



# Montana Fish, Wildlife & Parks

JUN 11 2004

## LEGISLATIVE ENVIRONMENTAL POLICY OFFICE

COVER LETTER

June 10, 2004

TO: Governor's Office, Ed Bartlett, Rm. 204, State Capitol, P.O. Box 200801, Helena, MT 59620-0801  
Environmental Quality Council, Capitol Building, Room 106, P.O. Box 201704, Helena, MT 59620  
Dept. Environmental Quality, Metcalf Building, P.O. Box 200901, Helena, MT 59620-0901  
Dept. of Natural Resources and Conservation, US F&G Bldg. 1625 11<sup>th</sup> Ave. Helena, MT 59620  
Bud Clinch, Director  
Information Services Section  
Water Resources Division, 48 N. Last Chance Gulch, P.O. Box 201601, Helena, MT 59620-1601  
Montana Fish, Wildlife & Parks, 1420 E. 6<sup>th</sup> Ave. Helena, MT 59620  
Director's Office  
Fisheries Division  
Parks Division  
Design and Construction Bureau  
FWP Region 3 Office, 1400 South 19<sup>th</sup>, Bozeman, MT 59715  
MT Historical Society, State Historic Preservation Office, P.O. Box 201202 Helena, MT 59620-1202  
MT State Library, 1515 E. Sixth Ave., P.O. Box 201800, Helena, MT 59620  
James Jensen, Montana Environmental Information Center, POB 1184, Helena, MT 59624  
Janet Ellis, Montana Audubon Council, P.O. Box 924, Helena, MT 59624  
Northern Plains Resource Council, 2401 Montana Ave. Suite 200, Billings, MT 59101-2336  
Jefferson County Commissioners, P.O. Box H, Boulder, MT 59632  
Jefferson County Disaster and Emergency Services Coordinator, P.O. Box H, Boulder, MT 59632  
Wildlife Federation, P.O. Box 1175, Helena, MT 59624  
Trout Unlimited, P.O. Box 7186, Missoula, MT 59807  
MT State Parks Association, P.O. Box 699, Billings, MT 59103  
Senator Duane Grimes, Senate District 20, 4 Hole In The Wall, Clancy, MT 59634-9516  
Rep. Rick Dale, House District 39, 5 Rocky Mountain Dr., Whitehall, MT 59759-9626  
George Ochenski, P.O. Box 689, Helena, MT 59624  
Environmental Protection Agency, 301 S. Park Ave. Drawer 10096, Helena, MT 59625-0096  
Larry Cole, U.S. Forest Service, Helena Ranger District, 2001 Poplar, Helena, MT 59601  
U.S.F.S. Engineering Section, 200 E. Broadway, P.O. Box 7669, Missoula, MT 59807  
U.S. Army Corps of Engineers, 10 W 15<sup>th</sup> St., Suite 2200, Helena, MT 59626  
U.S. Fish & Wildlife Service, MT Field Office, 100 N. Park Ave. Helena, MT 59601

Ladies and Gentlemen:

The enclosed Environmental Assessment (EA) has been prepared for the Park Lake Dam Rehabilitation and is submitted for your consideration. Comments or questions about the project can be submitted to the Montana Fish, Wildlife & Parks, Helena Area Resource Office, 930 Custer Ave. Helena, MT 59620, attn. Craig Marr (406) 495-3270, e-mail [cmarr@state.mt.us](mailto:cmarr@state.mt.us). Comments will be accepted until 5:00 p.m., July 12, 2004. Copies of the EA are available upon request.

Thank you for your interest

Michael Korn  
Area Coordinator MFWP

# MEPA ENVIRONMENTAL ASSESSMENT CHECKLIST

## Part I. Proposed Action Description

1. Type of Proposed State Action    Dam Rehabilitation

2. Agency Authority for the Proposed Action

Owner: MT Fish, Wildlife & Parks; Sec. 23-1-102 and Sec. 23-1-110, MCA.

3. Name of Project    Park Lake Dam Rehabilitation – Dam and Spillway

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

MT. Dept. of Natural Resources & Conservation, 1424 9<sup>th</sup> Ave., P.O. Box 201601, Helena, MT 59620 – 1601  
(406) 444-2932 - attn. Kevin Smith, State Water Projects Bureau Chief

5. If Applicable:        Estimated Construction/Commencement Date Fall, 2004  
                                 Estimated Completion Date Spring, 2005  
                                 Current Status of Project Design (% complete) 100%

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

Jefferson County - Section 13, Township 8N, Range 5W

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

- |   |   |
|---|---|
| (a)    Developed:<br>Residential ..... <u>acres</u><br>Industrial..... <u>acres</u><br>Open Space/<br>Woodlands /<br>Recreation..... <u>acres</u> | (c)    Floodplain..... <u>acres</u>   |
| (b)    Wetlands/Riparian<br>Areas ..... <u>acres</u>  | (d)    Productive:<br>Irrigated cropland ..... <u>acres</u><br>Dry cropland..... <u>acres</u><br>Forestry ..... <u>acres</u><br>Rangeland..... <u>acres</u><br>Other ..... <u>acres</u> |
|   | (e) <u>x</u> Other: earthen dam..... <u>5 acres</u>   |

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

Vicinity map, topographic map and construction sketches attached.

