Draft
Environmental Assessment

LITTLE MUDDY CREEK FAS
PROPOSED DEVELOPMENT

May 2012

Montana Fish, Wildlife & Parks

Little Muddy Creek Fishing Access Site
Proposed Development
Draft Environmental Assessment
MEPA, NEPA, MCA 23-1-110 CHECKLIST

PART I. PROPOSED ACTION DESCRIPTION

1. Type of proposed state action:

In 2007, Montana Fish, Wildlife & Parks (FWP) entered into a 10-year lease agreement with the Montana Department of Natural Resources and Conservation (DNRC) to lease 22 acres of School Trust land along the Missouri River for the purpose of establishing a fishing access site (FAS) and providing public access to this stretch of the Missouri River. FWP proposes to develop a FAS, including the improvement of the existing gravel access road, and the addition of a parking area, short access road to a new gravel staging area, farm fence with turnstiles around the staging area, and informational and regulatory signs. A vault latrine is already located on the site. The remains of a concrete house foundation would be removed.

2. Agency authority for the Proposed Action:

The 1977 Montana Legislature enacted Section 87-1-605, Montana Code Annotated (MCA), 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. Section 87-1-303, MCA, authorizes the collection fees and charges for the use of fishing access sites, and contains rule-making authority for their use, occupancy, and protection. Furthermore, Section 23-1-110, MCA, and Administrative Rules of Montana (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 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:

Little Muddy Creek Fishing Access Site Proposed Development

4. Project sponsor:

Montana Fish, Wildlife and Parks, Region 4
4600 Giant Springs Road
Great Falls, MT 59405
(406) 454-5840

5. Anticipated Schedule:

Estimated Public Comment Period: July-August 2012
Estimated Decision Notice: August 2012
Estimated Commencement Date: Fall 2012

Estimated Completion Date: Fall 2012
Current Status of Project Design (% complete): 35%

6. Location:

Little Muddy Creek FAS is located at the confluence of Little Muddy Creek and the Missouri River along Old U.S. Highway 91, eight miles south of Ulm and six miles north of Cascade in Cascade County in SE1/4 Section 4, Township 18 North, Range 1 East.

Figure 1. General Location of Little Muddy Creek FAS.

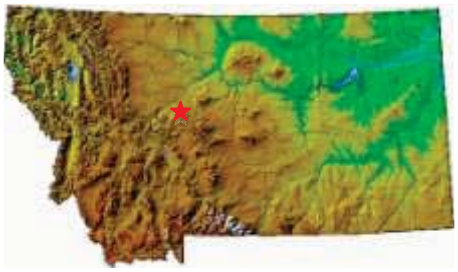


Figure 2. Highway Location of Little Muddy Creek FAS.

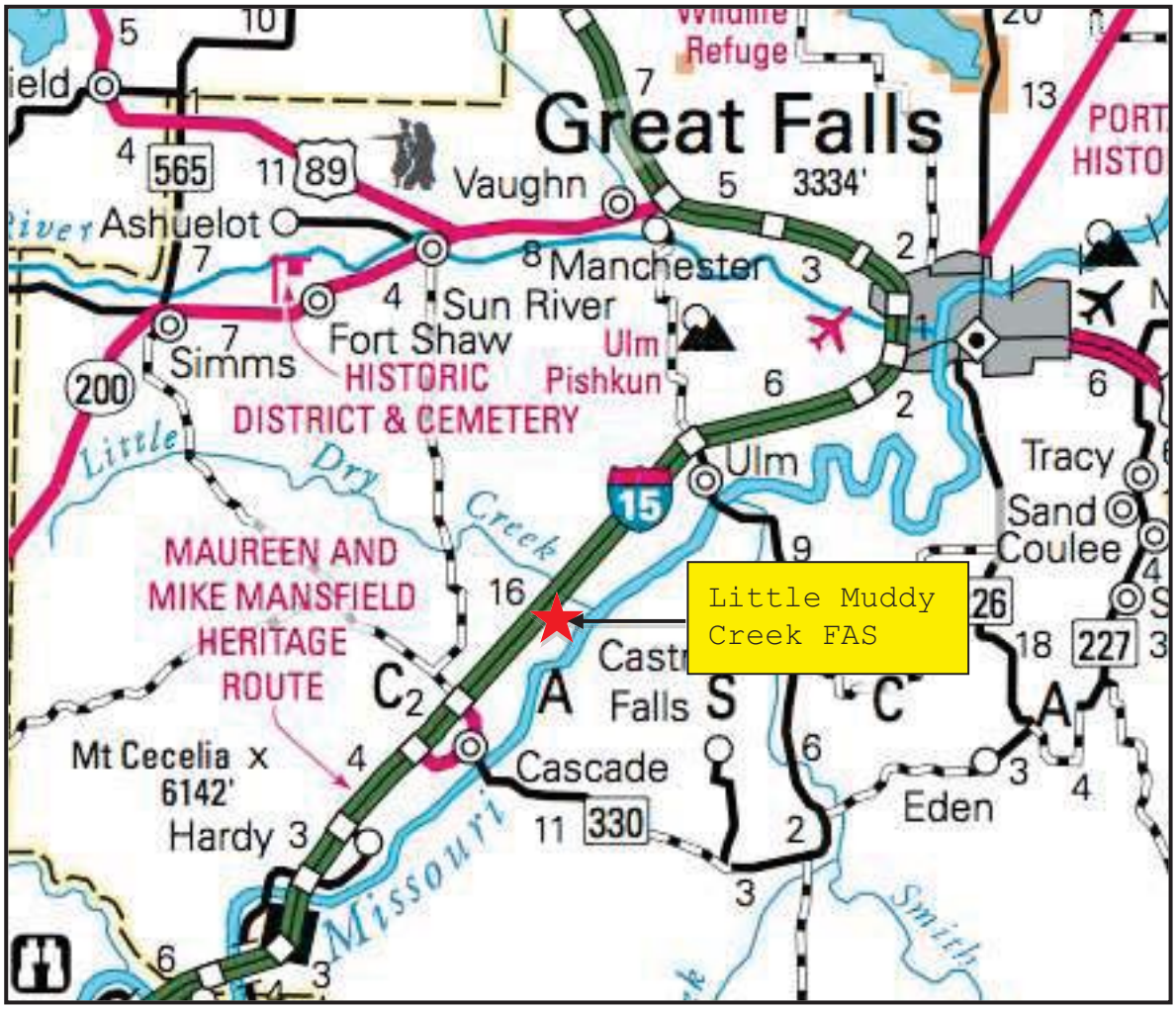
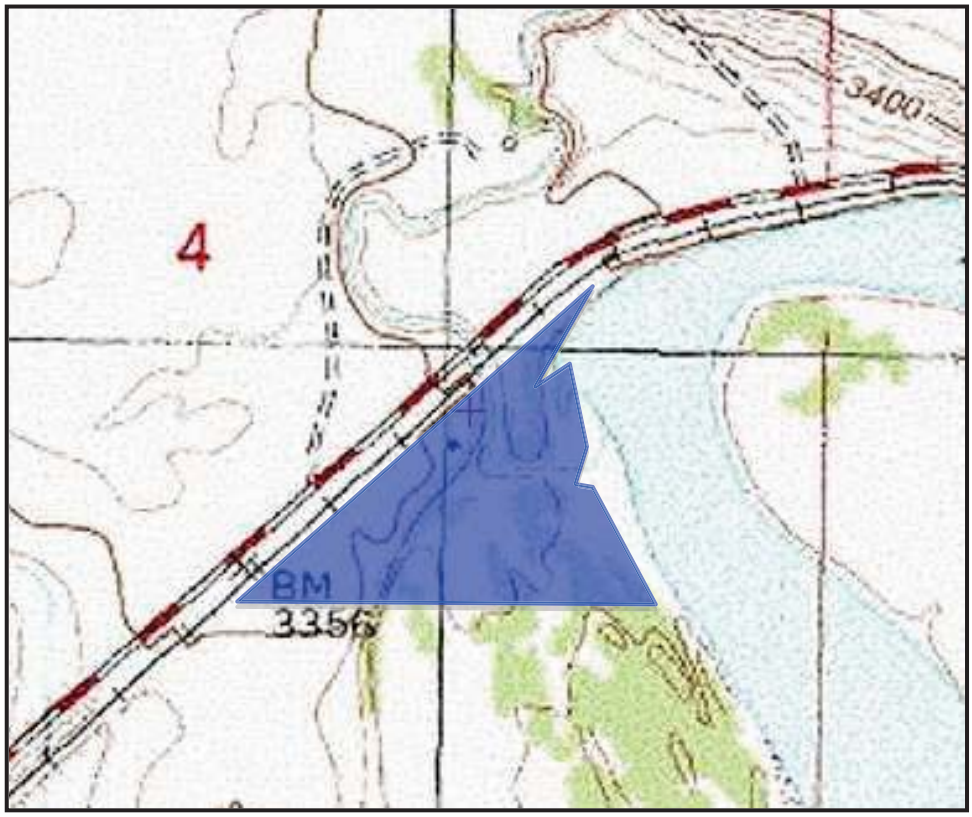


