

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Mohican Medicine Rock Timber Permit
Proposed Implementation Date:	August 14, 2012
Proponent:	DNRC, Helena Unit
Location:	Section 34, 36, T14N, R5W and Section 12, T13N, R5W
County:	Lewis & Clark
Trust:	Section 34 is Pine Hills, sections 36 and 12 are Common School

I. TYPE AND PURPOSE OF ACTION

A. Type of Action: *Mohican Medicine Rock Timber Permit*

The Montana Department of Natural Resources and Conservation (DNRC) is putting forward a timber permit, adjacent to Medicine Rock Creek near the town of Wolf Creek, Montana. Under the harvest alternative, the DNRC plans to cut approximately 230 MBF of sawlog material from five harvest units totaling 105 acres.

The proposed action could be executed as early as August 20, 2012. This project would be implemented using a ground based harvesting system on applicable slopes. Due to current timber harvesting on adjacent lands, limited access through private property, and the amount of dead ponderosa pine due to the bark beetle, it would be beneficial to implement management activities on State Trust Lands at this time.

B. Purpose of Action:

- **Enabling Act:** By the Enabling Act approved February 22, 1889, the Congress of the United States granted to the State of Montana, for common school support, sections sixteen and thirty-six in every township within the state. Some of these sections had been homesteaded, some were within the boundaries of Indian reservations, and yet others had been otherwise disposed of before passage of the Enabling Act. To make up for this loss, and in lieu thereof, other lands were selected by the State of Montana. The Enabling Act and subsequent acts also granted acreage for other educational and state institutions, in addition to the common schools.
- **Distribution of Revenues:** Each section of state trust land is assigned to a specific trust with distribution of revenue being handled in accordance to criteria outlined for that trust.
- **Trust Land Management / Distribution of revenue:** The lands involved in this proposed project are held by the State of Montana in trust for the support of the **Common School Trust** (Section 36, T14N, R5W and Section 12, T13N, R5W) and **Pine Hill School Trust** (Section 34, T14N, R5W) as described above (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 measures of reasonable and legitimate return over the long run for these beneficiary institutions (Section 77-1-202, MCA).

On May 30th, 1996, the Department released the "Record of Decision" on the State Forest Lands Management Plan (SFLMP). The Board of Land Commissioners approved the SFLMP's implementation on June 17, 1996. The SFLMP outlines DNRC's philosophy for management of state forested Trust Lands.

The Department shall manage lands involved in the project according to the philosophy in SFLMP, which states the following:

Our premise is that the best way to produce long-term income for the trust is to manage intensively for the healthy and biologically diverse forest. Our understanding is that a diverse forest is a dynamic forest that will produce the most reliable and highest long-term revenue stream. In the foreseeable future, timber management will continue to be the DNRC's primary source of revenue and primary tool for achieving biodiversity objectives.¹

C. Goals and Objectives:

In order to meet the goals of the management philosophy adopted through programmatic review in the SFLMP, the Department has set the following specific project objectives:

1. Improve forest health/vigor of the current stand while promoting natural regeneration.

Douglas-fir:

Western spruce budworm, *Choristoneura Occidentalis Freeman* is the most destructive defoliator of conifers in the western North America. It occurs in the Rocky Mountains from Arizona and New Mexico northward into Colorado, Utah, Wyoming, Montana, and Idaho. In the Pacific Northwest it can be found in Oregon and Washington and in British Columbia and Alberta, Canada (*Figure 1*). Major outbreaks can last for more than a decade and impact millions of acres of forests. The five types of tree damage associated with budworm defoliation are growth loss, top-kill, deformity, reduced seed production, and tree mortality. Host trees that survive major budworm outbreaks in a weakened condition are often killed later by bark beetles.

Nearly all the Douglas-fir growing on this site has been impacted to some degree by western spruce budworm. Defoliation and some branch dieback were apparent when conducting field evaluations in the proposed project area. Current weather as well as stand conditions throughout this area seems to favor a continuation of the western spruce budworm outbreak. Adjacent property managers are conducting salvage timber sales to capture the loss associated with this infestation, while trying to increase overall forest health and vigor.

