Draft Environmental Assessment of Stocking of Fish in Largent Bend Fishing Access Site Ponds

Montana Fish, Wildlife & Parks

4600 Giant Springs Road
Great Falls, Mt. 59405

15 March 2011

MONTANA FISH WILDLIFE & PARKS

MEPA/NEPA CHECKLIST

PART I. PROPOSED ACTION DESCRIPTION

1. Type of Proposed State Action:
   The development of a public fishery in Largent Bend Fishing Access Site (FAS) ponds 2 and 3. Introduction of fish into new waters.

2. Agency Authority for the Proposed Action:

   MCA 87-1-209 The department may develop, operate, and maintain acquired land or water rights: (c) for public hunting, fishing, or trapping areas;

   ARM 12.7.601(4) Introduction of fish not indigenous to a particular drainage may be made only after careful study to ensure these fish will be beneficial to that area.

3. Name of Project: Largent Bend FAS ponds fish introduction and fish management.

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

   Montana Fish, Wildlife & Parks
   4600 Giant Springs Road
   Great Falls, Mt. 59405

5. If Applicable:
   Estimated Commencement Date: April-July 2011
   Estimated Completion Date: August 2011
   Current Status of Project Design (% complete): 0
   If the proposed action is implemented, we anticipate the initial stocking of fish to occur in the spring and summer of 2011. The area would be open to public fishing at a later time when proper signing and site preparation is complete. We expect this to be October 2011.

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

   Largent Bend FAS is located in sections 29 and 32, Township 21 North, Range 1 East, Cascade County, Montana and is approximately 179 acres in size.

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

Pond 2 is 5.5 surface acres and has a maximum depth of 8.3 feet (Figure 2).
Pond 3 is 16.4 surface acres and has a maximum depth of 7.9 feet (Figure 3).

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.

Figure 1. Aerial photo of Largent Bend FAS

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

Other Overlapping or Additional Jurisdictional Responsibilities:

Agency Name: Fish Wildlife & Parks-Fish Health Committee

Type of Responsibility: Analysis, approval/denial of wild fish transfer requests.

10. Narrative summary of the proposed action or project including the benefits and purpose of the proposed action:

In 2009 Montana Fish, Wildlife & Parks acquired 179 acres of land on the Sun River known as the Lewis property. The land is located 4.3 miles west of the town of Vaughn. The site is in the beginning stages of development for public recreation including boundary delineation, weed management, signing and river and pond access. The site was recently renamed Largent Bend FAS in honor of John Largent, who was a prominent merchant in the area and founded the townsite of Johnstown (west Great Falls) near the mouth of the Sun River in 1884. The site was operated as an open pit gravel mine for many years. Three of the mining pits are flooded by ground water, which has created ponds (Figure 1). At least two of these ponds provide reasonably good habitat for fish and would likely provide sustainable angling opportunities.

In order to realize the full recreation potential of the site, FWP is proposing to stock fish in the ponds. The goal is to create a multi-tiered year-round fishery in ponds 2 and 3 that would provide at least 150 angler days per year. Surveys in 2008 show that pond 1 is fishless and given its small size and shallow depth would not likely sustain a population of game fish worthy of angling. Therefore it is not under consideration for development as a fishery at this time.

Data were collected in 2008 and lake bathymetry maps were completed for ponds 2 and 3 in 2009 (Figure 2, Figure 3). Pond 2 presently harbors a population of black bullheads. In 2009 one gill net captured 199 black bullheads with an average length of 6.07 inches (4.4-7.0) weighing an average of 0.09 pounds (0.01-0.16). No fish were captured in minnow traps in pond 2. Black bullheads are undesirable to most anglers. FWP is proposing to manage bullheads in pond 2 by stocking a species of fish that can utilize bullheads as prey. Other alternatives of removing the bullheads include using the piscicide rotenone or draining the pond. These were considered but ruled out for further development in favor of using a predator fish as the first method to reduce black bullhead numbers. FWP believes that stocking a predator fish pond 2 would have the least environmental impact at achieving the objectives for pond 2 so it is the first method proposed to achieve the objectives.

