# DRAFT
# ENVIRONMENTAL ASSESSMENT

## POWERHOUSE FISHING ACCESS SITE
## PROPOSED IMPROVEMENTS PROJECT

April 2010

Montana Fish, Wildlife & Parks

# Powerhouse Fishing Access Site
# Proposed Improvements Project
# Draft Environmental Assessment
# MEPA, NEPA, MCA 23-1-110 CHECKLIST

## PART I. PROPOSED ACTION DESCRIPTION

**1. Type of proposed state action:**

The existing gravel boat ramp at Powerhouse Fishing Access Site (FAS), a popular FAS on the Big Hole River, has a steep grade, an uneven and unstable surface, consisting of broken asphalt, large rock, cobble and gravel, and a five-inch drop halfway up the ramp. These conditions make it very difficult for many vehicles to maneuver when launching boats. The purpose of this project is to construct a concrete single-wide boat ramp with a lower grade for easier access for all vehicles. In addition, FWP proposes to improve the parking lot to accommodate three vehicles, construct a new concrete vault latrine to replace the temporary latrine used during seasons of heavy use, and install directional and regulatory signs.

**2. Agency authority for the proposed action:**

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

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

**3. Name of project:**

Powerhouse Fishing Access Site Proposed Improvements Project

**4. Project sponsor:**

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

**5. Anticipated Schedule:**

Estimated Construction Commencement Date: Summer 2010
Estimated Completion Date: Fall 2010

Current Status of Project Design (% complete): 0%

**6. Location:**

Powerhouse FAS is located on the Big Hole River 54 miles from the mouth in Section 11 Township 1 South Range 10 West. Powerhouse FAS is located between Greenwood Bottoms FAS (three miles upstream) and Maidenrock FAS (12 miles downstream). It is located in Butte-Silver Bow County, about 19 miles south of Butte, Montana and 2.5 miles west of Interstate 15 on Montana Highway 43.

