

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Monture Projects-EA
Proposed Implementation Date:	December, 2011
Proponent:	Montana DNRC, Clearwater Unit
Location:	Sections 4, 5 and 9, T15N R12W
County:	Powell

I. TYPE AND PURPOSE OF ACTION

The Clearwater Unit is proposing to harvest timber from sections 4, 5 & 9 T15N R12W. The proposed harvest area is located about 3 miles north and 6 miles northeast of Ovando (Attachment A-1, Vicinity Map). Under the proposed action pre-commercial thinning, possible aspen restoration and salvage harvesting of poor quality overstory trees would take place. This may occur over several different pre-commercial thinning and/or timber permit contracts. The residual trees would be of the highest quality that remains on the site. A reduction of fuels in the Wildland Urban Interface (W.U.I.) will also take place. This harvest will generate money for the trust and reduce fuels that have the potential to negatively affect the area residences.

The lands involved in this proposed project are held by the State of Montana in trust for the Common Schools (Enabling Act of February 22, 1889; 1972 Montana Constitution, Article X, Section 11). The Board of Land Commissioners and the DNRC are required by law to administer these trust lands to produce the largest measure of reasonable and legitimate return over the long run for the beneficiary institutions (Section 77-1-202, MCA). Specific objectives of the project are to reduce fuels within the W.U.I., increase growth and yield of pre-commercially thinned stands, capture sawlog value of poor quality trees and prevent future value loss.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

Through the scoping process, neighbors of this project, other land management groups (The Nature Conservancy, U.S. Fish and Wildlife Service, Blackfoot Challenge, The Blackfoot Community Conservation Area, and the Montana Department of Fish, Wildlife and Parks were informed.

DNRC specialists were consulted (2009), including: Mike McGrath: Wildlife Biologist, Jeff Collins: Hydrologist, and Patrick Rennie: Archeologist.

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

Approval from the U.S. Fish and Wildlife Service is required prior to the project as part of a conservation easement on portions of this ground. Approval has been received, and is available at Clearwater Unit if requested. Powell County road department will control the weight limits on the county roads used to haul forest products.

3. ALTERNATIVES CONSIDERED:

No Action Alternative: The proposed harvest and pre-commercial thinning would not occur at this time. Current land use activities would continue.

Action Alternative: Under this alternative, DNRC would continue current uses, and also harvest overstory trees that contain one or more of the following: have been infested by mountain pine beetle, have forked tops, crook, sweep, bole damage or Douglas-fir that are encroaching on ponderosa and western larch overstory and

understory trees. Pre-commercial thinning projects would also be implemented in the project area. Timber would be harvested using ground based methods.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

Geology on the proposed McCabe site is moderate to deep glacial till soils on mainly moderate terrain. No unstable or unique geology occurs within the project area. There are several short steep slopes that would be avoided or protected with equipment restrictions to ground skidding up to 45% maximum slopes. Soils on forest sites are mainly well drained, Winfall and Rumblecreek deep gravelly loams on 2-25% and are productive and resilient soils. Wildgen and Yreka soils occur on moderate slope of 2-8%. No high erosion risk soils were identified in the small project area. Maintaining the surface soil depth and silty volcanic ash soils is important to maintaining plant growth. These soils are similar with low to moderate erosion hazard rating, with moderate risk of compaction and displacement associated with equipment operations. Planned thinning and harvest operations would be completed with a combination of feller/buncher and grapple skidding and are expected to be low impact methods.

There is a long season of use on this site, yet avoid operations on wet soils as native material roads may rut and could require maintenance of road drainage features. Thinning operations should improve spacing and tree growth by reducing plant competition for soil moisture and nutrients. Recommended mitigation measures are to use existing skid trails where feasible, and limit ground operations to relatively dry or frozen conditions, and ground skidding to slopes less than 45%. Planned thinning operations present low risk of direct, in-direct and cumulative soil impacts based on light traffic and implementing BMP's.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

The McCabe project site is in the Dick Creek drainage. McCabe Creek flows along the northern east ¼ of DNRC sections 4 & 5 and is tributary to Dick Creek. Dick Creek is tributary to Monture Creek. There are no proposed thinning operations adjacent to or within SMZ's of the streams noted and there are no streams in the proposed thinning areas. There are several dry draws in the section, and one site was noted that may have ephemeral flow in the spring, but no channel was observed. There are small isolated wetlands indicated by aspen patches that would be protected as wetland features. This parcel is not in a municipal watershed and the nearest stream, McCabe Creek is not a 303d listed impaired stream. Thinning to improve spacing and retain approximately 50 square feet of basal care per acre would not affect water yield or influence stream channel stability. No proposed operations would occur in SMZ's or on sites that would deliver sediment to stream channels or affect water quality down slope. The proposed project would restore road drainage to meet BMP's.