FWP is proposing to stock largemouth bass in pond 2 to fulfill the objectives of reducing the number of black bullheads and to provide the primary fishery in a multi-tiered fishery. FWP recognizes that largemouth bass may not remove all of the black bullheads from the pond, but their numbers may be more manageable in the presence of a predator fish. Any remaining bullheads may offer a limited amount of angling opportunity. FWP proposes to also stock rainbow trout and brook trout in pond 2 to fulfill the objective of providing the second tier of the fishery. Maintenance stocking of both largemouth bass and rainbow trout is possible as FWP raises both species in the state hatchery system and hatchery trucks could access the pond from a road on the west shore.

In 2009 one gill net set in pond 3 captured ten larval tiger salamanders and no fish. Numerous small fish were observed from the shore line. One minnow trap captured approximately 40 fathead minnows, and dipnetting captured fathead minnows and creek chubs. FWP is proposing to stock black crappie, rainbow trout, brook trout in pond 3 to develop a recreational fishery. The fishery would be managed by stocking predatory fish such largemouth bass and tiger muskie. We believe stocking black crappie would provide a unique angling opportunity and would be self sustainable. Pond 3 has no road for hatchery trucks to access the pond but it is possible for limited or infrequent maintenance stocking of hatchery fish using an ATV or backpacking.

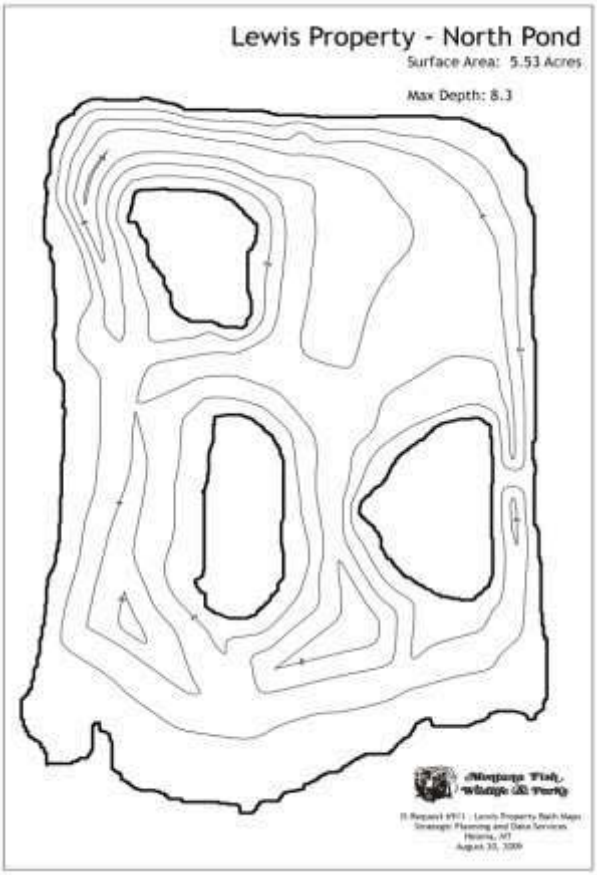

Figure 2. Bathymetric map of Largent Bend pond 2.