Figure 3. Little Muddy Creek FAS Parcel Map.

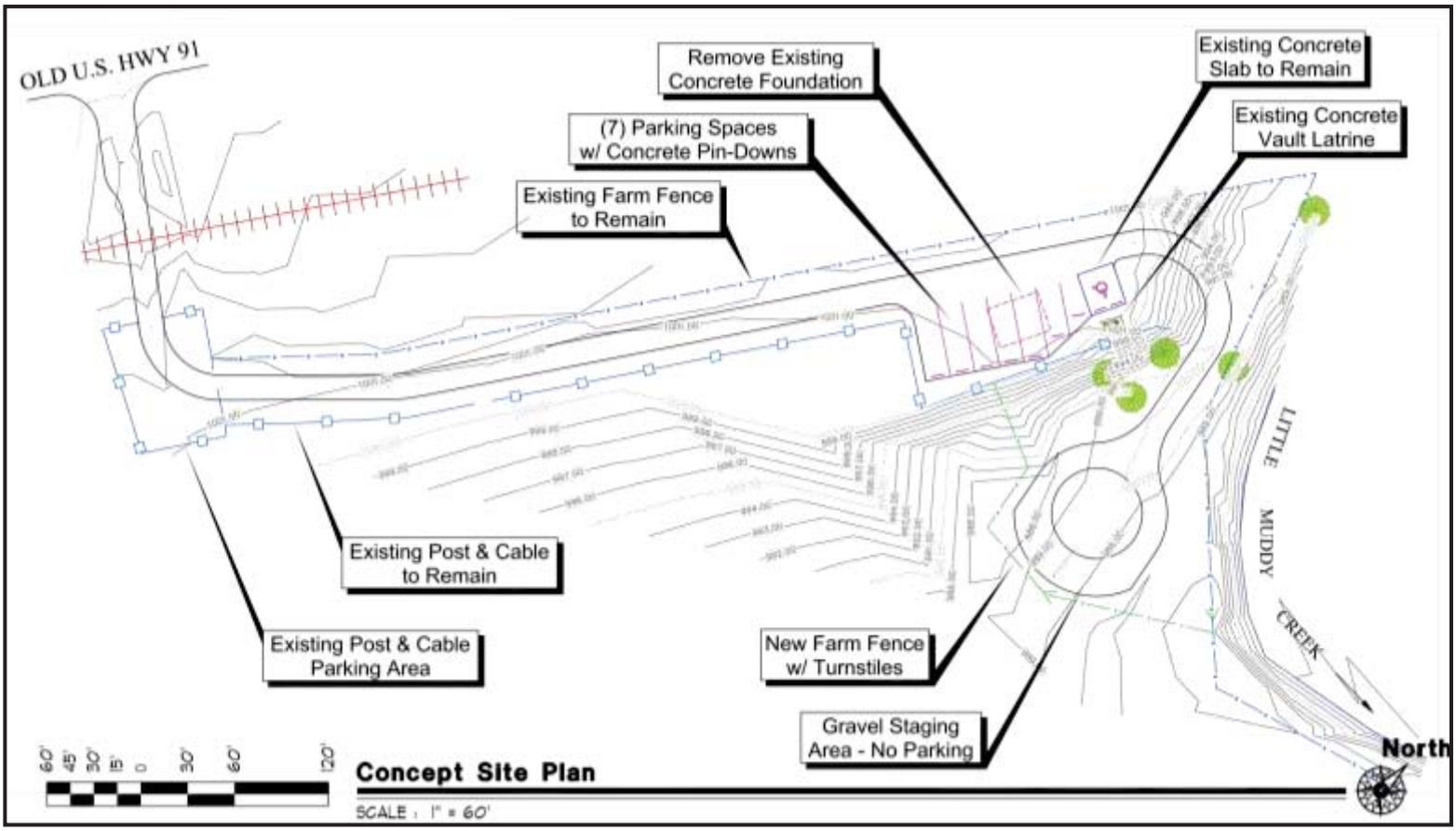
Figure 4. Little Muddy Creek FAS Topographic Map (blue area denotes FAS).



7. Project size -- estimate the number of acres that would be directly affected that are currently:

	Acres		Acres
(a) Developed:		(d) Floodplain	3
Residential	0		
Industrial	0	(e) Productive:	
		Irrigated cropland	0
(b) Open Space/ Woodlands/Recreation	0	Dry cropland	0
		Forestry	0
(c) Wetlands/Riparian Areas	3	Rangeland	0
		Other	0

Figure 5. Little Muddy Creek FAS Proposed Concept Plan



8. Permits, Funding & Overlapping Jurisdiction.

(a) Permits: Permits would be filed at least 2 weeks prior to project start.