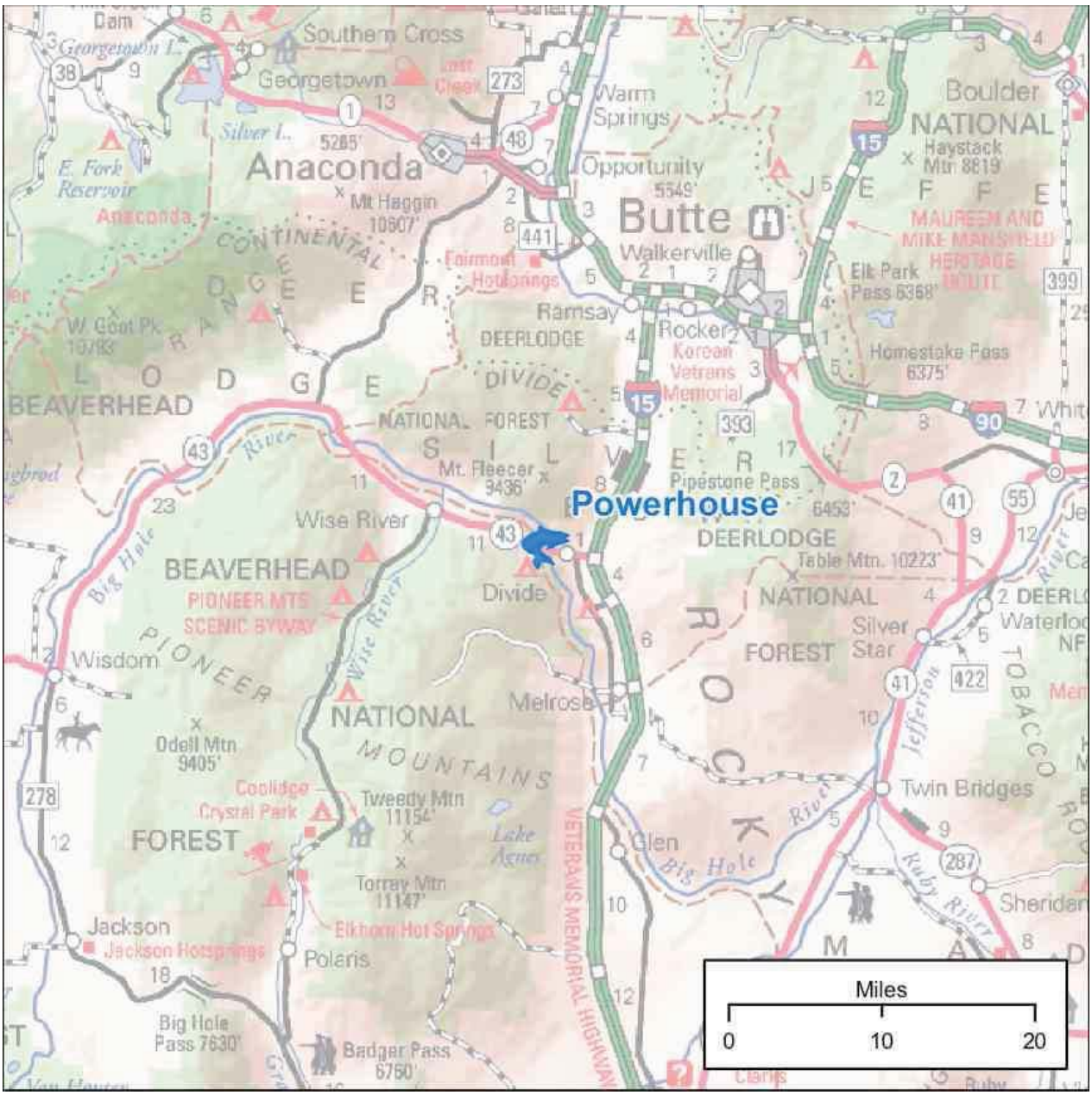
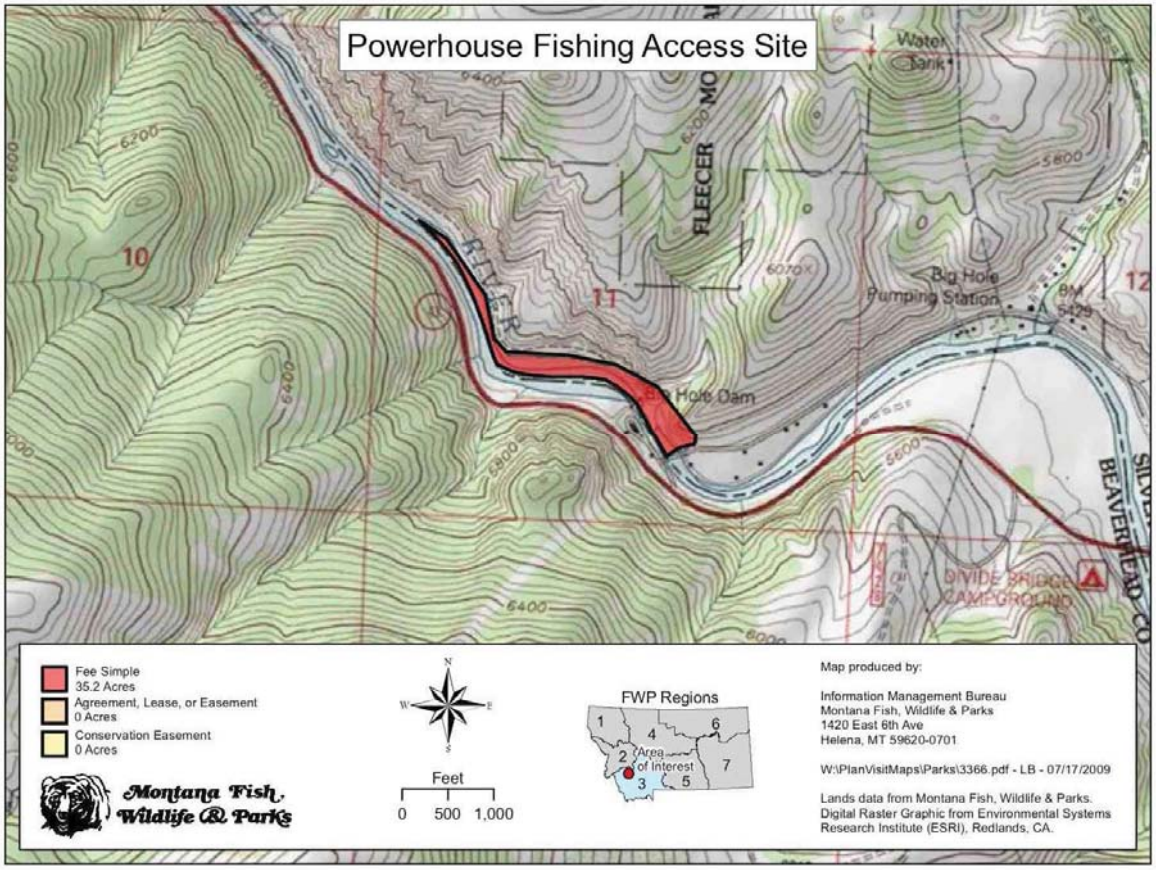


