DRAFT
ENVIRONMENTAL ASSESSMENT

SIXTEENMILE CREEK
FISHING ACCESS SITE
PROPOSED ACQUISITION AND DEVELOPMENT

JULY 2010

Montana Fish, Wildlife & Parks

Sixteenmile Creek Fishing Access Site
Proposed Acquisition and Development
Draft Environmental Assessment
MEPA, NEPA, MCA 23-1-110 CHECKLIST

PART I. PROPOSED ACTION DESCRIPTION

1. Type of proposed state action:

Montana Fish, Wildlife & Parks (FWP) proposes to acquire 89.16 acres of land along a five-mile stretch of abandoned Milwaukee Railroad right-of-way approximately one mile west of Highway 89 and one-half mile west of Ringling, Montana, for the purpose of developing a day use fishing access site (FAS) on Sixteenmile Creek. FWP also proposes to construct a parking area for approximately eight vehicles at the eastern end of the property, an access road to and fencing around the parking area, and installation of a vault latrine, and directional and informational signs. Western Rivers has offered to sell the property for the appraised price of $315,000, with Montana Fish, Wildlife, and Parks Foundation contributing $250,000 and FWP contributing the remaining $65,000. FWP proposes to acquire the parcel in fee title.

2. Agency authority for the proposed action:

The 1977 Montana Legislature enacted statute 87-1-605, which directs Montana Fish Wildlife and Parks (FWP) to acquire, develop, and operate a system of fishing accesses. The legislature earmarked a funding account to ensure that the fishing access site program would be implemented. Sections 23-1-105, 23-1-106, 15-1-122, 61-3-321, and 87-1-303, MCA, authorize the collection fees and charges for the use of state park system units and fishing access sites, and contain rule-making authority for their use, occupancy, and protection. Furthermore, state statute 23-1-110 MCA and ARM 12.2.433 guides public involvement and comment for the improvements at state parks and fishing access sites, which this document provides.

ARM 12.8.602 requires the Department to consider the wishes of users and the public, the capacity of the site for development, environmental impacts, long-range maintenance, protection of natural features and impacts on tourism as these elements relate to development or improvement to fishing access sites or state parks. This document will illuminate the facets of the proposed project in relation to this rule. See Appendix A for HB 495 qualification.

3. Name of project:

Sixteenmile Creek Fishing Access Site Proposed Acquisition and Development

4. Project sponsor:

Montana Fish, Wildlife and Parks, Region 3
1400 South 19th Ave
Bozeman, MT 59718
(406) 994-4042

5. Anticipated Schedule:

Estimated Public Comment Period: July 2010
Estimated Decision Notice: August 2010
FWP Commission and Land Board Approval: August 2010
Estimated Construction Commencement Date: Summer 2011
Estimated Completion Date: Summer 2011
Current Status of Project Design (% complete): 0%

6. Location:

The Sixteenmile Creek Proposed FAS site runs five miles along the abandoned Milwaukee Railroad right-of-way along Sixteenmile Creek, beginning one-half mile west of Ringling, Montana and 1 mile west of Highway 89 in Section 36 Township 6 North Range 6 East; Sections 20, 21, 22, 23, 29, 30, and 31 Township 6 North Range 7 East. The property lies entirely in Meagher County.

Figure 1. Sixteenmile Creek Proposed FAS General Location

Figure 2. Sixteenmile Creek Proposed FAS Parcel Map

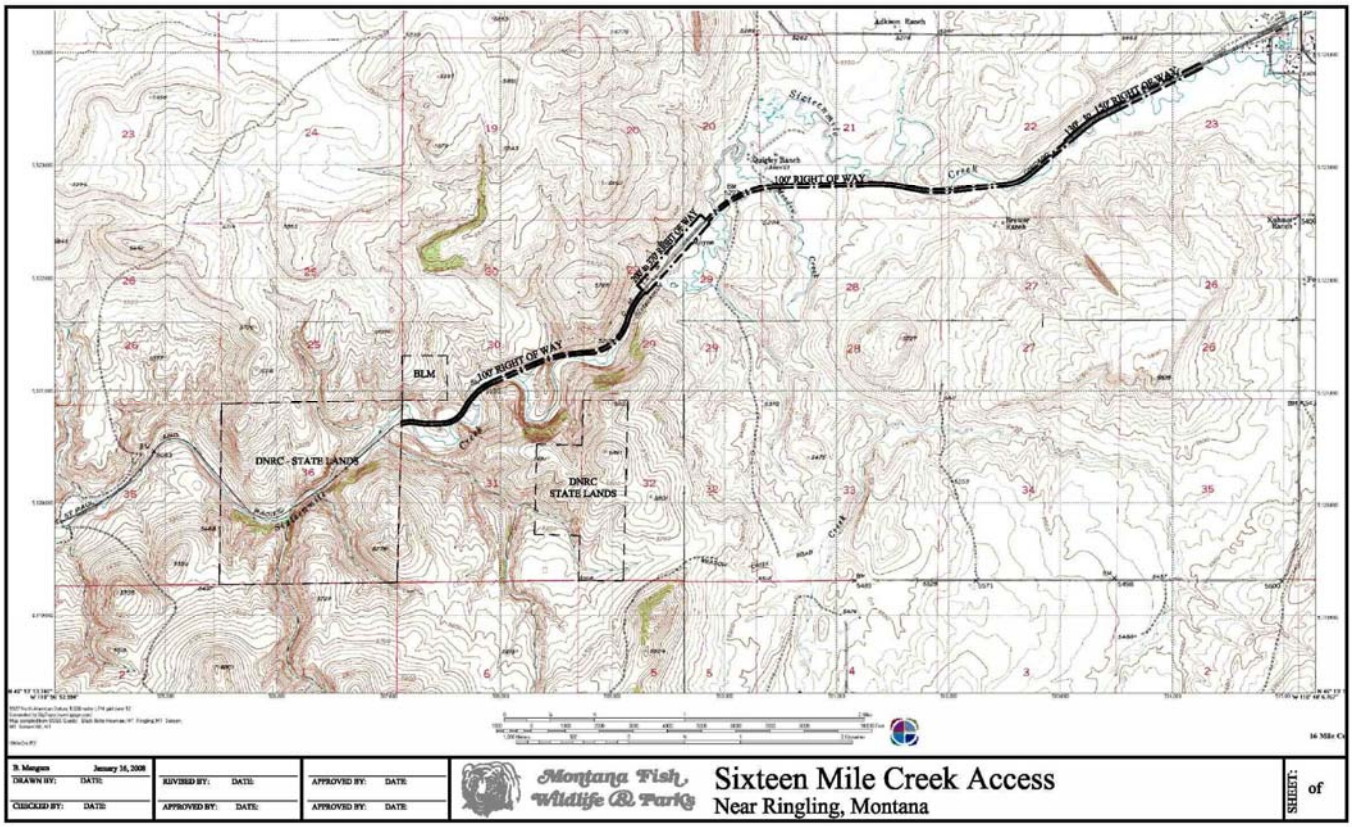
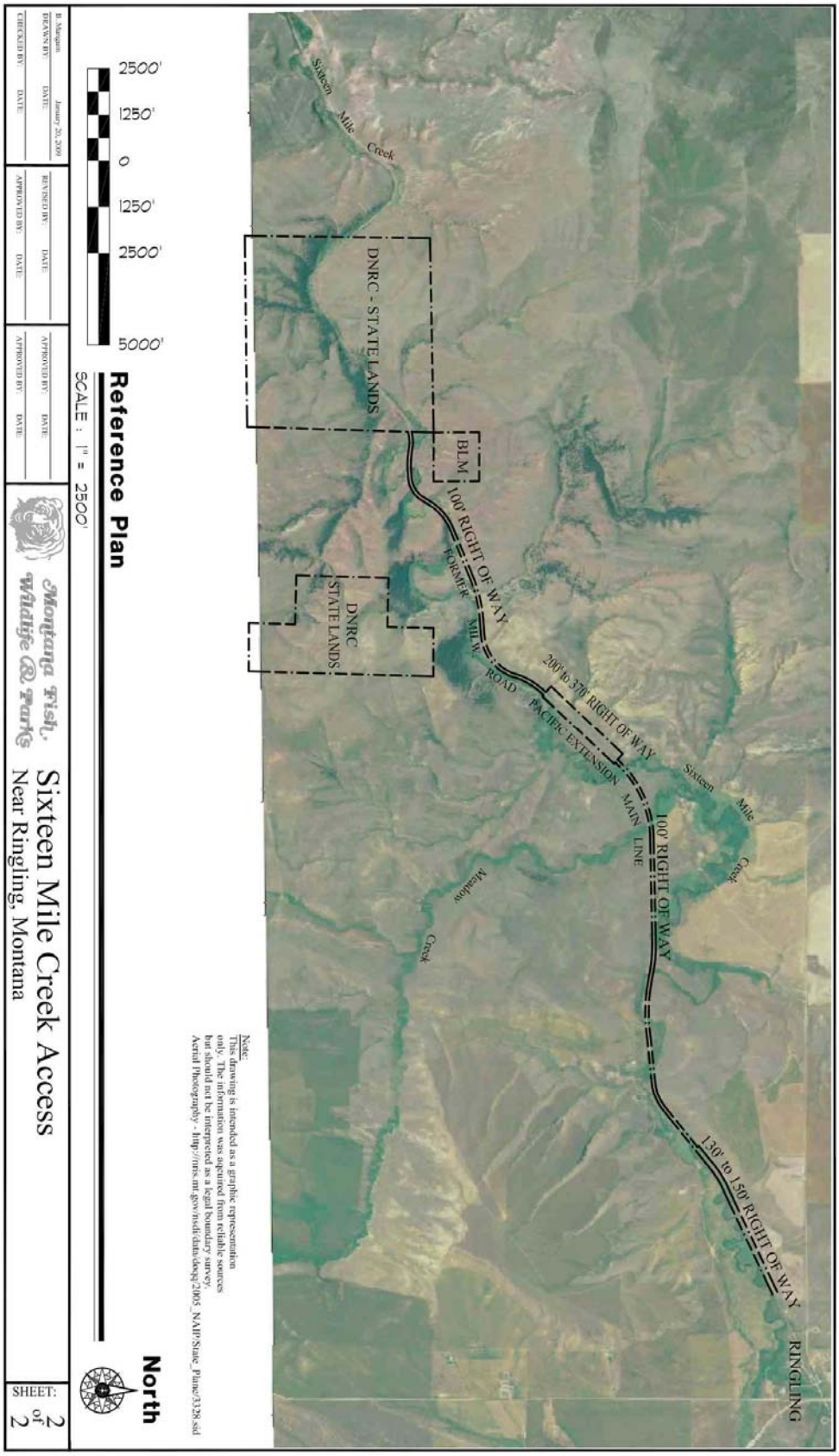


Figure 3. Sixteenmile Creek Proposed FAS Concept Map.



