CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Gravel Pulp Timber Permit
Proposed Implementation Date:	February 2012
Proponent:	Lincoln Station, Clearwater Unit, Southwestern Land Office, Montana DNRC
Location:	Section 16 T. 14 N., R. 8 W., P.M.M.
Counties:	Lewis and Clark

I. TYPE AND PURPOSE OF ACTION

The Montana Department of Natural Resources and Conservation (DNRC) is proposing to harvest approximately 65 MBF of timber from 70 acres in Section 16 T. 14 N., R. 8 W. The proposed project would salvage harvest approximately 65 MBF of ponderosa pine and lodgepole trees killed, or at risk of being killed by the mountain pine beetle (*Dendroctonus ponderosae*). The proposed harvest would salvage the value of dead trees, reduce bark beetle populations, and reduce competition in the remaining stand.

The project objectives are to:

1) Maximize revenue over the long-term for the School Trust accounts from the timber resources and salvage timber on state forests that is dead, dying or is threatened by insects, disease, fire, or windthrow as mandated by State Statute 77-5-207, MCA,

2) Manage the identified parcel intensively for healthy and biologically diverse forests to provide long-term income for the Trust.

3) Improve timber stand health and vigor.

The lands involved in this proposed project are held by the State of Montana in trust for the Common School Trust (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). The DNRC would manage lands involved in this project in accordance with the State Forest Land Management Plan (DNRC 1996) and the Administrative Rules for Forest Management (ARM 36.11.401 through 450) as well as other applicable state and federal laws.

II. PROJECT DEVELOPMENT

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

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

A DNRC wildlife biologist and soils scientist/hydrologist were consulted to help determine if any special circumstances existed.

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

Montana Department of Environmental Quality, burning restrictions.

3. ALTERNATIVES CONSIDERED:

Alternative A – No Action

Under this alternative no harvesting would occur at this time.

Alternative B – Timber Harvest (Action)

Approximately 65 MBF of timber would be harvested from approximately 70 acres. This harvesting would take place as soon as possible under the HB612 timber permit process.

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.

The proposed permit harvest of dead and dying trees on footslopes above the gravel pit east of Lincoln in Section 16, T14N, R8W meets watershed, soils and fisheries criteria for a categorical exclusion according to ARM 36.11.447, because the potential for impacts to these resources would be low risk.

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 proposed permit harvest of dead and dying trees on footslopes above the gravel pit east of Lincoln in Section 16, T14N, R8W meets watershed, soils and fisheries criteria for a categorical exclusion according to ARM 36.11.447, because the potential for impacts to these resources would be low risk.

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 6 which includes all of Lewis and Clark County. The project area is located approximately 3 miles north of the town of Lincoln. Year-round homes and vacation homes do exist adjacent to and within a few miles of the project area. The Bob Marshall Wilderness area is approximately 7 miles north of the project area. This wilderness area exceeds 5,000 acres and as such, is considered a Federal Class I Area that ultimately receives protection under the Federal Clean Air Act of 1977.

Alternative A - 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 6.

Alternative B – Timber Harvest (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 favor 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. Thus, cumulative effects to air quality due to slash pile burning associated with the proposed action would also be expected to be minimal.

Harvesting and log hauling could create dust which may affect local air quality. Harvesting operations would be short in duration and could occur during the winter months that would minimize dust dispersal. Thus, direct, indirect, and cumulative effects to air quality due to harvesting 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.

Rare plants and Noxious Weeds Analysis:
No rare plants have been identified in the harvest area. The noxious weeds spotted knapweed and thistle occur in this area. Noxious weeds would not be greatly increased by this action or cause cumulative impacts to vegetation based on the mitigation measures. The landings would be prioritized for herbicide treatment following the sale to reduce existing weeds.

General Vegetation:
The current stand is comprised of approximately 90 percent ponderosa pine, and the remaining 5 percent is a scattered mix of Douglas-fir, lodgepole pine and hardwoods. The stand is an even-aged single-storied stand averaging approximately 45 feet tall. Extensive mortality has occurred as a result of the mountain pine beetle epidemic.

Harvest in the stand would change stand conditions by removing live, dead, and dying trees and trees that are likely to be killed by the various insects and disease in the stand. Harvest would primarily be of dead and beetle hit ponderosa pine and lodgepole pine trees. To meet wildlife tree requirements areas have been left for snag retention that otherwise would have been included within the harvest units. Some harvest of green trees would take place. Live tree harvest would focus on removing those trees that show poor form and vigor, and creating growing space for the remaining trees.