Figure 2. Powerhouse FAS General Location

Figure 3. Powerhouse FAS Parcel Map.



**7. Project size:**

| | Acres | | Acres |
|---|---|---|---|
| (a) Developed: | | (d) Floodplain | 0 |
| Residential | 0 | | |
| Industrial | 0 | (e) Productive: | |
| | | Irrigated cropland | 0 |
| (b) Open Space/ Woodlands/Recreation | .5 | Dry cropland | 0 |
| | | Forestry | 0 |
| (c) Wetlands/Riparian Areas | 0 | Rangeland | 0 |
| | | Other | 0 |

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

**(a) Permits:** Permits will be obtained 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 (If required) |
| US Army Corps of Engineers | 404 Federal Clean Water Act |
| Butte-Silver Bow County | Floodplain Permit |

**(b) Funding:**

| Agency Name | Funding Amount |
|---|---|
| Montana Fish Wildlife & Parks FAS Development | $30,000 |

**(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 & Historic Resources |

**9. Narrative summary of the proposed action:**

From its modest beginnings at Skinner Lake in the Beaverhead Mountains of southwest Montana, the Big Hole River flows 153 miles to its confluence with the Beaverhead River near Twin Bridges. Early explorers and settlers were drawn to the Big Hole by the sheer size, beauty, and richness of the high elevation valley or “hole” as the trappers called it. The Big Hole River is designated as a Class I or “Blue Ribbon” fishery by FWP and is one of the most heavily used fishing streams in Montana. The river remains free flowing for its entire course, adding to its uniqueness and charm. In addition, the Upper Big Hole River contains the last stream-dwelling population of Arctic grayling in the lower 48 states.

An increasing number of anglers are discovering the fishing opportunities of the Big Hole River. Recent surveys conducted by FWP show that the Big Hole River supports over

50,000 angler days per year, with an average of approximately 20,000 angler days per year since 2001 in the stretch from Divide Creek to Pintlar Creek (river miles 50 - 95). Game fish opportunities in the river include Arctic grayling, brook trout, brown trout, mountain whitefish, and rainbow trout.

Powerhouse FAS is located on the Big Hole River, river mile 54, and includes a small boat ramp and parking area with a one mile long, narrow strip of river bank along the base of a dry, rocky hillside up stream from the boat ramp. The vegetation near the boat ramp and parking area is dry grassland with deciduous trees and shrubs near the river, dry grassland and shrubland on the rocky hillside above the parking area, and small areas of riparian shrubland and woodland along the river upstream of the boat ramp. The primary species found around the boat ramp and parking area include black cottonwood, Wood's rose, chokecherry, and smooth brome. Occasional Douglas fir, sagebrush, smooth brome, wild rye, intermediate wheatgrass, cheatgrass and Indian ricegrass are found on the dry, rocky slope above the parking area and riverbank. Riparian plants found along the river consist primarily of willow and chokecherry. Dominant introduced grasses found at the FAS include smooth brome, intermediate wheat grass, and cheatgrass. The most common noxious weeds found at the site are spotted knapweed on rocky sites with Canada thistle along the riverbanks.

Powerhouse is one of 13 FWP-managed fishing access sites on the Big Hole River, a tributary to the Jefferson River. Greenwood Bottoms is the next FAS upstream from Powerhouse; Maidenrock is the next site downstream. Of the 13 FAS's on the Big Hole River, only 2 others have concrete boat ramps: Fishtrap Creek FAS, 27 miles upstream, and George Grant Memorial FAS, three miles upstream. A Decision Notice to build a concrete ramp at Salmon Fly FAS, 20 miles downstream, was issued on August 19, 2009 and construction is scheduled for fall 2010 and the Environmental Assessment for constructing a concrete ramp at Glen FAS, 29 miles downstream, was released for public comment in February 2010.