**9. Narrative Summary of the Proposed Action or Project including the Benefits and Purpose of the Proposed Action.**

Park Lake Dam and Reservoir is located in Jefferson County, section 13, township 8 north, range 5 west, approximately 10 miles southwest of Helena, Montana. The dam and the shoreline of the reservoir, (approx. 90 acres) are owned by the Montana Fish, Wildlife and Parks (MFWP). The Montana Department of Natural Resources and Conservation (DNRC) is providing assistance by overseeing the design and construction work for this project.

Park Lake Dam does not currently meet state dam safety standards due to an undermined spillway culvert, eroded upstream dam face, downstream slope instability on the dam, and other potential deficiencies. The proposed project will rehabilitate the dam so that it meets current dam safety specifications and standards as required by the state of Montana. The rehabilitation will bring the dam into compliance with the requirements of the Montana Dam Safety Act.

The proposed action involves;

- The removal and the reconstruction of the dam embankment.
- Replacement of the primary spillway (road culvert).
- Placement of riprap on the outlet channel.

Approximately 20,000 cubic yards of material will be used in the cut and fill operations, with approximately 5 acres disturbed. Approximately 9,000 yards of material will be re compacted and the additional fill material will be removed from the shallow end of the reservoir. This action will deepen the reservoir which will improve Artic grayling habitat. The reservoir elevation would be lowered during construction, with the majority of the work conducted above the water level. Any disturbed areas would be reclaimed upon completion of the project, with the exception of the maintenance access to the main dam, which would be maintained for future use. The normal pool elevation at the spillway crest is 6,354.0, with 225 acre-feet of storage. The types of equipment used for the project will include bulldozers, backhoes, front-end loaders, tracked excavators, graders, and dump trucks.

A Storm Water Discharge Permit Application and Erosion Control Plan, 318 Permit Application, 404 Permit Application, and a 124 Permit Application have been submitted to the Montana Department of Environmental Quality, The Army Corps of Engineers and Montana Fish, Wildlife & Parks, respectively. Cultural clearance from the Montana State Historic Preservation Office was obtained in July 2000.

The goal of this project is to maintain the highest possible level of protection for the public and property located downstream from the dam, protect downstream water quality, and protect and enhance wildlife, fisheries and recreational resources associated with the reservoir. Park Lake dam is designated as a "high hazard" dam by the state of Montana. A "high hazard" dam is one whose failure would endanger lives downstream. The designation is not a reflection of the actual condition of the dam. Work is anticipated to begin in the fall of 2004 and end in the spring of 2005.

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

(a) Permits:

Agency Name	Permit	Date Filed/#
MT State Historic Preservation Office	Cultural Clearance	received July 2000 #2000061606
MT Dept. of Environmental Quality	318 / Stormwater Discharge	pending
MT Fish, Wildlife & Parks	124	pending
U.S. Army Corps of Engineers	404	pending
DNRC, Dam Safety Section	Dam Safety Permit	pending

**10. (Continued)**

(b) Funding:

Agency Name                      Funding Amount

MT Fish, Wildlife & Parks– The estimated cost is \$450,000

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

Agency Name                      Type of Responsibility

MT Dept. of Natural Resources and Conservation – Dam safety, maintenance and project engineering oversight.

MT Fish, Wildlife & Parks – Property owner and managing agency for wildlife and fisheries resources, and managing agency for recreational resources at the Park Lake Fishing Access Site.

U.S. Forest Service – Helena Ranger District, Property owner and managing agency of adjacent U.S. Forest Service lands

**11. List of Agencies Consulted during Preparation of the EA:**

MT Dept. of Environmental Quality

MT Fish, Wildlife & Parks

MT Dept. of Natural Resources & Conservation

MT State Library, Natural Resource Information System

U.S. Forest Service

U.S. Army Corps of Engineers

## Part II. Environmental Checklist Review

### 1. PHYSICAL ENVIRONMENT

	<u>IMPACTS</u>					
	Unknown *	No Impacts	Minor Impacts*	Potentially Significant Impacts*	Can Impacts be Mitigated*	Comment Index
<b>1. <u>LAND RESOURCES</u></b>						
Will the proposed action result in:						
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			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			1d.
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?	X					
f. Other: _____						

1 b & d.) Site disturbance will occur during construction. Some soil compaction may occur due to heavy equipment operation. Approximately 30,000 cubic yards of material would be involved in the cut and fill operations. Effects would be minor in the short-term due to the majority of the work being accomplished above the water level, and the lowering of the reservoir before construction begins. Effects are negligible in the long-term because of reclamation of areas disturbed during construction.