7. Pr

	Acres		Acres
(a) Developed:		(d) Floodplain	0
Residential	0		
Industrial	0	(e) Productive:	
		Irrigated cropland	0
(b) Open Space/	45*	Dry cropland	0
Woodlands/Recreation		Forestry	0
(c) Wetlands/Riparian	45*	Rangeland	0
Areas		Other	0

* Approximate acreage for open space/woodlands/recreation and wetlands/riparian.
NOTE: The proposed parking area would be located on approximately ½ acre of open space.

8. Local, State or Federal agencies with overlapping or additional jurisdiction:

(a) Permits:

Agency Name	Permits
Montana Fish Wildlife & Parks	124 MT Stream Protection Act (if required)
Montana Dept. of Environmental Quality	318 Short Term Water Quality Standard for Turbidity (If required)
US Army Corps of Engineers	404 Federal Clean Water Act (if required)
Meagher County	Floodplain Permit

(b) Funding:

Agency Name	Funding Amount
Access Montana	$65,000
Montana Fish, Wildlife and Parks Foundation	$250,000
Montana Fish Wildlife & Parks FAS Development	$50,000

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

Section 7-22-2154 (2), MCA requires a weed inspection by the county weed district before acquiring new land, which has been completed by the Meagher County Weed District.

Agency Name	Type of Responsibility
Meagher County Weed District	Weed Management Coordination
Natural Heritage Program	Species of Concern (Appendix B)
State Historic Preservation Office	Cultural & Historic Resources

9. Narrative summary of the proposed action:

From its beginnings in the Crazy and Big Belt Mountains of south central Montana, Sixteenmile Creek flows 69 miles southwest to its confluence with the Missouri River near Toston. Sixteenmile Creek derives its name from the fact that it enters the Missouri River 16 miles north of the river's beginning at Three Forks and is known throughout the region for its historic and scenic significance. The Lewis and Clark Expedition passed by the mouth of Sixteenmile Creek as they traveled along the Missouri River. Ringling, on the eastern end of Sixteenmile Creek, is the childhood home of Ivan Doig, the acclaimed Montana author of *This House of Sky*; is the one-time home of the Ringling Brothers, founders of the Ringling Brothers Circus; and is located along the historic Montana Railroad line. The rail line that runs along much of Sixteenmile Creek was originally built by the Montana Railroad 1895 and was later operated by Milwaukee Railroad until it was

abandoned in 1980. Much of the creek between Toston and Ringling is also particularly scenic, flowing among deep canyons.

Sixteenmile Creek maintains a fairly low gradient west of Ringling and is a well-established meandering stream upstream of Moyne, becoming a pool and riffle stream through the canyon downstream of Moyne, providing excellent habitat for trout. Adventurous anglers used to access the canyon runs of Sixteenmile Creek from the tracks of the Milwaukee Railroad. After the Milwaukee Railroad declared bankruptcy, ownership of its right-of-way reverted to private ownership. In order to fish Sixteenmile Creek today, permission must be obtained from landowners or outfitters who have permission from those landowners. Much of the creek is isolated and lightly fished. Recent surveys conducted by FWP show that Sixteenmile Creek supported an average of 807 angler days per year from 1997 to 2007, and statewide rankings for fishing pressure ranged from a high of 244 to a low of 508 during this period. Game fish opportunities include brook trout, rainbow trout, brown trout, and mountain whitefish.

The vegetation found on the proposed acquisition site varies from herbaceous dominated riparian on the eastern 2.5 miles to shrub dominated riparian and occasional conifer forests on the remaining 2.5 miles of the property. The herbaceous dominated riparian areas primarily consist of grasses and grass-like plants, such as reed canarygrass, sedges, cattails, smooth brome, Kentucky bluegrass, red top, and basin wildrye. Common grasses found on drier sites include bluebunch wheatgrass, Columbia needlegrass, green needlegrass, Idaho fescue, smooth brome, and cheatgrass. Common shrubs found in riparian areas include coyote willow, other willow species, chokecherry, and wild rose. Shrubs found in drier sites include big sagebrush, rubber rabbitbrush, and Rocky Mountain juniper. Stands of Douglas fir and limber pine are primarily found on north-facing slopes within the canyon along the western two miles of the property. Common introduced species found on the property include smooth brome, cheatgrass, and common mullein. The most common noxious weeds found on the property include spotted knapweed on drier sites, Canada thistle along the creek, St. Johnswort in isolated patches, and houndstongue. According to Otto Olsen of the Meagher County Weed District, the noxious weeds on the property have been treated annually since 2003 by the weed district, which has dramatically reduced their populations.

The proposed FAS totals 89.16 acres and includes five miles of abandoned railroad right-of-way. This includes six bridges over Sixteenmile Creek and one bridge over Meadow Creek and ranges from 100’ to 370’ wide. For 100 years, this property was defined by the railroad. There are still remnants of its past history remaining on the property even though the railroad tracks have been removed. The ties were not salvaged but rather pushed off the roadbed with a dozer and left in numerous piles next to the roadbed. The copper wires from the telegraph/telephone line have been removed, though the poles and cross arms remain through most of this section. Except for a pile of poles located along the road 1.7 miles west of Ringling, all transmission poles were removed from the property. Remnants of particleboard and a boxcar, evidence of a derailment, are found in a barrow pit. Earl Griffith, GEC, Inc., found no hazardous materials during his site inspection in December 2008. Mr. Griffith also found a 15 gallon grease drum mixed in with railroad ties about two miles west of Ringling, though there was no grease in the open drum. No containers with hazardous materials were found on the property. No substations, and therefore no asbestos, are located on the property.

No fishing access sites managed by FWP, U.S. Bureau of Land Management

(BLM), or U.S. Forest Service (USFS) are found along Sixteenmile Creek, and public access along the creek is limited and isolated. Along its 69 miles, Sixteenmile Creek flows through small parcels of land managed by Lewis and Clark, Gallatin, and Helena National Forests, BLM, and Montana Department of Natural Resources and Conservation (DNRC), much of which is not accessible by public road. Most of the land along the railroad right-of-way is privately owned, and stream access is limited to bridge crossings of Sixteenmile Creek Road and isolated parcels of USFS land. There is currently no public access to the 640 acres of state land located in T6N R6E section 36.

The acquisition of this 89.16 acre parcel of the five-mile stretch of abandoned Milwaukee Railroad right-of-way along Sixteenmile Creek would allow FWP to preserve this stretch of riparian and open-space habitat and allow for permanent public access to both this scenic and historic stretch of Sixteenmile Creek and to the 640 acre section (T6N R6E Section 36) owned by DNRC that is currently not accessible to the public. The land, if acquired, would be open to the general public. The property includes a five-mile long gravel road, running the length of the right-of-way, created when the tracks were removed from the railbed.

FWP envisions providing a parking area at the east end of the property and providing non-motorized access along the five-mile parcel upon acquisition. The existing road on the abandoned Milwaukee Railroad right-of-way would be utilized only for service activities such as weed control and administrative access for maintenance, operations, enforcement, and search and rescue. In addition, an access road, vault latrine, parking area fencing, and directional, informational, and regulatory signs are proposed around the parking area upon acquisition. This site would be managed for day use only, and camping would be prohibited.

This environmental analysis focuses solely on the acquisition on the 89.16-acre property along Sixteenmile Creek, and the initial development of a parking area and associated fencing, access road, and installation of a vault latrine and directional and informational signs. If FWP were to initiate new development in addition to the proposed initial development, a separate environmental assessment would be completed and the public would have the opportunity to comment on proposed developments.

PART II. ENVIRONMENTAL REVIEW

1. **Description and analysis of reasonable alternatives:**

Alternative A: No Action

If no action were taken, Western Rivers would likely pursue other alternatives for selling the property, and FWP would lose the opportunity to provide public access to this stretch of Sixteenmile Creek.

Alternative B: Proposed Action

Montana Fish, Wildlife & Parks (FWP) proposes to acquire 89.16 acres via fee title in order to develop a day use fishing access site and provide public access to Sixteenmile Creek for fishing, wildlife viewing, and non-motorized trail use. The target property is along a five-mile stretch of abandoned Milwaukee Railroad right-of-way approximately

one mile west of Highway 89 and one-half mile west of Ringling, Montana. Western Rivers has offered to sell the property for the appraised price of $315,000, with the Montana Fish, Wildlife, and Parks Foundation contributing $250,000 and FWP contributing the remaining $65,000. In addition, FWP proposes to develop a parking area with an access road and fencing around the parking area, vault latrine, and signs.

2. **Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:**
   There are no mitigations, stipulations, or other controls associated with this action, therefore no evaluation is necessary. FWP staff will develop the final design and specifications for the proposed project. All county, state, and federal permits listed in Part I 8 (a) above will be obtained by FWP as required. A private contractor selected through the State's contracting processes will complete the construction.

PART III. ENVIRONMENTAL REVIEW CHECKLIST

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 *					
	Unknown *	None	Minor *	Potentially Significant	Can Impact Be Mitigated *	Comment Index
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				
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				
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		X			.	