---

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
.

Terrestrial Wildlife: The project area provides habitat for a variety of wildlife species, including a host of species that use forested habitats. Deer, elk, and moose likely use the project area much of the year; winter range for white-tailed deer and moose exists in the project area, but no elk security habitats likely exist due to the proximity to open roads. Under the action alternative, proposed harvesting on up to 67 acres would lead to more open stands in portions of the project area. This would alter habitats for wildlife species requiring mature

forests, while creating habitats for species needing more open stands. Similarly, reduced thermal cover and snow intercept on winter range would be anticipated under both alternatives. These changes would be additive to past timber management in the area. Thus, a low risk of adverse direct, indirect, or cumulative effects to species requiring mature forested stands or big game winter range would be anticipated with the proposed activities.

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.

Terrestrial Wildlife: The project area contains some potential habitats for grizzly bears and flammulated owls. Habitats for grizzly bears are somewhat limited, but proposed harvesting could open up stands in an area where extensive grizzly bear use would not be anticipated due to proximity to habitats present and proximity to open roads and other disturbance vectors. Proposed activities would retain visual screening adjacent to riparian areas. Proposed harvesting could open up stands on as much as 27 acres of flammulated owl habitats, which could improve those habitats. These changes would be additive to past timber management in the area. Thus, a low risk of adverse direct, indirect, or cumulative effects to grizzly bears and flammulated owls would be expected to occur with the proposed activities.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:
Identify and determine effects to historical, archaeological or paleontological resources.

The project area has no previously identified cultural resources. If any archaeological sites are found, they would be protected. No direct, indirect, or cumulative impacts 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.

The proposed harvest area is visible from highway 200, approximately three miles east of Lincoln, MT. The proposed harvest would change the aesthetics from within and looking into the stands. The harvest would remove red dead trees that currently dominate the hillside. The stand would be more open, with fewer trees. Slash and skid trails would be noticeable. This slash would turn red and would be very noticeable for a few years. The use of heavy equipment to perform the logging could be quite audible however it is not “out of place” in this area.

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 negative direct, indirect or cumulative effects are expected to occur as a result of the proposed project.

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.

State Forest Land Management Plan EIS, DNRC 1996, set the strategy that guides DNRC management decisions statewide.

Lincoln Rural Fire District Fire Risk Management Strategy Community Protection Plan, Lincoln Rural Fire District and Residents of the Lincoln Community, January 2005.

South Lincoln Timber Sale EA, DNRC 2009, Harvest 3.00 MMBF on sections 22, 28 and 34 T. 14N R9W.

Beaver Lodge Salvage Timber Sale EA, DNRC 2009, harvest 3.00 MMBF on sections 4 and 16 T14N R9W and section 16 T14N R10W.

Whiskey Gulch Salvage Timber Sale EA, DNRC 2008, harvest 2.5 MMBF on section 36 T15N R07W.

Still Cool Bugs Salvage Timber Sale EA, DNRC 2007, harvest of 1.0 MMBF on section 10 T14N R08W.

Keep Cool Bugs Timber Sale EA, DNRC 2005, harvest of 1.3 MMBF on section 10 T14N R08W.

Golden Arches EA, DNRC 2004, harvest of 5.6 MMBF in the Landers Fork drainage.

Cool Flat 4X4 EA, DNRC 2005, harvest of 1.5 MMBF on Sections 8, 16, 19, and 22 of T14N, R8W.

Snow Talon Burned Area Emergency Rehabilitation Plan, FS 2003, assesses post-fire conditions.

Helena National Forest Weed EIS, FS 2004, proposes weed control on FS ground in the Lincoln area.

Lincoln Post-Fire Rehabilitation Project Categorical Exclusion, FS 2004, proposal to address non-emergency fire rehabilitation needs within the Snow Talon and Moose Wasson burned areas such as tree and shrub plantings, biological weed control, insect monitoring, pesticide, and pheromone treatments, and administrative site maintenance and repair.

Snow Talon Fire Salvage FEIS, FS 2005, proposal to salvage approximately 25 MMBF, from approximately 2700 burned acres, and associated reclamation all within the Copper Creek drainage and associated haul road in the Landers Fork and Copper Creek drainage.