**PHYSICAL ENVIRONMENT**  
(Continued)

**IMPACTS**

Unknown*	No Impacts	Minor Impacts*	Potentially Significant Impacts*	Can Impacts be Mitigated*	Comment Index
<b>2. AIR</b>					
Will the proposed action result in:					
a. Emission of air pollutants or deterioration of ambient air quality?		X			2a
b. Creation of objectionable odors?		X			2b
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?	X				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?	X				
e. Other: _____					

2 a. & b.) During construction and drawing down the lake level, heavy equipment emissions will contain some pollutants and odors.

**PHYSICAL ENVIRONMENT**

**IMPACTS**

Unknown*	No Impact	Minor Impacts*	Potentially Significant Impacts*	Can Impacts be Mitigated*	Comment Index
<b>3. WATER</b>					
Will the proposed action result in:					
a. Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?		X			3a
b. Changes in drainage patterns or the rate and amount of surface runoff?	X				
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			3d
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 the risk of contamination of surface or groundwater?	X				
i. Violation of the Montana Non-Degradation Statute?	X				
j. Effects on any existing water right or reservation?	X				
k. Effects on other water users as a result of any alteration in surface or groundwater quality?	X				
l. Effects on other users as a result of any alteration in surface or groundwater quantity?	X				
m. Other: _____					

3 a.) Short-term impacts to reservoir water quality may occur due to possible increases in turbidity during construction. The lowering of the reservoir before construction and the majority of work being performed above the water level, and the implementation of erosion control measures to protect surface water from sedimentation would minimize the effects. Long-term impacts are negligible. 3 d.) Short-term impacts will occur in the amount of surface water by lowering the reservoir during the construction process. The effects would be negligible to wildlife and fisheries habitat and end with the completion of the project. Refilling of the reservoir would begin after construction is completed.

**PHYSICAL ENVIRONMENT**  
(Continued)

IMPACTS

Unknown*	No Impacts	Minor Impacts*	Potentially Significant Impacts*	Can Impacts be mitigated*	Comment Index
4. <u>VEGETATION</u>					
Will the proposed action result in:					
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?		X			4a
b. Alteration of a plant community?	X				
c. Adverse effects on any unique, rare, threatened, or endangered plant species?	X				4c
d. Reduction in acreage or productivity of any agricultural land?	X				
e. Establishment or spread of noxious weeds?		X			4e
f. Other: _____					

4 a.) Some vegetation will be removed during construction. Effects are negligible in the long-term because of reclamation and re-seeding/revegetation of all disturbed area.

4 e.) An increase in noxious weeds may occur due to soil disturbance and equipment operation. Effects are negligible in the long-term because of reclamation and weed control implementation.

**PHYSICAL ENVIRONMENT**  
(Continued )

**IMPACTS**

Unknown*	No Impacts	Minor Impacts*	Potentially Significant Impacts*	Can Impacts be Mitigated*	Comment Index
<b>5. FISH/WILDLIFE</b>					
Will the proposed action result in:					
	X				
a. Deterioration of critical fish or wildlife habitat?		X			
b. Changes in the diversity or abundance of game animals or bird species?					
c. Changes in the diversity or abundance of nongame species?	X				
d. Introduction of new species into an area?	X				
e. Creation of a barrier to the migration or movement of animals?	X				
f. Adverse effects on any unique, rare, threatened, or endangered species?		X			5f
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?		X			5g
h. Other: _____					

5 b.) There may be minor impacts to fish associated with construction activities, however after construction the deepening of the reservoir will improve Artic Grayling habitat.

5 f.) A population of Artic Grayling exists in Park Lake. It is not anticipated that the lowering of the reservoir or the construction activity would negatively impact this population.

At least one know animal species of special concern (see Appendix C) has been documented in the area (Grizzly Bear) Due to the limited area of disturbance associated with the actual construction, the project is not expected to impact grizzly bear habitat or cause any significant or long-term impacts to bears in the area. The construction activity may cause bears or other wildlife to temporarily relocate away from the area of disturbance. This impact is temporary and will end with completion of the project.

5 g.) The temporary increase in activity and human presence associated with the construction activity may create an increase in stressful conditions for some local wildlife. The effects would be minor due to the small land area affected and would end with the completion of the project.

**2. HUMAN ENVIRONMENT**

**IMPACTS**

Unknown*	No Impacts	Minor Impacts*	Potentially Significant Impacts*	Can Impacts be Mitigated*	Comment Index
<p>6. <u>NOISE/ELECTRICAL EFFECTS</u></p>					
<p>Will the proposed action result in:</p>					
<p>a. Increases in existing noise levels?</p>		X			6a
<p>b. Exposure of people to severe or nuisance noise levels?</p>		X			6b
<p>c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?</p>	X				
<p>d. Interference with radio or television reception and operation?</p>	X				
<p>e. Other: _____</p>					

6 a & b.) Noise levels will increase temporarily during the construction and draw down period.

