

MONTANA FISH, WILDLIFE & PARKS



**Crystal Lake South Forest Restoration and Fire Hazard Reduction
Public Draft Environmental Assessment
August 2009
MEPA/NEPA CHECKLIST**

PART I. PROPOSED ACTION DESCRIPTION

1. Type of proposed action:

- Development _____
- Renovation _____
- Maintenance _____
- Land Acquisition _____
- Equipment Acquisition _____
- Other (Describe) Fuels reduction and forest restoration

2. If appropriate, agency responsible for the proposed action:

Montana Fish, Wildlife & Parks

3. Name, address, phone number, and e-mail address of project sponsor:

Montana Fish, Wildlife & Parks
Region One Parks Division
490 N. Meridian Road
Kalispell, MT 59901
Phone: (406) 751-4574
E-mail: dlandstrom@mt.gov

4. Estimated construction/commencement date: September 2009

Estimated completion date: December 2009

Current status of project design (% complete): 100%

5. Location affected by proposed action (county, range, and township):

Section 25, T27N, R28W

6. Project size: Estimate the numbers of acres that would be directly affected that are currently:

(a) Developed:
Residential __ acres
Industrial __ acres

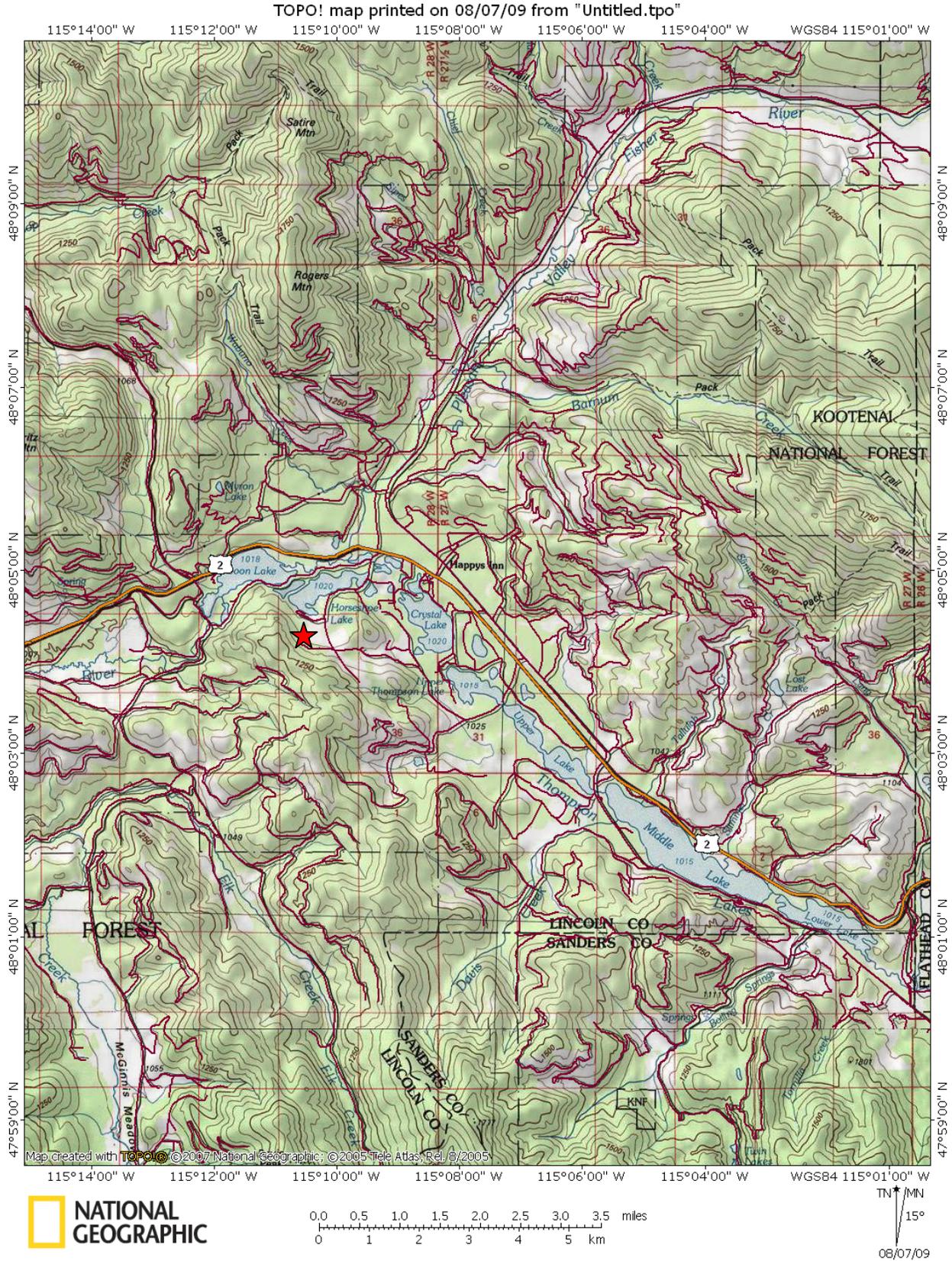
(b) Open Space/Woodlands/
Recreation **160** acres