The proposed acquisition and parking lot development would have no effect on existing soil patterns, structures, productivity, fertility, erosion, compaction, or instability. Providing a designated parking area would prevent uncontrolled, pioneered parking and prevent degrading the vegetation, which would result in compaction of the soil and the spread of noxious weeds.

* 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 cannot 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.

2. AIR Will the proposed action result in:	IMPACT *					
	Unknown *	None	Minor *	Potentially Significant	Can Impact Be Mitigated *	Comment Index
a. **Emission of air pollutants or deterioration of ambient air quality? (Also see 13 (c).)			X		Yes	2a.
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.)		NA				

The proposed acquisition would have no impact on air quality.

2a. During construction of the parking area and access road, dust may temporarily be generated during soil excavation and placement. If additional materials are needed off-site, loading at the source site will generate minor amounts of dust. FWP will follow the Best Management Practices (BMP's) during all phases of construction to minimize risks and reduce dust. (See Appendix G for the BMP's)

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3. **WATER** **Will the proposed action result in:**	**IMPACT ∗**					
	Unknown ∗	**None**	**Minor ∗**	**Potentially Significant**	**Can Impact Be Mitigated ∗**	**Comment Index**
a. ∗Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?			X		Yes	3a.
b. Changes in drainage patterns or the rate and amount of surface runoff?			X		Yes	3b.
c. Alteration of the course or magnitude of floodwater or other flows?		X				
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		Yes	3h..
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.)		NA				
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.)		NA				

The proposed acquisition would have no effect on surface water, drainage patterns, or floodwater routes. The route of the road and the location of the bridges would not be changed and, therefore would not affect the course or use of Sixteenmile Creek.

Flood plains in Meagher County have not been mapped, so it is uncertain how frequently the proposed acquisition property would flood. Due to the low gradient and meandering aspect of Sixteenmile Creek in the eastern half of the property, it is likely that the portions of the proposed acquisition property close to the creek would routinely flood in this area.

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3a. Construction of the access road, parking lot, and latrine may cause a minor, temporary, localized increase in turbidity in Sixteenmile Creek. FWP will obtain a Montana Department of Environmental Quality (DEQ) 318 Authorization Permit, as required. FWP Best Management Practices will be followed (Appendix G).

3b. Construction of the parking lot, access road, and latrine may slightly alter surface runoff. The proposed work would be designed to minimize any effect on surface water, surface runoff, and drainage patterns. FWP Best Management Practices will be followed (Appendix G).

3h. The use of heavy equipment during construction may result in a slight risk of contamination from petroleum products and an increase in sediment delivery to the creek. FWP Best Management Practices will be followed during all phases of construction to minimize these risks. (Appendix G). The application of herbicides to manage the existing noxious weeds would be done per the guidelines presented in the FWP Statewide Integrated Noxious Weed Management Plan.

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

4a/4b. The vegetation found on the proposed acquisition site varies from herbaceous dominated riparian on the eastern 2.5 miles to shrub dominated riparian and occasional conifer forest on the remaining 2.5 miles of the property. The herbaceous dominated riparian areas primarily consist of grasses and grass-like plants, such as reed canarygrass, sedges, cattails, smooth brome, Kentucky bluegrass, red top, and basin wildrye. Common grasses found on drier sites include bluebunch wheatgrass, Columbia needlegrass, green needlegrass, Idaho fescue, smooth brome, and cheatgrass. Common shrubs found in riparian areas include coyote willow, other willow species, chokecherry, and wild rose. Shrubs found in drier sites include big sagebrush, rubber rabbitbrush, and Rocky Mountain juniper. Stands of Douglas fir and limber pine are found primarily on north-facing slopes within the canyon along the western two miles of the property. Common introduced species found on the property include smooth brome, cheatgrass, and common mullein.

Development of the parking area will not take any cropland out of production because the area has not been in agricultural production since the railroad was built 100 years ago.

4b. Opening this area to public access may increase angling pressure in this stretch of Sixteenmile Creek which could affect riparian vegetation through trampling. However because the area will only be open to non-motorized traffic and the parking area will be at least 2.5 miles from the canyon entrance, the increase in angling use, and therefore the impact on riparian vegetation, is expected to be minimal.

4c. A search of the Montana Natural Heritage Program's (MNHP) species of concern database found no vascular or non-vascular plants species of significance within the boundaries of the proposed acquisition property.

4e. The primary noxious weeds currently found on the property include spotted knapweed, St. Johnswort, Canada thistle, and houndstongue (Appendix H Weed Inventory). Other common weedy species found on the site include common mullein and various other species of thistles. The Meagher County Weed District has aggressively treated weeds on the property since 2003, successfully reducing the cover of noxious weeds from 2002 levels. If the acquisition were approved, FWP would initiate the Statewide Integrated Weed Management Plan using chemical, biological, and mechanical methods. Weed management would facilitate the restoration of native vegetation and prevent the spread of weeds.

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Soils disturbed during the construction of the parking area, access road, and latrine may colonize with weeds. Disturbed areas will be re-seeded where necessary to reduce the establishment of weeds, and the area will be managed with an emphasis on controlling noxious weeds under the FWP Statewide Integrated Noxious Weed Management Plan. FWP estimates that weed control will cost approximately $2500 during fiscal year 2011. Vehicles would be restricted to the parking area, which would be maintained as weed-free. Occasional service vehicles would be restricted to the corridor service road and would not be allowed on the undisturbed areas of the site.

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** 5. FISH/WILDLIFE Will the proposed action result in:	IMPACT *					
	Unknown *	None	Minor *	Potentially Significant	Can Impact Be Mitigated *	Comment Index
a. Deterioration of critical fish or wildlife habitat?		X				
b. Changes in the diversity or abundance of game animals or bird species?		X				5b.
c. Changes in the diversity or abundance of nongame species?		X				5c.
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				5f.
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?		X				5g.
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.)		NA				
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.)		NA				

The proposed acquisition and initial development would have no bearing on the game and non-game species that frequent the property and is not considered critical habitat for any species, according to FWP Wildlife Biologist Tom Carlsen.

5b/5c. Based upon FWP wildlife biologists Allison Begley and Tom Carlsen and a review of Natural Resource Program Tracker, wildlife species whose habitat distribution overlaps the proposed acquisition area include whitetailed and mule deer, elk, antelope, mountain lion, moose, black bear, beaver, river otter, small mammals (voles, shrews and mice), golden eagles, great blue herons, sandhill cranes, trumpeter swans, raptors, waterfowl, and migratory and neotropical song birds. In addition, the region surrounding the proposed acquisition site supports numerous elk. According to FWP wildlife biologist Tom Carlsen, it is unlikely that acquisition of the Sixteenmile Creek parcel would impact wildlife or wildlife habitat.

Based upon visits by FWP fisheries biologists in September 2007 and April 2008 and electrofishing data collected in 2005 and 2008, the stretch of Sixteenmile Creek that runs along the eastern two miles of the proposed acquisition property provides marginal habitat for fish. No catchable fish were found in this section of Sixteenmile Creek in 2005 when it was electrofished by FWP fisheries biologists. When the creek was electrofished in 2008, only a few small trout, some suckers and sculpins were found. In September 2007, FWP biologists found that the upper third of the stream was dewatered due to irrigation. According to Otto

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Olsen, Meagher County Weed District, during years of below normal snow pack it is not unusual for this stretch of Sixteenmile Creek to be dewatered during July and August.

However based upon FWP surveys, the stretch of Sixteenmile Creek that flows through the canyon on the western half of the property provides good to excellent fish habitat. Recent surveys show that Sixteenmile Creek supported an average of 710 angler days per year since 1999, with a high of 1088 in 1999, and statewide rankings for fishing pressure ranged from a high of 264 to a low of 508. Opening this area to public access may increase angling pressure on game fish in this stretch of Sixteenmile Creek. However because the area will only be open to non-motorized traffic and the parking area will be approximately two miles from the canyon entrance, the increase in angling use is expected to be minimal and not expected to affect fish populations. Because the parking lot will not be built along the stream, it is unlikely that sedimentation in the stream would be increased enough during construction to affect fish or the aquatic habitat.

5f. A search of the Natural Resources Information System (NRIS) provided by the Montana Natural Heritage Program showed that no endangered or threatened species are found in the vicinity of the property. However, NRIS identified two species of concern in the vicinity of Sixteenmile Creek: greater sage grouse and gray wolf. Greater sage grouse were observed within two miles of the propose acquisition site as recently as 2006. The proposed project is unlikely to have any impact on greater sage grouse since it's habitat consists of sagebrush-covered benches, alfalfa fields, and greasewood bottoms, which are not found on the proposed acquisition site.

Gray wolves are listed as delisted in the Central Idaho Recovery Area by USFWS, Sensitive by USFS, and Special Status by BLM, in Tier 1 of the FWP Comprehensive Fish and Wildlife Conservation Strategy (CFWCS) and S3/G4 by MNHP. The ranking by MNHP indicates the species is potentially at risk of extirpation in the state and uncommon but not rare globally. In 2002, wolves met the recovery criteria set by the USFWS and are therefore biologically recovered. The gray wolf was officially delisted from the federal Endangered Species Act as of May 4, 2009. Montana's state laws, regulations and management plan replace federal regulations. Gray wolves are protected and managed as a Montana species in need of management. According to Val Asher, FWP Wolf Management Specialist, the project is within the habitat of the gray wolf in the Sixteenmile Creek watershed. There is one known pack (Lebo Peak pack) with a home range from Lennup to Two Dot, approximately 35 miles east of Ringling. While it is possible for wolves to travel through the project area, none have been sighted in the immediate area. The wolf population in Montana is strong and wolves may pass through just about any area including this site. FWP wolf specialist Val Asher has no concerns with this project impacting gray wolves.

5g. The proposed acquisition and initial development is unlikely to stress or impact fish or wildlife populations in the future since the area was historically disturbed from use by the Milwaukee Railroad.

Allowing public access to the railroad right-of-way and to the state section may increase elk hunting in the area. However by making the road only open to non-motorized traffic, the extent of increased hunting pressure on elk would be minimized.