**HUMAN ENVIRONMENT**  
(Continued)

**IMPACTS**

Unknown*	No Impacts	Minor Impacts*	Potentially Significant Impacts*	Can Impacts be Mitigated*	Comment Index
<p>7. <u>LAND USE</u></p> <p>Will the proposed action result in:</p> <p>a. Alteration of or interference with the productivity or profitability of the existing land use of an area?</p> <p>b. Conflict with a designated natural area or area of unusual scientific or educational importance?</p> <p>c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?</p> <p>d. Adverse effects on or relocation of residences?</p> <p>e. Cause increased government regulation on private property or adversely affect private property rights?</p> <p>f. Other _____</p>	<p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p>				

**HUMAN ENVIRONMENT**  
(Continued)

**IMPACTS**

Unknown*	No Impacts	Minor Impacts*	Potentially Significant Impacts*	Can Impacts be Mitigated*	Comment Index
<p>8. <u>RISK/HEALTH HAZARDS</u></p> <p>Will the proposed action result in:</p> <p>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?</p> <p>b. Affect an existing emergency response or emergency evacuation plan or create a need for a new plan?</p> <p>c. Creation of any human health hazard or potential hazard?</p> <p>d. Other: _____</p>	<p>X</p> <p>X</p> <p>X</p>				

**HUMAN ENVIRONMENT**  
(Continued)

**IMPACTS**

Unknown*	No Impacts	Minor Impacts*	Potentially Significant Impacts*	Can Impacts be Mitigated*	Comment Index
<p>9. <u>COMMUNITY IMPACTS</u></p> <p>Will the proposed action result in:</p> <p>a. Alteration of the location, distribution, density, or growth rate of the human population of an area?</p> <p>b. Alteration of the social structure of a community?</p> <p>c. Alteration of the level or distribution of employment or community or personal income?</p> <p>d. Changes in industrial or commercial activity?</p> <p>e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?</p> <p>f. Other: _____</p>	<p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p>				



**HUMAN ENVIRONMENT**  
(Continued)

IMPACTS

Unknown*	No Impacts	Minor Impacts*	Potentially Significant Impacts*	Can Impacts be Mitigated*	Comment Index
<p>11. <u>AESTHETICS/ RECREATION</u></p> <p>Will the proposed action result in:</p> <p>a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?</p> <p>b. Alteration of the aesthetic character of a community or neighborhood?</p> <p>c. Alteration of the quality or quantity of recreational opportunities and settings?</p> <p>d. Other: _____</p>	<p>X</p>	<p>X</p> <p>X</p>			<p>11a</p> <p>11c</p>

11 a & c.) Construction will temporarily affect the aesthetics of the area in the short-term. Some visitors to the area may be impacted. The quality of the recreational opportunities and setting will be temporarily impacted during construction. The effects will be short-term and end with the completion of the project.

IMPACTS

**HUMAN ENVIRONMENT**  
(Continued)

Unknown*	No Impacts	Minor Impacts*	Potentially Significant Impacts*	Can Impacts be Mitigated*	Comment Index
12. <u>CULTURAL/HISTORICAL RESOURCES</u>  Will the proposed action result in:  a. Destruction or alteration of any site, structure or object of prehistoric, historic, or paleontological importance?  b. Physical change that would affect unique cultural values?  c. Effects on existing religious or sacred uses of a site or area?  d. Other: _____					
	X				
	X				
	X				

12 a,b & c.) Cultural clearance has been obtained from the MT State Historic Preservation Office. (attached)

**3. SIGNIFICANCE CRITERIA**

**IMPACTS**

	Unknown*	No Impacts	Minor Impacts*	Potentially Significant Impacts*	Can Impacts be Mitigated*	Comment Index
<p>13. <u>SUMMARY EVALUATION OF SIGNIFICANCE</u></p> <p>Will the proposed action, considered as a whole:</p> <p>a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources which create a significant effect when considered together or in total.)</p> <p>b. Involve potential risks or adverse effects which are uncertain but extremely hazardous if they were to occur?</p> <p>c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?</p> <p>d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?</p> <p>e. Generate substantial debate or controversy about the nature of the impacts that would be created?</p> <p>f. Other: _____</p>			X			13a

13 a.) Short-term, temporary impacts will occur in the quality of the recreational opportunities and experience. Short-term increases in turbidity may be experienced in the reservoir. No adverse impacts are anticipated with the temporary lowering of the reservoir during construction. No adverse impacts are anticipated to fisheries or wildlife resources. All impacts are temporary, will end with the completion of the project, and will be mitigated by reclamation, reseeding and revegetation of the project area, and the implementation of weed control measures.

### Part III. Alternatives and Evaluation

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

A. No action alternative - Would not allow proposed rehabilitation efforts to proceed and result in continued deterioration of the dam. This could affect the integrity of the dam itself, including the possibility of failure of the dam. This would greatly increase the risk to the public and property downstream, and result in potentially negative impacts to existing fisheries, wildlife resources and recreational opportunities. This alternative would result in the MFWP being in violation of the state of Montana Dam safety regulations.