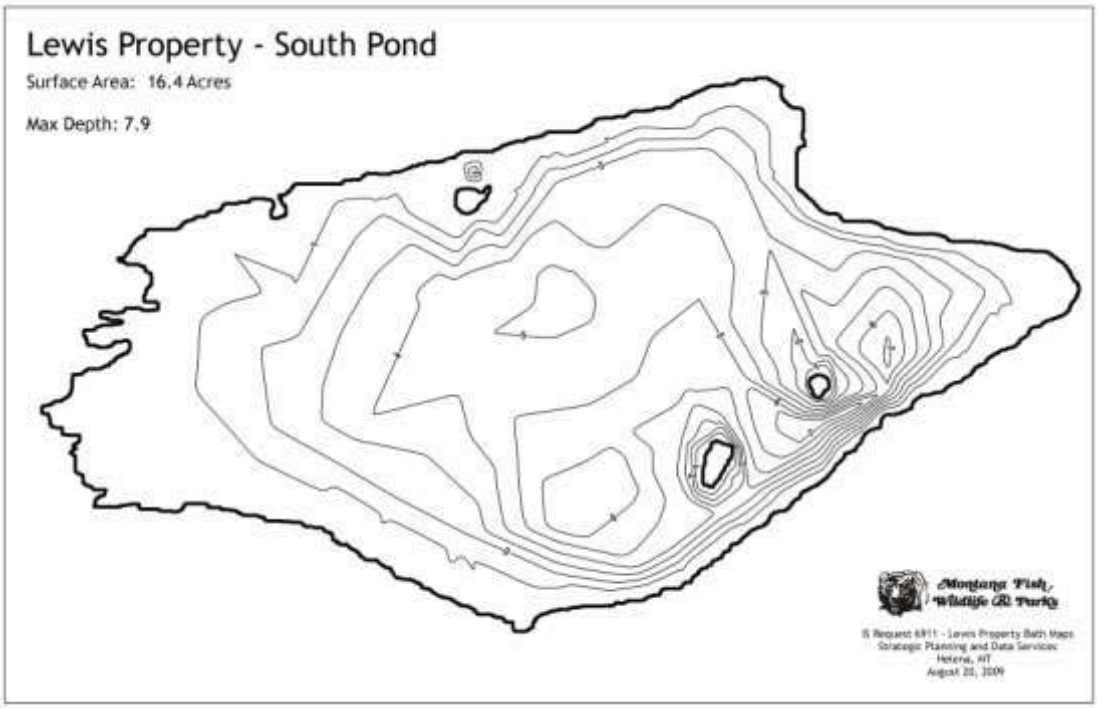

Figure 3. Bathymetric map of Largent Bend pond 3.

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

Montana Fish, Wildlife & Parks – Fish Health Committee was petitioned to consider a transfer of wild fish from an existing population of black crappie. The committee will consider disease issues associated with such a proposal.

PART II. ENVIRONMENTAL REVIEW

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

A. PHYSICAL ENVIRONMENT

1. LAND RESOURCES Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated*	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
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				
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?			X			1e
f. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

1b. There would likely be minimal impacts to the physical environment as a result of stocking fish in the ponds. Any impacts would be limited to soil compaction near the pond shores, but could be managed through normal site improvements commonly implemented at fishing access sites. There could be infrequent use of an ATV for administrative purposes to stock pond 3, but manual transfer by hatchery and fisheries field staff would be more likely methods of stocking. Under each option, impacts such as soil compaction would be short term and minor.

1e. In the event of a natural disaster (i.e. flood) there is some risk of the Sun River capturing pond 3 and resulting in stocked fish escaping into the Sun River. This would not be considered a risk of exposure to people resulting from the stocking of fish or fish escaping from the pond in the event of a natural disaster.

2. AIR Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated*	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. **Emission of air pollutants or deterioration of ambient air quality?		X				
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)		X				
f. Other:						

* 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 can not 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.

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Air Resources (Attach additional pages of narrative if needed):

No impacts to air quality are anticipated from the proposed project.

3. WATER **Will the proposed action result in:**	**IMPACT ∗**				**Can Impact Be Mitigated∗**	**Comment Index**
	Unknown ∗	**None**	**Minor ∗**	**Potentially Significant**		
a. ∗Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?		X				
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				
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				
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)		X				
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)		X				
n. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Water Resources (Attach additional pages of narrative if needed):

The proposed action of stocking fish into ponds 2 and 3 would not have any discernable impacts on water quality.

4. VEGETATION **Will the proposed action result in:**	**IMPACT ∗**				**Can Impact Be Mitigated∗**	**Comment Index**
	Unknown ∗	**None**	**Minor ∗**	**Potentially Significant**		
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?		X				
b. Alteration of a plant community?			X			4b
c. Adverse effects on any unique, rare, threatened, or endangered species?		X				
d. Reduction in acreage or productivity of any agricultural land?		X				

e. Establishment or spread of noxious weeds?		X				
f. ****For P-R/D-J, will the project affect wetlands, or prime and unique farmland?		X				
g. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

4b. The proposed action of stocking fish into ponds 2 and 3 would not have any discernable long term negative impacts on terrestrial or aquatic vegetation. There would likely be some trampling of vegetation by anglers who use the ponds, but this would be mitigated by proper site management that could be implemented if warranted. There could be infrequent administrative use of an ATV to stock pond 3. Impacts such as trampling of vegetation would be short term and minor.