IV. IMPACTS ON THE HUMAN POPULATION

- *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.*

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

Human health would not be impacted by the proposed timber sale or associated activity. Safety considerations and temporary risks would increase for the professional contractors working within the sale area. Log truck traffic would increase but safety concerns would be minimized by posting signs and imposing a speed limit, if necessary. There are no unusual safety considerations with the proposed timber sale. The general public and local residents would not face increased health or long term safety hazards because of the proposed timber sale

No additional negative effects would be expected as a result of the proposed action

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

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

People are currently employed in the wood products industry in the region. Due to the relatively small size of the timber sale, there would be no measurable direct, indirect, or cumulative effects from this proposed action on industrial, commercial and agricultural activities and production.

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-term jobs in the local area may 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 indirect, limited implications for tax collection.

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 there would be minimal impacts related to demand for government services due to the relatively small size of the timber sale the short-term impacts to traffic, and the small possibility of a few people temporarily relocating to the area.

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 State Forest Land Management Plan (SFLMP) is the plan under which DNRC manages forested state trust lands. DNRC developed the SFLMP in 1996 to provide field personnel with consistent policy and direction for the management of forested state trust lands. The SFLMP provides the philosophical basis, technical rationale, and direction for DNRC's forest management program. The SFLMP is premised on the philosophy that the best way to produce long-term income for the trust is to manage intensively for healthy and biologically diverse forests. In the foreseeable future, timber management will continue to be the primary source of revenue and primary tool for achieving biodiversity objectives on forested state trust lands.

The DNRC Administrative Rules for Forest Management (*ARM 36.11.401 through 456*) are the specific legal resource management standards and measures under which DNRC implements the SFLMP and subsequently its forest management program. The Rules were adopted in March 2003 and provide the legal framework for DNRC project-level decisions and provide field personnel with consistent policy and direction for managing forested state trust lands. All forest management projects administered by DNRC on forested state trust lands must comply with the Rules.

In January 2005 the Lincoln Rural Fire Department and residents of the Lincoln Community, in cooperation with the Montana DNRC and others adopted the Lincoln Rural Fire District Fire Risk Management Strategy and Community Protection Plan. In that document the area proposed for harvest was identified as part of the wildland-urban interface. The proposed harvest would be designed to increase wildland fire safety in these areas by removing some of the existing ladders fuels, increasing crown spacing, and ensuring slash left on site for nutrient cycling does not increase decrease the ability to suppress a wildfire in the proposed harvest area.

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 public primarily uses the area for hunting, snowmobiling and dispersed recreation. The Scapegoat Wilderness Area, which is approximately 10 miles north, is the nearest Wilderness area.

No direct, indirect, or cumulative effects to recreation or to the Wilderness Areas would be expected as a result of the proposed project.

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.

There would be no measurable direct, indirect, or cumulative impacts related to population and housing due to relatively small size of the timber sale proposed project.

22. SOCIAL STRUCTURES AND MORES:
Identify potential disruption of native or traditional lifestyles or communities.

No negative direct, indirect, or cumulative effects would be expected under either alternative.

23. CULTURAL UNIQUENESS AND DIVERSITY:
How would the action affect any unique quality of the area?

No negative direct, indirect, or cumulative effects 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.

Alternative A - No Action
A grazing lease on the parcels would continue to generate approximately $1,400.00 annually. The timber that is currently infested by the mountain pine beetle would continue to lose economic value.

Alternative B – Timber Harvest (Action)
Revenue from grazing would continue. The timber harvest would generate approximately $1,000.00 for the Common School trust. This is based on a stumpage rate of $1.00 per ton, multiplied by the estimated volume of tons (1,000). This stumpage rate was derived by comparing attributes of the proposed timber sale with attributes and results of other DNRC timber sales recently advertised for bid. Costs related to the administration of the timber sale program are only tracked at the Land Office and Statewide level. DNRC doesn't track project-level costs for individual timber sales. An annual cash flow analysis is conducted on the DNRC forest product sales program. Revenue and costs are calculated by land office and statewide. The most recent revenue-to-cost ratio of the Southwestern Land Office was 1.16. This means that, on average, for every $1.00 spent in costs, $1.16 in revenue was generated. Costs, revenues, and estimates of return are estimates intended for relative comparison of alternatives. They are not intended to be used as absolute estimates of return.

EA Checklist Prepared By:	**Names:** Neil Simpson	**Date:** 1/24/2012
	Titles: Management Forester	

V. FINDING

25. ALTERNATIVE SELECTED:

Alternative B- Action Alternative.