B. Proceed as planned with the project (preferred alternative)- This alternative will have the beneficial effects of addressing the structural deficiencies currently associated with the dam. This alternative would serve to protect the integrity of the dam, thereby reducing downstream public and property risks. Fisheries and wildlife resources and recreational opportunities associated with the reservoir would also be maintained. This alternative would result in the MFWP being in compliance with the dam safety regulations for the state of Montana.

C. Drain Park Lake/ Breach the Dam- This alternative will prevent MFWP from being mandated to repair the structural deficiencies currently associated with the dam. By removing the water the dam will no longer pose a risk to the public and property downstream. This alternative would not be acceptable to the public and would adversely affect the fishery and the recreation values of the area.

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

All impacts cited are minor. Any areas disturbed by the construction would be reclaimed.

3. Based on the significance criteria evaluated in this EA, is an EIS required? YES / **NO** If an EIS is not required, explain why.

The EA is the appropriate level of analysis for the proposed action. Because of the short-term, temporary, minor, and non-significant nature of the actual environmental impacts associated with this project and the beneficial, long-term affects to public safety, fisheries and wildlife resources and recreational opportunities, an EA is the appropriate level of analysis for this proposed action.

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

The appropriate level of public involvement for this proposal is the publication of the proposed action in the Helena Independent Record newspaper and the Boulder Monitor for two consecutive weeks in the legal notices section. An electronic version of the EA will also be posted on the MFWP website. This is an appropriate level of public involvement considering the minor, non-significant impacts of the environmental issues associated with the proposed action, and the long-term public safety, fisheries, and recreation issues being addressed by the proposed action.

5. Duration of comment period if any: 30 Days - Copies of the EA can be obtained from the address listed below. Comments will be accepted until July 12, 2004 and can be submitted via telephone, e-mail or mailed to the MFWP at the address listed below.

6. Name, title, addresses and telephone number of the Person(s) Responsible for Preparing the EA:

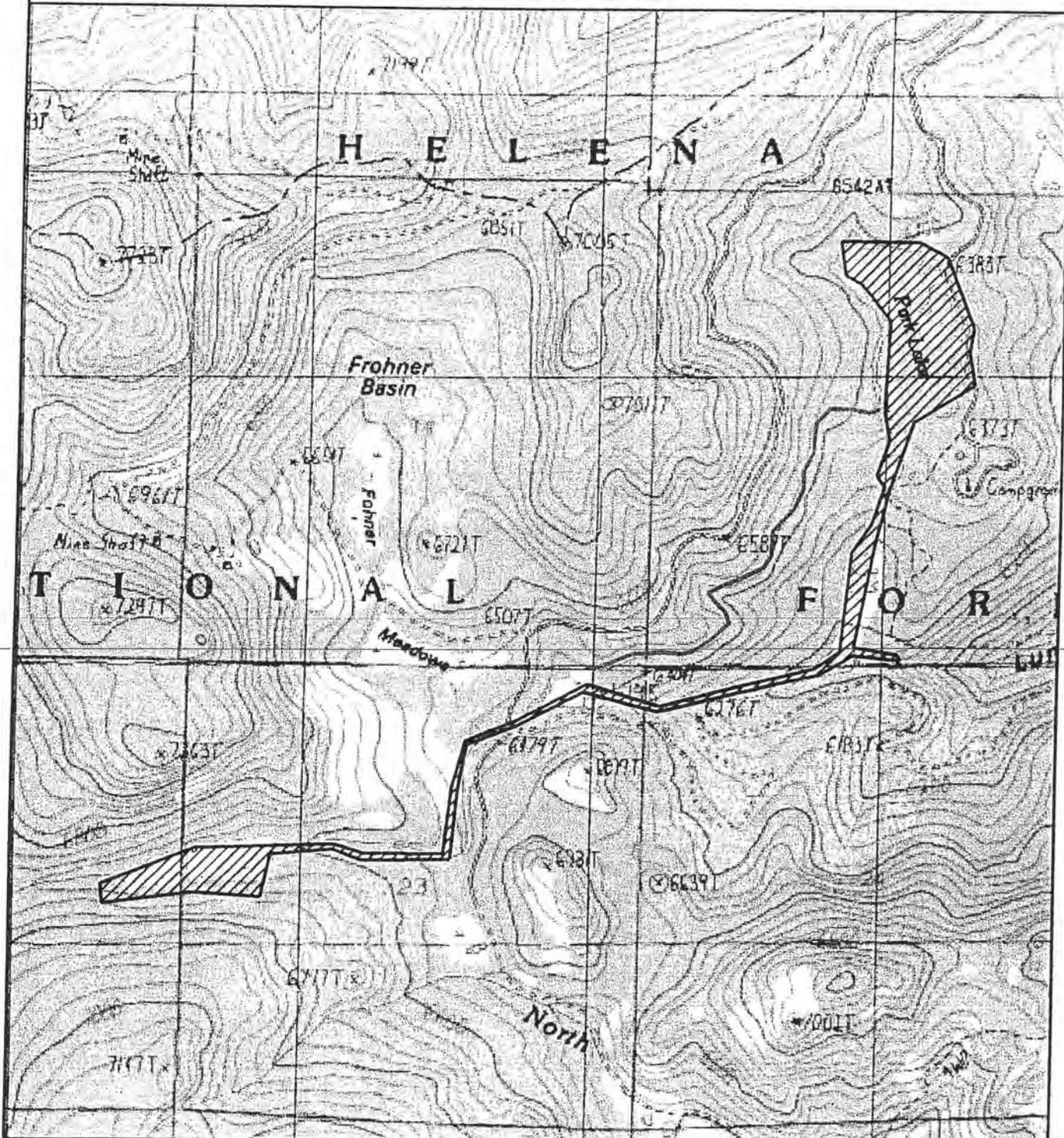
Mr. Craig Marr  
MT Fish, Wildlife & Parks  
930 Custer Avenue West  
Helena, MT 59620  
(406) 495-3270 [cmarr@state.mt.us](mailto:cmarr@state.mt.us)

