

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Doney section projects
Proposed Implementation Date:	August 2010
Proponent:	Montana DNRC, Clearwater Unit
Location:	Section 16, T15N R11W
County:	Powell

I. TYPE AND PURPOSE OF ACTION

The Clearwater Unit is proposing to harvest approximately 65 thousand board feet of timber from approximately 45 acres. The proposed harvest area (see attachment A-1) is located 6 miles northeast of Ovando. Under the proposed action Pyramid Lumber Company, selected for the Jumpstart 2 project, plans to complete a salvage harvest (Skeeter Bait) to remove dead and dying lodgepole pine. This harvest will generate money for the common schools trust and reduce fuels that have the potential to negatively affect residences in the area. Road maintenance activities as well as short segments of new road construction will take place to help improve road drainage and function. Pre-commercial thinning projects (see attachment A-2) will also take place within the section, but not necessarily part of the Jumpstart 2 project. These activities will reduce the competition among the understory which will promote growth by allowing additional water and sunlight to reach the residual stand.

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).

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, including: Mike McGrath: Wildlife Biologist and Jeff Collins: Hydrologist.

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

NA

3. ALTERNATIVES CONSIDERED:

Alternative A: The No-Action Alternative: The proposed "Jumpstart 2" project, road maintenance, road construction and pre-commercial thinning would not occur at this time. Current land use activities would continue.

Alternative B: The Action Alternative: Under this alternative, DNRC would continue current land use activities and implement the planned "Jumpstart 2" project. Timber would be harvested using ground-based methods. Non-sawlog material will also be treated within the section by pre-commercially thinning overstocked understory trees to reduce the number of stems per acre. New construction as well as reconstruction will take place within roads in the section to bring the road system up to BMP standards.

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 site is moderate to deep soils forming in glacial outwash and residual soils from limestone and argillite bedrock. Soils on forest sites are a complex of Crow clay loams along the road and on the footslopes, with Winkler gravelly loams within the harvest unit and midslope terrain. The Winkler soils are well drained with low to moderate erosion hazard soils. There is low compaction and moderate displacement risk on slopes up to 45%. The Crow clay loam soils that occur along the road have more cobbles than typical. Crow soils tend to remain wet in the spring and are subject to rutting and require more maintenance or gravel surfacing if operated on when wet. Drainage features should be spaced about 300 feet apart on moderate grades up to 8 % and more closely spaced on steeper grades. There is one short steep slope in the NE corner of the section that would be avoided or protected with equipment restrictions to ground skidding up to 45% maximum slopes. No wetland soils were noted to occur in the proposed harvest units. There are wetlands within the section. No high erosion risk soils were identified in the small project area. The proposed thinning operations should improve spacing and tree growth by reducing plant competition for soil moisture and nutrients. Where roads are relocated, the abandoned road segments should be stabilized with waterbars, ripped and seeded. A portion of logging slash and chips should be retained on site for nutrient cycling. Planned pre-commercial thinning, commercial thinning and salvage 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 project site is in the North Fork Blackfoot River drainage. The river flows near the SE corner of the DNRC parcel, and there are no surface water resources within the proposed harvest or pre-commercial thinning areas. The parcel is not in a municipal watershed and the river segment is not a 303d listed impaired stream. The planned pre-commercial thinning and harvest to improve spacing 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 main access road crosses an alluvial terrace through Section 21 and is adjacent to the river for a short segment where stream channel erosion and possibly sediment from the road toe-slope. The proposed project would relocate a portion of the road system within the DNRC section 16, on more well drained terrain that is away from wetlands. The proposed road work includes maintenance that will restore road drainage to meet BMP's and is expected to reduce erosion and maintenance needs compared to current conditions. There are several draws in the section, and one site was noted that may have ephemeral flow in the spring, but no channel was observed. There are several isolated wetlands that would be protected as wetland features.

The proposed pre-commercial 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 located within Montana Airshed 3B which encompasses portions of Missoula and Powell Counties. Currently, this Airshed does not contain any impact zones. This project is located approximately 6 miles northeast of Ovando and is bordered by either FWP, small private or other land management groups (Blackfoot Challenge, etc.). Scattered residential properties are found within the W.U.I. of this project. Two designated wilderness areas lie north of the project area. These wilderness areas each exceed 5,000 acres and as such, are considered Federal Class I Areas that ultimately receive protection under the Federal Clean Air Act of 1977.

No Action: Under the No Action Alternative, 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, there is the potential of burning slash piles instead of the planned chipping. 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 if no markets exist for chips and/or hogfuel. 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. Since chipping is planned, effects would be very minimal. At the same time, 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 USFS participates as an Airshed Cooperator and operate under the same Airshed Group guidelines as the DNRC. Thus, cumulative effects to air quality due to slash pile burning associated with the proposed action would also be expected to be minimal. Similar to above, chipping would also have a minimal effect.