Ponderosa Pine:

Approximately two hundred insect species may affect ponderosa pine from its cone stage to maturity. Twenty-four are seed and cone insects, sixty affect seedlings and saplings, and one hundred and sixty affect pole or sawlog-sized trees.

Bark Beetles, *Dendroctonus* and *Ips* are major killers of ponderosa pine in unmanaged stands. A long-term solution to beetle infestations may be to regulate stand density through timber harvesting. A good majority of the ponderosa pine within the proposed project area is dead due to mountain pine beetle. Harvesting operations would remove this material reducing fuel loading and potential negative impacts caused by wildfire.

2. Opportunity to generate revenue for the State Trust. Harvesting Douglas-fir and ponderosa pine sawtimber would generate a net positive return to the State Trust.

¹ "State Forest Land Management Plan, Final Environmental Impact Statement, Record of Decision", Montana Department Of Natural Resources And Conservation, May 30, 1996, p. ROD-1, ROD-2.

II. PROJECT DEVELOPMENT

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

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

Due to the small amount of rough forest product being proposed for harvest, in addition to the severity of beetle killed ponderosa pine and the limited time frame in which to capture this as a commercial product, an intensive public scoping was not sought in the planning phase of this project.

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

2.1 Smoke Monitoring Unit:

In 1978, federal, state, local government agencies, and the forest products industry formed the Montana State Airshed Group. Their purpose was to manage and limit the impacts of smoke generated from necessary prescribed burning. In 1990, agencies and companies in North Idaho joined the Montana group on an operational basis to accomplish the same purposes. Agencies and companies from southern Idaho joined the group in 1999.

Accumulation of smoke from controlled burning is limited through scientific monitoring of weather conditions and formal coordination of burns. Members submit a list of planned burns to the Monitoring Unit in Missoula, Montana. For each planned burn, information is provided describing the type of burn to be conducted, the number of acres, as well as the location and elevation at each site. Burns are reported by "Airshed", which are geographical areas with similar topography and weather patterns. The program coordinator and a meteorologist provide timely restriction messages for airsheds with planned burning.²

Slash generated from the timber harvest would either be lopped and scattered or piled and burned to reduce wildfire risk, adhering to state standards, which are as follows:

"General Standard" as defined by Administrative Rule-36.11.222, Number 4, which states: "Slash must be reduced such that a fire starting under conditions similar to a standard day, as defined by the department's HRA Manual, would burn with a flame length of four feet or less, as calculated by the fire science BEHAVE model, or other fire behavior model selected by the department".

Slash piles would be burned by the DNRC, Helena Unit Fire Crew after submitting a request, and receiving approval to burn from the Smoke Monitoring Unit.

2.2 Streamside Management Zone Law:

In 1991 Montana Legislature passed House Bill 731, known as the Streamside Management Zone (SMZ) Law (Sec.77-5-301 through 77-5-307, MCA). This law restricts forest practices within a 50-foot

² "Smoke Monitoring Unit", Montana/Idaho State Airshed Group. Available at: <http://www.smokemu.org>

streamside management zone (SMZ) along each side of a stream, around lakes, or other bodies of water. The SMZ width can be extended for areas with steeper slopes (>35% slope = 100 feet) or adjacent wetlands. The law prohibits seven forest practices in the SMZs which are:

- Broadcast burning.
- The operation of wheeled or tracked vehicles except on established roads.
- The forest practice of clearcutting.
- The construction of roads except when necessary to cross a stream or wetland.
- The handling, storage, application, or disposal of hazardous or toxic materials in a manner that pollutes streams, lakes, or wetlands, or that may cause damage or injury to humans, land, animals, or plants.
- The side-casting of road material into the stream, lake, wetland, or watercourse.
- The deposit of slash in streams, lakes, or other water bodies.³

All rules and regulations that apply to the Streamside Management Zone Law will be adhered to.

2.3 Temporary Right-Of-Way Deed:

Existing roads on private property would require a temporary right-of-way agreement to facilitate trucking of forest products. As these are joint operations removing product with marginal value, DNRC and the Sieben Ranch have agreed to a mutual exchange of no cost temporary road use.