Agency Name	Permits
Montana Fish, Wildlife & Parks	124 MT Stream Protection Act
Montana Dept. of Environmental Quality	318 Short Term Water Quality Standard for Turbidity
Cascade County	Floodplain Permit
US Corps of Engineers	404 Federal Clean Water Act

(b) Funding:

Agency Name	Funding Amount
Montana Fish, Wildlife & Parks Site Protection Fund	$80,000

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

Agency Name	Type of Responsibility
Natural Heritage Program	Species of Concern (Appendix B)
State Historic Preservation Office	Cultural Clearance
Cascade County Weed District	Weed Management Coordination and Approval of Weed Management Plan

9. Narrative summary of the proposed action:

Little Muddy Creek FAS is located at the confluence of Little Muddy Creek, a 36-mile long intermittent stream, and the Missouri River. The Missouri River is the longest river in North America and a historic and important waterway of the United States. Though the Missouri River drainage rises from the Rocky Mountains of western Montana and Wyoming, the river officially begins near the town of Three Forks, Montana at the confluence of the Jefferson and Madison Rivers. The Missouri River is joined by the Gallatin River one mile downstream, and flows over 2,300 miles before entering the Mississippi River near St. Louis, Missouri. From its beginning, the river flows wide and deep and for over 12,000 years people have depended upon the Missouri River and its tributaries as a source of sustenance and transportation. Today the river is also important for recreational use along its entire length through Montana and is heavily used for boating, floating, fishing, hunting, wildlife viewing, hiking, and picnicking.

The Missouri River is classified as both a Blue Ribbon and Red Ribbon Trout Stream. It is open to angling year-round along its entire length in Montana and use by anglers upstream of Great Falls is heavy. According to recent surveys by FWP, the average angler days per year from 2001 to 2009 on the 78-mile stretch from Box Elder Creek near Great Falls (river mile 2099.5) to the town of Cascade (river mile 2167.2) was 21,763, with a low of 15,909 in 2007 and a high of 28,883 in 2009. The state ranking for this stretch of river averaged the 32nd most fished body of water in Montana and ranged from 28 to 37 during this same period. Not only is the use for this stretch heavy, but also the adjacent stretch from Cascade to Holter Dam (river mile 2202.1), with an average of 101,672 angler days per year and average state ranking between 2 and 3, is one of the most heavily-used stretches of river in Montana. The Cascade North Park boat ramp is the only public boat launch between Pelican Point and Ulm Bridge FAS; the addition of a boat launch staging area at Little Muddy Creek FAS along with improved parking has the potential to increase use by anglers, floaters, boaters, and hunters. Also, some use of Dunes FAS and North Cascade

Park Access Site, managed by the town of Cascade, could be diverted to Little Muddy Creek FAS, reducing pressure on those sites and redistributing angler use on that reach of the Missouri River.

Game fish in this stretch of the Missouri River include brown trout, rainbow trout, walleye, burbot, and mountain whitefish. Other fish species commonly found in this reach include longnose dace, white sucker, longnose sucker, and yellow perch.

In 2004, a diversion was built on Little Muddy Creek approximately 1.5 miles northwest of the FAS to create wetland habitat and now regulates stream flow in Little Muddy Creek. Water can be diverted to an off-channel impoundment during spring flows, though when Little Muddy Creek is flowing, a minimum of 1 cfs must remain in the creek channel below the diversion.

Vegetation found on Little Muddy Creek FAS consists of Great Plains Floodplain, with a small area of Great Plains Mixed Grass Prairie on the bench above the floodplain. The Great Plains Floodplain community is degraded to the point that the cottonwood overstory is the only remaining natural component. Upstream dams and diversions, highways, and railroads have affected the hydrology and geomorphology of the Missouri River system and adjoining plant communities. In addition, cattle from neighboring lands have routinely overgrazed the property as a result of poor fence conditions or no fencing along the property's southern boundary and difficulty fencing the area near the river in a manner that would prevent cattle from trespassing. This has resulted in a highly altered community of relic cottonwood stands with little regeneration and a disclimax understory community dominated by non-native pasture grasses, legumes, weeds, and wild rose.

Common plant species found in the floodplain include black cottonwood, golden willow, wild rose, redosier dogwood, smooth brome, Kentucky bluegrass, cheatgrass, wild licorice, curly-cup gumweed, houndstongue, leafy spurge, spotted knapweed, water hemlock, and musk thistle. Common plants found on the bench above the floodplain include smooth brome, Kentucky bluegrass, cheatgrass, green sagewort, fringed sagewort, and prickly pear. Common introduced species found on the property include smooth brome, Kentucky bluegrass, cheatgrass, leafy spurge, houndstongue, spotted knapweed, water hemlock, and musk thistle.

Little Muddy Creek FAS has had a noxious weed infestation since before FWP leased the property, due in part to overgrazing and the proximity of the nearby highways and railroad line. Periodic flooding of the area below the bench has also contributed significantly to the noxious weed problem. Floodwaters are notorious for carrying and dispersing weed seeds within the floodway and will be a continuing problem at this site. The most common noxious weeds found on the property are leafy spurge, spotted knapweed, houndstongue, and water hemlock. Since lease of the property in 2007, FWP has spent $300 to $800 per year on weed control, which continues to be a high management priority. FWP will continue to implement the FWP Statewide Integrated Noxious Weed Management Plan to control noxious weeds on the property.

Common wildlife species whose habitat distribution overlaps Little Muddy Creek FAS include white-tailed deer, mule deer, beaver, river otter, muskrat, mink, raccoon, skunk, bald eagle, osprey, and waterfowl. A wide variety of resident and migratory bird species use or travel through the area on a seasonal basis, including Canada geese and a variety of waterfowl and songbirds. An active osprey nest is located on the FAS property. Bald

eagles, which were delisted and now being monitored, nest along the Missouri River; active bald eagle territories are within 1 mile upstream and downstream of the FAS. Great blue heron, veery, and spiny softshell turtle, Species of Concern, have been observed within or near the FAS. The proposed project has been designed to minimize disturbance to nesting raptors by locating the parking area outside of the riparian community. In addition, the project is unlikely to impact bald eagles, great blue heron, veery, and spiny softshell turtles as these species may be accustomed to some level of disturbance for years as the area has had cattle grazing and human traffic, given the proximity to old US Highway 91, the railroad tracks, the recreational use by anglers, floaters and hunters, and by nearby residences.

The property is School Trust Land managed by DNRC and has been leased by FWP since 2007. The provisions of the lease state that all proposed improvements to the property must be approved by DNRC. The property was previously leased as a private home site from 1974 to 2006; a house foundation, double-car garage concrete slab, two cisterns, well, septic tank and drain field, raised gravel access road and gate, power lines, and partial fencing on the upland bench were left on the property by the previous lessee. Since 2007, FWP has surveyed the property boundaries and installed boundary fencing on the correct southern and western property lines. The open well and cistern were filled with crushed gravel to remove the safety hazard. A concrete vault latrine was installed adjacent to the concrete slab. FWP proposes to leave the septic tank in place, but unused. The home foundation is proposed to be removed as part of the project.

The access road to the property includes a permitted crossing across Burlington Northern Santa Fe (BNSF) railroad tracks. Even though this railroad line has not been used for over eight years due to damaged tracks near Ulm, a public railroad crossing permit was obtained from BNSF Railway Company in June 2010as well as general liability insurance. The agreement will be effective until June 2035. The 16-foot crossing will be upgraded to 24 feet in order to accommodate trailers, campers, and recreational vehicles and allow for vehicles to pass.