Mr. James P. Domino  
MT Dept. of Natural Resources and Conservation  
1424 9<sup>th</sup> Avenue, P.O. Box 201601  
Helena, MT 59620-1601  
(406) 444-6622 [jdomino@state.mt.us](mailto:jdomino@state.mt.us)

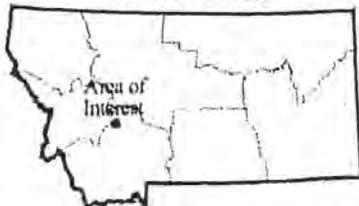
## Part IV. Narrative Evaluation and Comment

The project as proposed will not have significant impacts. This project is required for the Park Lake Dam structure to be in compliance with the state of Montana Dam regulations. The impacts associated with the actual construction will be short-term, minor, temporary, and end with the completion of the project. Impacts associated with weed proliferation and the quality of the recreational experience will be mitigated by reclamation and weed control efforts. All equipment will be cleaned of noxious weeds prior to entering National Forest lands. Any potential impacts to flora or fauna are minor, temporary in nature and would end with the completion of the project. The State Historic Preservation Office (SHPO) indicated that no cultural or historic resources would be impacted by the proposed project. All disturbed areas would be reclaimed upon project completion and reseeded using native grasses. The maintenance access to the main dam would be maintained for future use. The long-term public benefits, including enhanced public safety, the protection of property downstream from the dam, the protection of downstream water quality and the protection of existing fisheries and wildlife habitat and recreational resources outweigh any minor, short-term and temporary negative impacts.