(c) Wetlands/Riparian
Areas __ acres

(d) Floodplain..... __ acres

(e) Productive:
Irrigated cropland __ acres
Dry cropland __ acres
Forestry __ acres
Rangeland __ acres
Other __ acres

7. Map/site plan:



★ Proposed 160-acre fuels reduction and forest restoration parcel.

Crystal Lake Forestry/Fuel Reduction Public Draft
8/20/09

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

Proposed Action:

FWP proposes fuels reduction and forest restoration on 112 acres of forested FWP land within the 160-acre parcel located on the southwest side of Crystal Lake . This parcel is part of the 3,000-acre Thompson Chain of Lakes Fishing Access Site (TCL FAS). The site is managed as recreational land by Montana Fish, Wildlife & Parks (FWP).

The previous private owner heavily harvested this parcel approximately two decades ago. It has since naturally regenerated with a dense stand of sapling and pole-sized conifers and is overstocked. Douglas fir is currently the predominate understory species, though grand fir, lodgepole pine, western larch, western white pine, ponderosa pine, and subalpine fir are also present. The forest overstory includes widely scattered pole- and sawlog-sized Douglas fir in mostly poor-to-fair condition. The northwest and southeast corners of the stand border residential areas. The east boundary of the stand forms the shoreline of Crystal Lake. The parcel is bordered to the south and west by Plum Creek Real Estate Trust lands, which have been identified for future residential development (See appendix A).

The parcel lacks large-diameter ponderosa pine and western larch, which likely dominated the area during presettlement times. There is also a lack of coarse, woody debris and snags. The desired future condition is to create a multistoried, mixed-age stand that contains a significant component of large-diameter ponderosa pine and western larch. To accomplish this, the current stand density must be reduced in most of the area to promote growth and natural regeneration of seral stands of ponderosa pine and western larch. Thickets of Douglas fir regeneration would be retained on approximately 30% of the project area to meet wildlife habitat objectives for wintering white-tailed deer. All snags in the area would be retained. Log segments with significant decay would be left on-site during harvesting operations. All coarse, woody debris in the project area greater than 12” in diameter would be retained on-site. Due to previous harvest activity, anticipated residual tonnage is 5-10 tons per acre. Masticated slash would be treated to meet the state slash hazard law for postharvest flame length standards. Residual slash following mastication is estimated at 10 tons per acre. Approximately 112 of the parcel’s 160 acres would be treated.

Reducing stand density would reduce potential for intensive wildfire by removing ladder fuels, breaking the continuity of the canopy fuels, and installation of fuel breaks. Creation of ½-acre forest openings would promote natural regeneration of larch and ponderosa pine.