** 5. FISH/WILDLIFE Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Deterioration of critical fish or wildlife habitat?		X				
b. Changes in the diversity or abundance of game animals or bird species?		X				
c. Changes in the diversity or abundance of nongame species?				X		5c
d. Introduction of new species into an area?				X		5d
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				
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?	X					5g
h. ****For P-R/D-J, will the project be performed in any area in which T&E species are present, and will the project affect any T&E species or their habitat? (Also see 5f)		X				
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)				X		5i
j. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

5c. Black bullheads, fathead minnows and creek chub are all non-game fish species that currently exist in the ponds. There would be a long term negative impact on these species because success of the proposed action is dependent on the stocked fish utilizing these species as forage. The goal of stocking largemouth bass in pond 2 would a long term negative impact on black bullheads because the intended purpose is to use largemouth bass to reduce their numbers. Stocking black crappie, brook trout and rainbow trout in pond 3 would have a long term negative impact on fathead minnows and creek chubs but the intended purpose is to have these species utilize minnows as forage. We are proposing to use largemouth bass and tiger muskie as management tools to control crappie numbers and/or to develop this fishery with bass if the three aforementioned species do not establish. Larval tiger salamanders were sampled in pond 3. We anticipate a negative impact to tiger salamanders from largemouth bass and tiger muskie if the proposed action were implemented. This proposal does not involve developing a fishery in pond 1 which could help mitigate the impacts to larval salamanders in pond 3. Pond 1 provides suitable habitat for tiger salamander breeding and rearing of larvae to adult stage. Stocking fish to establish a fishery would have a long term and beneficial social impact.

5d., 5i. The proposed action involves introducing new fish species into ponds 2 and 3 to provide recreational angling opportunity. None of the species proposed (black crappie, rainbow trout, brook trout, largemouth bass, tiger muskie) are indigenous to the area. All of these species, with the exception of tiger muskie, presently occur in ponds and streams in the Sun/Missouri drainage with no discernable negative

impacts to other fishes or wildlife in these waters. Tiger muskie are sterile and would not pose a negative impact to other fish species due to their finite population lifespan. We expect no change in impacts or risk of impacts from the proposed action. Stocking fish to establish a fishery would have a long term and beneficial social impact.

5g. We do not anticipate any impacts to fish and wildlife other than those disclosed in this EA.

B. HUMAN ENVIRONMENT

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

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

6a., 6b. The proposed action is designed to promote public use at the site and may result in increased noise from vehicle traffic and normal human activity associated with angling. FWP would promote respectable 'good neighbor' use by the public. Nuisance noise levels would be subject to county laws governing public disturbance and enforceable by county and state law enforcement officials.

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

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

7a. The area was historically operated as a gravel mine. The change in use would involve improvement of aesthetics and other actions (beyond the scope of this assessment) would promote management and use as a more 'natural' area.

8. RISK/HEALTH HAZARDS Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
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				
b. Affect an existing emergency response or emergency evacuation plan or create a need for a new plan?		X				
c. Creation of any human health hazard or potential hazard?	X					8c
d. ***For P-R/D-J, will any chemical toxicants be used? (Also see 8a)		X				8d
e. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

8c. Developing a fishery in pond 3 would result in anglers crossing the Sun River to reach the pond. There would be some risk to anglers who cross the river. There is evidence of people crossing the river with ATV's and by foot prior to FWP acquiring the site. The river in this section is shallow and poses a low risk of water hazards while crossing during normal water flow periods. FWP would provide signing at the river crossing to warn people of the risks of crossing the river and discourage crossing during hazardous periods (high water). FWP would continue efforts to secure a drive-in access through private land to reduce the human health hazards associated with crossing the river. Crossing the river with an ATV would be restricted to administrative uses for the purpose of stocking fish and administering the area.