# Park Lake FAS



Lands File Number: 3265  
T8N/R5W



89.466 acres  
  
Fee Simple  
FAS Parcel

2.495 acres  
  
Leased  
FAS Parcel

0 1000 2000



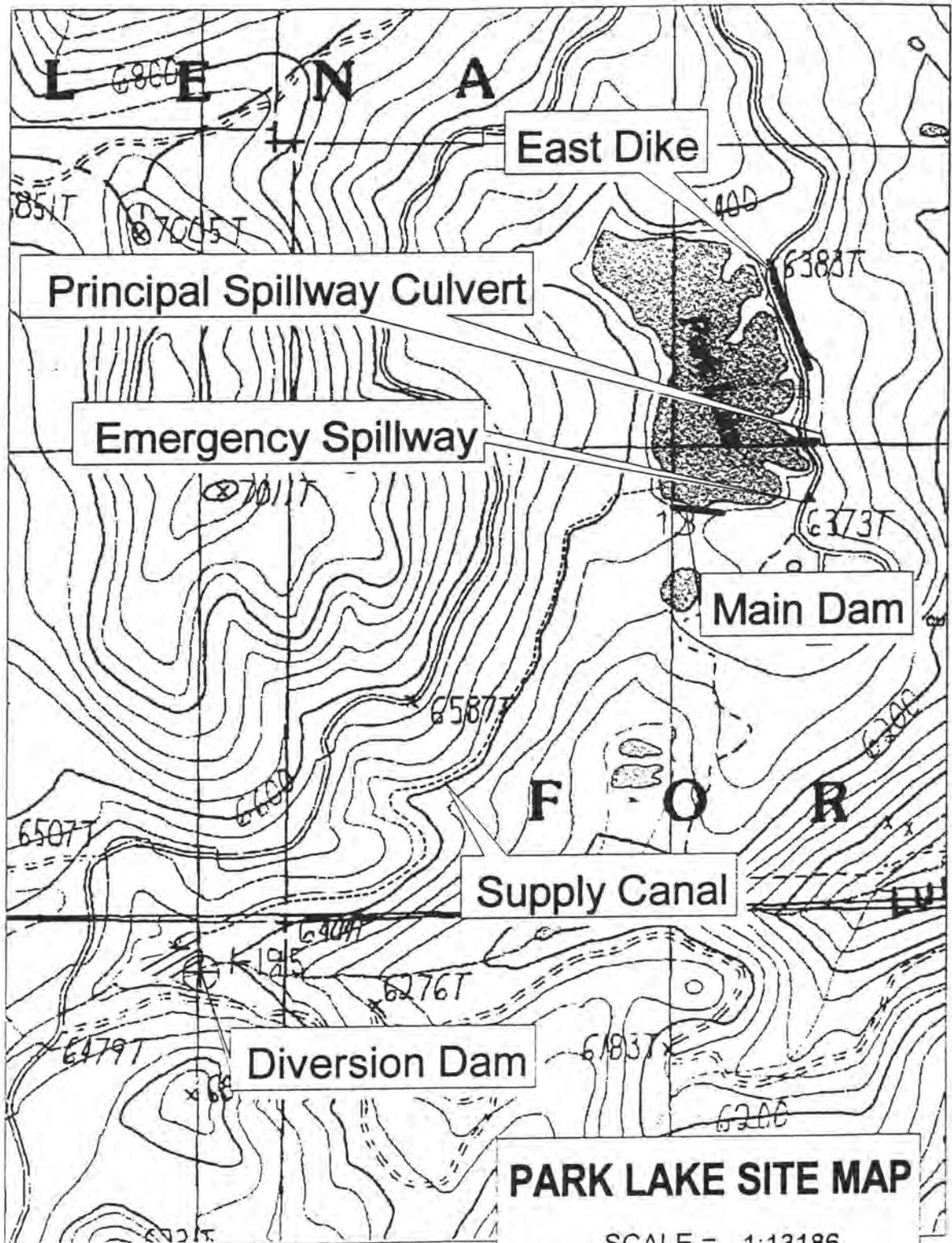
Scale in feet  
Scale 1:19000

Fishing Access Sites (FAS) are digitized and maintained by the Information Services Unit of the Montana Fish, Wildlife and Parks. FAS's were digitized at 1:24,000 using the COGO module of Arc/Info. The background image is a USGS 7.5 minute quadrangle digital raster graphic.