Methods, Equipment, and Personnel: Northwest Management, Inc., a private forestry consulting firm, would complete sale layout, tree marking, permitting, contract preparation, and coordination with FWP. Cut-to-length logging system would be used to harvest merchantable pulpwood and sawlog material designated for removal. Follow-up would be conducted with mastication of nonmerchantable trees and residual slash with processor-mounted mastication attachment.

Timing: Harvesting and mastication would be conducted during fall and winter months of 2009 and 2010. By conducting this work in fall and winter, ground disturbance can be minimized. FWP has obtained funding from a federal grant, and the cost per treated acre is \$625.

This proposal is consistent with direction provided in the Thompson Chain of Lakes Management Plan Update of 2006. The following are FWP management goals and objectives for the forested lands within the TCL FAS:

GOAL: Manage TCL's forests to promote stand health, species diversity, and wildlife habitat, and to enhance public safety from hazardous trees and wildfire.

Objective:

Manage TCL's forests for forest health, quality and diversity of fish and wildlife habitats, and fuels mitigation according to recognized defensible space criteria.

Action Items:

Monitor and prioritize forest management projects for the purpose of reducing fire risk to adjacent landowners and for providing wildlife habitat.

Implementation:

Continually monitor forest health, identifying areas of concern based on the following criteria:

- Fire risk to adjacent landowners.
- Overall forest vitality.
- Diversity of wildlife habitat, including but not limited to white-tailed deer thermal cover, snag recruitment, and mature forest stands.
- Shoreline and stream protection for fish habitat.

Alternative A. No Action.

Under the no-action alternative, fuels reduction work and forest restoration work would not be initiated on this parcel. This alternative would prevent ground disturbance and would thus result in lessened noxious weed propagation potential. This alternative would however fail to address fuels loading and associated fire concerns in this urban interface parcel. The outcome could potentially result in higher risk to residential areas resulting from wildfire that originates on FWP lands. Additionally, failing to restore historic stand conditions may impact forest diversity and wildlife habitat. Overstocked stands of Douglas fir create heavy competition for water and sunlight, resulting in stress and higher susceptibility to insect and disease infestations. Understory plant communities would be suppressed, resulting in lower potential for a diversity of herbaceous and shrubby plants.

Alternative B. Treatment of 160-acre South Crystal Lake parcel.

Under this alternative, FWP would treat 112 acres of forested land within the 160-acre parcel located on the southwest side of Crystal Lake for the purpose of fuels reduction and forest restoration. A cut-to-length system would be utilized to minimize ground disturbance, and the majority of slash would be masticated to avoid burning and reduce potential for noxious weed proliferation. Streamside management zone practices would be utilized on the portions of this unit that borders Crystal Lake and a fen located in the south end of the unit. Special attention would be given to preserving the view shed from Crystal Lake and adjoining residential properties. The majority of the work would be accomplished during fall and winter months to reduce ground disturbance and conflict with recreational use.

9. Listing of each local, state, or federal agency that has overlapping or additional jurisdiction:

(a) Permits	
Permit:	Date Filed:

(b) Funding	
Agency Name:	Funding Amount:

(c) Other Overlapping or Additional Jurisdictional Responsibilities	
Agency Name: Montana State Historical Preservation Office	Type of Responsibility: Archeological & Cultural Site Protection
Department of Environmental Quality	Air and water Quality
Department of Natural Resources and Conservation	Wildfire Response

10. List of agencies consulted during preparation of this environmental checklist:

MT Department of Natural Resources and Conservation
 MT Fish, Wildlife & Parks
 Parks Division
 Wildlife Division
 Fisheries Division
 Legal Bureau
 Montana State Historic Preservation Office (SHPO)
 Montana Department of Commerce - Tourism

11. Name of Preparer(s) of this environmental checklist:

David Landstrom, Region One Parks Program Manager, Montana Fish, Wildlife & Parks

12. Date submitted: August 20, 2009

PART II. ENVIRONMENTAL CHECKLIST

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		Y	1a
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil, which would reduce productivity or fertility?			x		Y	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		Y	1d
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		x				
f. Other		x				

NARRATIVE DESCRIPTION AND EVALUATION:

1a, b, and d:

Timber Harvest would result in ground disturbance and associated increase in potential for erosion and moisture loss.