8d. In Part I section 10, FWP considered using the piscicide rotenone to remove black bullheads from pond 2, but did not develop it for further review in favor of the proposed action of stocking a predator fish to manage the black bullheads. No chemical toxicants are proposed for this project. Chemical toxicants could be considered for use at in a future action if management goals were not achieved by the proposed management actions; any such proposal would require a separate environmental assessment to ensure public review and comment and to disclose the potential effects on the quality of the human environment.

9. COMMUNITY IMPACT Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		

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				
d. Changes in industrial or commercial activity?		X				9d
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?	X					9e
f. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

9d. The site was historically operated as a commercial gravel mine, but has been dormant for many years. There would be an increase in activity as a result of the proposed action, but this would be less disruptive than a commercial mining operation. The proposed action would not result in changes in industrial or commercial activity.

9e. The historical commercial activity at the site developed the approach from highway 200 with a safe-view approach for vehicles exiting or entering traffic on highway 200. There would be no increase in traffic risk as a result of developing the fishery at this site.

10. PUBLIC SERVICES/TAXES/UTILITIES **Will the proposed action result in:**	**IMPACT ***				**Can Impact Be Mitigated ***	**Comment Index**
	Unknown *	**None**	**Minor ***	**Potentially Significant**		
a. Will the proposed action have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify:	X					10a
b. Will the proposed action have an effect upon the local or state tax base and revenues?		X				
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 used of any energy source?		X				
e. **Define projected revenue sources		X				
f. **Define projected maintenance costs.		X				10f
g. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

10a. In Part II B6, FWP disclosed the possibility of increased noise and public disturbance. In this event, county law enforcement may be involved, but would not likely result in burdensome increases in cost to the county law enforcement program. FWP has law enforcement personnel who may respond to disturbances at public fishing access sites as part of their normally assigned duties. No substantial increases in public service are anticipated.

10f. Developing the fishery at this would require some increased maintenance costs, but these would be included in the overall operations cost for managing the site, and is beyond the scope of this analysis. Maintaining the fishery with hatchery stocked fish would not place an added burden on the state hatchery system or increase production costs for hatchery raised fish. Some fish anticipated to be stocked may reproduce in the ponds and not require annual plants.

** 11. AESTHETICS/RECREATION Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?			X			11a.
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			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)		X				
e. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

11a. There would be no alteration of the scenery at the site as a result of stocking fish in the ponds. As stated in Part I 10 of this EA, FWP expects to implement other programs to improve aesthetics at this site, but those actions are beyond the scope of this analysis.

11c. The proposed action is specifically designed to increase recreation activity at the site. The desired amount of public use is approximately 150 angler days per year. This amount of use is relatively low in comparison to other similar fisheries in the region. No tourism report is required to quantify these opportunities.

12. CULTURAL/HISTORICAL RESOURCES Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
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					12c.
d. ****For P-R/D-J, will the project affect historic or cultural resources? Attach SHPO letter of clearance. (Also see 12.a)		X				
e. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

12c. The site is a reclaimed gravel mine. The proposed action of stocking fish in ponds 2 and 3 is not expected to have an impact on any cultural resources or ceremonies. The project area is within the aboriginal range of the Blackfeet, Little Shell and Chippewa Cree Indians. Copies of this EA will be sent to the following cultural offices for consultation;

Blackfeet Tribal Business Council PO Box 850 Browning, MT 59417 (406) 338-7276
Chippewa Cree Tribal Council RR 1, Box 544 Box Elder, MT 59521 (406) 395-4282
Little Shell Tribe of the Chippewa Indians of Montana 105 Smelter Ave NE PO Box 1384 Great Falls, MT 59403 (406) 452-2892

C. SIGNIFICANCE CRITERIA

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

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Water Resources (Attach additional pages of narrative if needed):

13b. A portion of pond 3 is located in the floodplain of the Sun River but is protected by a dike system. There is some risk of the pond getting captured by the river during a catastrophic flood event. Given the species of fish present in pond, and other physical evidence on the river bank and dike, there is no evidence of this happening since the creation of pond 3. The species of fish presently in the pond, as well as those proposed for stocking, would not have any long term negative impact on the biological community of the Sun/Missouri river drainage in the event of an escapement resulting from a flood.