Need and Benefits

There are 25 FAS's managed by FWP along the 193-mile stretch of the Missouri River between Fairweather FAS near Three Forks and Great Falls. In addition, Cascade North Park Access Site, river mile 2168, is owned by PPL-MT and managed through a cooperative agreement by the town of Cascade. Little Muddy Creek FAS is located at river mile 2157 between North Cascade Access Site (river mile 2166), the closest upstream, developed access, and Dunes FAS (river mile 2147). The proposed development of Little Muddy Creek FAS would provide a convenient location for launching and taking out rafts, canoes, kayaks, and at times, drift boats, halfway between North Cascade North Park Access Site, 11 miles upstream and Dunes FAS, 10 miles downstream (Table 1). Little Muddy Creek FAS is located in the middle of a 21-mile long river stretch between developed FAS's. Providing additional sites allows greater dispersion of anglers and recreationists by spreading out use and reducing crowding and potential resource damage.

Table 1. Fishing Access Sites near Little Muddy Creek Fishing Access Site.

Fishing Access Site	Management	River Mile	Available Facilities
Pelican Point	FWP	2176	Concrete Boat ramp, latrine
Cascade North Park	Cascade	2166	Boat ramp, latrine
Wing Dam	FWP	2165	Undeveloped- No facilities
Little Muddy Creek	FWP	2157	Proposed staging area and carry-in launch, latrine
Dunes	FWP	2147	Carry-in launch, latrine
Ulm Bridge	FWP	2143	Concrete boat ramp, latrine

The proposed action includes improvement of the existing gravel access road, the addition of a parking area, a short access road to a new graveled staging area surrounded by a farm fence with turnstiles, and informational and regulatory signs. A vault latrine is already located on the site near the parking area. The western and southern property lines have been surveyed and fenced. The remains of a concrete house foundation would be removed. The FAS would have carry-in boat access only. The staging area would allow for boats to be dropped off on the flood plain next to Little Muddy Creek and approximately 400 feet from the riverbank, reducing the distance boats and rafts would need to be carried. Powerboat launching from this site is not feasible due to the shallow water in the Missouri River and Little Muddy Creek. A concrete or gravel boat ramp is not feasible due to annual flooding, ice jams, and sediment deposition that would require expensive, annual maintenance.

Under a second alternative, a trail to carry boats and rafts would be built from the parking area down to the floodplain rather than constructing a staging area on the floodplain. , This would increase the distance and inconvenience of carrying boats and rafts down hill to a launch point on either the creek or river. Without a staging area, construction and maintenance costs would be lower.

No grazing would be proposed on the property, except for management purposes such as noxious weed control, as outlined in the FWP Statewide Integrated Noxious Weed Management Plan. The property has been subjected to season long grazing and overgrazing has resulted in reduced plant vigor and vegetation sensitive to grazing. FWP has installed fencing that restricts cattle access to the property during much of the year. Cattle are still able to walk around the fence next to the river during low flows, though an additional fence located approximately 50’ from the high water line and parallel to the riverbank prevents cattle from accessing the riparian vegetation. It is anticipated that the riparian plant communities would improve over time with improved management.

The property would be managed under existing FWP public use regulations. Management of the proposed development includes routine maintenance, control of vehicles and firearms, and other accepted FWP recreation area management policies. Protection of the natural resources, the health and safety of visitors, and consideration of neighboring properties would all be considered and incorporated into development plans for this site. Development of the parking area and boat launch staging area would enhance visitor use of this site as well as provide long-term protection for the resources not impacted by the development footprint. The FAS would be for day use only with no overnight camping, night time activities, or rifle hunting on the site. Shotgun hunting for waterfowl and deer

would be allowed. In addition to providing public access to the Missouri River for fishing, hunting, boating, and floating, the site would provide a convenient halfway point for floaters and boaters between existing developed FAS's. Development of Little Muddy Creek FAS would also improve recreational opportunities including hiking, dog walking, picnicking, and wildlife viewing and fill a need for enhanced floating and river recreation opportunities on this reach of the Missouri River.

10. Description and analysis of reasonable alternatives:

Alternative A: No Action

If no action was taken and the property was not developed as a FAS with an improved access road, parking area, staging area with short access road, staging area fencing, and signs, there would continue to be no convenient location for boat launch or take-out in the 21-mile stretch between Cascade North Park Access Site and Dunes FAS. Boat launching and removal from this property would continue to be difficult and could result in boaters, floaters, and anglers creating a pioneered launch on the Missouri River or Little Muddy Creek. A pioneered launch could result in: safety issues; degradation of the Missouri River bank, riparian vegetation, and wildlife habitat, resulting in increased erosion and sedimentation of the Missouri River. FWP would continue implementing the FWP Statewide Integrated Noxious Weed Management Plan to control noxious weeds on the property.

Alternative B: Proposed Action

FWP proposes to develop a FAS including the improvement of the existing gravel access road, and the addition of a parking area, short access road to the new gravel staging area surrounded by a farm fence with turnstiles, and informational and regulatory signs. A vault latrine is already located on the site. The remains of a concrete slab house foundation would be removed. The proposed developments would provide a more convenient location to launch and take-out small or light boats, rafts, canoes, and kayaks. It would improve the recreational opportunities along the Missouri River, including fishing, hunting, floating, picnicking, and wildlife viewing.

Alternative C: Development on the Bench Only:

This alternative would include improvement of the exiting access road and construction of a parking area on the bench next to the latrine and a trail to the floodplain below. Boats, rafts, canoes, and kayaks would be carried downhill along the trail and launch into either Little Muddy Creek or the Missouri River. The construction and maintenance costs for Alternative C would be less than Alternative B though launching boats, rafts, canoes, and kayaks would be less convenient.

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

FWP would employ Best Management Practices (BMP), which are designed to reduce or eliminate sediment delivery to waterways during construction. FWP would develop the final design and specifications for the proposed project. All county, state and federal permits listed in Part I 8(a) above would be obtained by FWP as required. A private contractor selected through the State's contracting processes would complete the construction.

PART II. 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				1a.
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil, which would reduce productivity or fertility?			X		Yes	1b.
c. Destruction, covering or modification of any unique geologic or physical features?		X				1c.
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			Yes Positive	1d.
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		X				

1a. The proposed development would not affect existing soil patterns, structures, productivity, fertility, erosion, compaction, or instability. Soil and geologic substructure would remain stable during and after the proposed work.

1b. During construction, some minor modifications to the existing soil features would be required for the improvement of the access road, and construction of the parking area, staging area, and staging area access road. Disturbed areas would be seeded with a native seed mix to minimize erosion and sediment delivery to the Missouri River and Little Muddy Creek, and the spread of noxious weeds.

Other than the proposed FAS facilities, the property is primarily managed for wildlife habitat and is not in agricultural production. Cattle grazing would only be utilized for vegetative management purposes. The proposed project would not affect soil productivity or fertility. FWP Best Management Practices (BMP) would be followed during all phases of construction to minimize erosion.

1c. No unique geologic or physical features would be altered by the proposed project.

1d. The proposed project would have a positive impact on the river or stream channels and banks by controlling use patterns on the FAS. The development of the staging area would decrease the possibility that the public would pioneer trails or launch sites, which would decrease potential erosion impacts. Construction of the staging area in the floodplain area may result in result in additional sediment delivery including gravel and finer sediment during ice jams and flooding conditions. The proposed project does not include a boat ramp and the banks of neither the Missouri River nor Little Muddy Creek would be disturbed during construction. Minor amounts of sediment may enter the river or creek during construction. However, upon completion, erosion and sedimentation would improve.