Harvesting, masticating, and hauling (chips or logs) could create dust which may affect local air quality. Harvesting operations would be short in duration. Thus, direct, indirect, and cumulative effects to air quality due to harvesting, chipping, and hauling associated with the proposed action would be minimal.

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 activities would occur at this time. Fuel levels in the W.U.I. would not be reduced and forest restoration activities would not be conducted. The road system within the section would not be improved at this time. Existing projects, such as grazing allotments, would continue. Direct, indirect, and cumulative effects are low.

Action Alternative: Existing projects, such as grazing allotments, would continue. The Jumpstart 2 project would occur. Pre-commercial thinning and sanitation logging would be completed to reduce stands of overstocked, unhealthy and/or mountain pine beetle attacked trees. Mountain pine beetle infested lodgepole pine and overstocked clumps of submerchantable Douglas-fir will no longer occupy the site. All slash created during the Jumpstart 2 project would either be chipped (at the landing, or by a masticator within the harvest area) or burned. Burning will only take place if a market does not exist for the product, whether it be chips or hog-fuel. The long-term goals of this project are to increase tree growth, promote desired species and reduce available fuels within the W.U.I. areas.

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: The North Fork Blackfoot River, supports bull trout (an endangered species) and westslope cutthroat trout. 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.

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.

Fisheries: The North Fork Blackfoot River, supports bull trout (an endangered species) and westslope cutthroat trout. As described in section 8 above, there is very low risk of direct, in-direct or cumulative impacts to fish habitat or aquatic life.

Lynx (*Felis lynx*): According to the most recent stand level inventory (20080908), there is no lynx habitat within the parcel. As a result, no impact is likely to occur.

Gray Wolf (*Canis lupus*): The proposed action is located in, or close to, the territory of ≥ 1 wolf pack(s). However, no known wolf dens or rendezvous sites are known to occur within 1 mile of the project area, and DNRC timber sale contracts forbid purchasers and their contractors from hunting in areas behind locked gates to which the proposed action affords them access. As a result, there would likely be low risk of direct, indirect, or cumulative effects to this species from the proposed action.

Grizzly Bear (*Ursus arctos*): While the parcel does receive use by grizzly bears, it is located several miles behind locked gates. The following mitigations are proposed: (1) if the contractor chooses to camp on the sale area, they would be required to keep a clean camp. Food should be stored by hanging, or placement in bear resistant containers. Cleaning of the campsite and landings should be done every day; (2). if the Purchaser / contractor does not choose to camp onsite, lunches and other food would be stored within vehicle or equipment cabs; and (3). contractors and purchasers conducting contract operations would be prohibited from carrying firearms while operating (ARM 36.11.433 (1)(d)) and bear spray would be recommended for protection of personnel. Providing these mitigations would be implemented, there would likely be little to no impact to grizzly bears from the proposed action.

Bald Eagle (*Haliaeetus leucocephalus*): The proposed haul route would be located approximately 0.5 mile from a bald eagle nest. However, due to topography and vegetative screening cover, there would likely be low risk of direct, indirect, or cumulative effects to this species from the proposed action.

Fisher (*Martes pennanti*): While fisher preferred habitat types do occur within the proposed harvest unit, they do not occur near a class 1 or 2 stream. As a result, there would likely be minimal impacts to fishers due to the proposed action.

Flammulated Owl (*Otus flammeolus*): The proposed action would reduce the stocking on approximately 15 acres of potential flammulated owl habitat that is currently too dense for use by this species. As a result, the affected stand would be put on a path that could produce suitable habitat within 30 to 50 years. No impact is likely to occur because the affected stand is currently too dense to be used by this species.

Pileated Woodpecker (*Dryocopus pileatus*): The proposed action would enter into potential pileated woodpecker habitat and reduce crown cover through removal of lodgepole pine that comprises approximately 20 to 30 percent of the affected stands. As a result, the suitability of the affected stands for pileated woodpeckers would likely be reduced due to the proposed action. Thus, there would likely be low-level direct, indirect, and cumulative effects to this species because the proposed action would likely treat fewer than 50 acres of potential habitat.

For the complete wildlife analysis refer to attachment B.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

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

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. The trees that would be killed by the beetle attack would lose all foliage, and eventually fall to the ground. Although the tree bole would still be in existence, this would not be very apparent in the distance, but would be more noticeable when observed close range. The color would be lighter than the current view after the attacked trees die. Thus, direct, indirect, and cumulative effects to aesthetics would be minimal.

Action Post harvest this area would have more openings with no dead and dying lodgepole pine present. Submerchantable patches of Douglas-fir and lodgepole would also be removed leaving a more open understory that would not be noticed from outside the proposed harvest unit.