PART II. ENVIRONMENTAL REVIEW, CONTINUED

2. 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:

Alternative 1 – No Action.

This alternative would involve no stocking of fish at the FAS ponds. The present status of the ponds would remain. Black bullheads would remain in pond #2 and provide little recreation. This species is generally undesirable to the majority of the angling public. Populations of this species tend to display stunted growth, which makes them even less desirable to anglers. Pond #3 would remain in its present state harboring fathead minnow and creek chub populations with no benefit to the angling public. Under this alternative, the objectives of the project would not be met and the full angling potential of the Largent Bend FAS ponds would not be realized.

Alternative 2 – Stocking the ponds with a single species of game fish.

This alternative involves stocking the ponds with a single species of fish. This alternative may result in limited angling opportunity and not allow the full potential of the site to be realized. The objectives of the project would not be met. For this reason this alternative was not developed further.

Alternative 3 – (Preferred alternative) Stocking the ponds with a multi-tiered game fish community.

This alternative involves stocking the ponds with multiple species of fish to maximize year round angling opportunity and to achieve the desired objectives of the project.

Species under consideration for the preferred alternative include;

Rainbow trout – FWP believes rainbow trout would provide at least a medium quality fishery in pond 2 and 3 and would be a suitable second tier for another species in each pond. This species would require maintenance stocking due to the lack of suitable spawning habitat. Rainbow trout would provide year round angling and are desirable to anglers. The state hatchery system currently produces a suitable number of fish necessary to meet the goals of this fishery. Rainbow trout could be stocked in pond 2 by truck, and limited stocking by ATV or backpacking could be conducted in pond 3.

Brook trout – FWP believes this species would offer similar opportunity as rainbow trout but would provide a unique opportunity for a species not commonly found in lakes and ponds in central Montana. Brook trout may be more tolerant of high water temperatures associated with shallow ponds, and may feed on small fish at certain times of the year. The species may show differences in growth rates than rainbow trout. The state hatchery system presently produces a suitable number of brook trout to meet the management goals of this fishery. The same stocking issues considered for rainbow trout apply to brook trout.

Yellow perch –This species would provide a high quality year round fishery. Yellow perch are a species that can reproduce effectively in pond 3. Proper management of yellow perch requires harvest at maximum sustained yield in order to maintain a size and abundance desirable to anglers. High yield is generally accomplished through angling, predation by an effective predator fish (northern pike, walleye, largemouth bass) or both. When angling is the sole mechanism for seeking maximum sustained yield of

a perch population, often times these fisheries can become stunted and result in undesirable sizes for anglers. In instances when both angling and predation are involved, a desirable yellow perch population can be maintained for angling while providing forage for a second tier predator species fishery. Adult perch can prey upon small perch, but generally not at the amount necessary to maintain high quality of the population. Yellow perch provide suitable angling year round and are generally desirable to anglers. Yellow perch spawn in mid April on flooded vegetation. Pond 3 has an abundance of flooded vegetation and would provide suitable spawning habitat for yellow perch to naturally sustain the population. Due to the risk of creating a fishery that has a high probability of becoming stunted in the absence of a predator fish, FWP eliminated yellow perch from consideration for the initial stock in the FAS ponds.

Black crappie – This species would provide opportunity for a unique species not common in central Montana. Crappie are well suited to shallow warm water ponds with vegetation. Crappies spawn on gravel, sand and mud on the bottom of the ponds. There is suitable spawning habitat for black crappie in the ponds. They feed primarily on plankton, aquatic insects and other fishes. Summer angling is especially good in July after the spawning season. A number of states and Canadian provinces (Ontario, North Dakota, Minnesota, Maine and New Hampshire) maintain high quality ice fishing for crappie. Crappie are at less risk than yellow perch of becoming stunted in the absence of a predator fish. For these reasons, this species was considered to fulfill the desired objectives of the project. Black Crappie would be obtained by a wild fish transfer.