Powerhouse FAS is a very popular FAS for anglers, boaters and rafters. Currently, the use consists almost entirely of anglers and floaters taking their boats and rafts out of the river at this site because Powerhouse FAS is the last point with public access to remove boats before the Butte-Silver Bow County pump house diversion dam. After the existing dam is replaced with a rock weir structure with a boat notch in July 2010, the river will be navigable below Powerhouse FAS. As a result, the use of Powerhouse FAS is likely to increase and consist of both launching and removing boats and rafts. Though the FAS is used heavily throughout the year, peak use occurs during the spring salmon fly hatch.

No camping is allowed at Powerhouse FAS so no revenue has been generated from camping at Powerhouse FAS. Average FAS annual operations and personal services costs for fiscal year 2010 are approximately $3673.

The existing gravel boat ramp at Powerhouse Fishing Access Site (FAS) has a steep 20% grade, an uneven and unstable surface, consisting of broken asphalt, large rock, cobble and gravel, and a five-inch drop halfway up the ramp. These conditions make it very difficult for many vehicles to maneuver when launching boats. The purpose of this project is to construct a concrete single-wide boat ramp with a 14% - 16% grade for easier access for all vehicles. In addition, FWP proposes to improve the parking lot to accommodate three vehicles, construct a new concrete vault latrine to replace the temporary latrine used during seasons of heavy use, and install directional and regulatory

signs.

Figure 4. Existing Boat Ramp at Powerhouse FAS

## PART II. ENVIRONMENTAL REVIEW

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

   **Alternative A: No Action**
   Use of the existing boat ramp, which is difficult to access due to steep slope, a five-inch drop midway up the ramp, and an uneven and unstable surface, would continue. The parking area would not be improved. A temporary latrine would continue to be seasonally placed on the site. FWP would continue to provide routine maintenance to the existing facilities as it has done in the past.

   **Preferred Alternative B: Proposed Action**
   FWP would replace the existing steep, gravel boat ramp with a single-wide concrete boat ramp, replace the temporary, seasonal latrine with a permanent concrete latrine, improve the existing gravel parking lot, and install directional and regulatory signs.

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

## PART III. ENVIRONMENTAL REVIEW CHECKLIST

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

## A. PHYSICAL ENVIRONMENT

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

1b. A small portion of stream bank will be overlain by a concrete slab that will serve as a boat ramp. FWP Best Management Practices (BMP) for Fishing Access Sites will be followed to minimize erosion risks. (Appendix D)

1d. The concrete ramp will resist erosion, reducing sedimentation to the river from the existing gravel boat ramp.

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

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

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

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

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

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

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

3a. Construction of the concrete boat ramp, parking lot improvements, and latrine may cause a temporary, localized increase in turbidity. FWP will obtain a Montana Department of Environmental Quality (DEQ) 318 Authorization Permit, as required. FWP Best Management Practices will be followed (Appendix D).

3b. Construction of the gravel boat ramp, parking lot, and latrine may slightly alter surface runoff. The proposed work would be designed to minimize any effect on surface water, surface runoff, and drainage patterns. FWP Best Management Practices will be followed (Appendix 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 Best Management Practices will be followed during all phases of construction to minimize these risks. (Appendix D). The application of herbicides to manage the existing noxious weeds would be done per the guidelines presented in the FWP Statewide Integrated Noxious Weed Management Plan.

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| 4. VEGETATION<br>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 | | Yes | 4a |
| b. Alteration of a plant community? | | X | | | | |
| c. Adverse effects on any unique, rare, threatened, or endangered species? | | X | | | | 4c. |
| d. Reduction in acreage or productivity of any agricultural land? | | X | | | | |
| e. Establishment or spread of noxious weeds? | | | X | | Yes | 4e. |
| f. ****For P-R/D-J, will the project affect wetlands, or prime and unique farmland? | | NA | | | | |

4a. The most common plants found along the river at Powerhouse FAS are black cottonwood, willow, chokecherry, Wood's rose, and smooth brome, while the most common species found in rocky, upland areas are big sagebrush, smooth brome, wild rye, intermediate wheatgrass, Indian ricegrass, and cheatgrass. The most common exotic species found at the FAS are smooth brome and cheatgrass. Common noxious weeds include spotted knapweed and Canada thistle. Construction of the concrete boat ramp, parking lot improvements, and latrine will require the removal of few, if any, riparian plants. The concrete ramp will displace few native and introduced grasses, forbs and shrubs.