The proposed thinning of overstocked trees would have no impact on sedimentation or water yield increase compared to the current conditions. The planned thinning presents very low risk of direct, in-direct or cumulative impacts to water resources or beneficial uses based on the project design and implementing BMP's.

6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

The DNRC is a member of the Montana/Idaho Airshed Group which was formed to minimize or prevent smoke impacts while using fire to accomplish land management objectives and/or fuel hazard reduction (Montana/Idaho Airshed Group 2006). The Group determines the delineation of airsheds and impact zones throughout Idaho and Montana. Airsheds describe those geographical areas that have similar atmospheric conditions, while impact zones describe any area in Montana or Idaho that the Group deems smoke sensitive and/or having an existing air quality problem (Montana/Idaho Airshed Group 2006).

The project area is in Airshed 3b which encompasses much of eastern Missoula County. Currently, this airshed does not contain any impact zones. All prescribed burning would be approved by Missoula County using the daily phone approval site as well.

No Action: No slash piles would be burned within the project areas. Thus, there would be no effects to air quality within the local vicinity and throughout Airshed 3b.

Action: Under the Action Alternative, slash piles consisting of tree limbs and tops and other vegetative debris would be created throughout the project area during harvesting. These slash piles would ultimately be burned after harvesting operations have been completed. Burning would introduce particulate matter into the local airshed, temporarily affecting local air quality. Over 70% of emissions emitted from prescribed burning is less than 2.5 microns (National Ambient Air Quality PM 2.5). High, short-term levels of PM 2.5 may be hazardous. Within the typical column of biomass burning, the chemical toxics are: Formaldehyde, Acrolein, Acetaldehyde, 1,4 Butadiene, and Polycyclic Organic Matter.

Burning within the project area would be short in duration and would be conducted when conditions favored good to excellent ventilation and smoke dispersion as determined by the Montana Department of Environmental Quality and the Montana/Idaho Airshed Group. Prior to burning a "Prescribed Fire Burn Plan" would be done for the area. The DNRC, as a member of the Montana/Idaho Airshed Group, would burn only on approved days. Thus, direct and indirect effects to air quality due to slash pile burning associated with the proposed action would be minimal.

Burning that may occur on adjacent properties in combination with the proposed action could potentially increase cumulative effects to the local airshed and the Class I Areas. The United States Forest Service and large scale industrial forestry operations in the area participate as airshed cooperators and operate under the same Airshed Group guidelines as the DNRC. Non-industrial timberland operators are regulated by the Montana Department of Environmental Quality and burning is only allowed during seasons that provide good ventilation and smoke dispersion.

Prior to burning be used, a "Prescribed Fire Burn Plan" will be been done for the area. Given these conditions the proposed action would show minimal risk of direct and indirect effects on air quality.

Cumulative effects to air quality would not exceed the levels defined by State of Montana Cooperative Smoke Management Plan (1988) and managed by the Montana Airshed Group. Prescribed burning by other nearby airshed cooperators (for example Plum Creek Timber Company) would have potential to affect air quality. All cooperators currently operate under the same Airshed Group guidelines. The State, as a member, would burn only on approved days. This should decrease the likelihood of additive cumulative effects.

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

No Action: No harvest or pre-commercial thinning would occur at this time. The W.U.I. areas would not see any work accomplished on fuel levels. Existing projects, such as grazing allotments, would continue. Direct, indirect, and cumulative effects are low.

Action Alternative: The project would occur. Pre-commercial thinning and sanitation logging would be done that would reduce forest stocking. The long-term effect of this project is to increase tree growth and reduce

available fuels within the W.U.I. areas. These treatments will create a fuel break that will give initial attack firefighting forces a better place to make a stand against a wildland fire should one start either by human caused reasons or from a lightning strike. There may also be opportunities for aspen restoration in the project area, and when feasible will be carried out.