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			2b.
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 regulations? (Also see 2a.)		NA				2e.

2a. During construction, temporary amounts of dust may be generated during leveling and grading of the access road, parking areas, staging area, and staging area access road. If additional materials are needed off-site, loading at the source site would generate minor amounts of dust. FWP would follow BMPs during all phases of construction to minimize risks and reduce dust. See Appendix D for the BMPs.

2b. Diesel equipment would be used to implement the proposed action. There would be a temporary increase in diesel exhaust. If the proposed action were implemented, odors from diesel exhaust would dissipate rapidly. The impacts would be short term and minor.

2e. The proposed project would not affect air quality and would not result in discharges that would conflict with federal or state air quality regulations.

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		No	3c.
d. Changes in the amount of surface water in any water body or creation of a new water body?			X		Yes	3d.
e. Exposure of people or property to water related hazards such as flooding?		X				3e.
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				3l.
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				3m.

3a/3m. Improvement of the access road and construction of the parking area, staging area, staging area access road, and installation of the staging area fence may cause a temporary, localized increase in turbidity in the Missouri River and Little Muddy Creek. FWP would obtain a Montana Department of Environmental Quality (DEQ) 318 Authorization Permit for Short Term Water Quality Standard for Turbidity. FWP BMPs would be followed (Appendix D). FWP would follow the permit requirements for the Montana Department of Environmental Quality for Permit 318 for Short Term Water Quality Standard for Turbidity. The impacts would be short term and minor and associated with the construction phase of the project.

3b. Improvement of the access road and construction of the parking area, staging area, and staging area access road may alter surface runoff patterns and increase the rate of runoff. The proposed work would be designed to minimize any effect on surface water, surface runoff, and drainage patterns. FWP BMPs would be followed (Appendix D).

3c/3e. The lower 19 acres of the property are located within the Missouri River floodplain. However, the limited improvements proposed with this project would not affect flood risks of neighboring

properties. Development of the staging area may have minor impacts on the course of flood and ice flows on the floodplain area of the property. See 3l.

3d. There may be a minor, temporary increase of runoff during construction. We do not expect the runoff to reach any surface body of water after implementation of FWP BMPs (Appendix D).

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 river. FWP BMPs would be followed during all phases of construction to minimize these risks (Appendix D).

3l. According to the Cascade County Floodplain Administrator, the proposed project would have no effect on the existing floodplain.

3m. All impacts to water quality would be temporary resulting from construction. See comment 3a.

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				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				4d.
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				4f.
g. Other:		NA				

4a./4b. Construction of the staging area, staging area access road, and parking area would have a minor impact on the vegetation, removing existing vegetation in the area of construction. Improvement of the FAS access road would not affect vegetation. Few trees and shrubs would be removed during construction of the staging area, staging area access road, and parking area. Because the construction area is small, impacts from construction would be minor. Any disturbed area would be reseeded with a plant mix native to the area. The proposed action is not anticipated to have any impacts on the diversity of plant species on the FAS property.

4b. The proposed project would not alter the composition of plant communities at the site. Vegetation found on Little Muddy Creek FAS consists of Great Plains Floodplain, with a small area of Great Plains Mixed Grass Prairie on the bench above the floodplain. The Great Plains Floodplain community is degraded to the point where the cottonwood overstory is the only remaining natural component. Upstream dams and diversions, highways, and railroads have affected the hydrology of the Missouri River system and adjoining plant communities. In addition, season long cattle grazing on the property as a result of inadequate boundary fencing has resulted in a highly altered community of relic cottonwood stands with little regeneration and an understory dominated by non-native pasture grasses, legumes, weeds, and the disclimax wild rose.

Common plant species found in the floodplain include cottonwoods, golden willow, wild rose, redosier dogwood, smooth brome, Kentucky bluegrass, cheatgrass, wild licorice, curly-cup gumweed, houndstongue, leafy spurge, spotted knapweed, water hemlock, and musk thistle, Common plants found on the bench above the floodplain include smooth brome, Kentucky bluegrass, cheatgrass, green sagewort, fringed sagewort, and prickly pear. The Montana Natural Heritage Program (NHP) identified that an emergent wetland is located on the southern property boundary, though no emergent wetland vegetation was observed on the property during the site visit on April 12, 2011.

Common introduced species found on the property include smooth brome, Kentucky bluegrass, cheatgrass, leafy spurge, houndstongue, spotted knapweed, water hemlock, and musk thistle. Little Muddy Creek FAS has had a noxious weed infestation since before FWP leased the property, due in large part to grazing management, periodic flooding, and the proximity of the highways and railroad line. The most common noxious weeds found on the property are leafy spurge, spotted knapweed, houndstongue, and water hemlock. Since leasing of the property in 2007, FWP has spent $300 to $800 per year on weed control, which continues to be a high management priority. FWP would continue implementing the FWP Statewide Integrated Noxious Weed Management Plan to control noxious weeds on the property regardless of which alternative is implemented.

Trespassing livestock use of the site has resulted in over grazing of the floodplain. It is anticipated that the riparian community would improve with the elimination or controlled grazing and continued weed control.

The proposed action will not alter the plant community; the diversity of existing vegetation will be maintained. However, there may be temporary and minor impacts to vegetation from equipment during the construction. Additionally, approximately 23,000 square feet would be removed and replaced with hardened surfaces. Any unintentional impacts to vegetation would be mitigated by reseeding with a native seed mix.

4c. A search of the Montana Natural Heritage Program's (MNHP) Species of Concern database found no vascular or non-vascular plants of significance within the boundaries of Little Muddy Creek FAS.

4d. Installation of the fence on the property's boundaries has reduced trespassing livestock's grazing of the property. This may remove approximately 19 floodplain acres from agricultural production, though cattle grazing had occurred on the property without permission or authorization. Cattle are still able to walk around the fence next to the river during low flows, though an additional fence located approximately 50' from the high water line parallel to the riverbank prevents cattle from accessing the riparian vegetation. It is anticipated that the riparian plant communities would improve over time with the elimination of cattle grazing.

4e. Due to significant weed infestations on the property over many years, numerous weed seeds are likely present in the property's soil. As a result, soils disturbed during construction could colonize with weeds. Disturbed areas would be re-seeded with a native reclamation seed mix to reduce the establishment of weeds. In conjunction with Cascade County Weed Control District, FWP would continue implementing the Statewide Integrated Weed Management Plan using integrated (chemical, biological and mechanical) methods to control weeds on the property. Weed management would include the establishment of native vegetation to prevent the spread of weeds. Vehicles would be restricted to the parking area, access roads, and staging area, which would be monitored to control weeds, and non-administrative vehicles would not be allowed on undisturbed areas of the site to minimize the spread of noxious weeds. FWP estimates that weed control will cost approximately $200 to $500 during fiscal year 2012.

4f. The Montana Natural Heritage Program (NHP) identified an emergent wetland on the southern property boundary, though no emergent wetland vegetation was observed on the property during the site visit on April 12, 2011. FWP does not anticipate any wetlands would be affected by the proposed project.

