DRAFT ENVIRONMENTAL ASSESSMENT

UPPER BIG SPRING CREEK FISHING ACCESS SITE PROPOSED ACQUISITION AND DEVELOPMENT



June 2013



Upper Big Spring 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 two parcels totaling approximately 3 acres in fee title along Big Spring Creek in Fergus County, Montana for the purpose of providing public access to Big Spring Creek and establishing a fishing access site (FAS). In addition, FWP proposes to develop approximately 0.5 acres of those acres, including a parking area, the potential installation of concrete vault latrine if necessary, fencing, picnic tables, informational and directional signs.

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 12.8.604 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 action in relation to this rule. See Appendix A for HB 495 qualification.

3. Name of project:

Upper Big Spring Creek Fishing Access Site Proposed Acquisition and 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: June-July 2013 Estimated Decision Notice: July 2013

FWP Commission and Land Board Consideration: August 2013 Estimated Commencement Date of Development: Fall 2013 Estimated Completion Date of Development: Fall 2013

Current Status of Project Design (% complete): 35%

6. Location:

The proposed Upper Big Spring Creek FAS is located along Big Spring Creek 7 miles southeast of Lewistown along Fish Hatchery Road (County Road 466) across from the lower unit of Big Spring Trout Hatchery in Fergus County. The land is located in NW1/4 Section 5 Township 14 North, Range 19 East.

Figure 1. General Location of the Proposed Upper Big Spring Creek FAS

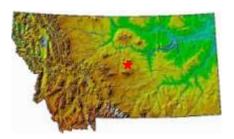


Figure 2. Highway map location of the proposed Upper Big Spring Creek FAS.

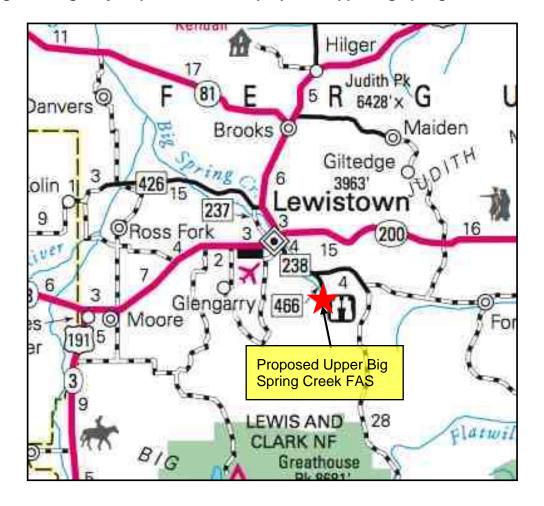
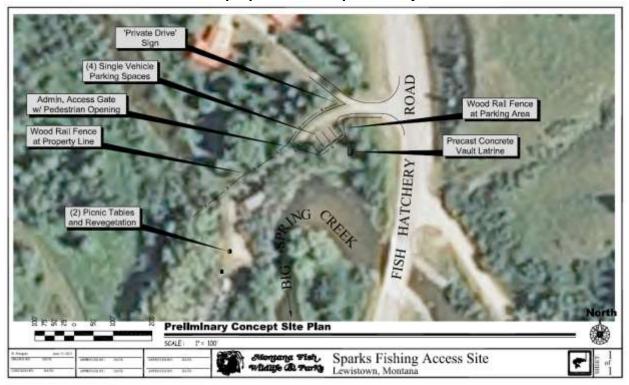


Figure 3. Aerial photo representing the approximate parcel boundaries of the proposed Upper Big Spring Creek FAS.



Figure 4. The Proposed Upper Big Spring Creek FAS preliminary concept development plan. The preliminary plan currently does not identify a vault latrine location. The proposed development may also



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

	<u>Acres</u>		<u>Acres</u>
(a) Developed: Residential	(d) FI	oodplain	0
Industrial	<u>0</u> (e) Pr	oductive: Irrigated cropland	0
(b) Open Space/ Woodlands/Recreation	0	Dry cropland Forestry	<u>0</u> 0
(c) Wetlands/Riparian Areas		Rangeland Other	<u>0</u>

8. Permits, Funding & Overlapping Jurisdiction.

(a) Permits:

Fergus County

Floodplain Permit and Sanitation Permit

(b) Funding:

Agency Name	Funding Amount
Monsanto Settlement Fund - Acquisition	\$150,934
Monsanto Settlement Fund – Development	\$ 57,500
Monsanto Settlement Fund – Total	\$ 208,434

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

Agency Name Type of

Responsibility

Natural Heritage Program
Fergus County Weed District
State Historic Preservation Office

Species of Concern (Appendix B)
Weed Management Coordination (Appendix E)
Cultural Clearance

Section 7-22-2154 (1), MCA requires a weed inspection by the county weed district before acquiring new land. The weed inspection has been completed by Fergus County Weed District (Appendix E Weed Inspection).