Timber removal would utilize a cut-to-length system, which eliminates log skidding. Most slash would be masticated to minimize ground disturbance, erosion, and siltation. Slash burning would be minimal to nonexistent, thus reducing impacts on vegetation and soils. Any disturbed areas would be reseeded with annual grasses to reduce erosion and compaction. Any invading noxious weeds would be managed through the Regional Noxious Weed Program.

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? (Also see 13c.)			X		Y	2a
b. Creation of objectionable odors?			X		Y	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. Any discharge that will conflict with federal or state air quality regs?		x				2e
f. Other		x				

NARRATIVE DESCRIPTION AND EVALUATION:

2a and b: Machinery used during the timber removal project would create noise and emissions. Care would be taken to limit working hours to minimize disturbance to adjacent neighbors. If slash burning occurs, it would result in temporary effects on air quality. All burning would occur during periods when conditions are suitable for good air dispersion. Mastication would be utilized for the majority of slash treatment.

2e. All applicable air shed or burning permits would be acquired before any burning is conducted.

3. WATER	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
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				
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. Effects to a designated floodplain?		X				
m. Any discharge that will affect federal or state water quality regulations?		X				
n. Other:		X				

NARRATIVE DESCRIPTION AND EVALUATION:

This project is anticipated to have no impact on water resources. Stream management practices would be followed, and work would not be conducted within 200 feet of Crystal Lake.

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		N	3a
b. Alteration of a plant community?			X		N	3b
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		Y	3e
f. Effects to wetlands or prime and unique farmland?		X				
g. Other:		X				

NARRATIVE DESCRIPTION AND EVALUATION:

4a and b: An expected outcome from this project is a reduction in the amount of overstocked Douglas fir and ponderosa pine thickets. The impacts are considered positive, as this would reduce dense areas to more historic levels, thereby improving the health and vigor of remaining trees. This would make them more resistant to insect and disease infestations and reduce the risk of stand replacement fire. With the reduction of overhead cover, existing undergrowth is anticipated to regenerate and possibly increase in variety. Where little undergrowth is present, opened, disturbed areas would be reseeded with native species.

4e: There is a possibility for the introduction of noxious weeds in disturbed soils. Disturbed soils would be reseeded with native vegetation and monitored. The area is managed under Region One's noxious weed management program, and any occurrence of noxious weeds would be treated chemically, biologically, or mechanically under that program.

5. FISH/WILDLIFE	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
Will the proposed action result in:						
a. Deterioration of critical fish or wildlife habitat?			X		Yes	5a
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		Yes	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				
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?		X				
h. Adverse effects to threatened/endangered species or their habitat?		X				
i. Introduction or exportation of any species not presently or historically occurring in the affected location?		X				
j. Other:		X				

NARRATIVE DESCRIPTION AND EVALUATION:

5a. Some game animal cover would be eliminated by reducing dense Douglas fir thickets. Thirty percent of these fir thickets would be left intact to benefit wintering game animals. Potentially, this project would result in a higher quantity of browse as understory plant communities are encouraged.

5c. A minor alteration of bird and small mammal habitat may occur as a result of this project. The project area is located within areas of larger, similar habitat types, thus limiting the impact. A minor alteration may prove to be a positive impact for cavity-nesting birds and mammals as larger-diameter trees are encouraged.

HUMAN ENVIRONMENT:

6. NOISE/ELECTRICAL EFFECTS	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
Will the proposed action result in:						
a. Increases in existing noise levels?			X		Y	6a
b. Exposure of people to severe or nuisance noise levels?			X		Y	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:		X				

NARRATIVE DESCRIPTION AND EVALUATION:

6a and b: Machinery used during the timber removal project would create noise and emissions. Workers would be exposed to intermittent noise levels that would require use of hearing protection. In addition, care would be taken to limit working hours to minimize disturbance to adjacent neighbors.