4c. Montana Natural Resource Information System (NRIS) identified no plant species that are species of concern.

4e. Soils disturbed during the construction of the boat ramp, parking lot, and latrine may colonize with weeds. Disturbed areas will be re-seeded where necessary to reduce the establishment of weeds and the area will continue to be managed with an emphasis on controlling noxious weeds under the FWP Statewide Integrated Noxious Weed Management Plan.

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

5b/5c. Wildlife species whose habitat distribution area includes Powerhouse FAS include white-tail and mule deer, elk, antelope, bighorn sheep, mountain lion, moose, black bear, beaver, small mammals (voles, shrews and mice), raptors, and migratory song birds. There is a low likelihood that there would be changes in the diversity or abundance of game or non-game animals or birds since the FAS is already used.

5f. NRIS identified six species of concern in the vicinity of Powerhouse FAS: northern goshawk, Brewer's sparrow, arctic grayling, gray wolf, wolverine, and Canada lynx. Northern goshawks were observed within two miles of the FAS as recently as 2004. The proposed project is unlikely to have any impact on northern goshawks since it's habitat is generally coniferous forests with relatively dense canopies and Powerhouse FAS has little to no canopy cover. Brewer's sparrows were observed within two miles of Powerhouse FAS in 1994. The proposed project is unlikely to have any impact on Brewer's sparrow since its habitat is sagebrush and sagebrush is only found on very steep, rocky portions of the FAS.

Even though Arctic grayling have been observed in this section of river, they are rare. The project should have little impact on all aquatic species, including Arctic grayling, because of the small area that will be disturbed and the erosion prevention methods that will be used during construction. Wolverines were observed within three miles of the project area as recently as 2005. Wolverines occupy large and diverse habitats, including alpine tundra, boreal forests, and large, mountainous, and essentially roadless areas. Due to the limited nature of the proposed project and that the FAS has been used for years, wolverines are unlikely to be affected by the proposed project. Canada lynx were observed within two miles of the project

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area in 1997. Canada lynx habitat is generally high elevation, coniferous forests and is, therefore, unlikely to be affect by the proposed project.

Gray wolves are listed as delisted in the Central Idaho Recovery Area by USFWS, Sensitive by USFS, and Special Status by BLM, in Tier 1 of the FWP Comprehensive Fish and Wildlife Conservation Strategy (CFWCS) and S3/G4 by Montana Natural Heritage Program. The ranking by MNHP indicates the species is potentially at risk of extirpation in the state and uncommon but not rare globally. In 2002, wolves met the recovery criteria set by the USFWS and are therefore biologically recovered. The gray wolf was officially delisted from the federal Endangered Species Act as of May 4, 2009. Montana's state laws, regulations and management plan replace federal regulations. Gray wolves are protected and managed as a Montana species in need of management. According to Nathan Lance, FWP Wolf Management Specialist, the project is within the habitat of the gray wolf in the Big Hole watershed. There are two known packs (Mt. Haggin, and Table Mountain) 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. 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.

Establishment of a permanent boat ramp will have a long-term beneficial effect on fish and wildlife habitat by reducing sedimentation and improving riparian health.

5g. The improved facilities may result in increased use, however the potential impact on existing wildlife in the area is temporary and minor since the FAS is already heavily used.

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## B. HUMAN ENVIRONMENT

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

6a. Heavy equipment will be used during construction of the boat ramp, parking lot, and latrine, which will temporarily increase noise levels at the site. FWP Best Management Practices will be followed to minimize noise disturbance to neighboring homes and to workers. (Appendix D).

6b. If construction noise levels exceed a level deemed unsafe over a workday time frame, all workers will be required to wear proper ear protection. All construction work will be done during hours that will minimize disturbance to neighboring homes. FWP will follow the Best Management Practices during all phases of construction to minimize noise risks to workers and neighboring homeowners. (Appendix D).