9. Narrative summary of the proposed action:

Big Spring Creek, one of the largest spring-fed streams in Montana, is known for its clean water, beautiful scenery, and good fishing. Big Spring Creek originates nine miles southeast of Lewistown near FWP's Big Spring Trout Hatchery and runs northwest for 30 miles between the Big Snowy, Moccasin, and Judith mountains, entering the Judith River west of Brooks, Montana. The large spring is enclosed in concrete for the city of Lewistown. Several smaller springs emerge into pools surrounded by willows and cottonwoods that shade a park and wildlife viewing area. Upstream of Lewistown, the cold, high quality water of Big Spring Creek averages 38 feet wide and 18 inches deep and below Lewistown it averages 45 feet wide and 24 inches deep. Downstream of Lewistown, the channel meanders through agricultural fields and riparian vegetation where water quality degrades due to erosion and pollution. Considered by anglers to be the most important trout stream in central Montana, Big Spring Creek attracts large numbers of wildlife, including waterfowl and furbearers. Agricultural, municipal, residential, and recreational uses also depend on or are associated with Big Spring Creek.

Big Spring Creek is a popular and heavily used recreational stream due to its excellent fishing opportunities, beautiful scenery, and close proximity to Lewistown. Big Spring Creek is the best trout fishing stream near Lewistown and is open for fishing year round. Because Big Spring Creek is not a floatable stream, all anglers fish from the streambank or wade into the stream. There are six FWP-managed FASs on Big Spring Creek, with Spring Creek FAS (stream mile 27) being the closest to the proposed Upper Big Spring Creek FAS (stream mile 29). Common game fish found in this reach of Big Spring Creek include rainbow trout, brown trout, and mountain whitefish. Other fish species commonly found in this reach include longnose sucker, and mottled sculpin.

A wide variety of resident and migratory mammal and bird species use the area. No occurrences of any animal or plant species listed as Threatened or Endangered by the U.S. Fish and Wildlife Service (USFWS) are located within the vicinity of the proposed FAS. Berry's mountainsnail, delisted and being monitored by the USFWS, and northern redbelly dace, a Species of Concern, have been observed within the vicinity of the proposed FAS (Appendix B- Native Species Report).

In 2003, it was discovered that polychlorinated biphenyls (PCBs), a carcinogenic chemical found in the paint that lined the Big Spring Trout Hatchery raceways, had leached into the soils in and around Big Spring Creek downstream of the hatchery. In late 2011, FWP began the process of cleaning the streambed, banks, and affected soils surrounding Big Spring Creek from the Big Spring Trout Hatchery to the East Fork of Big Spring Creek by removing the contaminated soil and depositing it at a landfill north of Great Falls. PCBs were also found in soils and sediment in and around a private fish hatchery located on the proposed

FAS. PCBs were found in the soil in and around the raceways, a soil mound containing sediment cleaned from the raceways, and 49 tanks located inside the hatchery building. The affected soils in the raceways were cleaned in Spring 2013 then back-filled with pit run gravel. The contaminated soil mound was removed at the same time. The contaminated tanks and soil inside the hatchery building will be removed during summer 2013 and the raceways and soil mound will be covered with topsoil and seeded with a grass mix during fall 2013.

A driveway shared with the neighboring landowner; a latrine; an A-frame house; and an old hatchery that is no longer in operation, including a hatchery building, earthen raceways, drainage ditches, pipes, and two water intakes, are currently located on the property. If acquired, FWP would remove the hatchery building, latrine, A-frame house, and water intakes. The existing driveway would serve as the access to a parking area and would continue to be shared with the neighboring property for approximately 75 feet (Figure 4) if the preliminary concept plan was developed. Access development at the southeast corner of the parcel will also be considered. A city water line that runs under the property would be unaffected by the proposed action.

Limited public access to Upper Big Spring Creek has forced anglers to use of the steep bank at the bridge crossing near the lower unit of Big Spring Trout Hatchery for stream access, which can be difficult to use. Vehicles also park along Fish Hatchery Road creating a potential public safety hazard. FWP proposes to acquire up to 2.41 acres from one landowner and approximately 0.5 acres from a second for a total of up to 3 acres in fee title along Big Spring Creek for the purpose of establishing a FAS (Figure 3). FWP proposes to develop the FAS, including a parking area to accommodate three to six vehicles, a concrete vault latrine, fencing, informational and directional signs, and picnic tables (Figure 4).