No rare plants have been identified in the project area. To prevent introduction of new weeds, off-road equipment will be cleaned and inspected prior to entry into harvest areas.

Direct, indirect, and cumulative effects are minimal to low.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

Fisheries: Dick Creek and McCabe Creek drainages also support westslope cutthroat trout (a sensitive species). There are no streams or surface water within the proposed commercial thinning/fuel reduction project areas and no harvest operations are planned adjacent to or within streamside management zones as described in the water quality section above. No trees would be cut that could be recruitable to streams and there would be no change in large woody debris. There would be no expected change to components of fish habitat, including shading of streams and stream channel stability or aquatic life associated with this proposed thinning project. For these reasons there is very low risk of direct, in-direct or cumulative impacts to fish habitat or aquatic life.

Elk (*Cervus elaphus*), White-tailed Deer (*Odocoileus virginianus*) & Mule Deer (*Odocoileus hemimonus*): A majority of the project area is behind locked gates, and hunting pressure is reduced by the gates. Much of the forest overstory is too young to provide snow intercept cover. As a result there would likely be low risk of direct, indirect, or cumulative effects to these species from the proposed action.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

Refer to Fisheries Analysis in section 8: Dick Creek and McCabe Creek drainages support westslope cutthroat trout (a sensitive species). Due to the buffer distance of activities away from surface waters, there is very low risk of direct, in-direct or cumulative impacts to fish habitat or aquatic life as described in section 8 above.

Lynx (*Felis lynx*): Within three miles of the project area, four lynx were been observed or trapped between 1979 and 2000 (Montana Natural Heritage Program database). Although lynx have been located near the project area, the affected parcels do not contain lynx habitat. Due to the lack of existing habitat, there would likely be minimal risk of direct, indirect, or cumulative effects to this species from the proposed action.

Gray Wolf (*Canis lupus*): The Mollett Park and Marcum Mountain packs are located near the project area, but no known den or rendezvous sites are located within a 1-mile radius of the project area. Additionally, the proposed action would not create additional road, or change road status from closed to open. As a result, there would likely be low likelihood of direct, indirect, or cumulative effects to wolves from the proposed action.

Grizzly Bear (*Ursus arctos*): Grizzly bears have been observed within the project area (A. Helena, DNRC forester, observation 20 April 2009) and have been observed within a 3-mile radius of the project area (Montana Natural Heritage Program database). Currently, motorized access to the affected parcels is restricted by locked gates. Additionally, residual sapling density following the proposed pre-commercial thinnings, along with topography and pole and sawtimber-sized trees, would continue to provide visual screening cover from along many of the closed roads within the project area. Finally, the proposed action would also retain visual screening cover, where it currently exists, around wetland and streamside management zones within the proposed units. As a result, there would likely be low risk of direct, indirect, and cumulative effects to grizzly bears from the proposed action.

Bald Eagle (*Haliaeetus leucocephalus*): There is a bald eagle nest within 0.12 mile of the haul route for the proposed. However the haul route being a heavily used, open county road, there would likely be a low risk of direct, indirect, or cumulative effects to bald eagles as a result of the proposed action.

Fisher (*Martes pennanti*): The proposed action would focus on reducing sapling density through pre-commercially thinning the understory, and selectively harvesting in the project area. Additionally, proposed units would be located > 100 ft from class 1 and 2 streams and affected habitat has overstory canopy cover < 50%, thereby reducing the potential for impact to fishers. As a result, there would likely be low risk of direct, indirect, or cumulative effects to fishers from the proposed action.

Flammulated Owl (*Otus flammeolus*): There are several large diameter (dbh > 18 inches) trees within the project area, with many having potential for utilization by flammulated owls. The proposed action would reduce sapling stocking densities, potentially increasing the value of the habitat for flammulated owls. Potential impacts would likely be positive for this species. Thus, the proposed action would likely have low to moderate risk of positive direct and indirect effects for this species. There would likely be low risk of cumulative effects from the proposed action.