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B. HUMAN ENVIRONMENT

6. NOISE/ELECTRICAL EFFECTS Will the proposed action result in:	IMPACT *					
	Unknown *	None	Minor *	Potentially Significant	Can Impact Be Mitigated *	Comment Index
a. Increases in existing noise levels?			X		Yes	6a.
b. Exposure of people to severe or nuisance noise levels?			X		Yes	6b.
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				

The proposed acquisition would have no impact on noise level or electrical levels and would not interfere with radio or television reception or operation. Adjacent landowners would be notified and should not be affected. Visitor use is not expected to increase noise levels or disturb neighbors since no homes are located along the road and vehicles would be restricted to the parking area.

6a. Heavy equipment would be used during construction of the parking area, access road, and latrine, which would temporarily increase noise levels at the site. FWP Best Management Practices would be followed. (Appendix G).

6b. If construction noise levels exceed a level deemed unsafe over a workday time frame, all workers would be required to wear proper ear protection. FWP would follow the Best Management Practices during all phases of construction to minimize risks. (Appendix G).

* 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 cannot 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.

7. **LAND USE** **Will the proposed action result in:**	**IMPACT ***					
	Unknown *	**None**	**Minor ***	**Potentially Significant**	**Can Impact Be Mitigated ***	**Comment Index**
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		X				
b. Conflict 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		Yes	7d.

The property is not currently used for commercial or agricultural purposes. The proposed action would not alter or interfere with the productivity or profitability of the existing land use of the property. No groundbreaking activities would be done before clearance from the State Historical Preservation Office (SHPO) is obtained. Schauber Surveying conducted a retracement survey on June 22, 2010 to confirm that there is public access to the property (Appendix F Certificate of Survey- To Retrace an Existing Parcel)

7d. Increased use of the property by the public may affect neighboring landowners by increasing litter and trespass. Allowing non-motorized access only would minimize these impacts.

* 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 cannot 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 *					
	Unknown *	None	Minor*	Potentially Significant	Can Impact Be Mitigated *	Comment Index
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		Yes	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)		NA				

8a. A Hazardous Materials Assessment for 5.5 miles of the former Milwaukee Railroad right-of-way from Ringling to the State Section in Section 36 T6N R6E was conducted by Earl Griffith of Griffith Environmental Consulting, Inc. in December 2008. The inspection revealed evidence of a derailment where it appears a boxcar of particleboard tipped off the rails and ended up in the barrow pit. The benign remnants of particleboard and part of the car are all that identify the wreck. Evidence of other derailments was not observed along this section.

This section of the Montana Railroad, and later the Milwaukee Railroad, was powered by electricity during most of its operation. Because this section of the railroad operated as a steam locomotive line for only five or six years before converting to electric locomotives, there is very little coal clinker or ash on the roadbed.

The inspection also found a 15 gallon Texaco grease drum mixed among railroad ties about two miles west of Ringling, but no grease was found inside the drum. No other containers with hazardous materials were found on the property.

According to Mr. Griffith, the creosote on the rail ties will slowly degrade as the ties age. Date nails from the ties indicate that the newest ties date from 1936 – 1939. The ties are, thus, nearly 70 years old with most much older than that. Few ties are near the creek to allow leaching of creosote; but whereas the trestle pilings are also heavily creosoted, the ties pose a minimal hazard.

The roadbed that runs along the original railroad tracks crosses seven bridges. On April 1, 2010, Kelly Williams, engineer for Fish, Wildlife and Parks, conducted a visual inspection of the seven bridges along the proposed Sixteenmile Creek proposed acquisition. Six of the seven bridges are very similar in design consisting of a gravel surface over wooden plank decking with wooden beam stringers, square beam pier caps (occasionally the pier cap consisted of two such beams stacked atop one another), wooden post piers and abutments, and wood plank wing walls. The other bridge was constructed with concrete abutments and wing walls, wooden beam decking, and steel I-beam stringers. None of the bridges have any type of guardrail extending above the gravel surfacing.

Visual inspection of the exposed portions of the sub-structure (piers, pier caps, wing-walls), super-structure (beams, stringers), and deck (decking, railing), revealed no signs of wood rot or deterioration that would affect the structural integrity of the bridges. On a couple of the bridges, there was some evidence of rot along the top of the railings that serve to keep the gravel in place. However, these members are non-structural. The outermost stringers on a number of the bridges were slightly twisted or warped, but all still have full bearing on the pier cap (see Appendix E Bridge Evaluation).

* 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 cannot 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.

A detailed analysis of the bridge's structural integrity has not been completed. Additionally, the condition of the portions of the piers located below grade or in the stream was not evaluated. However, these bridges were originally designed and erected to carry railroad cars. Barring any unseen or subsurface structural defects, these structures should be more than adequate to support occasional service vehicle traffic.

If acquired, FWP would address the noxious weeds on the property (Appendix H Weed Inventory). The Statewide Integrated Weed Management Plan calls for an integrated method of managing weeds. The use of herbicides would be in compliance with application guidelines and conducted by people trained in safe handling techniques. Weeds would also be controlled using mechanical or biological means in certain areas to reduce the risk of chemical spills or water contamination.

9. COMMUNITY IMPACT **Will the proposed action result in:**	**IMPACT ***					
	Unknown *	**None**	**Minor ***	**Potentially Significant**	**Can Impact Be Mitigated ***	**Comment Index**
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		Yes	9b.
c. Alteration of the level or distribution of employment or community or personal income?			X		Positive	9c.
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				

9b. Because Sixteenmile Creek is a meandering stream and the railroad right-of-way and the proposed acquisition is a straight and narrow parcel of land, there are places where the creek flows as little as 100 feet outside the property boundary and as little as 200 feet from the road, creating potential trespass problems. According to FWP Region 4 Warden Captain Mike Martin and Warden Sergeant Steve Vinnedge, trespass onto neighboring private property would increase by both anglers and hunters. Allowing non-motorized vehicle use of the road only would minimize the incidence of trespass.

According to Mike Martin, FWP Region 4 Warden Captain, local wardens would also be required to spend additional time patrolling the area and addressing trespass issues. Despite prohibiting vehicle use of the road, opening the area to the public would attract more people to the area and would increase the incidence of trespass onto neighboring private land. Warden Sergeant Steve Vinnedge estimates that the local warden would receive at least ten additional Tip-Mont calls during hunting and fishing seasons combined and would be required to make at least nine routine patrol visits to the site from May through August annually. This would place additional burdens on the local warden's patrol time because Sixteenmile Creek is in the southwest corner of that warden district and a long distance from usual patrol areas. Additional travel expenses are estimated to be at least $1520 per year.

9c. The proposed project is likely to improve tourism in the area, which would benefit local retail and service businesses (Appendix C - Tourism Report).

* 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 cannot 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.

9e. The use of Sixteenmile Creek would increase since there is currently no public access to this section of the creek or to the state-owned section of land. As a result, there would be increased use of the area. There would also be increased access to state land that currently has no public access.

10. PUBLIC SERVICES/TAXES/UTILITIES **Will the proposed action result in:**	**IMPACT ∗**					
	Unknown ∗	**None**	**Minor ∗**	**Potentially Significant**	**Can Impact Be Mitigated ∗**	**Comment Index**
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				10b.
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 use of any energy source?		X				
e. ∗∗Define projected revenue sources		X				
f. ∗∗Define projected maintenance costs.		X				10 f.

The proposed project would have no impact on public service, taxes or utilities
.

10b. There would be no change in the tax base since FWP would pay property taxes in an amount equal to that of a private individual.

10f. Weed control costs for 2010 are estimated to be about $2,500. Annual maintenance costs for parks staff, fencing repair, latrine maintenance, and enforcement staff time are estimated to be a minimum of $5000 if FWP acquired the property. Road maintenance costs would be minimal because the road would only be open to service vehicles. Maintenance costs are part of the Parks Operations and Maintenance budget. Informational, regulatory, and directional signs are estimated to cost $1000.

* 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 cannot 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.

** 11. AESTHETICS/RECREATION Will the proposed action result in:	IMPACT *					
	Unknown *	None	Minor *	Potentially Significant	Can Impact Be Mitigated *	Comment Index
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?			X		Positive	11a.
b. Alteration of the aesthetic character of a community or neighborhood?			X		Yes	11b.
c. **Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report.)			X		Positive	11c.
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.)		NA				

11a. Acquisition of five miles of abandoned Milwaukee Railroad right-of-way, currently privately owned and closed to the public, would allow the public access to this scenic and historic section of Sixteenmile Creek.

11b. There would be some changes to the ranching character of the neighborhood as a result of the property being accessible to the public. This would include pedestrian and bicycle traffic for the purpose of fishing, hunting, sightseeing, wildlife viewing, and picnicking.

11c. Acquisition of this property would allow public use for fishing, biking, picnicking, sightseeing, and wildlife viewing, improving recreational opportunities in the area. It would also allow for access to the 640 acres of state land located at the end of the five mile long proposed acquisition property for hunting as well as for fishing, hiking, wildlife viewing, and picnicking.

12. CULTURAL/HISTORICAL RESOURCES Will the proposed action result in:	IMPACT *					
	Unknown *	None	Minor *	Potentially Significant	Can Impact Be Mitigated *	Comment Index
a. **Destruction or alteration of any site, structure or object of prehistoric historic, or paleontological importance?		X				
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.)		NA				

* 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 cannot 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.

A clearance from the State Historic Preservation Office (SHPO) would be obtained before any groundbreaking activity was initiated.

SIGNIFICANCE CRITERIA

13. SUMMARY EVALUATION OF SIGNIFICANCE **Will the proposed action, considered as a whole:**	**IMPACT ***					
	Unknown *	**None**	**Minor ***	**Potentially Significant**	**Can Impact Be Mitigated ***	**Comment Index**
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				
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.)		NA				
g. ****For P-R/D-J, list any federal or state permits required.		NA				

The proposed action would have no negative cumulative effects on the biological, physical, and human environments. When considered over the long-term, the proposed action poses positive effects towards the public's access of a scenic and historic area of Sixteenmile Creek.