The acquisition and development of a parcel up to 3 acres along Big Spring Creek would allow FWP to manage this stretch of riparian and open-space habitat for the benefit of wildlife and fisheries species: potentially reduce angling pressure on nearby FAS's by redistributing angler use; and allow permanent public access to this stretch of the popular Big Spring Creek for fishing, picnicking, and wildlife viewing.

The property would be managed under existing FWP public use regulations. Management of the proposed FAS would include routine maintenance and 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. The FAS would be for day use only and no overnight camping, night time activities, or off road vehicle use would be allowed on the site.

10. Description and analysis of reasonable alternatives: Alternative A: No Action.

If no action was taken and the proposed acquisition and development was not made, including a parking area, concrete vault latrine, fencing, signs, and picnic tables, recreational access to this stretch of Big Spring Creek would continue to be limited. The landowners could retain or dispose of the property at their option. The public would continue to access Big Spring Creek from the steep bank at the Big Spring Trout Hatchery bridge crossing and vehicles would continue to park along Fish Hatchery Road creating a potential public safety hazard. With No Action, no or negligible impacts to existing resources are anticipated if this alternative were chosen. However, public recreational

opportunities for fishing, picnicking, and wildlife viewing would continue to be limited along this stretch of Big Springs Creek.

Alternative B: Proposed Action.

Montana Fish, Wildlife & Parks (FWP) proposes to acquire two parcels totaling approximately 3 acres in fee title along Big Spring Creek in Fergus County, Montana for the purpose of providing public access to Big Spring Creek and establishing a fishing access site (FAS). In addition, FWP proposes to develop approximately 0.5 acres of those acres, including a parking area, a concrete vault latrine if deemed necessary, fencing, informational and directional signs, and picnic tables.

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) (Appendix D), which are designed to reduce or eliminate sediment delivery to waterways during construction. FWP would develop the final design and specifications for the proposed action. 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 <u>Proposed Action</u> including secondary and cumulative impacts on the Physical and Human Environment.

A. PHYSICAL ENVIRONMENT

1. LAND RESOURCES	IMPACT						
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index	
a. Soil instability or changes in geologic substructure?		Х				1a.	
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil, which would reduce productivity or fertility?			Х		Yes	1b.	
c. Destruction, covering or modification of any unique geologic or physical features?		Х				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?			Х		Yes	1d.	
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		Х					

1a. The proposed acquisition and development would have no effect on 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 or construction of the parking area. Any disturbed areas would be seeded with a native seed mix to minimize erosion and sediment delivery to Big Spring Creek and the spread of noxious weeds. The property is not in agricultural production and the proposed action would not affect soil productivity or fertility. FWP Best Management Practices (BMP) would be followed during all phases of construction to minimize erosion (Appendix D- BMP).
- 1c. No unique geologic or physical features would be altered by the proposed action.
- 1d. Minor amounts of sediment may enter Big Spring Creek during construction or improvement of the parking area. However, upon completion, erosion and sedimentation to the stream would be improved.

2. AIR	IMPACT *					
Will the proposed action result in:	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).)			х		Yes	2a.
b. Creation of objectionable odors?			Х		Yes	2b.
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		х				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		Х				
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				

- 2a. During construction, temporary amounts of dust may be generated during leveling and grading of the parking area. If additional materials were needed off-site, loading at the source site would generate minor amounts of dust. FWP would follow FWP BMPs during all phases of construction to minimize risks and reduce dust (Appendix D- BMP). Diesel equipment would be used to implement the development5 portion of 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.
- 2b. The vault latrine would be regularly maintained to minimize objectionable odors.

2 WATER				IMPACT		
3. WATER Will the proposed action result in:	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?			Х		Yes	За.
b. Changes in drainage patterns or the rate and amount of surface runoff?			Х		Yes	3b.
c. Alteration of the course or magnitude of floodwater or other flows?		х				
d. Changes in the amount of surface water in any water body or creation of a new water body?			Х		Yes	3d.
e. Exposure of people or property to water related hazards such as flooding?		х				
f. Changes in the quality of groundwater?		Х				
g. Changes in the quantity of groundwater?		Х				
h. Increase in risk of contamination of surface or groundwater?			Х		Yes	3h.
i. Effects on any existing water right or reservation?			Х		Yes	3i
j. Effects on other water users as a result of any alteration in surface or groundwater quality?		х				
k. Effects on other users as a result of any alteration in surface or groundwater quantity?		х				
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				

- 3a. Construction of the parking area has a small potential to cause a temporary, localized increase in turbidity in Big Spring Creek, but due to its location, it is not anticipated. FWP would obtain a Montana Department of Environmental Quality (DEQ) 318 Authorization Permit for Short Term Water Quality Standard for Turbidity if the design is changed that would increase that risk. FWP BMPs would also be followed (Appendix D- BMP). FWP would follow the permit requirements for the DEQ for Permit 318 for Short Term Water Quality Standard for Turbidity.
- 3b. Construction of the parking area may alter surface runoff. The proposed action would be designed to minimize any effect on surface water, surface runoff, and drainage patterns. FWP BMP would be followed (Appendix D- BMP).
- 3d. There may be a minor, temporary increase of runoff during construction. FWP BMPs would be followed (Appendix D- BMP). Any runoff would likely be contained by a vegetative filter strip.