There are no Prime Farmlands included within the FAS boundaries, though approximately 5 acres of the riparian community along the southern border is considered Farmland of Statewide Importance (02/27/2012, Natural Resources Conservation Service Soil Survey database). The proposed project would have no impacts on the riparian community at the southern border of the FAS; however, FWP would mange the area to maintain and improve the riparian community on the FAS.

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				5a.
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				5f/5h.
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				5i.

5a. The proposed project would have no impact on any critical fish or wildlife habitat. However, the new fence along the southern boundary, minimizing trespass cattle grazing on the property, in conjunction with the control of noxious weeds should gradually improve the health of the riparian community and increase the use by a wide variety of wildlife species. Weeds will continue to be controlled as part of the Statewide Integrated Noxious Weed Management Plan.

5b/5c. Although the goals of the proposed project are to increase public use of this area for many purposes, including harvesting waterfowl, deer and fish, it would have no impact on the diversity or abundance of game animals, bird species, or nongame species. Present harvest regulations safeguard fish and wildlife from population impacts. Increased public use could displace fish and wildlife to other areas. Raptors may be displaced to adjacent foraging areas. Spiny softshell turtles could be displaced to other areas. This species has been observed in Bird Creek and in the Missouri River within 1.5 miles upstream of the project site.

5f. The Montana Natural Heritage Program (MNHP) and FWP biologists were contacted regarding impacts to Threatened and Endangered (TE) Species or their critical habitat in the area of the proposed development site. The bald eagle is the only species in or near the project area that has had federal protection. The bald eagle is listed as DM, delisted and monitored, by the U.S. Fish and Wildlife Service; Sensitive by the U.S. Forest Service; and Sensitive by the U.S. Bureau of Land Management. The bald eagle was observed within the project area as recently as 2009. The great blue heron, a Species of Concern, was observed within two miles of the project area as recently as

1993. The veery, a Species of Concern, was observed within two miles of the project area as recently as 2004. The spiny softshell turtle, another Species of Concern, was observed within the project area as recently as 2010.

The project is unlikely to have any impact on bald eagle, great blue heron, veery, and spiny softshell turtle since the FAS has been highly disturbed for years by grazing, former residents, the interstate highway and railroad line and public recreational use on the river and, more recently, the FAS. In addition, the proposed project has been designed to minimize disturbance to bald eagle, by locating the staging area out of the line of sight of eagle nests upstream and downstream of Little Muddy Creek FAS and on the perimeter of the riparian community. Construction would also be scheduled outside of the nesting period (February 1 to August 1).

According to Nathan Lance, FWP Wolf Biologist, the project is within the habitat of the gray wolf. Wolves have been known to previously occupy a territory near the area south of Ulm in 2010. Currently there are no known radio-collared packs that may have home ranges that could overlap the project area. While it is possible for wolves to travel through the project area none have been sighted in the immediate area recently. The wolf population in western Montana is strong and wolves may pass through just about any area including this site. FWP wolf specialist Nathan Lance has no concerns with this project impacting gray wolves. No adverse impacts are anticipated from the proposed project on the wolf population.

5g. The improved facilities at Little Muddy Creek FAS may result in increased use of the area for fishing in both the Missouri River and Little Muddy Creek, deer, waterfowl, and upland bird hunting, floating and boating, picnicking, dog walking, and wildlife viewing. The site was previously disturbed by season long cattle grazing, a private residence, the highway, a railroad line, boaters on the Missouri River, and, most recently, by public recreational use. The increased human use may displace some wildlife at times from the FAS. However, the proposed development of Little Muddy Creek FAS would not contribute to additional disturbance of the area and would have no permanent, detrimental impacts stressing existing wildlife populations or wildlife habitat. In addition, the area is not considered critical wildlife habitat. In fact, it is anticipated that the riparian vegetation, and wildlife habitat, would improve with weed control and the elimination of extended cattle grazing.

5h. The bald eagle is a federally protected species under the Bald and Golden Eagle Protection Act and is found near the project area (Appendix B – Native Species Report). The proposed development has been designed to minimize disturbance to bald eagles, by locating the staging area out of the line of sight of eagles nests upstream and downstream of Little Muddy Creek FAS and on the edge of the riparian area along the riverbank. Construction would be scheduled to occur outside of the nesting period (February 1 to August 1). In addition, since the FAS and the project area have been highly disturbed for years, it is unlikely that the proposed development would have any impact on the bald eagle.

5i. No wildlife species would be imported or exported to the area as a result of the proposed development and the proposed project is not expected to result in the spread of invasive species.

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			6a.
b. Exposure of people to severe or nuisance noise levels?			X			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				

6a. Construction equipment would cause a temporary, minor increase in noise levels at the site. Any increase in noise level at the construction site would be short term and minor.

6b. The increase of noise levels during construction would be short term and minor. During construction, FWP may close the site to eliminate nuisance noise levels. Sportsman and outdoor recreationists using the site would not increase noise levels to neighboring residences, the closest of which is 0.4 miles from the property. No overnight camping or nighttime activities would be permitted and FWP would follow the guidelines of the good neighbor policy, all of which would mitigate the concern of increased noise levels.

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. Conflicted with a designated natural area or area of unusual scientific or educational importance?		X				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		X				
d. Adverse effects on or relocation of residences?		X				7d.

7d. The proposed project would have no effect on any residence.

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				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		Yes	8c.
d. For P-R/D-J, will any chemical toxicants be used? (Also see 8a)		X				

8a. Petroleum products used by the equipment to develop the site under the proposed action pose a low risk. No defective equipment shall be operated in the project area or in any area capable of reaching surface water. Refueling of equipment would occur in areas designed to minimize impacts if spills or accidents occur.

8c. FWP entered into an "Agreement for Private Crossing" with BNSF Railway Company on June 14, 2010 to allow the public to cross the BNSF Railway tracks to enter Little Muddy Creek FAS for an approximate cost of $10,000. The 16-foot crossing will be upgraded to 24 feet in order to accommodate trailers, campers, and recreational vehicles and allow for sufficient room for vehicles to pass. BNSF will perform the work at FWP expense. FWP has also obtained liability insurance as required by the BNSF Agreement for Private Crossing permit.

It is estimated that the FAS could receive an average of 2 to 10 vehicles per day. Depending on the time of year, much of that traffic would be a redistribution of vehicles already using nearby FAS's. The road surface and alignment was designed as a U.S. primary highway and is adequate to support any additional traffic generated by the FAS. The driveway approach to Old Highway 91 has good sight distances in both directions for access to the highway and crossing the railroad tracks, .25 miles to the northeast and .5 miles to the southwest, minimizing safety hazards.

The site would be closed to camping, campfires, smoking, and fireworks, minimizing the threat from fire. The site would be closed to public entry and use from 60 minutes after sunset to 60 minutes before sunrise, to minimize noise, disorderly conduct, and vandalism.

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				
c. Alteration of the level or distribution of employment or community or personal income?			X		Yes 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			9e.

9c. The proposed project may slightly increase recreational or tourism use in the local area by increasing the number of visitors to the Cascade and Ulm area due to the improved distribution of recreational facilities. This could benefit local retail and service businesses at current or slightly increased levels. (Appendix C - Tourism Report).