* 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 cannot 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 III. NARRATIVE EVALUATION AND COMMENT

The proposed action would have no negative cumulative effects on the biological, physical, and human environments. When considered over the long term, the proposed action poses positive effects towards the public's access of a scenic and historic area of Sixteenmile Creek.

The minor impacts to the environment that were identified in the previous section are small in scale and would not influence the overall environment of the immediate area. The natural environment would continue to provide habitat to transient and permanent wildlife species and would be open to the public for access to the river and to the state section in T6N R6E Section 36 for fishing, hunting, hiking, picnicking, sightseeing, and wildlife viewing.

Even though abandoned railroad right-of-ways are typically weedy, the Meagher County Weed District has aggressively treated weeds on the property since 2003, successfully reducing the cover of noxious weeds from 2002 levels. Continued weed management would facilitate the restoration of native vegetation and prevent the spread of weeds.

The proposed alternative would have little impact on the local wildlife species that frequent the property, would not increase negative conditions that stress wildlife populations, and the property is not considered critical habitat for any species. Even though the area is within the habitat of greater sage grouse, the proposed project is unlikely to have any impact on this species since its habitat consists of sagebrush covered benches, alfalfa fields, and greasewood bottoms which are not found on the acquisition site. While it is possible for wolves to travel through the project area, none have been sighted in the immediate area. Even if wolves pass through the area, it is unlikely that the proposed acquisition and any subsequent development will impact gray wolves.

Even though the stretch of Sixteenmile Creek that flows through the eastern 2.5 miles of the property is sometimes dewatered during a few summer months and that no catchable fish were found from electrofishing in this stretch, the western 2.5 miles of Sixteenmile Creek that flows through the canyon provides excellent fish habitat. This stretch has historically supported an excellent fishery and, based upon FWP surveys, has supported an average of 710 angler days per year since 1999 with a high of 1088 in 1999.

Based upon inspection by Earl Griffith, the proposed acquisition property was found to be free of introduced hazardous materials. No orphan drums containing fuel or other materials were located during the inspection. There was no evidence of a siding or shed, which would have been used to store a track speeder, nor any evidence that a UST to store fuel was buried along this part of the right-of-way. Because this section of the right-of-way did not have a substation, the concerns of asbestos and transformer oil are moot. While the ties were not removed along this stretch of the right-of-way, their presence does not appear to pose a threat to the environment or to the public that may utilize the right-of-way for access to the public.

The roadbed that runs along the original railroad tracks crosses seven bridges. The roadbed is currently in good shape and is passable by passenger vehicles. Visual inspection of the exposed portions of the sub-structure, super-structure, and deck

revealed no signs of wood rot or deterioration that would affect the structural integrity of the bridges. A detailed analysis of the bridge's structural integrity has not been completed. Additionally, the condition of the portions of the piers located below grade or in the stream was not evaluated. However, these bridges were originally designed and erected to carry railroad cars. Barring any unseen or subsurface structural defects, these structures should be more than adequate to support occasional car and truck vehicle traffic.

In addition to providing public access to this stretch of Sixteenmile Creek for angling, wildlife viewing, biking, and hiking, acquisition of this property would also give public access to 640 acres of DNRC State Trust Land (S36 T6N R6E), an area that has not been accessible to the public since the rail line was abandoned in 1980. This land would also provide opportunities for angling, hunting, hiking, wildlife viewing, biking, and picnicking.

Because the proposed FAS is located in an area with a large elk population and because Sixteenmile Creek flows close to but not within the property boundaries in some areas, acquisition of this property would likely increase the incidence of trespass onto neighboring private land by anglers and hunters. This would divert time and resources from the local FWP warden to address trespass problems. By allowing non-motorized road use only, trespassing would be minimized.

This environmental analysis focuses solely on the acquisition and parking lot development of the property. If FWP were to initiate additional development of the property, a separate environmental assessment would be completed and the public would have the opportunity to comment on proposed improvements.

The proposed acquisition of an 89.16-acre parcel along Sixteenmile Creek would allow FWP to preserve this stretch of riparian habitat and provide public access to Sixteenmile Creek and to the 640-acre state section in addition to increasing other general public recreational opportunities.

PART IV. PUBLIC PARTICIPATION

1. 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 public will be notified in the following manners to comment on the Sixteenmile Creek Fishing Access Site Proposed Acquisition and Development Environmental Assessment:

- Two public notices in each of these papers: the *Meagher County News, the Bozeman Daily Chronicle,* and the *Helena Independent Record*
- Public notice on the Fish, Wildlife & Parks web page: *http://fwp.mt.gov.*
- Direct notice will be given to adjacent landowners.
- Draft environmental assessments (EA) will be available at the FWP Region 3 Headquarters in Bozeman and the FWP State Headquarters in Helena.
- A news release will be prepared and distributed to a standard list of media outlets interested in FWP Region 3 issues.

Copies of this EA will be distributed to the neighboring landowners and interested parties to ensure their knowledge of the proposed project.

This level of public notice and participation is appropriate for a project of this scope having limited impacts, many of which can be mitigated.

2. Duration of comment period, if any.

The public comment period will extend for (30) thirty days following the publication of the second legal notice in area newspapers. Written comments will be accepted until 5:00 p.m., July 30, 2010 and can be e-mailed to tgarrett@mt.gov or mailed to the address below:

Sixteenmile Creek Fishing Access Site Proposed Acquisition and Development
Montana Fish, Wildlife & Parks, Region 3
1400 South 19th Ave
Bozeman, MT 59718

If requested within the comment period, FWP will schedule and conduct a public meeting on this proposed project.

3. Organizations contributing to development and/or supporting the project.

City of Three Forks
PO Box 187
Three Forks, MT 59752
(406) 285-3431

Federation of Fly Fishers
215 East Lewis
Livingston, MT 59047
(406) 222-9369

Gallatin Valley Land Trust
PO Box 7021
Bozeman, MT 59715
(406) 587-0404

Montana Trout Unlimited
321 East Main Street, Suite 411
Bozeman, MT 59715
(406) 522-7291

Public Lands/Water Access Association, Inc.
PO Box 2
Ramsay, MT 59748
(406) 995-3201

PART V. EA PREPARATION

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

Based on an evaluation of impacts to the physical and human environment under MEPA, this environmental review revealed no significant negative impacts from the proposed action.

Therefore, an EIS is not necessary and an environmental assessment is the appropriate level of analysis. In determining the significance of the impacts, Fish, Wildlife and Parks assessed the severity, duration, geographic extent, and frequency of the impact, the probability that the impact would occur, or reasonable assurance that the impact would not occur. FWP assessed the growth-inducing or growth-inhibiting aspects of the impact, the importance to the state and to society of the environmental resource or value affected, any precedent that would be set as a result of an impact of the proposed action that would commit FWP to future actions; and potential conflicts with local, federal, or state laws. As this EA revealed no significant impacts from the proposed actions, an EA is the appropriate level of review and an EIS is not required.

2. Persons responsible for preparing the EA:

Todd Garrett
Region 3 Fishing Access Site Manager
1400 South 19th Ave
Bozeman, MT 59718
tgarrett@mt.gov
(406) 994-6987

Andrea Darling
FWP EA Contractor
39 Big Dipper Drive
Montana City, MT 59634
apdarling@gmail.com

Jerry Walker
Regional 3 Parks Manager
1400 South 19th Ave
Bozeman, MT 59718
gwalker@mt.gov.
(406) 994-3552

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

Griffith Environmental Consulting, Inc.
Meagher County Weed District
Montana Department of Commerce – Tourism
Montana Department of Natural Resources and Conservation
- Trust Land Management Division

Montana Fish, Wildlife & Parks
- Parks Division
  - Design and Construction Section
- Fish and Wildlife Division
  - Fisheries Bureau
  - Wildlife Bureau
  - Enforcement Bureau
- Lands Unit
- Legal Unit

Montana Natural Heritage Program – Natural Resources Information System (NRIS)
U.S. Bureau of Land Management – Lewistown Field Office

APPENDICES

A. MCA 23-1-110 Qualification Checklist
B. Native Species Report Montana Natural Heritage Program (MNHP)
C. Tourism Report – Department of Commerce
D. Sixteenmile Creek Proposed Acquisition- Bridge Evaluation

E. Hazardous Material Assessment
F. Certificate of Survey: To Retrace an Existing Parcel
G. Best Management Practices Final FAS Department of Fish, Wildlife & Parks
H. Sixteenmile Creek Weed Inventory

APPENDIX A
23-1-110 MCA
PROJECT QUALIFICATION CHECKLIST

Date: April 8, 2010 **Person Reviewing:** Andrea Darling

Project Location: Sixteenmile Creek Proposed Fishing Access Site is along the Sixteenmile Creek 1 mile west of Ringling, Montana in Meagher County, Section 36 T6N R6E; Sections 20, 21, 22, 23, 29, 30, 31 T6N R7E.

Description of Proposed Work: FWP proposes to acquire 89.16 acres of abandoned Milwaukee Railroad right-of-way along Sixteenmile Creek to be developed as a FAS and to develop a parking area with associated fencing and access road and install a vault latrine and signs.

The following checklist is intended to be a guide for determining whether a proposed development or improvement is of enough significance to fall under 23-1-110 rules. (Please check ✓ all that apply and comment as necessary.)

[X] A. New roadway or trail built over undisturbed land?
Comments: An access road over previously disturbed land would be built.

[ ] B. New building construction (buildings <100 sf and vault latrines exempt)?
Comments: No new construction.

[X] C. Any excavation of 20 c.y. or greater?
Comments: Over 20 c.y. of soil could be excavated during construction of the parking lot and access road.

[X] D. New parking lots built over undisturbed land or expansion of existing lot that increases parking capacity by 25% or more?
Comments: A parking lot to accommodate eight vehicles would be build over previously disturbed land.

[ ] E. Any new shoreline alteration that exceeds a doublewide boat ramp or handicapped fishing station?
Comments: No shoreline alteration.