2.4 Weed Management:

The Montana County Noxious Weed Control Law (MCA 7-2101 through -2153) was established in 1948 to protect Montana from destructive noxious weeds. This act, amended in 1991, has established a set of criteria for the control and management of noxious weeds in Montana. Noxious weeds are defined by this act as being any exotic plant species which may render land unfit for agriculture, forestry, livestock, wildlife or other beneficial uses or that may harm native plant communities. Plants can be designated statewide noxious weeds by rule of the Department of Agriculture or county-wide noxious weeds by district weed boards following public notice of intent and a public hearing.

The noxious weed control law establishes weed management districts throughout the state. These management districts are commonly called county weed control districts and are defined by the boundaries of the county. Currently, there are 56 weed control districts within Montana.

After the establishment of a county weed management district, a county weed board is appointed by the county commissioners of each district to oversee responsibilities established by the noxious weed control law. A county weed board must consist of at least three members and no more than nine members, a majority of who must be agricultural landowners. County weed board members are considered public officers of the county, and may call upon the county attorney for legal advice and services.

The County Noxious Weed Control Law commissions the county weed boards with three main responsibilities. They are:

³ DNRC, "Guide to the Streamside Management Zone Laws and Rules," DNRC Forestry Division, Service Forestry Bureau, Missoula, Montana, 2002, 32p.

- to develop and administer the district's noxious weed program,
- to establish management criteria for noxious weeds on all lands within the district,
- to make all efforts to develop and implement a noxious weed program covering all land within the district owned or administered by a federal agency.⁴

Weed management procedures are addressed in Section 3.2.2.1, Principle Actions, Alternative "B" of this document.

3. ALTERNATIVES CONSIDERED:

3.1 Introduction:

Alternatives including the proposed action are the heart of this "Checklist Environmental Assessment". The purpose of this section is to describe the alternatives, comparing them in terms of environmental impacts and achieved objectives. Alternatives were determined through limited scoping, identifying the issues of concern, input from Interdisciplinary Team (IDT) specialists, and guidance from resource management standards set forth in the "SFLMP" and "Administrative Rules".

3.2 Description of Alternatives:

This section describes the activities of the No Action Alternative and all other Action Alternatives.

3.2.1 Alternative A: Deferred Harvest (No Action)

3.2.1.1 Principle Actions: Alternative A

Timber harvesting would be deferred until a later entry. However, ongoing State Trust Land permitted, licensed, and approved activities would continue as follows:

- **Livestock grazing** - existing grazing leases would continue in the project area contributing \$1935.50 (245 AUM's x \$7.90) annually to the State Trust.
- **Fire suppression** - human and natural caused fires would be suppressed by the DNRC, volunteer fire departments, and other government agencies.
- **Hunting** - deer, elk, bear, other big game hunting, as well as upland game bird hunting would continue according to the rules and regulations set forth by Montana Department of Fish, Wildlife & Parks. Beginning in 2004, purchase of a conservation license authorized use of accessible trust lands for hunting and fishing.
- **Public vehicle access** - existing motorized access privileges, as well as limitations, would remain the same. Currently this area is not open to public motorized use. Hunting season access is allowed per the Block Management Agreement which the Ranch has with FWP. Road use associated with the terms of the BMA is allowed.
- **Hiking and other recreational uses** - persons having a valid State Trust Land Recreational Use Permit are welcome to hike, pick chokecherries, or perform other outdoor activities on legally accessible portions of this acreage.

⁴ Ag / Extension Communications for Montana State University. Available at: <http://www.montana.edu/wwwpb/pubs/mt9605.html>

3.2.1.2 Present Relevant Action Not Part of the Proposed Action:

Current land uses as described above would continue on property owned by the State of Montana. Forest management on private lands would most likely continue. No current timber management activity is taking place on BLM or U.S. Forest Service lands close to the project area.

3.2.1.3 Reasonably Foreseeable Relevant Actions Not Part of the Proposed Action:

U.S. Forest Service, BLM, and Private ownership would undoubtedly experience timber-harvesting activities during the next several decades. Impacts to ponderosa pine from mountain pine beetle would most likely continue causing additional mortality on the landscape.