Montana Fish, Wildlife and Parks

Map produced by NRIS,  
request# 001WPh - September 22, 1999

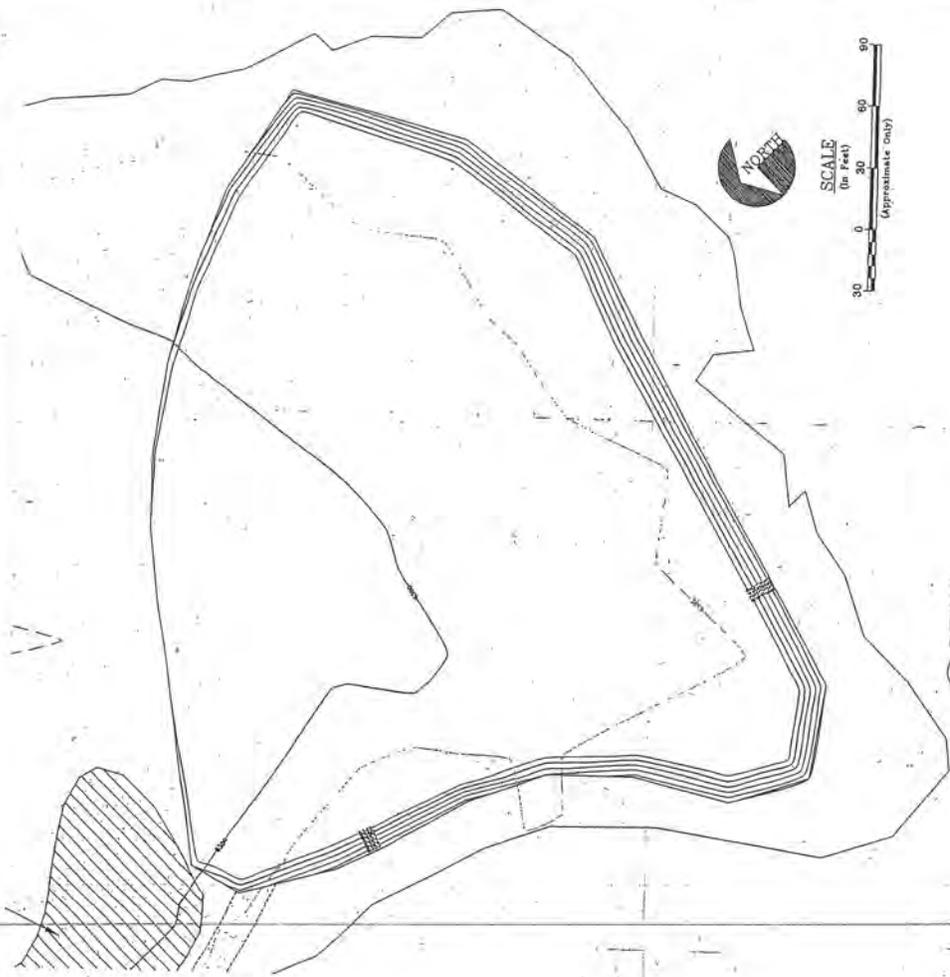


**PARK LAKE SITE MAP**

SCALE = 1:13186

CONTOUR INTERVAL = 40 FT

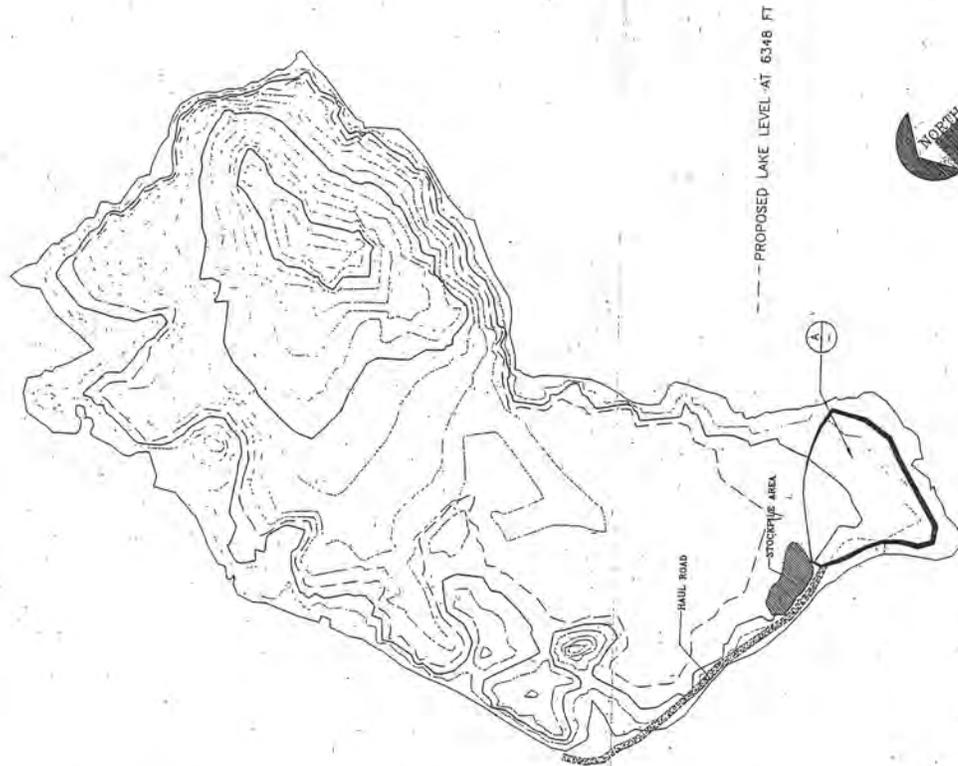
Note: Data digitized at a 1:24,000 scale from Chessman Reservoir, MT. USGS 7.5 Quad UTM Zone 12, NAD 1927. Map produced by MT-DNRC-WRD-GIS in March 1999.



**A** DETAIL  
BORROW AREA EXCAVATION  
1" = 30'

- NOTES:**
1. REMOVE AND DISCARD TOP 12" OF SOIL FROM BORROW AREA.
  2. SLOPE SIDES OF BORROW EXCAVATION AT 2.5:1.
  3. APPROXIMATELY 9500 CY OF USEABLE SOIL TO BE REMOVED.
  4. HAUL ROAD TO BE STAKED BY ENGINEER.
  5. HAUL ROAD AND APPROACH TO BE REMOVED AND RECLAIMED TO FOREST SERVICE SPECIFICATIONS WHEN DAM CONSTRUCTION IS COMPLETED.

PRELIMINARY  
NOT FOR  
CONSTRUCTION



**ZONE 1 MATERIAL BORROW AREA PLAN VIEW**  
SCALE: 1"=150'

--- PROPOSED LAKE LEVEL AT 6348 FT

SCALE  
(in Feet)  
150 300 450  
(Approximate only)

DATE	DESCRIPTION	NO.	BY	DATE	PROJECT NO.	SCALE	DATE	BY	DATE
					0202	1"=10'	5/1/03	TOP	5/1/03
							5/1/03	APP	5/1/03
							5/1/03	CON	5/1/03

**Hydrometrics, Inc.**  
Consulting Engineers and Geologists  
Helena, Montana 59601  
406.442.4444

PARK LAKE IMPROVEMENTS PROJECT  
2004 CONSTRUCTION DRAWINGS  
ZONE 1 EMBANKMENT BORROW SOURCE

DRAWING FILE NUMBER 20240101016.dwg
ATTACHED 2004 DRAWING LIST
SHEET NUMBER 8