9e. The proposed project may have a minor effect on traffic. It is estimated that 2 to 10 vehicles per day would visit Little Muddy Creek FAS, depending on the time of year. This estimate is based on the use at nearby FAS's on the Missouri River. Some of this use could be new, specific to this site. However, considering the FAS' location between existing river access points, a large portion of the use likely would be a redistribution of use already existing along this corridor. Persons currently floating anywhere between Pelican Point FAS and the Dunes or Ulm Bridge FAS's may already be traveling this route. Providing an opportunity to split the float at Little Muddy Creek FAS may result in a diversion of traffic on Old Highway 91 that would have used Interstate 15 in the past.

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				10a.
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				10e.
f. Define projected maintenance costs.		X				10f.

10a. The proposed development would have no impact on public services, taxes, or utilities. The proposed development would require a minor reallocation of existing resources for cleaning and site maintenance and would be patrolled by FWP enforcement staff.

10b. The proposed project would have no effect on the local and state tax base and revenue.

10e. Little Muddy Creek FAS would be operated for day use only and camping facilities would not be provided. No revenue would be generated from camping fees. Outfitters who use the site would not be required to obtain an Outfitting Special Recreational Use License from the State to use Little Muddy Creek FAS for river access because the public is covered under the FAS lease to FWP, also generating no revenue. FWP commercial use rules would apply to outfitters and commercial interests using the FAS, but the revenue would not be tied directly to the Little Muddy Creek site.

10f. Projected annual operating, maintenance, and personnel expense for fiscal year 2012 is estimated to total approximately $1,000 to $1,800 per year. Of that total, $300 to $700 is for weed control, $300 for latrine maintenance, and $400 to $800 for grounds keeping. Depending upon the year, an additional $1000 to $1,500 per year would be required for flood damage repair to fences, culverts, and re-graveling the staging area and staging area access road.

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		Yes	11a.
b. Alteration of the aesthetic character of a community or neighborhood?		X				11b.
c. Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report.)					Yes 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				11d.

11a/b. Little Muddy Creek FAS has approximately ¼ mile of Missouri River frontage and is readily visible from Old Highway 91 and the Missouri River. The aesthetic values of the site would not be adversely affected by the proposed project.

11c. The primary purpose of the project is to increase recreational opportunities along the Missouri River for fishing, hunting, floating, hiking and picnicking. The FAS is proposed to be closed to the discharge of firearms and weapons except for lawful hunting. The site is open to archery and shotgun deer and waterfowl hunting during the hunting season. All FWP hunting regulations apply. The site would be closed to camping and would be managed for day use only.

11d. The proposed project area does not impact any designated or proposed wild or scenic river, trail, or wilderness area.

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				12a.
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				

12a. A cultural resource inventory has been completed and no heritage sites were identified. SHPO would be consulted and concurrence obtained prior to any ground disturbing activities. If cultural materials are discovered during the project, work would cease and SHPO would be contacted for additional consultation.

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				13g.

During construction of the proposed improvements, there may be minor and temporary impacts to the physical environment, but the impacts would be short-term and the improvements would benefit the community and recreational opportunities over the long-term. The proposed development would have no negative cumulative effects on the biological, physical, and human environments. When considered over the long-term, the proposed development positively impacts the public's recreational use of the Missouri River, an important, popular, and heavily used recreational river.

13g. The U.S. Army Corps of Engineer 404 Federal Clean Water Act is the only federal permit required for the proposed development. State permits required may include a 124 MT Stream Protection Act from Montana Fish, Wildlife & Parks, a 318 Short Term Water Quality Standard for Turbidity from the Montana Dept. of Environmental Quality, and a Floodplain Permit from Cascade County.

PART III. NARRATIVE EVALUATION AND COMMENT

During construction of the proposed improvements, there may be minor and temporary impacts to the physical environment, but the impacts would be short-term and the improvements would benefit the community and recreational opportunities over the long-term. The Proposed Action would have no negative cumulative effects on the biological, physical, and human environments. When considered over the long-term, the proposed development poses positive effects towards the public's access of the Missouri River.

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 river access. FWP would manage any increase in noxious weeds at Little Muddy Creek FAS resulting form the proposed project.

The proposed development would not impact the local wildlife species that frequent the property and would not increase conditions that stress wildlife populations. The property is not considered critical habitat for any species. Even though the area is within the habitat of bald eagles, the proposed project has been designed to minimize disturbance to the bald eagle. In addition, the proposed development is unlikely to impact this species since there is already substantial activity and disturbance in the area from recreational boating and fishing on the Missouri River, cattle grazing, private residences, highways, and the BNSF railroad line. While it is possible for wolves to travel through the project area, none have been sighted and there is no pack located in the area, so it is unlikely that the proposed development would impact gray wolves.

The Missouri River is open to angling year-round and use by anglers and other recreationists on many reaches is heavy. Little Muddy Creek FAS is located in the middle of a 21-mile long river stretch between developed FAS's. The proposed development of Little Muddy Creek FAS would fill a need for enhanced floating and river recreation opportunities and allows greater dispersal of recreation on this reach of the Missouri River.

The development of Little Muddy Creek FAS would increase recreational opportunities on the Missouri River. The proposed development of Little Muddy Creek FAS would allow FWP to provide a convenient put-in and take-out point for boaters and floaters and public access for fishing, boating, and floating to this stretch of the Missouri River, one of the most popular and heavily used rivers in Montana. This developed access would increase other public recreational opportunities, including waterfowl, upland bird, and deer hunting, dog-walking, picnicking, wildlife viewing, and hiking and provide safe and developed access to a stretch of river that has been a high priority for FWP and the public.

PART IV. PUBLIC PARTICIPATION

1. Public involvement:

The public will be notified in the following manners to comment on the Little Muddy Creek FAS Proposed Improvement Project, the Proposed Action and alternatives:

- Two public notices in each of these papers: *the Cascade Courier, the Great Falls Tribune, 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 EA's will be available at the FWP Region 4 Headquarters in Great Falls 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 4 issues.
- Copies of this environmental assessment will be available upon request 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.

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

2. Duration of comment period:

The public comment period will extend for (30) thirty days. Written comments only will be accepted until 5:00 p.m., August 13, 2012 and can be submitted on the public notice page where the EA is posted on the FWP website, emailed to gliknes@mt.gov or mailed to the addresses below:

Little Muddy Creek FAS Proposed Improvement Project
% George Liknes
Montana Fish, Wildlife & Parks, Region 4
4600 Giant Springs Road
Great Falls, MT 59405

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. Person(s) responsible for preparing the EA:

George Liknes
Region 4 Fisheries Manager
4600 Giant Springs Road
Great Falls, MT 59405
gliknes@mt.gov
(406) 454-5840

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

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

Montana Department of Commerce – Tourism
Montana Fish, Wildlife & Parks
- Parks Division
  - Design and Construction Section
- Fish and Wildlife Division
  - Fisheries Bureau
  - Wildlife Bureau
- Lands Unit
- Legal Unit

Montana Natural Heritage Program – Natural Resources Information System (NRIS)

APPENDICES

A. MCA 23-1-110 Qualification Checklist
B. Native Species Report - Montana Natural Heritage Program (MNHP)
C. Tourism Report – Department of Commerce
D. Fish, Wildlife and Parks Best Management Practices
E. State Historic Preservation Office Clearance

APPENDIX A
23-1-110 MCA PROJECT QUALIFICATION CHECKLIST

Date: March 1, 2012 **Person Reviewing:** Andrea Darling

Project Location: Little Muddy Creek FAS is located along the Missouri River and Old U.S. Highway 91, eight miles south of Ulm and six miles north of Cascade in Cascade County in SE1/4 Section 4, Township 18 North, Range 1 East.