Pileated Woodpecker (*Dryocopus pileatus*): There are several large diameter trees within the project area, however, the proposed units currently have canopy closure < 40%, which is not conducive to nesting by pileated woodpeckers. Additionally, the focus of the proposed action would be to pre-commercially thin the dense understory, and removal of scattered merchantable trees. Because the proposed action would not solely focus on overstory removal, there would likely be low risk of direct, indirect, or cumulative effects to pileated woodpeckers as a result of the proposed action.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

Based on the lack of previously identified cultural resources, DRNC Archaeologist Patrick Rennie did not recommend additional investigative work. If any archaeological sites are found, they would be protected. No direct, indirect, or cumulative effects to cultural resources are expected as a result of the proposed action.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

Any change to the scenery in the area from these alternatives would be in addition to past timber harvests, road building, vegetation management (grazing, pre-commercial thinning, etc.) and future fire activity within the project area. This analysis includes all past and present effects.

No Action If the no action alternative is selected, patches created by dead trees will exist. Overstory trees of poor quality would continue to exist on the landscape giving the area a "high graded" look. The understory would continue to grow in thick patches blocking the overall view of the area and choking out native grasses and shrubs.

Action Portions of the proposed sale would be visible from the Monture Road. However this is a very small percentage of the overall harvest area. The property is set back in such a way that it limits visibility from the open road. Following the commercial harvest and the pre-commercial thin areas will display a variable spaced overstory with quality ponderosa pine, Douglas-fir and western larch existing in the overstory. Scattered wildlife trees will also exist. The understory will be spaced out with vigorous ponderosa pine and western larch.

Harvest systems and activities would be ground-based and would be completed this winter. Harvest activities would be quite audible, and, depending upon air conditions, equipment could be heard many miles from their location. The proposed harvest of this volume would most likely be done within several months and would occur during the general "work week". Direct, indirect, and cumulative effects to aesthetics due to harvesting and hauling associated with the proposed action would be minimal.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

No impacts are likely to occur under either alternative.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

The following timber sales have been completed in this area:

Ride The Pine Timber Sale section 16 T15N R12W

Jumpstart Jones Timber Permit sections 4 & 9 T15N R12W

IV. IMPACTS ON THE HUMAN POPULATION

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| <ul style="list-style-type: none">• <i>RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.</i>• <i>Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.</i>• <i>Enter "NONE" if no impacts are identified or the resource is not present.</i> |
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14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

The activities are designed to reduce fuel loadings (amount of available fuels for a wildfire) and thereby reduce flame length and the energy released along the fires edge. This would then make the fire easier to control and at the minimum, reduce the fires ability to spread that would enable the ability to egress the surrounding area.

Log truck traffic would increase slightly on area roads for the duration of the permits associated with the proposed action. Signs at appropriate locations on county roads and access roads would be used to warn motorists and local residents.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

The proposed action would lead to a small, temporary increase in industrial activity during implementation. The proposed action would include timber harvesting and log hauling.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

A few short time jobs would be created for the duration of the proposed action.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

The proposed action has only minor indirect, limited implications for tax collections.

18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

Aside from contract administration, the impact on government services should be minimal due to the temporary nature of the proposed action.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

The DNRC operates under the State Forest Land Management Plan (SFLMP, DNRC 1996) and Administrative Rules for Forest Management (ARM 36.11.401 through 450, DNRC 2003). The SFLMP established the agency's philosophy for management of forested trust lands. The Administrative Rules provide specific guidance for implementing forest management projects.

It is required that the DNRC receive acceptance of the project from the U.S. Fish and Wildlife Service. This is part of a conservation easement that is held upon these lands.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

The project area receives use by walk-in recreationists, horse riders, and snowmobilers. Recreation opportunities would continue under the proposed action. The nearest wilderness area is approximately 8 miles to the north of the project area. None of the planned work would interfere with this wilderness or its use.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

The project has no direct implications for density and distribution of population and housing

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

No measurable impacts related to social structures and mores would be expected.

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

No measurable impacts related to cultural uniqueness and diversity would be expected under either alternative.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

Direct costs associated with pre-commercial thinning in the project area are estimated to be \$22,800.00. This figure is achieved by multiplying the estimated number of future project acres 114 by estimated cost per acre \$200.00. This cost estimate is assumed from previous projects. The most recent pre-commercial thinning contract yielded a cost per of \$114.00 and required less hand piling. The assumed cost should be recovered, by a net increase in growth, thus lessening rotation between harvests by up to thirty years.