3.2.2 Alternative B: Mohican Medicine Rock Timber Permit:

3.2.2.1 Principle Actions: Alternative B

If Alternative “B” were selected for implementation, the following actions would occur:

- ***Proposed Management.***
The proposed timber permit would cut approximately 230 MBF of Douglas-fir and Ponderosa Pine sawtimber from five harvest units, totaling approximately 105 acres. Monies obtained through stumpage would generate a net positive return to the State Trust. Ground based equipment would be the primary harvesting system used in felling/skidding rough forest products.

The implementation of an even-aged shelterwood/seed tree harvest in areas where enough quality co-dominant and dominant Douglas-fir and ponderosa pine can be found, should increase overall stand health and vigor. Salvage harvesting ponderosa pine killed by mountain pine beetle would reduce potential excessive fuel loading, lessening the negative effects caused by intensive wildfire.
- ***Access Routes.***
Access to the proposed harvest units would be primarily from existing roads on private and State Trust Lands. Road reconstruction may be necessary at various locations to facilitate trucking activities.
- ***Weed Management.***
Road construction and timber harvesting equipment would be pressure washed to make sure that they are clean and free of weeds. Areas other than the main driving surface that are disturbed would be re-vegetated to reduce the spread of noxious weeds.

Post-harvest weed management would consist of monitoring for noxious weeds for a minimum of five years following timber harvesting. Spot weed spraying would then be done if necessary.
- ***Increase Tree Health & Vigor.***
Creating and maintaining stand structures that are even-aged, by implementing regeneration harvests such as seed-tree and shelterwood cuts, should result in vigorous forest and habitats that are less favorable for western spruce budworm and mountain pine beetle.

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.

Due to the limited scope of this project, adverse impacts to soil quality, stability and moisture, and geology are not expected. Harvesting activities would be limited to favorable slope grades for ground based equipment. Areas of exposed/disturbed soil would be grass seeded to reestablish vegetation and to reduce the spread of noxious weeds.

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.

Adverse impacts to water quality are not anticipated due to the limited scope of this project. All Stream Side Management Zone laws and regulations that apply within, and adjacent to the harvest area would be adhered to.

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.

6.1 Air Quality:

Air quality may be affected by burning slash that would accumulate as a result of the implementation of this proposed timber harvest. An ample amount of logging slash would remain on site however to provide for erosion control and nutrient recycling.

6.1.1 Montana / Idaho Airshed Group:

The DNRC, a member of the Montana / Idaho Airshed Group, is required to:

- Minimize or prevent the accumulation of smoke in Montana to such degree as is necessary to protect state and federal ambient air quality standards when prescribed burning is necessary for the conduct of accepted forest practices such as hazard reduction, regeneration and wildlife habitat improvement. The development of alternative methods shall be encouraged when such methods are practical.⁵
- Submit a plan and receive approval to burn, in Airshed 6, the slash that would accumulate as a result of this project.

⁵ "Smoke Monitoring Unit", *Montana/Idaho State Airshed Group*. Available at: <http://www.smokemu.org>

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.

7.1 Rare Plants and Weeds:

Montana Natural Heritage Program was consulted to provide information on plant and animal species of concern in the vicinity of the project area. Of the 10 species of concern listed, the only vascular plant identified was the Divide Bladderpod. Adverse effects to the Divide Bladderpod are not anticipated due to the open shale/gravel habitat requirements of this vascular plant.

The majority of Divide Bladderpod populations occurring in the Big Belt Mountains and extend north to the southern end of the Rocky Mountain Front. Many large populations exist and the species typically occurs on gravelly slopes that are not usually subject to human disturbance.

Threats: Low

Short- and Long-Term Trends: Unknown

Intrinsic Vulnerability: Moderate

Phenology:

Flowers in May and early June, fruiting in late May through June.

Diagnostic Characteristics:

Physaria geyeri closely resembles *Lesquerella klausii* and a technical manual should be consulted to distinguish between the two. The two species are usually separable by the mostly disjunct ranges of the two; with *P. geyeri* occurring mainly in the southwest part of the state.

Range:

Montana endemic, restricted to Broadwater, Lewis and Clark, and Meagher Counties.

Habitat:

Open shale slopes and gravelly areas, at moderate to fairly high elevations in the mountains.

Ecology:

Most species of *Lesquerella* are cross-pollinated by insects. Seed dispersal is probably most prevalent near the parent plant, though longer dispersal by wind and gravity are possible. High recruitment levels the two years following a wildfire have been noted. Reproduction by seed is the only means of recruitment.