Throughout the proposed harvest area and pre-commercial thinning areas slash would be noticeable yet temporary. Generally slash disappears from the site within five years, and is often covered by other vegetation within three years. Again, sites would be generally lighter in color than can be seen currently.

New road segments as well as road reconstruction will not be visible unless the observer is within the section.

Harvest systems and activities would be ground-based. The skidding equipment and log trucks may cause temporary dust clouds that will quickly disperse and would only occur during harvest. 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:

Jumpstart Doney was located within the same section but in the southeast corner in 2009.

Evans Lake Timber Sale was located within section 36 T15N R11W in May of 2004.

Dry Creek Helicopter Timber Sale was located within section 16 T15N R10W in 2005.

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.

A primary impetus behind this project is to reduce wildland urban interface fuels. The planning of this project involved the W.U.I. designations of Powell County, and the project units are within those areas. 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 timber harvest permit 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. **It is conceivable that this pre-commercial thinning would increase the current rate of growth.** This would make rotation age, or time needed to make trees large enough to be harvested, arrive sooner. The ability to harvest these trees would effect future DNRC decisions regarding timber harvest and location.

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.

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.

The proposed harvest project should return approximately \$942.50 to the Common Schools trust. This estimate uses an estimated stumpage rate of \$3.23 per ton. This is multiplied by the expected volume removed, 65 thousand board feet, or 455 tons. Additionally, the proposed action would contribute approximately \$2,035.15 for Forest Improvement. The main haul route within the section will be improved and brought up to BMP standards. This road will be used in future timber sales within this area which will have a positive impact on stumpage for future sales (minimal road packages).

The direct costs associated with the pre-commercial thinning project are estimated to be \$39,783.00. This figure is achieved by multiplying the estimated number of acres 267 by estimated cost per acre \$149.00. This cost estimate is assumed from previous projects. The assumed cost should be recovered, by a net increase in growth, thus lessening rotation between harvests by up to thirty years.

EA Checklist Prepared By:	Name: Amy Helena	Date: 8/3/10
	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

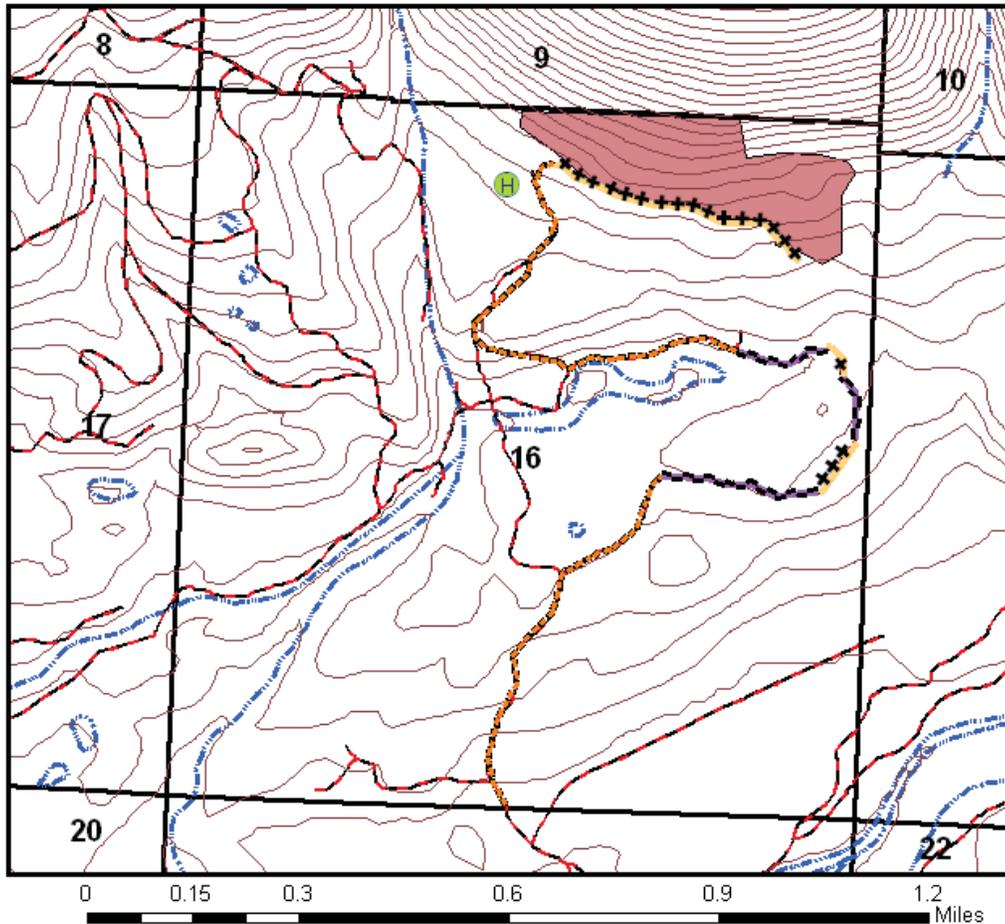
No Further Analysis

EA Checklist Approved By:	Name: Craig Nelson
	Title: Supervisory Forester
Signature: /s/ Craig Nelson	Date: 8/3/2010