- 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 Big Spring Creek. FWP BMP would be followed during all phases of construction to minimize these risks (Appendix D- BMP).
- 3i. As part of the proposed acquisition, FWP would obtain pertinent water rights from the current landowner. Water was diverted from Big Spring Creek to operate the private hatchery on the property. No water has been diverted for hatchery use since it was closed. The proposed action would have no effect on other privately held water rights on Big Spring Creek.

4. VEGETATION				IMPACT		
Will the proposed action result in?	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)?			Х		Yes	4a.
b. Alteration of a plant community?		Х				4b.
c. Adverse effects on any unique, rare, threatened, or endangered species?		Х				4c.
d. Reduction in acreage or productivity of any agricultural land?		Х				
e. Establishment or spread of noxious weeds?			Х		Yes	4e.
f. For P-R/D-J, will the project affect wetlands, or prime and unique farmland?		NA				
g. Other:		NA				

- 4a. Construction of the parking area and installation of the latrine and signs would have a minor impact on the vegetation. The minimal number of trees and shrubs would be removed during construction. Because the construction area is small, impacts from construction would be minor. Any disturbed area would be reseeded with a native seed mix and revegetated.
- 4b. The proposed action would have no impact on the plant diversity, composition, or abundance of the site. The Montana Natural Heritage Program (MNHP) classified the plant community on the proposed FAS as Great Plains Riparian. The plant community found on the proposed FAS is dominated by black cottonwood, ponderosa pine, Douglas-fir hawthorn, red osier dogwood, chokecherry, snowberry, and rose. The grassland consists primarily of smooth brome, Kentucky bluegrass, timothy, and orchardgrass, with sedges along the streambank. A small area is dominated by cattails. Common introduced species include smooth brome, timothy, Kentucky bluegrass, orchardgrass, and common dandelion.
- 4c. A search of the MNHP element occurrence database found no vascular or non-vascular plant Species of Concern within the boundaries of the proposed FAS.
- 4e. No noxious weeds were found on the proposed FAS during the weed inspection conducted by Fergus County Weed District on May 6, 2013 (Appendix E- Weed Inspection). If the property were acquired by FWP, FWP would begin implementing the

Statewide Integrated Weed Management Plan in conjunction with the Fergus County Weed District using chemical, biological and mechanical methods of weed control. Weed management would facilitate the preservation and, where necessary, the restoration of native vegetation to prevent the spread of weeds. Vehicles would be restricted to the parking area and roadway, which would be maintained as weed-free, and public vehicles would not be allowed on undisturbed areas of the site.

5. FISH/WILDLIFE				IMPACT		
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Deterioration of critical fish or wildlife habitat?		Х				5a.
b. Changes in the diversity or abundance of game animals or bird species?		Х				5b.
c. Changes in the diversity or abundance of nongame species?		Х				5c.
d. Introduction of new species into an area?		Х				
e. Creation of a barrier to the migration or movement of animals?		Х				
f. Adverse effects on any unique, rare, threatened, or endangered species?		Х				5f.
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?		Х				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				

5a. The proposed action would have no impact on any critical fish or wildlife habitat and the proposed developments are designed to minimize impacts to wildlife habitat

5b/5c. According to the MNHP, common wildlife species whose habitat distribution overlaps the proposed acquisition include white-tailed and mule deer, elk, moose, mountain lion, bobcat, beaver, northern river otter, muskrat, American mink, muskrat, raccoon, and a variety of small mammals and raptors. 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, raptors, and songbirds.

According to Anne Tews, FWP Fisheries Biologist, and a review of Montana Fisheries Information System (MFISH), common game fish found in this reach of Big Spring Creek include rainbow trout, brown trout, and mountain whitefish. Other fish species found in this reach include longnose sucker, mottled sculpin, brook trout (rare), longnose dace, northern redbelly dace, white sucker, and fathead minnow.