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

The FAS is currently used for fishing, boating, floating, and wildlife viewing and will continue to be used for the same purposes.

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

8a. Physical disturbance of the soil during construction of the concrete ramp, parking lot improvement and latrine may introduce noxious weeds to the site. FWP actively manages noxious weeds on the FAS in conjunction with Butte-Silver Bow County Weed District and will continue to use an integrated approach to control any new occurrence of noxious weeds, as outlined in the FWP Statewide Integrated Noxious Weed Management Plan. The integrated plan uses a combination of biological, mechanical and herbicidal treatments to control noxious weeds.

| 9. COMMUNITY IMPACT<br>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 | 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 | | Yes | 9e. |

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

9e. There is a potential for an increase in use due to a more accessible boat ramp therefore potential increased traffic to the FAS. Though not a part of the proposed project, the replacement of the Butte-Silver Bow County

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diversion dam with a rock weir structure with a boat notch, which will allow fish and boat passage, will also likely increase the use at the FAS. The proposed improvements to the parking area should help alleviate vehicle congestion at the FAS.

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

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

10b. There will be no change in the tax base since FWP already pays property taxes to Butte-Silver Bow County.

10f. Average annual operating and personal expenses for fiscal year 2010 are approximately $3673.

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

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

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

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

| ** 11. AESTHETICS/RECREATION<br>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 | | | | |
| b. Alteration of the aesthetic character of a community or neighborhood? | | X | | | | |
| c. **Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report.) | | | X | | 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 | | | | |

11c. Improving launching facilities, the parking lot and constructing a concrete latrine will improve the quality of recreation by providing recreationists a more user-friendly site and by making loading and unloading more easily accessible. With improved launch facilities and the replacement of the diversion dam downstream at Divide with a rock weir structure which will allow boat and fish passage, there will likely be an increase in use of the FAS by commercial outfitters. FWP commercial use fee rules will apply to the use by outfitters.

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

Clearance from the State Historic Preservation Office (SHPO) has been received (Appendix E- SHPO Letter of Clearance). If cultural materials are discovered during construction, work will cease and SHPO will be contacted for a more in depth investigation.

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

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

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

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

## SIGNIFICANCE CRITERIA

| 13. SUMMARY EVALUATION OF SIGNIFICANCE<br><br>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 | | | | |

Because of the limited scope of the proposed improvements, it is expected there will be a limited number of impacts to the physical, biological and human environments. When considered over the long term, the proposed action poses significant positive effects towards the public's continued access of a popular recreation area on the Big Hole River.

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

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

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

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

## PART III. NARRATIVE EVALUATION AND COMMENT

Because of the limited scope of the proposed improvements, it is expected there will be a limited number of impacts to the physical, biological and human environments. When considered over the long term, the proposed action poses significant positive effects towards the public's continued access of a popular recreation area on the Big Hole River.

The minor impacts that were identified in the previous section are small in scale and will not influence the overall environment of the immediate area. The natural environment will continue to provide habitat to transient and permanent wildlife species and will continue to be open to the public for access to the river for fishing, boating, rafting, and wildlife viewing.

The proposed alternative will have little impact on the local wildlife species that frequent the property, will not increase negative conditions that stress wildlife populations, and is not considered critical habitat for any species.

Canada lynx, a federally listed threatened species, were observed within two miles of Powerhouse FAS in 1997. The proposed project is unlikely to affect Canada lynx because Canada lynx habitat generally consists of high elevation, coniferous forests and because Powerhouse FAS has been heavily used for years.

The Big Hole River supports the last remaining native population of fluvial Arctic grayling, a species of special concern, in the lower 48 states. The highest concentration of Arctic grayling occur in the upper reaches of the Big Hole River and are not expected to be affected by the construction of the boat ramp or by stabilization activities and will ultimately benefit their population by reducing sedimentation into the river.

Many of the minor impacts are expected to be only for the relatively short duration of the construction period with no lasting negative effects on the local environment. For those actions requiring minor mitigation, such as disturbances to soils that could increase the possibility of noxious weeds spreading at the site, efforts will be taken to diminish those impacts.

## PART IV. PUBLIC PARTICIPATION

### 1. Public Involvement

The public will be notified in the following manners to comment on the proposed improvements of Powerhouse FAS:

- Two public notices in each of these papers: the Montana Standard 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 3 Headquarters in Bozeman and the FWP State Headquarters in Helena.
- A news release will be prepared and distributed to a standard list of media outlets interested in FWP Region 3 issues.