7. LAND USE	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
Will the proposed action result in:						
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		X				
b. A conflict with a designated natural area or area of unusual scientific or educational importance?		X				
c. A 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. Compliance with existing land policies for land use, transportation, and open space?		X				
f. Increased traffic hazards, traffic volume, or speed limits or effects on existing transportation facilities or patterns of movement of people and goods?		X				
g. Other:		X				

NARRATIVE DESCRIPTION AND EVALUATION:

There are no anticipated impacts on land use in the project area as a result of this proposal.

8. RISK/HEALTH HAZARDS	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
Will the proposed action result in:						
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. Effects on existing emergency response or emergency evacuation plan or create need for a new plan?		X				
c. Creation of any human health hazard or potential hazard?		X				
d. Disturbance to any sites with known or potential deposits of hazardous materials?		X				
e. The use of any chemical toxicants?		X				
f. Other:		X				

NARRATIVE DESCRIPTION AND EVALUATION:

This proposal is anticipated to reduce the potential for property-threatening forest fires to residential dwellings immediately adjacent to the project area.

9. COMMUNITY IMPACT	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
Will the proposed action result in:						
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		NA	9c
d. Changes in industrial or commercial activity?			X		NA	9d
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?		X				
f. Other:		X				

NARRATIVE DESCRIPTION AND EVALUATION:

9 c. and d. This project would have a positive effect on employment and commercial activity. Work would be conducted by forestry work contractors, thus providing economic opportunity.

10. PUBLIC SERVICES/TAXES/UTILITIES	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
Will the proposed action result in:						
a. 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 so, specify:		X				
b. Effects on the local or state tax base and revenues?		X				
c. 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. Increased used of any energy source?		X				
e. Other.		X				
Additional information requested:						
f. Define projected revenue sources.	Jump Start II Federal Forestry Grant					
g. Define projected maintenance costs.						

NARRATIVE DESCRIPTION AND EVALUATION:

10f. Annual maintenance costs would be determined by the extent of any invasive weeds in disturbed areas. All areas could be treated in two-to-three days by one-to-two seasonal staff. If treatment is necessary, the projected cost is estimated to be \$550 per year for chemicals and labor in the first two years, with costs decreasing in subsequent years as native species regenerate and become dominant.

11. AESTHETICS/RECREATION	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
Will the proposed action result in:						
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?			X		NA	11a
b. Alteration of the aesthetic character of a community or neighborhood?			X		NA	11b
c. Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report)		X				
d. Adverse effects to any designated or proposed wild or scenic rivers, trails or wilderness areas?		X				
e. Other:		X				

NARRATIVE DESCRIPTION AND EVALUATION:

11 a & b. This project is anticipated to have a positive effect on the scenic vistas and aesthetic character of the area. The project is intended to encourage larger mature trees by decreasing overstocked thickets of Douglas fir trees. The resulting conditions would include greater visibility and healthier tree species diversity.

12. CULTURAL/HISTORICAL RESOURCES	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
Will the proposed action result in:						
a. Destruction or alteration of any site, structure, or object of prehistoric, historic, or paleontological importance?		X				
b. Physical changes that would affect unique cultural values?		X				
c. Effects on existing religious or sacred uses of a site or area?		X				
d. Adverse effects to historic or cultural resources?		X				
e. Other:		X				

NARRATIVE DESCRIPTION AND EVALUATION:

This proposed project is designed to mitigate recent changes in forest conditions (i.e., dense regeneration following timber harvest and exclusion of fire) that resulted from previous forest management activities. Sites would not be altered in such a way as to damage any historic resources that may be present in the project areas.