Description of Proposed Work: FWP proposes to develop a FAS including the improvement of the existing gravel access road, and the addition of a parking area, short access road to a new gravel staging area, farm fence with turnstiles around the staging area, and informational and regulatory signs. A vault latrine is already located on the site. The remains of a concrete house foundation would be removed.

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: The short access road to the staging area would be constructed over undisturbed land.

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

[X] C. Any excavation of 20 c.y. or greater?
Comments: Yes, for construction of the access road, parking area, and staging area.

[X] D. New parking lots built over undisturbed land or expansion of existing lot that increases parking capacity by 25% or more?
Comments: Yes, parking capacity would increase by over 25%.

[ ] E. Any new shoreline alteration that exceeds a doublewide boat ramp or handicapped fishing station?
Comments: No shoreline of Little Muddy Creek or the Missouri River would be disturbed.

[ ] F. Any new construction into lakes, reservoirs, or streams?
Comments: There would be no construction into Little Muddy Creek or the Missouri River.

[ ] G. Any new construction in an area with National Registry quality cultural artifacts (as determined by State Historical Preservation Office)?
Comments: No. SHPO clearance would be obtained before any ground-breaking activity begins.

[ ] H. Any new above ground utility lines?
Comments: No new utility lines would be added as a result of the proposed project.

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

[ ] J. Proposed project significantly changes the existing features or use pattern, including effects of a series of individual projects?
Comments: No. The proposed project would not affect existing features or use patterns.

APPENDIX B

NATIVE SPECIES REPORT – MONTANA NATURAL HERITAGE PROGRAM
Sensitive Plants and Animals in the Vicinity of Little Muddy Creek FAS

Species of Concern Terms and Definitions

A search of the Montana Natural Heritage Program (MNHP) element occurrence database (http://nris.mt.gov) indicates occurrences of the bald eagle within the proposed development site. No other occurrences of federally ranked animal or plant species have been found within the vicinity of the proposed development site. The search indicated that great blue heron, veery, and spiny softshell, Species of Concern, have been observed in or near the proposed development site. 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 LITTLE MUDDY CREEK FISHING ACCESS SITE

1. **Ardea herodias (Great Blue Heron)**
   Vertebrate animal

Natural Heritage Ranks	Federal Agency Status:
State: **S3**	U.S. Fish and Wildlife Service:
Global: **G5**	U.S. Forest Service**:**
	U.S. Bureau of Land Management:

FWP CFWCS Tier: **3**

Element Occurrence data was reported of great blue heron within 2 miles of the project area. Last recorded observation date was 1993.

2. **Haliaeetus leucocephalus (Bald Eagle)**
   Vertebrate animal

Natural Heritage Ranks	Federal Agency Status:
State: **S3**	U.S. Fish and Wildlife Service: **DM**
Global: **G5**	U.S. Forest Service: **Sensitive**
	U.S. Bureau of Land Management: **Sensitive**

   FWP CFWCS Tier: **1**

   Element Occurrence data was reported of bald eagle within the project area. Last recorded observation date was 2009.

3. **Catharus fuscescens (Veery)**
   Vertebrate animal

Natural Heritage Ranks	Federal Agency Status:
State: **S3B**	U.S. Fish and Wildlife Service:
Global: **G5**	U.S. Forest Service:
	U.S. Bureau of Land Management:

   FWP CFWCS Tier: **2**

   Element Occurrence data was reported of veery within 2 miles of the project area. Last recorded observation date was 2004.

4. **Apalone spinifera (Spiny Softshell)**
   Vertebrate animal

Natural Heritage Ranks	Federal Agency Status:
State: **S3**	U.S. Fish and Wildlife Service:
Global: **G5**	U.S. Forest Service**:**
	U.S. Bureau of Land Management: **Sensitive**

   FWP CFWCS Tier: **1**

   Element Occurrence data was reported of spiny softshell within the project area. Last recorded observation date was 2010.

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
Travel Montana-Department of Commerce
301 S. Park Ave.
Helena, MT 59601

Project Name: Little Muddy Creek FAS Proposed Development

Project Description:
FWP proposes to develop a FAS including the improvement of the existing gravel access road, and the addition of a parking area, short access road to a new gravel staging area, farm fence with turnstiles around the staging area, and informational and regulatory signs. A vault latrine is already located on the site. The remains of a concrete house foundation would be removed.

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 if properly maintained. We are assuming the agency has determined it has necessary funding for the on-going operations and maintenance once this project is complete.

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 quality and quantity of tourism and recreational opportunities if properly maintained. We are assuming the agency has determined it has necessary funding for the on-going operations and maintenance once this project is complete.

Signature Carol Crockett, Visitor Services Manager Date February 28, 2012

APPENDIX D

MONTANA FISH, WILDLIFE AND PARKS

BEST MANAGEMENT PRACTICES

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. <u>Road Design</u>

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. <u>Drainage from Road Surface</u>

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 E
STATE HISTORIC PRESERVATION OFFICE CLEARANCE

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

DIVISION OF TRUST LAND MANAGEMENT

BRIAN SCHWEITZER, GOVERNOR

1625 ELEVENTH AVENUE

STATE OF MONTANA

DIRECTOR'S OFFICE (406) 444-2074
FAX NUMBER (406) 444-2684

PO BOX 201601
HELENA, MONTANA 59620-1601

RECEIVED
FEB 13 2012
BY: SHPO

February 13, 2012

RECEIVED
FEB 21 2012
D.N.R.C.

• Stan
• DNRC Trust
• Little Muddy Creek FAS
Individuals
CACO

Montana State Historic Preservation Office
Attn: Dr. Stan Wilmoth
P.O. Box 201202
Helena, MT 59620-1202

RE: Cultural Resources Inventory of the Little Muddy Creek Fishing Access Site: Cascade County, Montana. Report prepared by Patrick Rennie (DNRC, Helena) for the DNRC (Helena, MT) and DFWP (Helena, MT). Report dated 2-2012.

Dear Stan:

Enclosed for your review and files please find a copy of the above referenced report. That report details the results of a cultural resources inventory of 22 acres of state land in Cascade County where the Montana Department of Fish, Wildlife and Parks proposes to further develop an existing fishing access site. During the course of inventory, one previously documented cultural resource (24CA0371: The Cascade County portions of the Great Northern Railroad) was identified and a site form update was prepared. The DNRC is seeking concurrence of the SHPO that there should be **No Effect** to heritage properties on state lands with the proposed action.

Thank you in advance for your time, and if you have any questions or concerns regarding the above referenced report or project please let me know.

Sincerely,

Patrick J. Rennie
DNRC Archaeologist

CONCUR
MONTANA SHPO
DATE 2/17/12 SIGNED Stan Wilmoth

encl.