[ ] F. Any new construction into lakes, reservoirs, or streams?
Comments: No new construction.

[ ] G. Any new construction in an area with National Registry quality cultural artifacts (as determined by State Historical Preservation Office)?
Comments: No construction.

[ ] H. Any new above ground utility lines?
Comments: No new utility lines.

[ ] I. Any increase or decrease in campsites of 25% or more of an existing number of campsites?
Comments: No camping.

[ ] J. Proposed project significantly changes the existing features or use pattern; including effects of a series of individual projects?
Comments: No.

If any of the above is checked, 23-1-110 MCA rules apply to this proposed work and should be documented on the MEPA/HB495 CHECKLIST. Refer to MEPA/HB495 Cross Reference Summary for further assistance.

APPENDIX B

SENSITIVE PLANTS AND ANIMALS IN THE SIXTEENMILE CREEK PROPOSED ACQUISITION AREA

Species of Concern Terms and Definitions

A search of the Montana Natural Heritage Program (MNHP) element occurrence database (http://nris.mt.gov) indicates no occurrences of federally listed endangered or threatened animal or plant species in the project area. The search indicated that the project area is within the habitat for greater sage grouse and gray wolf. More information on these species is included below.

Montana Species of Concern. The term **"Species of Concern"** includes taxa that are at-risk or potentially at-risk due to rarity, restricted distribution, habitat loss, and/or other factors. The term also encompasses species that have a special designation by organizations or land management agencies in Montana, including: Bureau of Land Management Special Status and Watch species; U.S. Forest Service Sensitive and Watch species; U.S. Fish and Wildlife Service Threatened, Endangered and Candidate species.

Status Ranks (Global and State)

The international network of Natural Heritage Programs employs a standardized ranking system to denote global (**G** -- range-wide) and state status (**S**) (Nature Serve 2003). Species are assigned numeric ranks ranging from 1 (critically imperiled) to 5 (demonstrably secure), reflecting the relative degree to which they are "at-risk". Rank definitions are given below. A number of factors are considered in assigning ranks -- the number, size and distribution of known "occurrences" or populations, population trends (if known), habitat sensitivity, and threat. Factors in a species' life history that make it especially vulnerable are also considered (e.g., dependence on a specific pollinator).

Status Ranks

Code	Definition
G1 S1	At high risk because of extremely limited and/or rapidly declining numbers, range, and/or habitat, making it highly vulnerable to global extinction or extirpation in the state.
G2 S2	At risk because of very limited and/or declining numbers, range, and/or habitat, making it vulnerable to global extinction or extirpation in the state.
G3 S3	Potentially at risk because of limited and/or declining numbers, range, and/or habitat, even though it may be abundant in some areas.
G4 S4	Uncommon but not rare (although it may be rare in parts of its range), and usually widespread. Apparently not vulnerable in most of its range, but possibly cause for long-term concern.
G5 S5	Common, widespread, and abundant (although it may be rare in parts of its range). Not vulnerable in most of its range.

MFWP Conservation Need. Under Montana's Comprehensive Fish and Wildlife Conservation Strategy of 2005, individual animal species are assigned levels of conservation need as follows:

Tier I. Greatest conservation need. Montana FWP has a clear obligation to use its resources to implement conservation actions that provide direct benefit to these species, communities and focus areas.

Tier II. Moderate conservation need. Montana FWP could use its resources to implement conservation actions that provide direct benefit to these species communities and focus areas.

Tier III. Lower conservation need. Although important to Montana's wildlife diversity, these species, communities and focus areas are either abundant or widespread or are believed to have adequate conservation already in place.

Tier IV. Species that are non-native, incidental or on the periphery of their range and are either expanding or very common in adjacent states.

SENSITIVE PLANTS AND ANIMALS IN THE VICINITY OF POWERHOUSE FAS

1. **Centrocercus urophasianus (Greater Sage Grouse)**

Natural Heritage Ranks	Federal Agency Status:
State: **S2**	U.S. Fish and Wildlife Service:
Global: **G4**	U.S. Forest Service**: Sensitive**
	U.S. Bureau of Land Management: **Sensitive**

FWP CFWCS Tier: **1**

Element Occurrence data was reported of greater sage grouse within two miles of the project area. Last observation date was 2006.

2. **Canis Lupus (Gray Wolf)**

Natural Heritage Ranks	Federal Agency Status:
State: **S3**	U.S. Fish and Wildlife Service: **DM**
Global: **G4**	U.S. Forest Service: **Sensitive**
	U.S. Bureau of Land Management: **Sensitive**

FWP CFWCS Tier: **1**

Element Occurrence data was reported of gray wolf within the project area. Last observation date was not reported.

APPENDIX C

TOURISM REPORT
MONTANA ENVIRONMENTAL POLICY ACT (MEPA) & MCA 23-1-110

Montana Fish, Wildlife and Parks has initiated the review process as mandated by MCA 23-1-110 and the Montana Environmental Policy Act in its consideration of the project described below. As part of the review process, input and comments are being solicited. Please complete the project name and project description portions and submit this form to:

Carol Crockett, Visitor Services Manager
Montana Office of Tourism-Department of Commerce
301 S. Park Ave.
Helena, MT 59601

Project Name: Sixteenmile Creek Fishing Access Site Proposed Acquisition and Development

Project Description:
Montana Fish, Wildlife & Parks (FWP) proposes to acquire 89.16 acres of land along a five-mile stretch of abandoned Milwaukee Railroad right-of-way approximately one mile west of Highway 89 and one-half mile west of Ringling, Montana for the purpose of developing a fishing access site (FAS) on Sixteenmile Creek. FWP also proposes to construct a parking area for approximately eight vehicles at the eastern end of the property, an access road to and fencing around the parking lot, and installation of a vault latrine and directional and informational signs. Western Rivers has offered to sell the property for the appraised price of $315,000, with the Montana Fish, Wildlife, and Parks Foundation contributing $250,000 and FWP contributing the remaining $65,000. FWP proposes to acquire the parcel in fee title.

1. Would this site development project have an impact on the tourism economy?
   NO **YES** If YES, briefly describe:

Yes, as described, the project has the potential to positively impact the tourism and recreation industry economy.

2. Does this impending improvement alter the quality or quantity of recreation/tourism opportunities and settings?
   NO **YES** If YES, briefly describe:

Yes, as described, the project has the potential to improve the quality and quantity of tourism and recreational opportunities.

Signature Carol Crockett, Visitor Services Manager Date 3/15/10

APPENDIX D

SIXTEENMILE CREEK PROPOSED ACQUISITION
BRIDGE EVALUATION

All of the bridges (except the fourth) were of similar design and construction. Gravel surface over wooden plank decking with wooden beam stringers, square beam pier caps (occasionally the pier cap consisted of two such beams stacked atop one another) and wooden post piers (see pictures). There was evidence that most of the piers have been replaced since the original construction. The timbers all seem to be in relatively good condition with no signs of rotting or deterioration, except for occasional rot along the top-most side members used to keep the gravel in place. The condition of the subsurface portion of the piers (either in the ground or in the stream) was not evaluated. The fourth bridge is shorter and lower and of completely different design. The wood and steel members all appear to be in good condition, as do the concrete abutments.

First Bridge: (eastern most)
84' long, 14' 3" wide
6 piers, 2 abutments
Decking: 3" x 12" wood planks
Stringers: 15" x 8" wood beams (13 total, varied spacing)
Pier Caps: ~13.5" x 13.5" wood beams
Piers: ~ 13" wood posts (six each)

(Date stamp is incorrect, picture was taken on 4/1/10)

Second Bridge:
102' long, 14' 3" wide
6 piers, 2 abutments
Decking: 3" x 12" wood planks
Stringers: 15" x 8" wood beams (13 total, varied spacing)
Pier Caps: ~13.5" x 13.5" wood beams
Piers: ~ 13" wood posts (six each)

(Date stamp is incorrect, picture was taken on 4/1/10)

Third Bridge:
100' long, 14' 3" wide
6 piers, 2 abutments
Decking: 3" x 12" wood planks
Stringers: 15" x 8" wood beams (13 total, varied spacing)
Pier Caps: ~13.5" x 13.5" wood beams
Piers: ~ 13" wood posts (six each)

(Date stamp is incorrect, picture was taken on 4/1/10)

Fourth Bridge:
14' 9"' long, 10"' wide
Decking: 12" x 10" wood beams
Stringers: 15" x 5" steel beams (six)
Concrete Abutments

(Date stamp is incorrect, picture was taken on 4/1/10)

Fifth Bridge:
99' long, 14' 3" wide
6 piers, 2 abutments
Decking: 3" x 12" wood planks
Stringers: 15" x 8" wood beams (13 total, varied spacing)
Pier Caps: ~13.5" x 13.5" wood beams
Piers: ~ 13" wood posts (six each)

(Date stamp is incorrect, picture was taken on 4/1/10)

Sixth Bridge:
~100' long, 14' 3" wide
5 piers, 2 abutments
Decking: 3" x 12" wood planks
Stringers: 18" x 10" wood beams (9 total, varied spacing)
Pier Caps: ~13.5" x 13.5" wood beams
Piers: ~ 13" wood posts (six each)

(Date stamp is incorrect, picture was taken on 4/1/10)

Seventh Bridge:
~115' long, 14' 3" wide
5 piers, 2 abutments
Decking: 3" x 12" wood planks
Stringers: 18" x 10" wood beams (9 total, varied spacing)

Pier Caps: ~13.5” x 13.5” wood beams
Piers: ~ 13” wood posts (six each)

(Date stamp is incorrect, picture was taken on 4/1/10)

Miscellaneous pictures:

Rot and deterioration of deck “rail” on bridge #2. (Not a structurally significant member.)
(Date stamp is incorrect, picture was taken on 4/1/10)

Bridge deck separating from abutment on Bridge #2 (date stamp is incorrect, picture was taken on 4/1/10)

Rot and deterioration of deck “rail” on bridge #7. (Not a structurally significant member.)
(Date stamp is incorrect, picture was taken on 4/1/10)

APPENDIX E
HAZARDOUS MATERIAL ASSESSMENT

Griffith Environmental Consulting Inc.
5089 Hedges Drive
Helena, MT 59602
406-458-5720
406-459-4830 (cell)
406-422-0017 (fax)
e mail: egriffithgec@gmail.com

10 Dec. 2008

Ms. Darlene Edge
Field Services Division
MT Dept. of Fish, Wildlife and Parks
1400 Eighth Avenue
Helena, MT 59601

RE: Hazardous Material Assessment for 5.5 Miles of the Former CM St. P. & P. Railway (Milwaukee Road) ROW from Ringling West to Section 36, T 6N, R6E

Dear Ms. Edge:

On 13 November 2008, I conducted a site inspection of the former CM St. P. & P. Railroad ROW (The Milwaukee Road) from Ringling west to the first tunnel located in State section #36. I obtained permission to enter the property from Mr. Tom Langel of Manhattan, MT who was very gracious in granting this access.