13. SUMMARY EVALUATION OF SIGNIFICANCE	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
Will the proposed action, considered as a whole:						
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.)		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. Have organized opposition or generate substantial public controversy?		X				
Additional information requested:						
g. List any federal or state permits required.						

NARRATIVE DESCRIPTION AND EVALUATION:

13b: Timber removal is hazardous. Precautions would be taken to close roads during the project to prevent vehicles from entering. Signs would be prominently displayed, informing visitors of the project and hazardous conditions. Areas would be closed to public access while work is being performed and machinery is operated or if conditions are deemed unsafe.

PART III. CONCLUSION

1. Cumulative and secondary effects of this project as a whole:

The cumulative effects of this proposal are anticipated to be positive. The effect would be a reduction of overstocked Douglas fir stands and a reduction in the volume of ladder fuels. The anticipated result is a reduction in potential for damage to neighboring properties and FWP lands as a result of wild fire. The secondary effect would be an improvement in stand condition as a result of reduced intercompetition resulting from dense thickets of conifer saplings. Ground disturbance would provide an opportunity for increased spread of noxious weeds, while simultaneously encouraging native plant regeneration. Noxious weed spread would be mitigated through the application of herbicides by FWP staff.

Wildlife habitat impacts are considered to be minimal and may promote future positive impacts for cavity-nesting birds and mammals. Game animals may benefit from more vigorous understory development following this project. There would be a small loss of Douglas fir thickets utilized by white-tailed deer for winter habitat; however, significant amounts of similar habitat exist in the project area. Additionally, 30% of existing thickets would be left intact for this reason.

Impacts to aesthetic qualities are considered to be positive as a result of encouraging larger, more diverse stands with greater crown spacing. Recreational impacts are expected to be minimal due to the timing of this project and the fact that no developed recreational facilities will be altered.

The impacts to the local economy are expected to be positive as a result of the intent to hire forestry professionals to conduct the work.

Best management practices would be utilized to limit ground disturbance and subsequent noxious weed proliferation. The project area would be reseeded where necessary, and noxious weed growth would be monitored and treated by FWP staff.

2. Based on the significance criteria evaluated in this environmental checklist (Part II), is an EIS required? No

The cumulative effects of this proposal are anticipated to have a positive impact on the human environment by reducing the potential for damage to private residential property resulting from forest fire on adjoining FWP lands. FWP also predicts a positive effect on forest conditions within the project area through reduction in overstocked Douglas fir and ponderosa pine stands.

3. Public involvement for this project:

Scoping has been conducted with neighbors who border the project area to evaluate opinions or concerns regarding this proposal. In 2005 FWP conducted an environmental assessment of similar work elsewhere on Crystal Lake, and substantial public input was provided regarding fuels mitigation and forest restoration. During the TCL FAS management planning update process in 2006, public comment was again solicited and received regarding the management of FWP forest lands on Crystal Lake and elsewhere in the TCL FAS. In 2009 FWP again sought public input regarding forest management at Crystal Lake during the annual Thompson Chain of Lakes Homeowners Association meeting. The public has been very interested and supportive of forestry projects throughout the FAS. If requested, FWP will schedule a public meeting for the proposed project during the comment period.

4. **Duration of the public comment period:**

The public comment period will be 21 days, from August 20 through 5:00 p.m., September 10, 2009. Please submit comments to:

Crystal Lake Forest Restoration Project
Montana Fish, Wildlife & Parks
490 N. Meridian Road
Kalispell, MT 59901

Or e-mail comments to: dlandstrom@mt.gov

GLOSSARY OF TERMS

Affected Environment – The aspects of the human environment that may change as a result of an agency action.

Alternative – A different approach to achieve the same objective or result as the proposed action.

Categorical Exclusion – A level of environmental review for agency action that does not individually, collectively, or cumulatively cause significant impacts to the human environment, as determined by rulemaking or programmatic review, and for which an EA or EIS is not required.