Largemouth bass – This species is well suited for shallow warm water ponds in central Montana. There are a number of high quality gravel pit-type largemouth bass ponds in central Montana and we would expect the FAS pond to be productive for bass. Largemouth bass thrive in ponds where there is suitable habitat for spawning and where there is cover. Spawning occurs in the early to mid summer when water temperatures reach 60-64^{o}F. Spawning habitat includes shallow vegetated shorelines with gravel or sand. Largemouth bass are highly efficient predators and will cannibalize. In areas where a forage fish such as perch, blue gill or crappie is present, a multi tiered fishery can be accomplished. Largemouth bass are catchable during summer months, but are very difficult to catch through the ice. In areas with high densities of forage, they can be difficult to catch. FWP believes that largemouth bass would be a suitable species of fish that may succeed in fulfilling the objectives of reducing bullhead numbers while providing a fishery. For this reason, largemouth bass was considered for the first stock in pond 2 and 3 to fulfill the desired objectives of the project.

Northern pike – This species is well suited for shallow warm water ponds. This species spawns in shallow areas with flooded vegetation, generally in late April to early May when water temperature reaches 45^{o}F. Northern pike are highly efficient predators, are sought by and are easily caught by anglers, and they can attain trophy size. Northern pike are easily caught year round and provide one of the best winter fishing opportunities for a top level predator. Given the efficiency of this predator, it is not likely the second tier of the fishery (trout) could be maintained without excessive stocking. Although the hatchery system can produce northern pike, an option that would be more effective would involve the transfer of limited numbers of adult male fish from a wild source so numbers could be controled; the transfer could only be accomplished during the spawning season when the sex of each fish could be verified. For these reasons, northern pike were not considered as the first stock of fish in pond 2 and 3. In the event that largemouth bass do not meet expectations, FWP would consider stocking male northern pike in the pond. Northern pike have been sampled in this reach of the Sun River in the past. That alternative would be analyzed in a supplemental analysis to this EA prior to taking action.

Tiger muskie – This species is a hybrid of northern pike and muskellunge and is a top level predator. This hybrid displays a condition known as heterosis or hybrid vigor which means it manifests the best qualities of both parental species and that it is sterile. One benefit of this sterile hybrid is that its numbers can be controlled by stocking. They can be very territorial and thus are a challenge to anglers. They generally

prefer soft rayed fish such as suckers, but have been known to prey on fish such as perch and bluegill. This species is viewed in Montana and other places as a management tool to reduce numbers of unwanted rough fish or stunted game fish while providing a unique and rare angling opportunity. Their availability in Montana has been inconsistent due to the need to import muskie semen or live fish from out of state, but may be more available in the future. Montana has instituted recent import restrictions on fish (or semen) from great lakes region due to a virus outbreak. In 2010 Montana imported a small number of live tiger muskies from the state of South Dakota for use in several ongoing management and trophy angling programs. This species has a proven success in throughout Montana. Tiger muskies would be proposed for stocking in pond 3 if when needed to control stunted fish and/or provide a unique angling opportunity. Stocking densities of Tiger muskie would be low in pond 3.

3. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:
   (This section provides an analysis of impacts to private property by proposed restrictions or stipulations in this EA as required under 75-1-201, MCA, and the Private Property Assessment Act, Chapter 462, Laws of Montana (1995). The analysis provided in this EA is conducted in accordance with implementation guidance issued by the Montana Legislative Services Division (EQC, 1996). A completed checklist designed to assist state agencies in identifying and evaluating proposed agency actions, such as imposed stipulations, that may result in the taking or damaging of private property, is included in Appendix A.)

The EA disclosed the anticipated impacts to private property as a result of the proposed action, as well as any mitigation measures.