Individual populations vary in size from a few plants to several thousand plants. *L. klausii* appears tolerant of light to moderate disturbance based on the unstable habitats it frequently occupies.

7.2 Vegetative Cover Type Changes:

The overall vegetative community of the surrounding ecosystem should not change dramatically due to the relatively small scope of this project.

7.3 Current Stand Conditions:

Species composition is primarily Douglas-fir and ponderosa pine with substantial impacts from mountain pine beetle and western spruce budworm being found throughout this stand.

7.4 Proposed Silvicultural Management:

7.4.1 Ponderosa Pine Silviculture: Because of ponderosa pine's intolerance to shade, the regeneration method chosen must provide adequate exposure. During early development, even a light overstory can result in 20 to 50 percent reduction in height growth. The intolerance of ponderosa pine suggests choosing silvicultural systems such as clearcutting, seed tree, or group selection that provide the needed light for adequate establishment, growth, and subsequent development of regeneration.⁶

7.4.1 Douglas-fir Silviculture: Stand susceptibility to the western spruce budworm is affected by the interaction among regional climate, site climate, and tree and stand factors. Tree and stand factors include (i.e., shade tolerant or intolerant) species composition, degree of intraspecific genetic variation, stand vigor, stand density, height-class structure, stand maturity, and proximity to susceptible stands. Other than climatic factors, all these factors can be changed through silvicultural treatments.⁷

Where manageable pockets of Douglas-fir exist, stand density would be reduced to shelterwood/ seed tree stocking levels (35 sq.ft.Ba/acre). Dominant and co-dominant trees with good crown development would be retained as a source of seed as well as to regulate temperatures that may impact natural regeneration.

7.5 Harvest Prescription-Shelterwood Cut:

An even-aged, shelterwood system is most preferred when trying to establish Douglas-fir. Implementation of this harvest would retain a small number of trees per acre, ameliorate temperature and moisture extremes in the openings created, providing large quantities of seed, capturing potential economic loss, and establishing natural Douglas-fir regeneration.

7.6 Harvest Prescription-Clear Cut:

Ponderosa pine mortality due to mountain pine beetle has resulted in limited opportunities to implement various silvicultural prescriptions. Salvage harvesting will remove dead material from the landscape resulting in a clearcut.

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.

8.1 Fish: The proposed timber harvest should have no adverse effect on fish habitat. Tree retention requirements as outlined in the SMZ Law will be adhered to when cutting timber along classified stream segment within, and adjacent to the harvest unit.

8.2 Birds: A number of large sawlog-class Douglas-fir and ponderosa pine will remain after harvest to provide nesting trees and for future snag recruitment. Implementation of the proposed alternative should have minimal, if any, effect on avian species.

8.3 Animals: A variety of animals utilize the diverse habitat of the Medicine Rock watershed basin including: deer, black bears, small mammals, and elk, among others. No direct or cumulative adverse effects are anticipated from the implementation of the proposed timber sale.

8.4 HCP Tracts: The three sections in which the proposed harvest is to take place are HCP covered tracts. Please reference the HCP checklist for further documentation of compliance with those rules.

⁶ David M. Baumgartner, James E. Lotan, "Ponderosa Pine, The Species And Its Management", Symposium Proceedings, September 29 – October 1, 1987, Spokane Washington, USA, p.221.

⁷ David M. Baumgartner, James E. Lotan, "Interior Douglas-Fir The Species And Its Management", Symposium Proceedings, February 27 – March 1, 1990, Spokane Washington, USA, p.115.

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.

9.1 Issues Eliminated From Further Study:

Montana Natural Heritage Program was consulted to provide information on plant and animal species of concern in the vicinity of the project area. Of the 12 species of concern listed, 11 of them were vertebrate animals.

9.1.1 Sage Thrasher - *Oreoscoptes montanus*

The Sage Thrashers need continuous stands of dense big sagebrush habitat to thrive, therefore adverse impacts to this bird are not expected with the implementation of this project. Proposed harvest area is primarily that of ponderosa pine and Douglas-fir with minimal underbrush.

9.1.2 Canada Lynx - *Lynx Canadensis*

Lynx habitat requirements are not common in the vicinity of the proposed timber sale, and therefore adverse effects are not expected.