Big Spring Creek is the trout fishing stream near Lewistown and is open year round to fishing. According to recent surveys by FWP, the average angler days per year from 2001 to 2009 on the 20-mile stretch from Cottonwood Creek (river mile 10) to the source of Big Spring Creek (river mile 30) was 8,225, with a low of 6,936 in 2005 and a high of 10,309 in 2007. The state ranking for this stretch of river averaged the 79th most fished body of water in Montana and ranged from 53 to 101 during this same period. This stretch averaged the 13th most fished river in FWP Region 4 and ranged from 8 to 18 during this same period. Using a scale from 1 (poor) to 5 (excellent), the average angler satisfaction rate for this stretch from March 2009 to February 2010 was 3.34, compared with 3.63 for the stretch including river mile 0 to 10 of Big Spring Creek. Using a scale of 1 (sparse) to 5 (crowded), the average crowding rating for this stretch for the same period was 1.34 with an average of 2.3 people seen per angler, compared with a crowding rating of 2.75 with 13.9 people seen per angler for miles 0-10 of Big Spring Creek. As a result of the presence of PCBs, there is currently a catch and release fish-consumption advisory for the stretch upstream of the U.S. Highway 191 bridge.

5f. A search of the MNHP element occurrence database indicates no occurrences of any animal species listed as Threatened or Endangered by the U.S. Fish and Wildlife Service (USFWS) within the vicinity of the proposed FAS. However, the search found that Berry's mountainsnail, delisted and being monitored by the U.S. Fish and Wildlife Service, and classified as Sensitive by the U.S. Forest Service and U.S. Bureau of Land Management, has been observed within the vicinity of the proposed FAS. The search also indicated that the northern redbelly dace, a Species of Concern, has been observed within the vicinity of the proposed FAS (Appendix B- Native Species Report).

According to Ty Smucker, FWP Wolf Management Specialist, there is no known wolf activity in the area around the Big Spring Trout Hatchery or the proposed FAS, nor has there been in prior years. While there may be individuals that could potentially move through the area, and there are occasional reports of wolf activity in the Snowy Mountains, it is unlikely that a wolf pack would persist in the area due to the high potential for livestock conflicts. Wolf pack territories cover hundreds of square miles and wolves are very flexible in their habitat use. Even if there were wolves in the area, neither the acquisition nor development of the proposed FAS would have a significant or measurable effect on the wolves or their habitat use.

5g. The proposed acquisition and development is unlikely to stress or impact fish or wildlife at the population level in the future since wildlife have become accustomed to human activity in the region. The Big Spring Trout Hatchery, nearby residences, the adjoining county road, and agricultural activity have disturbed the area near the proposed FAS for years. In addition, the clean up of PCBs along Big Spring Creek and on the proposed FAS further created a disturbance in the area.

B. HUMAN ENVIRONMENT

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

- 6a. Construction equipment could cause a temporary, minor increase in noise levels at the project site. Any increase in noise level at the construction site would be short term and minor. Visitor use could increase noise levels and disturb nearby neighbors. However, no camping would be allowed and a noise buffer created by the riparian vegetation would minimize noise disturbance.
- 6b. The proposed Upper Big Spring Creek FAS is located within .5 mile of approximately 10 to 15 residences, with the closest residence located within 100 yards of the proposed FAS. The proposed FAS is also located within 250 yards of the Big Spring Trout Hatchery. The minor and temporary increase of noise levels during construction may disturb nearby residents and employees and visitors of the hatchery. FWP would follow the guidelines of the good neighbor policy, to mitigate increased noise levels and would limit construction to periods of low visitation to minimize disturbance to others.

7. LAND USE	IMPACT						
Will the proposed action result in:	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?		Х				7a.	
b. Conflicted with a designated natural area or area of unusual scientific or educational importance?		х					
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		х				7c.	
d. Adverse effects on or relocation of residences?		Х				7d.	

- 7a. The property is not under agricultural production and the private hatchery located on the property has not been in operation for years. Consequently, the proposed action would not alter or interfere with the productivity or profitability of the existing land use of the property.
- 7c. The private hatchery on the property includes a hatchery building, 49 tanks, earthen

raceways, and drainage ditches. FWP would remove all structures from the property. The raceways and drainage ditches were filled with pit-run gravel and will be seeded with a native seed mix as part of the PCB clean up in fall 2013. The proposed action would not conflict with any existing land use.

7d. The primary FAS parking area identified in the proposed alternative is located approximately 100 yards from a residence with dense riparian vegetation growing between the residence and parking area. As a result, visual and noise disturbance to the neighboring residence would be minimal. An alternative parking area located at the southeast corner of the parcel will also be evaluated. In addition, no camping would be allowed to further minimize disturbance to neighbors.