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

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

**2. Duration of comment period, if any.**

The public comment period will extend for (30) thirty days following the publication of the second legal notice in area newspapers. Written comments will be accepted until 5:00 p.m., May 25, 2010 and can be e-mailed to tgarrett@mt.gov or mailed to the address below:

Powerhouse Fishing Access Site Proposed Improvement Project
Montana Fish, Wildlife & Parks, Region 3
1400 South 19th Avenue
Bozeman, MT 59718

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

## PART V. EA PREPARATION

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

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

**2. Persons responsible for preparing the EA:**

Todd Garrett
Fishing Access Site Manager
1400 South 19th Avenue
Bozeman, MT 59718
tgarrett@mt.gov
406-994-4042

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

Jerry Walker
Regional Parks Manager, Region 3
1400 South 19th Avenue
Bozeman, MT 59718
gwalker@mt.gov
406-994-4042

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

Montana Fish, Wildlife & Parks
- Parks Division
- Wildlife Bureau
- Fisheries Bureau
- Design & Construction Bureau
- Legal Unit

Montana State Historic Preservation Office (SHPO)
Montana Department of Commerce – Tourism
Montana Natural Heritage Program – Natural Resources Information System (NRIS)
Butte-Silver Bow County Weed District

## APPENDICES

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

# APPENDIX A
## 23-1-110 MCA
## PROJECT QUALIFICATION CHECKLIST

**Date:** February 28, 2010 **Person Reviewing:** Andrea Darling

**Project Location:** Powerhouse FAS is along the Big Hole River about 2.5 west of Divide, Montana in Butte-Silver Bow County, Section 11, T1S R10W.

**Description of Proposed Work:** Montana Fish, Wildlife & Parks proposes to replace the existing gravel boat ramp with a single-wide concrete boat ramp, improve the parking lot to accommodate three vehicles, construct a permanent, concrete latrine, and install directional and regulatory signs.

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

[ ] **A. New roadway or trail built over undisturbed land?**
Comments: No new roadways or trail.

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

[x] **C. Any excavation of 20 c.y. or greater?**
Comments: This project will require more than 20 c.y. of material to be excavated during the construction of the single-wide boat ramp and parking lot improvements.

[ ] **D. New parking lots built over undisturbed land or expansion of existing lot that increases parking capacity by 25% or more?**
Comments: No new parking lot.

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

[X] **F. Any new construction into lakes, reservoirs, or streams?**
Comments: A single-wide concrete boat ramp will be built on the riverbank.

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

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

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

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

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

# APPENDIX B

## SENSITIVE PLANTS AND ANIMALS IN THE POWERHOUSE FAS AREA

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 Canada lynx, a federally listed threatened animal species, no occurrences of endangered animal species and no occurrences of endangered or threatened plant species in the project area. The search also indicated that the project area is within the habitat for northern goshawk, Brewer's sparrow, Arctic grayling, gray wolf, and wolverine. 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**<br>**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**<br>**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**<br>**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**<br>**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**<br>**S5** | Common, widespread, and abundant (although it may be rare in parts of its range). Not vulnerable in most of its range. |

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

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

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

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

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

## SENSITIVE PLANTS AND ANIMALS IN THE VICINITY OF POWERHOUSE FAS

1. **Accipiter gentilis (Northern Goshawk)**

| 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: **2**

Element Occurrence data was reported of northern goshawk within two miles of the project area. Last observation date was 2004.

2. **Spizella breweri (Brewer's Sparrow)**

| 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: **Sensitive** |

FWP CFWCS Tier: **2**

Element Occurrence data was reported of Brewer's sparrow within two miles of the project area. Last observation date was 1994.

3. **Thymallus arcticus (Arctic Grayling)**

| Natural Heritage Ranks | Federal Agency Status: |
|---|---|
| State: **S1** | 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 arctic grayling within three miles of the project area. Last observation date was not recorded.

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

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

FWP CFWCS Tier: **1**

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

5. **Gulo gulo (Wolverine)**

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

FWP CFWCS Tier: **2**

Element Occurrence data was reported of wolverine within three miles of the project area. Last observation date was 2005.