This project should return to the trusts involved approximately \$5,200 in stumpage (may occur as more than one timber permit) and \$3,133.00 (\$4.82/ton) in forest improvements. Stumpage payments for non-sawlog material would be charged \$100.00 to be paid lump sum if requested. **The overall cash flow to the trust looks rather minimal but the intent of the project is to return the stand to a condition where the desired tree species dominate the overstory and understory.**

EA Checklist Prepared By:	Name: Amy Helena	Date: 12/5/2011
	Title: Management Forester	

V. FINDING

25. ALTERNATIVE SELECTED:

Action Alternative

26. SIGNIFICANCE OF POTENTIAL IMPACTS

NONE

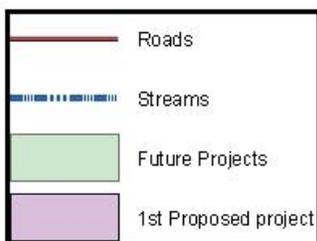
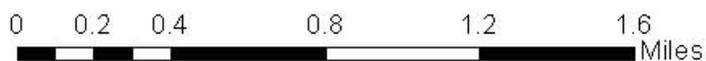
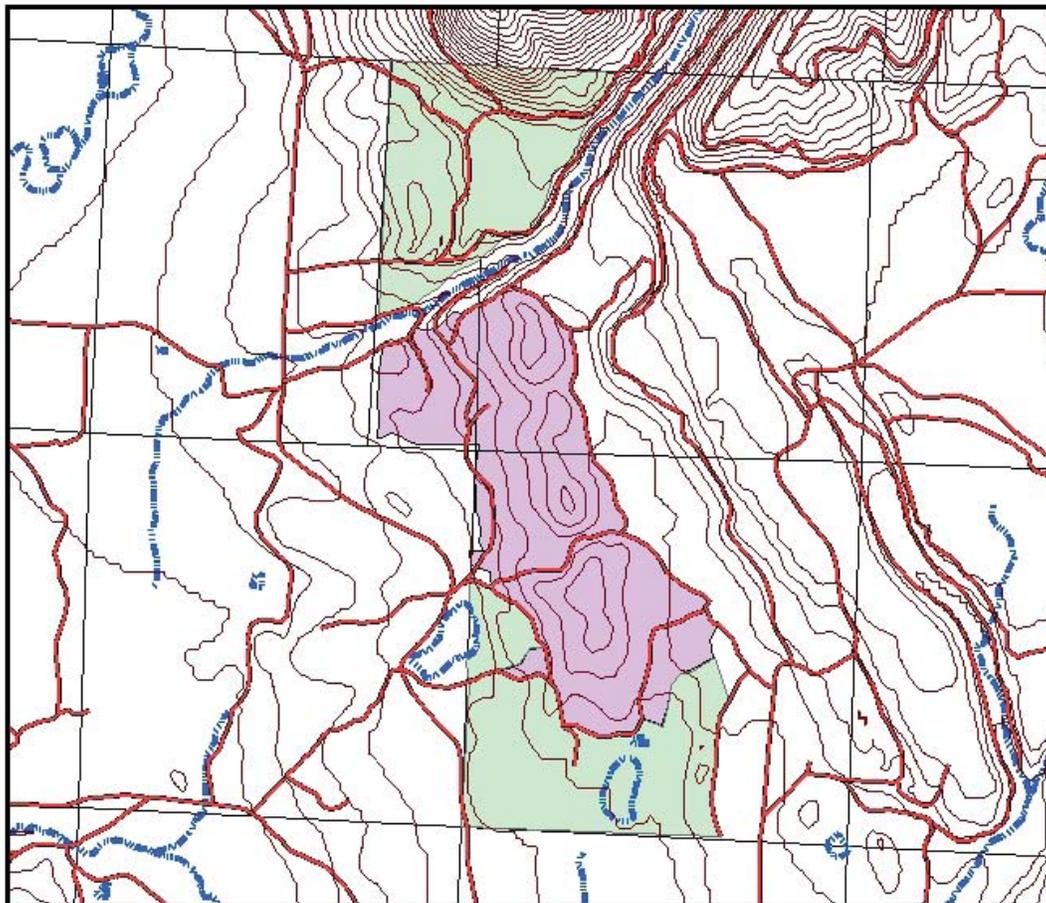
27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS
 More Detailed EA
 No Further Analysis

EA Checklist Approved By:	Name: Craig V. Nelson
	Title: Supervisory Forester
Signature: /s/ Craig V. Nelson	Date: 12/5/2011



Monture Projects
Sec 4,5 & 9 T15N R12W
DNRC-CLEARWATER UNIT



A. Helena
12/5/11