SKEETER BAIT
 Sec 16 T15N R11W
 DNRC-CLEARWATER UNIT

Attachment A-1



Harvest merchantable lodgepole pine. Retain all other species 8" dbh and greater. Harvest trees under 8" dbh if they contain undesirable growth characteristics (forked tops, insect and disease, crook, sweep, no leader growth, etc.)

The access route indicated on the map will require opening up old roads as well as some new construction.

Road Condition	
	Roads
	Existing
	New
	Reconstruct
	Harvest Unit
	Streams



Degrees Minutes Seconds
 112 59' 50.797" W
 47 3' 42.649" N

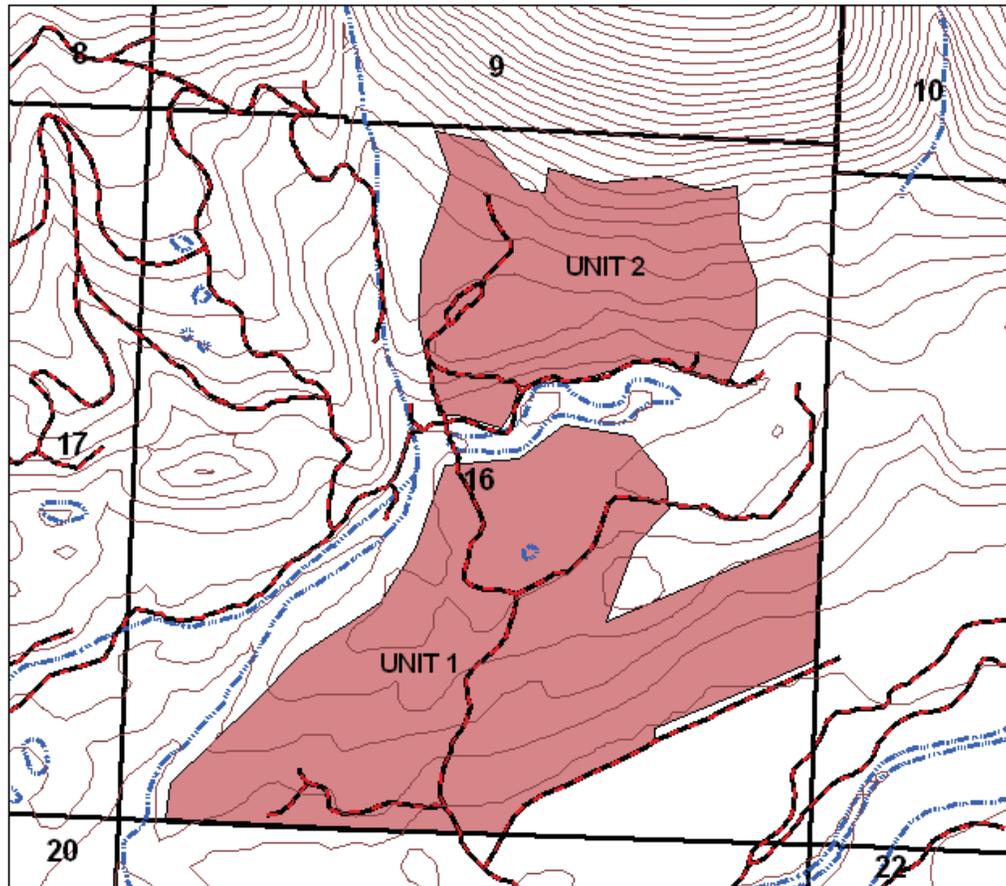


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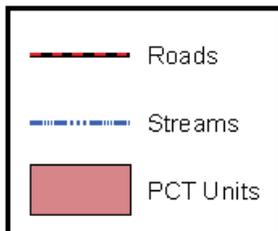


Doney Lake PCT Units
Sec 16 T15N R11W
DNRC-CLEARWATER UNIT

Attachment A-2



Leave only those trees exhibiting quality characteristics (no forked tops, crook, disease or insects) on a 14' X14' spacing. No lazy straps, high stumps or live limbs will be permitted. The species order of preference is WL, PP, DF, LPP. See contract for further details.



Unit 1: 180 acres
Unit 2: 87 acres



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