Cumulative Impacts – Impacts to the human environment that, individually, may be minor for a specific project, but when considered in relation to other actions, may result in significant impacts.

Direct Impacts – Primary impacts that have a direct cause and effect relationship with a specific action, i.e., they occur at the same time and place as the action that causes the impact.

Environmental Assessment (EA) – The appropriate level of environmental review for actions that either do not significantly affect the human environment or for which the agency is uncertain whether an environmental impact statement (EIS) is required.

Environmental Assessment Checklist – An EA checklist is a standard form of an EA, developed by an agency for actions that generally produce minimal impacts.

Environmental Impact Statement (EIS) – A comprehensive evaluation of the impacts to the human environment that likely would result from an agency action or reasonable alternatives to that action. An EIS also serves as a public disclosure of agency decision-making. Typically, an EIS is prepared in two steps. The draft EIS is a preliminary, detailed written statement that facilitates public review and comment. The final EIS is a completed, written statement that includes a summary of major conclusions and supporting information from the draft EIS, responses to substantive comments received on the draft EIS, a list of all comments on the draft EIS, and any revisions made to the draft EIS and an explanation of the agency's reasons for its decision.

Environmental Review – An evaluation, prepared in compliance with the provisions of MEPA and the MEPA Model Rules, of the impacts to the human environment that may result as a consequence of an agency action.

Human Environment – Those attributes, including but not limited to biological, physical, social, economic, cultural, and aesthetic factors that interrelate to form the environment.

Long-term Impact – An impact, which lasts well beyond the period of the initial project.

Mitigated Environmental Assessment – The appropriate level of environmental review for actions that normally would require an EIS, except that the state agency can impose designs, enforceable controls, or stipulations to reduce the otherwise significant impacts to below the level of significance. A mitigated EA must demonstrate that: (1) all impacts have been identified, (2) all impacts can be mitigated below the level of significance, and (3) no significant impact is likely to occur.

Mitigation – An enforceable measure(s), designed to reduce or prevent undesirable effects or impacts of the proposed action.

National Environmental Policy Act (NEPA) – The federal counterpart of MEPA that applies only to federal actions.

No Action Alternative – An alternative, required by the MEPA Model Rules for purposes of analysis, that describes the agency action that would result in the least change to the human environment.

Public Participation – The process by which an agency includes interested and affected individuals, organizations, and agencies in decision-making.

Record of Decision – Concise public notice that announces the agency's decision, explains the reason for that decision, and describes any special conditions related to implementation of the decision.

Scoping – The process, including public participation, that an agency uses to define the scope of the environmental review.

Secondary Impacts – Impacts to the human environment that are indirectly related to the agency action, i.e. they are induced by a direct impact and occur at a later time or distance from the triggering action.

Short-term Impact – An impact directly associated with a project that is of relatively short duration.