9.1.3 Bobolink - *Dolichonyx oryzivorus*

Bobolink habitat requirements are not common in the vicinity of the proposed timber sale, and therefore adverse effects are not expected.

9.1.4 Wolverine - *Gulo gulo*

Wolverine habitat requirements are not common in the vicinity of the proposed timber sale, and therefore adverse effects are not expected.

9.1.5 Gray Wolf - *Canis lupus*

Because the Gray Wolf's home range requirements are, at a minimum 150+ square miles in size, the diminutive scope of this project should have no adverse effects on this species. However, because wolf sightings near Mitchell Mountain have been recently reported, and the potential for new pack formation exists, monitoring for denning sights and management considerations under Montana Administrative Rule, 36.11.430, Threatened and Endangered Species – Gray Wolf, will be considered.

9.1.6 Fisher - *Martes pennanti*

Because of the relatively small scope of this project, negative impacts to the Fisher are not expected.

9.1.7 Marten - *Martes Americana*

Marten habitat requirements are not common in the vicinity of the proposed timber sale, and therefore adverse effects are not expected.

9.1.8 Grizzly Bear - *Ursus arctos*

Because the Grizzly Bear's large home range requirements and the minimal scope of this project, adverse effects on this species are not expected.

9.1.9 Lewis's Woodpecker - *Melanerpes lewis*

Because of the relatively small scope of this project, negative impacts to the Lewis's Woodpecker are not expected.

9.1.10 Long-billed Curlew - *Numenius americanus*

Because of the relatively small scope of this project, negative impacts to the Long-billed Curlew are not expected.

9.1.11 Brewer's Sparrow - *Spizella breweri*

The Brewer's Sparrow needs sagebrush habitat to thrive, therefore adverse impacts to this bird are not expected with the implementation of this project. Proposed harvest area is primarily that of ponderosa pine and Douglas-fir with minimal underbrush.

9.2 Montana Administrative Rules:

Threatened, endangered, and sensitive species as outlined in the "Montana Administrative Rules" have been eliminated from further study for the following reasons:

9.2.1 Bald Eagle:

Some potential transient use may occur but is not anticipated. Adverse impacts to the Bald Eagle or its habitat are not expected.

9.2.2 Gray Wolf:

See information provided above.

9.2.3 Grizzly Bear:

See information provided above.

9.2.4 Lynx:

See information provided above.

9.2.5 Flammulated Owl:

This species prefers seral ponderosa pine stands or secondarily Douglas-fir timber types where historical fire regimes occurred on the landscape. Favored stands are usually found on warm, dry slopes with basal areas of 35 to 80 ft.²/acre. Post harvest area characteristics should favored habitat requirements of the Flammulated Owl. Conflicts to this species are not expected.

9.2.6 Black-Backed Woodpecker:

As there have been no wildfires or areas of natural mortality of great magnitude within the past few years, adverse impacts to the Black-Backed Woodpeckers are not anticipated.

9.2.7 Pileated Woodpecker:

Large diameter ponderosa pine, western larch, and black cottonwood are used for nesting cavities by the Pileated Woodpecker. Large diameter ponderosa pine would be left for suitable nesting sites. If nesting sites become established, "Administrative Rules" and contractual requirements are in place to protect this species. Conflicts with this woodpecker are not expected.

9.2.8 Fisher:

See information provided above.

9.2.9 Northern Bog Lemming:

The project area contains no suitable Lemming habitat.

9.2.10 Peregrine Falcon:

Nest sites or habitat suitable for the Peregrine Falcon are not found within the project area, therefore, negative effects are not expected.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

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

10.1 Historical And Archaeological Sites:

Patrick Rennie, DNRC Archaeologist was consulted to provide information on historical and cultural sites that may be present within the project area. Database information mentions a cabin site but no specific location was provided. If historical and/or archaeological site are found, recommendations provided by the State Archaeologist would be adhered to.

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.

11.1 Local Effects to Aesthetics:

Because the scope and nature of this project is somewhat small, long lasting negative visual effect are not expected. The existing landform is rolling with the harvest area being located at mid slope on the mountainside.