6. **Lynx canadensis (Canada Lynx)**

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

FWP CFWCS Tier: **1**

Element Occurrence data was reported of Canada lynx within three miles of the project area. Last observation date was 1997.

# 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:** Powerhouse FAS Proposed Improvements Project

**Project Description:**

The existing gravel boat ramp at Powerhouse Fishing Access Site (FAS), a popular FAS on the Big Hole River, has a steep 20% grade and an uneven and unstable surface, consisting of broken asphalt, large rocks, cobble and gravel, making it difficult for many vehicles to maneuver when launching boats. The purpose of this project is to construct a concrete single-wide boat ramp with a 14% - 16% grade for easier access for all vehicles. In addition, FWP proposes to improve the parking lot, construct a new concrete vault latrine to replace the temporary latrine used during seasons of heavy use, and install directional and regulatory signs.

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

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

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

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

Signature Carol Crockett, Visitor Services Manager Date 2/24/10

# APPENDIX D

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

10-02-02
Updated May 1, 2008

## I. ROADS

### A. Road Planning and location

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

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

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

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

4. Minimize the number of stream crossings.

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

### B. Road Design

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

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

### C. Drainage from Road Surface

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

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

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

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

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

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

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

## D. Construction/Reconstruction

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

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

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

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

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

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

### E. Road Maintenance

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

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

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

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

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

### A. Site Design

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

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

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

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

### B. Maintenance: Soil Disturbance and Drainage

1. Maintenance operations minimize soil disturbance around parking lots, swimming areas and campsites, through proper placement and dispersal of such facilities or by reseeding disturbed ground. Drainage from such facilities should be promoted through

proper grading.

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

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

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

## III. RAMPS AND STREAM CROSSINGS

### A. Legal Requirements

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

### B. Design Considerations

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

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

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

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

### C. Installation of Stream Crossings and Ramps

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

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

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

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

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

# APPENDIX E

# State Historic Preservation Office (SHPO) Letter of Clearance

201003043

**Montana Fish, Wildlife & Parks**

RECEIVED
MAR 22 2010
DESIGN & CONSTRUCTION
DEPT. OF FISH, WILDLIFE & PARKS

RECEIVED
MAR 04 2010
BY: SHPO


**1420 East Sixth Avenue**
**P.O. Box 200701**
**Helena, Montana 59620-0701**


CONCUR
MONTANA SHPO
DATE 14 Mar 2010 SIGNED

. JOSEF
. FWP/PARKS
. Powerhouse fishing access improvements Big Hole Riv SB Co

Dr. Mark Baumler, SHPO
State Historical Preservation Office
P.O. Box 201202
1410 8th Avenue
Helena, Montana 59620-1202

**RE: Powerhouse Fishing Access Site, Big Hole River, Silver Bow County, Montana**

March 3, 2010

Dear Dr. Baumler:

The Department of Fish, Wildlife and Parks (FWP) is proposing improvements to the existing boat ramp and parking at the Powerhouse Fishing Access Site on the Big Hole River in Silver Bow County, Montana. The proposed undertaking is located on lands administered by FWP at approximately T1S R10W Section 11 as indicated in the enclosed report entitled *Heritage Resource Inventory of the Powerhouse Fishing Access Site Improvement Project, Silver Bow County, Montana.* Pursuant to regulations found at 36 CFR 800 we request SHPO review of the enclosed inventory and the eligibility determinations stated below.

FWP believes that the APE, as defined in the enclosed report, adequately considers all reasonable potential effects to Historic Properties from this proposed undertaking. We also believe that the report prepared by Ken Dickerson of Renewable Technologies, Inc. for FWP is adequate and we agree with his methods. We agree with the consultant's recommendations of eligibility and that, due to the low likelihood of adverse impacts to cultural resources, the project should be allowed to proceed as proposed.

We request your concurrence on the adequacy of the enclosed report and the low likelihood of adverse impacts to cultural resources. Please feel free to contact Bardell Mangum at (406) 841-4012 or by e-mail at bmangum@mt.gov if you have any questions or concerns regarding the proposed project.

Sincerely,

Bardell Mangum, RLA
Landscape Architect
Design & Construction Unit

Encl.: report; CRABS form
cc: File 719.1, Sara Scott (no enclosure)