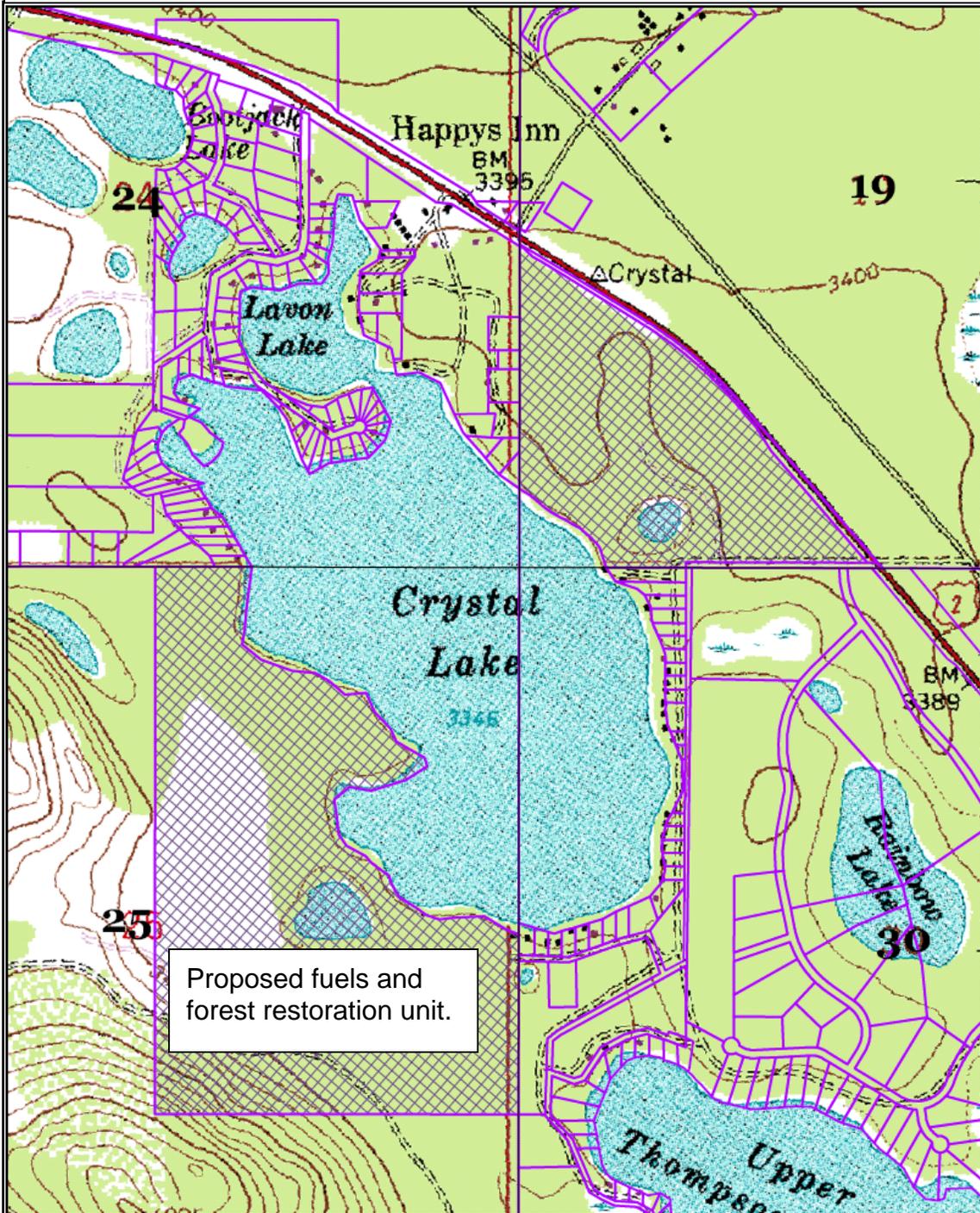
Significance – The process of determining whether the impacts of a proposed action are serious enough to warrant the preparation of an EIS. An impact may be adverse, beneficial, or both. If none of the adverse impacts are significant, an EIS is not required.

Supplemental Review – A modification of a previous environmental review document (EA or EIS) based on changes in the proposed action, the discovery of new information, or the need for additional evaluation.

Tiering – Preparing an environmental review by focusing specifically on a narrow scope of issues because the broader scope of issues was adequately addressed in previous environmental review document(s) that may be incorporated by reference.

Appendix A.

Proposed 160-acre fuels reduction and forest restoration unit within the Thompson Chain of Lakes Fishing Access Site.



Proposed fuels and forest restoration unit.

Map Produced March 2007
FWP Field Services Division



1 inch equals 1,000 feet

Montana Dep FWP Wildlife & Parks
Crystal Lake Property Ownership Map

- FWP Project Parcels
- Land Ownership Parcels



Proposed fuels and forest restoration unit.

Map Produced April 2007
FWP Field Services Division



1 inch equals 500 feet

Montana Department of Fish, Wildlife & Parks
Crystal Lake Property Ownership Map

-  FWP Parcels
-  Land Ownership Parcels