PART III. NARRATIVE EVALUATION AND COMMENT

After consideration of the alternatives listed, the desired objectives of the project, and any limitations identified in the analysis, FWP has made the following determination;

FWP has made the determination that alternative 3, as described in this Draft EA, has the greatest chance of fulfilling the desired objectives, while having the least environmental impact. Alternative 3 specifically proposes to 1) stock largemouth bass from the state's hatchery source in ponds 2 and 3, 2) stock black crappies in pond 3 through a wild fish transfer of adult fish from a source deemed suitable by the FWP Fish Health Committee, 3) stock rainbow trout and brook trout in ponds 2 and 3 to provide the second tier of the fishery. If needed to control stunted fish populations, male northern pike may be introduced would through a wild fish transfer or stocking of Tiger muskie could occur if a source was available.

PART IV. EA CONCLUSION SECTION

1. 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 this proposed action.

   An Environmental assessment is a suitable level of analysis for the proposed action. No Environmental Impact Statement is necessary based on the level of social, environmental and economical impacts.

2. 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?

   FWP has met with the landowner to the south to discuss options for administrative access for fish stocking and fencing. Both parties are considering options for an easement for public access to pond 3 from the south.

   This EA will be circulated to interested publics and neighboring landowners. It will be posted on the FWP website, and copies made available in the FWP Region 4 headquarters for a period of 30 days. A notice of the proposed project and EA will be advertised in the Great Falls Tribune.

3. Duration of comment period, if any. Date when comments are due. Mail or email address to send comments.

   The draft EA will be open for public comment starting March 22, 2011 through April 22, 2011. Send comments to;

   Largent Bend FAS ponds fish stocking comments
   Montana Fish, Wildlife & Parks
   4600 Giant Springs Road
   Great Falls, Mt. 59405
   ggrisak@mt.gov

4. Name, title, address and phone number of the person(s) responsible for preparing the EA;

   Grant Grisak
   Fisheries biologist
   Montana Fish, Wildlife & Parks
   4600 Giant Springs Road
   Great Falls, Mt. 59405
   454-5853

APPENDIX A

PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST

The 54th Legislature enacted the Private Property Assessment Act, Chapter 462, Laws of Montana (1995). The intent of the legislation is to establish an orderly and consistent process by which state agencies evaluate their proposed actions under the "Takings Clauses" of the United States and Montana Constitutions. The Takings Clause of the Fifth Amendment of the United States Constitution provides: "nor shall private property be taken for public use, without just compensation." Similarly, Article II, Section 29 of the Montana Constitution provides: "Private property shall not be taken or damaged for public use without just compensation..."

The Private Property Assessment Act applies to proposed agency actions pertaining to land or water management or to some other environmental matter that, if adopted and enforced without compensation, would constitute a deprivation of private property in violation of the United States or Montana Constitutions.

The Montana State Attorney General's Office has developed guidelines for use by state agency to assess the impact of a proposed agency action on private property. The assessment process includes a careful review of all issues identified in the Attorney General's guidance document (Montana Department of Justice 1997). If the use of the guidelines and checklist indicates that a proposed agency action has taking or damaging implications, the agency must prepare an impact assessment in accordance with Section 5 of the Private Property Assessment Act. For the purposes of this EA, the questions on the following checklist refer to the following required stipulation(s):

(LIST ANY MITIGATION OR STIPALTIONS REQUIRED, OR NOTE "NONE")

NONE

DOES THE PROPOSED AGENCY ACTION HAVE TAKINGS IMPLICATIONS UNDER THE PRIVATE PROPERTY ASSESSMENT ACT?

Yes	No		
	X	1.	Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2.	Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3.	Does the action deprive the owner of all economically viable uses of the property?
	X	4.	Does the action deny a fundamental attribute of ownership?
	X	5.	Does the action require a property owner to dedicate a portion of property or to grant an easement? [If the answer is **NO**, skip questions 5a and 5b and continue with question 6.]
		5a.	Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b.	Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6.	Does the action have a severe impact on the value of the property?
	X	7.	Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally? [If the answer is **NO**, do not answer questions 7a-7c.]
		7a.	Is the impact of government action direct, peculiar, and significant?

		7b.	Has government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?
		7c.	Has government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?

Taking or damaging implications exist if **YES** is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if **NO** is checked in response to questions 5a or 5b.

If taking or damaging implications exist, the agency must comply with Section 5 of the Private Property Assessment Act, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.