History

The CM St. P. & P. Railroad completed its westward expansion and became a full fledged transcontinental railroad by 1909. There was criticism that the main line didn't follow a route that passed through the major population centers, but with the Great Northern on the Hi-Line and the Northern Pacific following the Yellowstone River and then the Clark Fork, routes were limited. Early on, the Milwaukee Road experienced difficulties traversing the mountain passes during the very cold winter weather with steam power and looked for an alternative motive solution. With a contract for power from the newly formed Montana Power Company, the Milwaukee Road electrified the mainline from Harlowton to Avery, Idaho in 1914-1915 and a section over the Cascades from Seattle to Othello WA., a few years later. What they built was one of the most energy efficient freight/passenger railroad sections in the world. The power supplied to the railroad was 100,000 volts AC which was converted to 3,000 volts DC to run the locomotive motors. These DC motors could be switched to generators when a train descended a pass and provided "dynamic braking" to slow the entire train and produce power with gravity providing the mechanical energy. Given the numerous passes that existed in the Rocky Mountain Division, a 12% power savings was realized through dynamic braking.

The railroad went through several periods when the company was in receivership or bankruptcy. After WW II things improved, but the advent of diesel power, increased competition from the Great Northern and Northern Pacific, potential high costs to maintain an aging electric locomotive fleet, as well

as the new interstate highway system put pressure on the railroad that couldn't be overcome. With aging electric locomotives, and increased costs to maintain the electrified sections, the railroad became a complete diesel railroad in 1974. By 1980 in Montana, the Milwaukee Road ceased operation and its infrastructure was sold off piecemeal.

Hydrology and Geology

Hydrology

Sixteen Mile Creek originates from two main branches; one from the west foothills of the Crazy Mountains and the other from the east foothills of the Little Belts. The stream maintains a fairly low gradient east and west of Ringling, most likely the result of the resistant bedrock encountered at the beginning of the canyon just southwest of Moyne. Although the creek's gradient changes very little down gradient from Moyne, it becomes a pool and riffle stream through the canyon, unlike the well established meandering stream up gradient from Moyne.

Geology

From Ringling to the entrance of the canyon at Moyne, the bedrock consists of the Cretaceous Colorado Shale, an easily erodible rock unit. At the canyon entrance, the pre-Cambrian Spokane Shale, a more resistant series of red and green shales several hundred feet in thickness defines the canyon. These resistant units are encountered for the next 5(+) miles into the canyon. The shales are thin bedded, hard and moderately fractured, characteristics which Sixteen Mile Creek expresses through right angle turns, straight runs, and some other interesting channel configurations.

Soil Surveys

There is no published soil survey for Meagher County, only small sections dedicated to the prime farm land. However, this property is a very narrow, well defined railroad ROW consisting of durable gravel ballast for the ties underlain by locally derived crushed bedrock for the roadbed. Most of the route inventoried passed through the canyon where impacts from the railroad were confined to a very narrow portion of the terrain.

Because this section of the railroad operated only 5-6 years as a steam locomotive line before converting to electric locomotives, there is very little coal clinker or ash on the roadbed.

Site Inventory

For nearly 100 years, this property has been defined by the railroad. There was no substation located on the six miles from Ringling to the first tunnel which is located in state section 36, T6N, R 6E. There are 2 or 3 signal standards still upright along the ROW and several located off the immediate ROW still attached to their concrete footings.

Unlike other portions of the electrified section from Harlowton west, the ties were not salvaged, but rather pushed off the roadbed with a dozer and left in numerous piles next to the roadbed. The telegraph/telephone line is still present over most of this section, but the copper wire has been removed, leaving only the poles and cross arms. The transmission poles and catenary supports have all been

removed with little evidence they even existed. A pile of transmission poles is located alongside the roadbed about 1.7 miles west of Ringling; the only power poles found during the inspection.

Over this 5(+) mile section of ROW, the railroad crossed Sixteen Mile Creek six times and Meadow Creek once. The wood piling trestles are in amazing shape considering they are nearly 100 years old. One trestle had a piling sheared off at the bottom with the top kicked out to the south, but whereas these structures were designed to carry 100 ton rail cars and 300 ton locomotives, they are more than capable of carrying vehicular loads.

The inspection revealed evidence of a derailment where it appears a boxcar of particle board tipped off the rails and ended up in the barrow pit. The benign remnants of particle board and part of the car are all that identify the wreck. Evidence of other derailments was not observed along this section.

I located a 15 gallon Texaco grease drum mixed in with some ties about 2 miles west of Ringling, but there was no grease in the open drum. No other containers with hazardous materials were found along the ROW during the inspection.

As far as the ties are concerned, the creosote will slowly degrade as the ties age. Date nails from the ties indicate that the newest ties date from 1936, 37, 38 and 39. Thus the ties are at best nearly 70 years old with most much older than that. Fortunately, there are few ties that are near the creek to allow leaching of creosote; but whereas the trestle pilings are also heavily cresoted, the ties pose a minimal hazard.

Conclusions

This linear ROW parcel of the old Milwaukee Road was found to be free of introduced hazardous materials. No orphan drums containing fuel or other materials were located during the inspection. There was no evidence of a siding or shed which would have been used to store a track speeder, nor any evidence that a UST to store fuel was buried along this part of the ROW. Also, because this section of the ROW did not have a substation, the concerns of asbestos and transformer oil are moot. Finally, while the ties were not removed along this stretch of the ROW, their presence does not appear to pose a threat to the environment or to the public that may utilize the ROW for access to state owned land.

Respectfully,

Earl F. Griffith

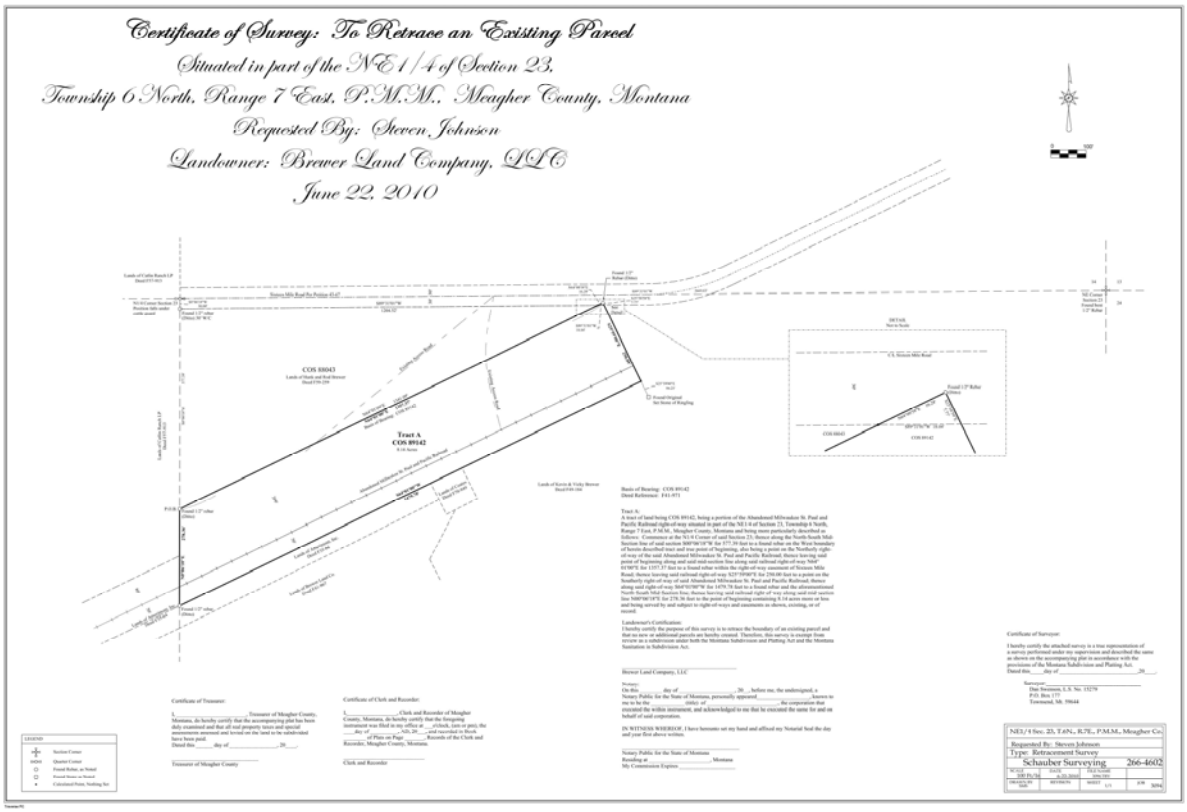
Earl F. Griffith PG.

Wyoming # 1033

11 December 2008

APPENDIX F

CERTIFICATE OF SURVEY: TO RETRACE AN EXISTING PARCEL



APPENDIX G

MONTANA FISH, WILDLIFE AND PARKS
BEST MANAGEMENT PRACTICES FOR FISHING ACCESS SITES

10-02-02
Updated May 1, 2008

I. ROADS

A. Road Planning and location

1. Minimize the number of roads constructed at the FAS through comprehensive road planning, recognizing foreseeable future uses.

    a. Use existing roads, unless use of such roads would cause or aggravate an erosion problem.