Harvest units would be irregular in shape and total approximately 105 acres. Slated for harvest is disease/damaged dominant and codominant as well as suppressed and intermediate Douglas-fir and ponderosa pine. Residual Douglas-fir and ponderosa pine should most likely be large in diameter and at spacing that most resembles a shelterwood/seed tree harvest where applicable.

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.

Demands on land, water, air or energy is not expected to increase in intensity as a result of timber harvesting on State Trust Lands.

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.

13.1 DNRC Plans/Current Projects:

State tract includes active Forest Grazing License producing 871 AUM's annually. This activity would remain unchanged under both alternatives. Implementation of the action alternative would initiate a noxious weed management program by the DNRC. This spot spaying would concentrate on noxious and nuisance weeds, controlling them before and after timber harvesting.

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.

No significant change is expected from the implementation of the project.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

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

No significant change is expected from the implementation of the project.

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.

People are currently employed in the wood products industry in this region of Montana. No measurable cumulative impacts are expected on employment from the execution of this alternative action due to the relatively small DNRC timber sale program.

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.

People are currently paying taxes on monies generated from the wood products industry in this region of Montana. No measurable cumulative impacts are expected on tax revenues from the execution of this alternative action due to the relatively small DNRC timber sale program.

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

There should be no measurable cumulative impacts related to demand for government services due to the relatively small DNRC timber sale program, short term impacts to traffic, possible temporary addition of a few people to the area, and the lack of other timber sales on adjacent lands.

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.

19.1 State Forest Land Management Plan:

Refer to Section 1: "Type and Purpose of Action", Part-B, "Purpose of Action", of this document for reference to the "State Forest Land Management Plan".

The three sections in which the proposed harvest is to take place are HCP covered tracts. Please reference the HCP checklist for further documentation of compliance with those rules.

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.

20.1 Local Effects to Recreational Opportunities:

Persons having a valid State Trust Land Recreational Use Permit are welcome to hike or perform other approved outdoor activities. Beginning in 2004, purchase of a conservation license authorized use of accessible Trust Lands for hunting and fishing. Implementation of the proposed alternative should have minimal effect on recreational opportunities. Access to these State Trust parcels is facilitated by BMA's on the Sieben Ranch and O'Connell-Anderson properties, as well as access through BLM lands located to the east of the tract.

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 will be no measurable, cumulative impacts related to population and housing due to the relatively small nature of the DNRC timber sale program. Personnel required to execute this project are currently employed in this region of Montana.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

Not Applicable.

23. CULTURAL UNIQUENESS AND DIVERSITY:

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

Not Applicable.

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.

24.1 Economic Cost/Return Associated With Project:

The action being proposed not only takes into consideration silvicultural and biological characteristics of managing this forested stand, but the economic viability of implementing such a project.

A net financial return to the State Trust would be anticipated.

24.2 Future Management Options:

Implementation of this project should increase the managed forest base on State Trust Lands. This should most likely result in the production of a healthier forested stand that would bring in additional revenue to the Trust in the future.

24.3 Current Activities:

Grazing of State Trust Lands in this area currently brings in \$1935.50 per year. Some revenue percentage from the General Recreational Use License as well as the newly adopted Conservation License may also be attributed to this tract, although this revenue probably is quite small.

Oil and Gas Leases exist on these sections, and although no activity has taken place on the ground, rental rates provide additional income to the State Trust.

No negative, cumulative economic or social effects are anticipated as a result of the proposed action.

EA Checklist Prepared By:	Name: Shawn Morgan	Date: 08/14/2012
	Title: Helena Unit Forester	

V. FINDING

25. ALTERNATIVE SELECTED:

I have selected the action alternative to harvest roughly 230 MBF from approximately 105 acres, utilizing a ground based harvesting systems. The harvest will provide income to the State School Trust. Silvicultural prescription should enhance tree health and vigor while establishing natural regeneration.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

