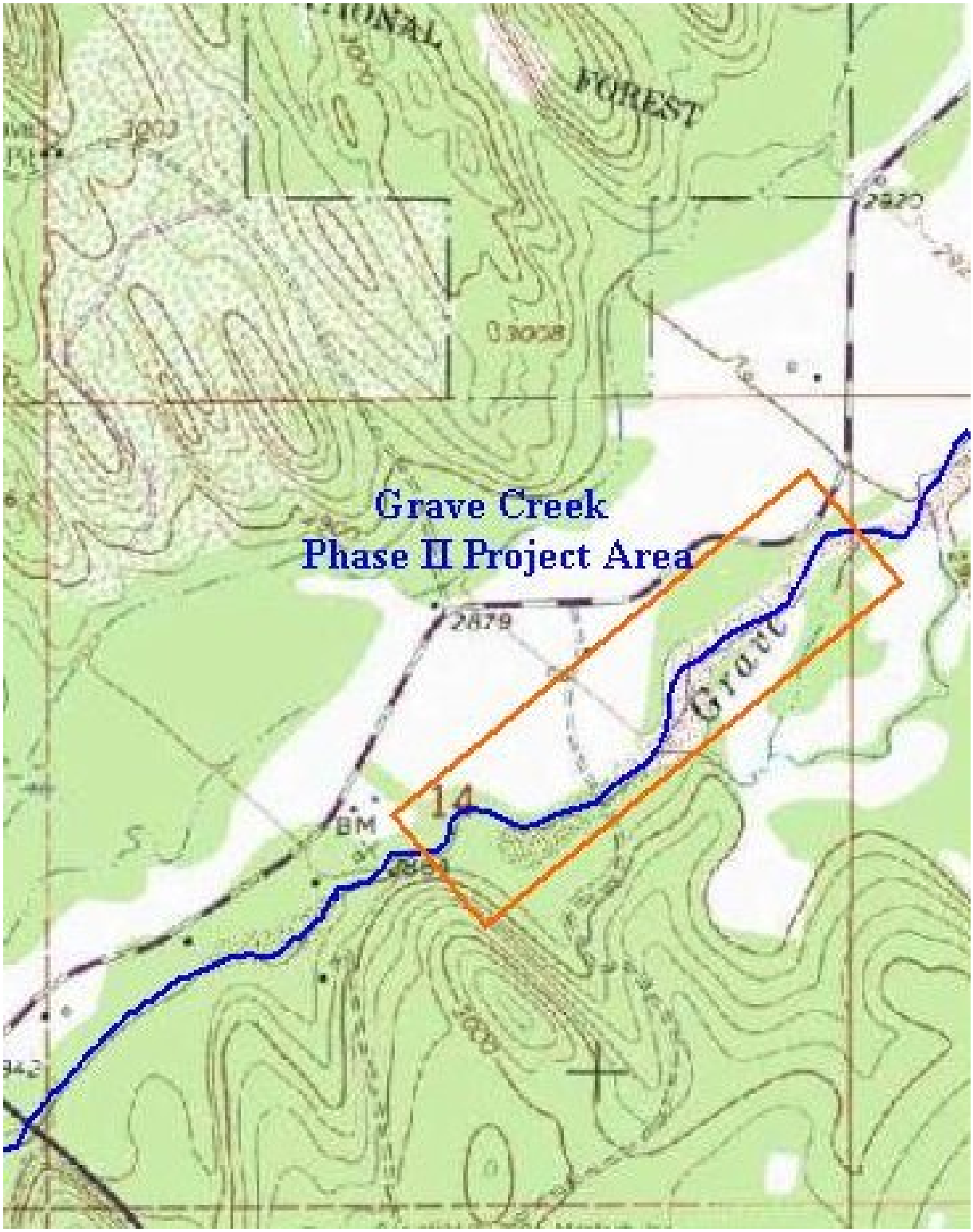

Figure 2. Detailed Map of Grave Creek Phase II Stream Restoration project.