2. Fit the road to the topography by locating roads on natural benches and following natural contours. Avoid long, steep road grades and narrow canyons.

3. Locate roads on stable geology, including well-drained soils and rock formations that tend to dip into the slope. Avoid slumps and slide-prone areas characterized by steep slopes, highly weathered bedrock, clay beds, concave slopes, hummocky topography, and rock layers that dip parallel to the slope. Avoid wet areas, including seeps, wetlands, wet meadows, and natural drainage channels.

4. Minimize the number of stream crossings.

    a. Choose stable stream crossing sites. “Stable” refers to streambanks with erosion-resistant materials and in hydrologically safe spots.

B. Road Design

1. Design roads to the minimum standard necessary to accommodate anticipated use and equipment. The need for higher engineering standards can be alleviated through proper road-use management. “Standard” refers to road width.

2. Design roads to minimize disruption of natural drainage patterns. Vary road grades to reduce concentrated flow in road drainage ditches, culverts, and on fill slopes and road surfaces.

C. Drainage from Road Surface

1. Provide adequate drainage from the surface of all permanent and temporary roads. Use outsloped, insloped or crowned roads, installing proper drainage features. Space road drainage features so peak flow on road surface or in ditches will not exceed their capacity.

a. Outsloped roads provide means of dispersing water in a low-energy flow from the road surface. Outsloped roads are appropriate when fill slopes are stable, drainage will not flow directly into stream channels, and transportation safety can be met.

b. For insloped roads, plan ditch gradients steep enough, generally greater than 2%, but less than 8%, to prevent sediment deposition and ditch erosion. The steeper gradients may be suitable for more stable soils; use the lower gradients for less stable soils.

c. Design and install road surface drainage features at adequate spacing to control erosion; steeper gradients require more frequent drainage features. Properly constructed drain dips can be an economical method of road surface drainage. Construct drain dips deep enough into the sub-grade so that traffic will not obliterate them.

2. For ditch relief/culverts, construct stable catch basins at stable angles. Protect the inflow end of cross-drain culverts from plugging and armor if in erodible soil. Skewing ditch relief culverts 20 to 30 degrees toward the inflow from the ditch will improve inlet efficiency.

3. Provide energy dissipators (rock piles, slash, log chunks, etc.) where necessary to reduce erosion at outlet of drainage features. Cross-drains, culverts, water bars, dips, and other drainage structures should not discharge onto erodible soils or fill slopes without outfall protection.

4. Route road drainage through adequate filtration zones, or other sediment-settling structures. Install road drainage features above stream crossings to route discharge into filtration zones before entering a stream.

D. Construction/Reconstruction

1. Stabilize erodible, exposed soils by seeding, compacting, riprapping, benching, mulching, or other suitable means.

2. At the toe of potentially erodible fill slopes, particularly near stream channels, pile slash in a row parallel to the road to trap sediment. When done concurrently with road construction, this is one method to effectively control sediment movement and it also provides an economical way of disposing of roadway slash. Limit the height, width and length of these “slash filter windrows” so not to impede wildlife movement. Sediment fabric fences or other methods may be used if effective.

3. Construct cut and fill slopes at stable angles to prevent sloughing and subsequent erosion.

4. Avoid incorporating potentially unstable woody debris in the fill portion of the road prism. Where possible, leave existing rooted trees or shrubs at the toe of the fill slope to stabilize the fill.

5. Place debris, overburden, and other waste materials associated with construction and maintenance activities in a location to avoid entry into streams. Include these waste areas in soil stabilization planning for the road.

6. When using existing roads, reconstruct only to the extent necessary to provide adequate drainage and safety; avoid disturbing stable road surfaces. Consider abandoning existing roads when their use would aggravate erosion.

E. Road Maintenance

1. Grade road surfaces only as often as necessary to maintain a stable running surface and to retain the original surface drainage.

2. Maintain erosion control features through periodic inspection and maintenance, including cleaning dips and cross-drains, repairing ditches, marking culvert inlets to aid in location, and clearing debris from culverts.

3. Avoid cutting the toe of cut slopes when grading roads, pulling ditches, or plowing snow.

4. Avoid using roads during wet periods if such use would likely damage the road drainage features. Consider gates, barricades or signs to limit use of roads during wet periods.

II. RECREATIONAL FACILITIES (parking areas, campsites, trails, ramps, restrooms)

A. Site Design

1. Design a site that best fits the topography, soil type, and stream character, while minimizing soil disturbance and economically accomplishing recreational objectives. Keep roads and parking lots at least 50 feet from water; if closer, mitigate with vegetative buffers as necessary.

2. Locate foot trails to avoid concentrating runoff and provide breaks in grade as needed. Locate trails and parking areas away from natural drainage systems and divert runoff to stable areas. Limit the grade of trails on unstable, saturated, highly erosive, or easily compacted soils

3. Scale the number of boat ramps, campsites, parking areas, bathroom facilities, etc. to be commensurate with existing and anticipated needs. Facilities should not invite such use that natural features will be degraded.

4. Provide adequate barriers to minimize off-road vehicle use

B. Maintenance: Soil Disturbance and Drainage

1. Maintenance operations minimize soil disturbance around parking lots, swimming areas and campsites, through proper placement and dispersal of such facilities or by

reseeding disturbed ground. Drainage from such facilities should be promoted through proper grading.

2. Maintain adequate drainage for ramps by keeping side drains functional or by maintaining drainage of road surface above ramps or by crowning (on natural surfaces).

3. Maintain adequate drainage for trails. Use mitigating measures, such as water bars, wood chips, and grass seeding, to reduce erosion on trails.

4. When roads are abandoned during reconstruction or to implement site-control, they must be reseeded and provided with adequate drainage so that periodic maintenance is not required.

III. RAMPS AND STREAM CROSSINGS

A. Legal Requirements

1. Relevant permits must be obtained prior to building bridges across streams or boat ramps. Such permits include the SPA 124 permit, the COE 404 permit, and the DNRC Floodplain Development Permit.

B. Design Considerations

1. Placement of boat ramp should be such that boats can load and unload with out difficulty and the notch in the bank where the ramp was placed does not encourage bank erosion. Extensions of boat ramps beyond the natural bank can also encourage erosion.

2. Adjust the road grade or provide drainage features (e.g. rubber flaps) to reduce the concentration of road drainage to stream crossings and boat ramps. Direct drainage flow through an adequate filtration zone and away from the ramp or crossing through the use of gravel side-drains, crowning (on natural surfaces) or 30-degree angled grooves on concrete ramps.

3. Avoid unimproved stream crossings on permanent streams. On ephemeral streams, when a culvert or bridge is not feasible, locate drive-throughs on a stable, rocky portion of the stream channel.

4. Unimproved (non-concrete) ramps should only be used when the native soils are sufficiently gravelly or rocky to withstand the use at the site and to resist erosion.

C. Installation of Stream Crossings and Ramps

1. Minimize stream channel disturbances and related sediment problems during construction of road and installation of stream crossing structures. Do not place erodible material into stream channels. Remove stockpiled material from high water zones. Locate temporary construction bypass roads in locations where the stream course will have a minimal disturbance. Time the construction activities to protect fisheries and water quality.

2. Where ramps enter the stream channel, they should follow the natural streambed in order to avoid changing stream hydraulics and to optimize use of boat trailers.

3. Use culverts with a minimum diameter of 15 inches for permanent stream crossings and cross drains. Proper sizing of culverts may dictate a larger pipe and should be based on a 50-year flow recurrence interval. Install culverts to conform to the natural streambed and slope on all perennial streams and on intermittent streams that support fish or that provide seasonal fish passage. Place culverts slightly below normal stream grade to avoid culvert outfall barriers. Do not alter stream channels upstream from culverts, unless necessary to protect fill or to prevent culvert blockage. Armor the inlet and/or outlet with rock or other suitable material where needed.

4. Prevent erosion of boat ramps and the affected streambank through proper placement (so as to not catch the stream current) and hardening (riprap or erosion resistant woody vegetation).

5. Maintain a 1-foot minimum cover for culverts 18-36 inches in diameter, and a cover of one-third diameter for larger culverts to prevent crushing by traffic.

APPENDIX H
SIXTEENMILE CREEK WEED INVENTORY

FWP Land Acquisition – Weed Inspection and Report

COMPLIANCE CHECKLIST FOR SECTION 7-22-2154, MCA

FWP Regional Staff: Please return this form to
FWP Lands Bureau, P.O. Box 200701, Helena, MT 59620

Property Name: 16 mile Creek FWP Region: __

County: MEAGHER

Date of Property Inspection with County Weed Management District: 04/01/10

County Representative(s): Otto W. Ohlson

FWP Staff: RAY SWARTZ, WOODY BAXTER,

County Weed Management District - Inspection Report (Please attach weed inspection report or use the space below to describe noxious weeds present on the property, including observations of weed distribution and abundance):

WEEDS PRESENT: Spotted Knapweed - moderate to light infestation
St. Johnswort - moderate to light infestation
Houndstongue - moderate to light infestation
Woolly Mullien - moderate to light infestation (county designation)

Noxious Weed Management Agreement (Please attach applicable weed management agreement or use the space below to indicate how noxious weeds on the property will be managed when the property is under FWP ownership. Indicate if property will be included in an FWP county or regional weed management plan):

Adjacent Landowners have expended considerable dollars to control Heavy Weed infestation. An active Weed management plan needs to be developed and carried out. Increased use by public will only serve to increase spread of noxious weeds
→ Plan needs developed with Meagher County WEED DISTRICT

County Weed Management District Representative: I have inspected the property, and reviewed the weed situation with a representative of Montana Fish, Wildlife & Parks. I concur with FWP's weed management plan for the property, as presented above and/or described in the attached information.

Signed: Otto W. Ohlson Date: 04/12/10
OTTO W. OHLSON