8. RISK/HEALTH HAZARDS	IMPACT						
Will the proposed action result in:	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?			Х		Yes	8a.	
b. Affect an existing emergency response or emergency evacuation plan, or create a need for a new plan?		Х					
c. Creation of any human health hazard or potential hazard?			Х		Yes	8c.	
d. For P-R/D-J, will any chemical toxicants be used? (Also see 8a)		NA					

8a. If acquired, FWP would address noxious weeds found on the property (Appendix E- Weed Inspection). In conjunction with the Fergus County Weed District, FWP would implement an integrated approach to control noxious weeds, as outlined in the FWP Statewide Integrated Noxious Weed Management Plan, which is not included in this proposed action. The integrated plan uses a combination of biological, mechanical, and herbicidal treatments to control noxious weeds. The use of herbicides would be in compliance with the label to minimize the risk of chemical spills or water contamination and applied by licensed applicators trained in safe handling techniques.

There is a minor and temporary risk of fuel or oil from heavy equipment accidently released during construction activities. Contractors would have absorbent materials on site to minimize any hydrocarbon releases, as well as conduct startup inspection of all hydraulic lines and cylinder seals daily to reduce the potential for a release. FWP would follow FWP BMPs during all phases of construction to minimize risks (Appendix D- Best Management Practices).

8c. During January 2013, PCB-contaminated soils of the old hatchery raceways and adjacent soil mound were removed and the raceways filled with pit run gravel. The 49 contaminated tanks and soil inside the hatchery building will be removed during summer 2013 and the raceways and soil mound will be covered with topsoil and seeded with a grass mix during fall 2013. Removal of PCB contaminated soils eliminated a potential threat to public health on the property.

The proposed FAS would improve public safety by providing a designated parking area, eliminating the potential safety hazards and nuisance from the public parking along Fish Hatchery Road to access Big Spring Creek at the bridge crossing downstream of Big Spring Trout Hatchery.

9. COMMUNITY IMPACT				IMPACT		
Will the proposed action result in:	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?		Х				
b. Alteration of the social structure of a community?		Х				
c. Alteration of the level or distribution of employment or community or personal income?		Х				9c.
d. Changes in industrial or commercial activity?		Х				9d.
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?		х				9e.

- 9c. The proposed FAS is likely to improve recreational use of the area by providing additional recreational opportunities for fishing, wildlife viewing, and picnicking. This would benefit local retail and service businesses in the nearby city of Lewistown (Appendix C Tourism Report).
- 9d. There is currently no commercial or industrial use of the property and, if acquired by FWP, would not be allowed on the property in the future.
- 9e. The proposed FAS would have little potential to increase traffic hazards. Impacts to traffic would be minor and would be anticipated to be concentrated on weekends during the summer months. The proposed action would not alter the existing movement of people and goods in the area.

10. PUBLIC SERVICES/TAXES/UTILITIES				IMPACT		
Will the proposed action result in:	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:		Х				10a.
b. Will the proposed action have an effect upon the local or state tax base and revenues?		Х				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		Х				

fuel supply or distribution systems, or communications?			
d. Will the proposed action result in increased use of any energy source?	Х		
e. Define projected revenue sources	Х		10e.
f. Define projected maintenance costs.	Х		10f.

- 10a. The proposed action would have no impact on public services or utilities. If the property was acquired, it would require periodic maintenance by FWP and would be patrolled by FWP.
- 10b. There would be no change in the local and state tax base since FWP would pay property taxes in an amount equal to that of a private individual.
- 10e. Because the proposed FAS would be operated for day use only, no revenue would be generated from camping fees.
- 10f. Projected annual operating, maintenance, and personnel expense for fiscal year 2013 is estimated to total approximately \$1,100 per year.

11. AESTHETICS/RECREATION	IMPACT					
Will the proposed action result in:	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?			Х		Yes Positive	11a.
b. Alteration of the aesthetic character of a community or neighborhood?		Х				11b.
c. Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report.)			X		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				

- 11a/b. The proposed action would improve the aesthetic values of the property by removing older structures in unsightly disrepair and reclaiming the disturbed area with the planting of native grasses. The proposed FAS would be for day use only, with no camping allowed, Proposed developments include a designated parking area, concrete vault latrine, fencing, signs, and picnic tables.
- 11c. The proposed acquisition and development of this property would slightly improve the recreational and tourism opportunities of the area by providing additional recreational facilities for fishing, picnicking, and wildlife viewing and obtaining additional public access to the popular Big Spring Creek, which has been a high priority for FWP (Appendix C- Tourism Report).

12. CULTURAL/HISTORICAL RESOURCES	IMPACT					
Will the proposed action result in:	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?		Х				12a.
b. Physical change that would affect unique cultural values?		Х				
c. Effects on existing religious or sacred uses of a site or area?		Х				
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 will be completed and the State Historic Preservation Office (SHPO) will be consulted before any ground disturbance begins. If cultural materials are discovered during construction, work would cease and SHPO would be contacted for a more in-depth investigation.