26. SIGNIFICANCE OF POTENTIAL IMPACTS: Given this environmental assessment, I believe that this project will not cause any detrimental effect to the project area or surrounding properties or resources. This

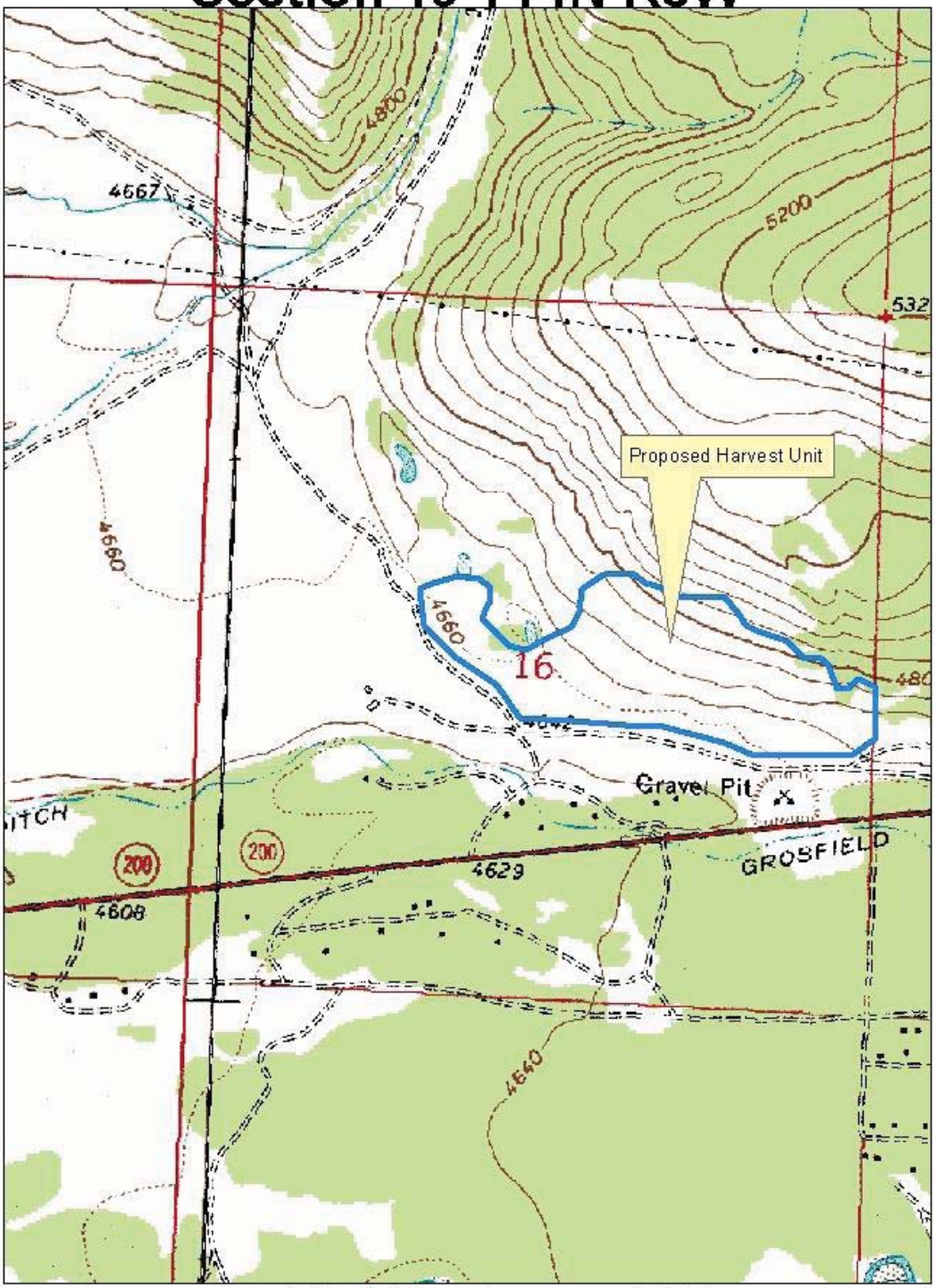
project is also consistent with the requirements of the Montana State Statute 77-5-207.

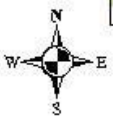
27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

[ ] EIS	[ ] More Detailed EA	[X] No Further Analysis

EA Checklist Approved By:	**Name:**	Craig V. Nelson
	Title:	**Supervisory Forester, Clearwater Unit, Montana DNRC**
Signature: /S/ Craig V. Nelson		**Date**: January 24, 2012

GRAVEL PULP TIMBER PERMIT
Section 16 T14N R8W





0.25 0.125 0 0.25 Miles

N.C.S. Janury 24, 2012