SIGNIFICANCE CRITERIA

13. SUMMARY EVALUATION OF	IMPACT					
SIGNIFICANCE Will the proposed action, considered as a whole:	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.)		х				
b. Involve potential risks or adverse effects, which are uncertain but extremely hazardous if they were to occur?		Х				
c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?		Х				
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		Х				
e. Generate substantial debate or controversy about the nature of the impacts that would be created?		Х				
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				

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 positively impacts the public's recreational use of the scenic Big Spring Creek, a popular stream for recreation, and improves the habitat values at the site by removing unused buildings and re-vegetating disturbed areas

The minor impacts to the environment that were identified in the previous section are minor in scale and would not influence the overall environment of the immediate area. The natural environment would continue to provide habitat to transient and resident wildlife species and the scenic character of the area would not be affected by the proposed project.

Soils disturbed during construction resulting from the proposed alternative could colonize with weeds. Disturbed areas would be re-seeded with a native seed mix to reduce the establishment of weeds. In conjunction with Fergus County Weed Control District, FWP would begin implementing the Statewide Integrated Weed Management Plan using chemical, biological and mechanical methods to control weeds on the property.

The proposed action would not negatively 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 and no threatened or endangered animal or plant species are found on the property. Though Berry's mountainsnail and northern redbelly dace, Species of Concern, were observed on or near the proposed FAS in the past, the proposed project is unlikely to affect these species. While it is possible for wolves to travel through the proposed FAS, none have been sighted and there is no pack located in the area. Therefore, it is unlikely that the proposed acquisition and development would impact gray wolves.

Big Spring Creek has historically supported an excellent fishery for angling. It is likely that angler use of this stretch of Big Spring Creek would increase with additional access. It is also possible that with the acquisition and development of the proposed Upper Big Spring Creek FAS, angling pressure may be re-distributed, thereby reducing the pressure on other fishing access sites on Big Spring Creek.

The proposed acquisition and development of the proposed Upper Big Spring Creek FAS along Big Spring Creek would allow FWP to provide public access for anglers, picnickers, wildlife viewers, and other recreationists to Big Spring Creek. The proposed project would increase recreational use of this stretch of Big Spring Creek, one of the most scenic, popular, and heavily used streams in central Montana and a high priority for FWP.

PART IV. PUBLIC PARTICIPATION

1. Public involvement:

The public will be notified in the following manners to comment on the Upper Big Spring Creek FAS Proposed Acquisition and Development, the proposed action and alternatives:

• Two public notices in each of these papers: the Lewistown News-Argus and the Helena

Independent Record.

- Public notice on the Fish, Wildlife & Parks web page: http://fwp.mt.gov/news/publicNotices/
- Draft EA's will be available at the FWP Region 4 Headquarters in Great Falls and the FWP Lewistown Area Resource Office.
- A news release will be prepared and distributed to a standard list of media outlets interested in FWP Region 4 issues.
- Notice (post card, letters or emails) will be sent to neighboring landowners and interested parties to ensure their knowledge of the proposed action. Copies of this environmental assessment will be distributed to then upon request.

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 action.

2. Duration of comment period:

The public comment period will extend for (30) thirty days. Written comments will be accepted until 5:00 p.m., July 17, 2013 and can be emailed to gliknes@mt.gov, or mailed to the addresses below:

Upper Big Spring Creek Fishing Access Site Proposed Acquisition and Development 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, FWP 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) 454-5855

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

Don Skaar Fish Management Section Supervisor Montana Fish, Wildlife & Parks State Headquarters Helena, MT 59620 dskaar@mt.gov (406) 444-7409

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

Montana Department of Commerce – Tourism Montana Fish, Wildlife & Parks Lands Unit Legal Unit Fisheries Division

Design and Construction Bureau

Wildlife Division

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
- C. Tourism Report Department of Commerce
- D. FWP Best Management Practices
- E. Fergus County Weed Control District Weed inspection

APPENDIX A

23-1-110 MCA PROJECT QUALIFICATION CHECKLIST

Date: April 24, 2013 Person Reviewing: Andrea Darling

Project Location: The proposed Upper Big Spring Creek FAS is located along Big Spring Creek 7 miles southeast of Lewistown across County Road 466 from the lower unit of Big Spring Trout Hatchery in Fergus County in NW1/4 Section 5 Township 14 North Range 19 East.

Description of Proposed Work: Montana Fish, Wildlife & Parks (FWP) proposes to acquire and develop up to approximately 3 acres of land in fee title in Fergus County, Montana along Big Spring Creek for the purpose of establishing a fishing access site (FAS). Proposed developments include a parking area, concrete vault latrine, fencing, signs, and picnic tables.

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

- [] A. New roadway or trail built over undisturbed land? Comments: No trails or roadways. New building construction (buildings <100 sf and vault latrines exempt)? [] B. Comments: No new construction. Anv excavation of 20 c.y. or greater? [X] C. Comments: Construction of the parking area could excavate 20 c.y. [X] D. New parking lots built over undisturbed land or expansion of existing lot that increases parking capacity by 25% or more? Comments: Construction of a parking area for 4 to 6 parking spaces may increase parking by 25% or more. [] E. Any new shoreline alteration that exceeds a doublewide boat ramp or handicapped fishing station? Comments: No. Any new construction into lakes, reservoirs, or streams? [] F. Comments: No. [] G. Any new construction in an area with National Registry quality cultural artifacts (as determined by State Historical Preservation Office)? Comments: No.
- [] H. Any new above ground utility lines? Comments: No.
- [] I. Any increase or decrease in campsites of 25% or more of an existing number of campsites?

Comments: No campsites.

[] J. Proposed project significantly changes the existing features or use pattern, including effects of a series of individual projects?

Comments: No.

APPENDIX B

NATIVE SPECIES REPORT MONTANA NATURAL HERITAGE PROGRAM Sensitive Plants and Animals in the Vicinity of The Proposed Upper Big Spring Creek Fishing Access Site

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 any animal or plant species listed as Threatened or Endangered by the U.S. Fish and Wildlife Service (USFWS) within the vicinity of the proposed FAS. However, the search found that Berry's mountain snail, delisted and being monitored by the U.S. Fish and Wildlife Service, and classified as Sensitive by the U.S. Forest Service and U.S. Bureau of Land Management, has been observed within the proposed acquisition area. The search also indicated that the northern redbelly dace, a Species of Concern, has been observed within the proposed acquisition area.

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).

- **MFWP Conservation Need**. Under <u>Montana's Comprehensive Fish and Wildlife Conservation</u> <u>Strategy</u> 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.

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.				

SENSITIVE PLANTS AND ANIMALS IN THE VICINITY OF THE PROPOSED UPPER BIG SPRING CREEK FISHING ACCESS SITE

1. Chrosomus eos (Northern Redbelly Dace)

Fish

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 northern redbelly dace within the project area. No observation date was recorded.

2. Oreohelix striaosa berryi (Berry's Mountainsnail)

Invertebrate

Natural Heritage Ranks Federal Agency Status:

State: **S1S2**Global: **G5T2**U.S. Fish and Wildlife Service: **DM**U.S. Forest Service: **Sensitive**

U.S. Bureau of Land Management: Sensitive

FWP CFWCS Tier:

Element Occurrence data was reported of Berry's mountainsnail within the project area. No observation date was recorded.

APPENDIX C

TOURISM REPORT

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

The Montana Department of 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: Upper Big Spring Creek Fishing Access Site Proposed Acquisition and Development

Project Description: Montana Fish, Wildlife & Parks (FWP) proposes to acquire and develop approximately up to 3 acres of land in Fergus County, Montana along Big Spring Creek for the purpose of establishing a fishing access site (FAS). Proposed developments include a parking area, concrete vault latrine, fencing, signs, and picnic tables.

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 November 7, 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. Road Design

- 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

- 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. <u>Design Considerations</u>

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. <u>Installation of Stream Crossings and Ramps</u>

- 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 FEGUS COUNTY WEED INSPECTION

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:Big Spring Hatchery FAS	FWP Region: <u>4</u>
County: Fergus	
Date of Property Inspection with County Weed Manage	ement District: May 03, 2013
County Representative(s): <u>Brady Cannon – County W</u>	Veed Coordinator
FWP Staff:	
County Weed Management District - Inspection Report use the space below to describe noxious weeds present weed distribution and abundance):	
_There were not any noxious weeds observed at the fish	ning access site.
Noxious Weed Management Agreement (Please attach or use the space below to indicate how noxious weeds or property is under FWP ownership. Indicate if property vergional weed management plan):	on the property will be managed when the
Current fishing access areas located in Fergus County tl	hat have weed infestations are managed
by the Fergus County Weed District annually. The Fish	ing Access Areas are included in the
Fergus County Weed Management Plan.	
County Weed Management District Representative: I have the weed situation with a representative of Montana Fis weed management plan for the property, as presented all information.	h, Wildlife & Parks. I concur with FWP's bove and/or described in the attached
Signed: <u>Brady Cannon</u> Da	te: <u>May 06, 2013</u>