None.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS

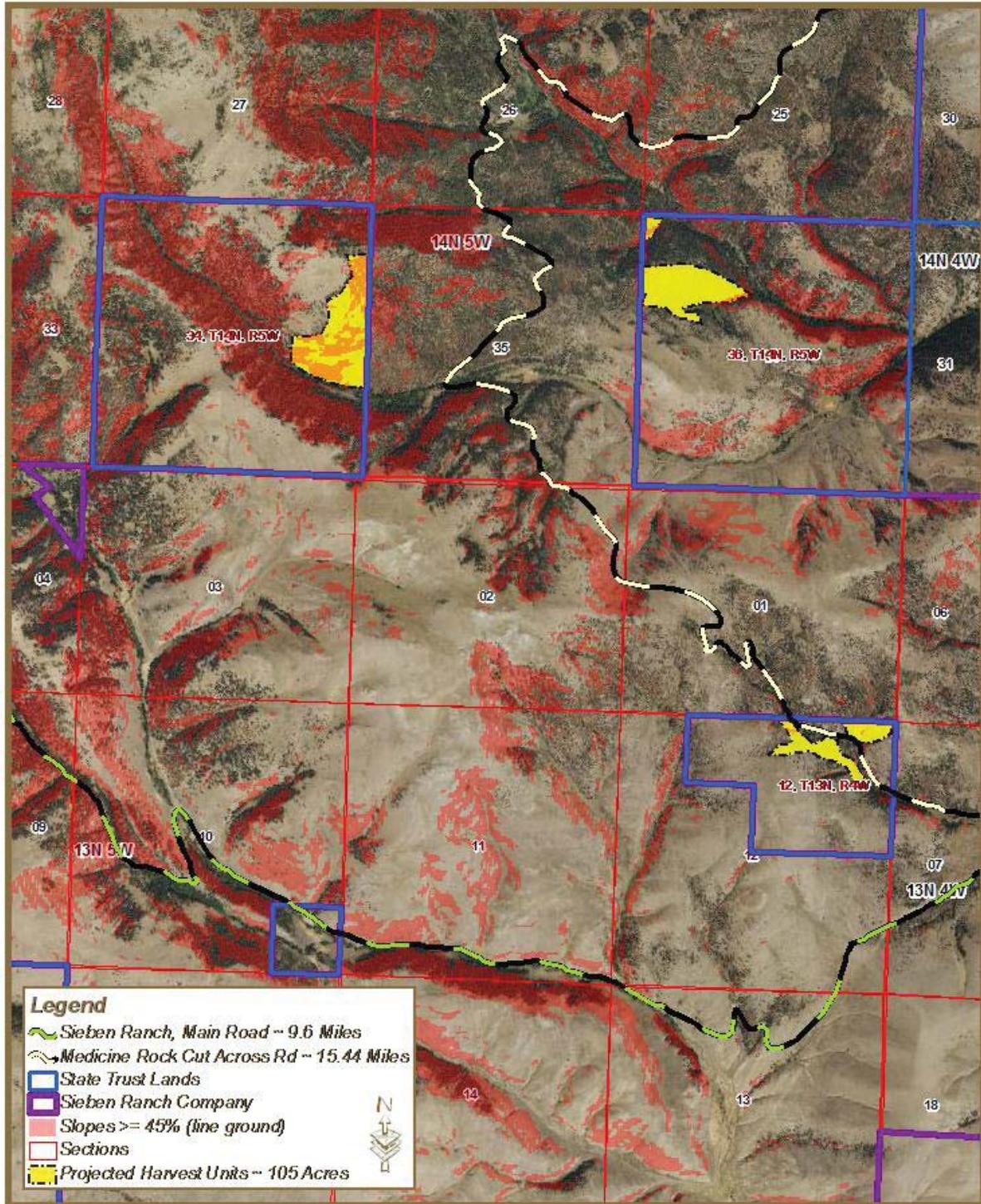
More Detailed EA

No Further Analysis

EA Checklist Approved By:	Name:	D.J. Bakken	
	Title:	Helena Unit Manager	
Signature:			Date: 8/22/2012



Mohican Medicine Rock
Section 12, T13N, R5W
Section 34, 36, T14N, R5W



Legend

- Sieben Ranch, Main Road ~ 9.6 Miles
- Medicine Rock Cut Across Rd ~ 15.44 Miles
- State Trust Lands
- Sieben Ranch Company
- Slopes >= 45% (line ground)
- Sections
- Projected Harvest Units ~ 105 Acres



T13N, R5W, SECTION 12 & T14N, R5W, SECTION 34, 36

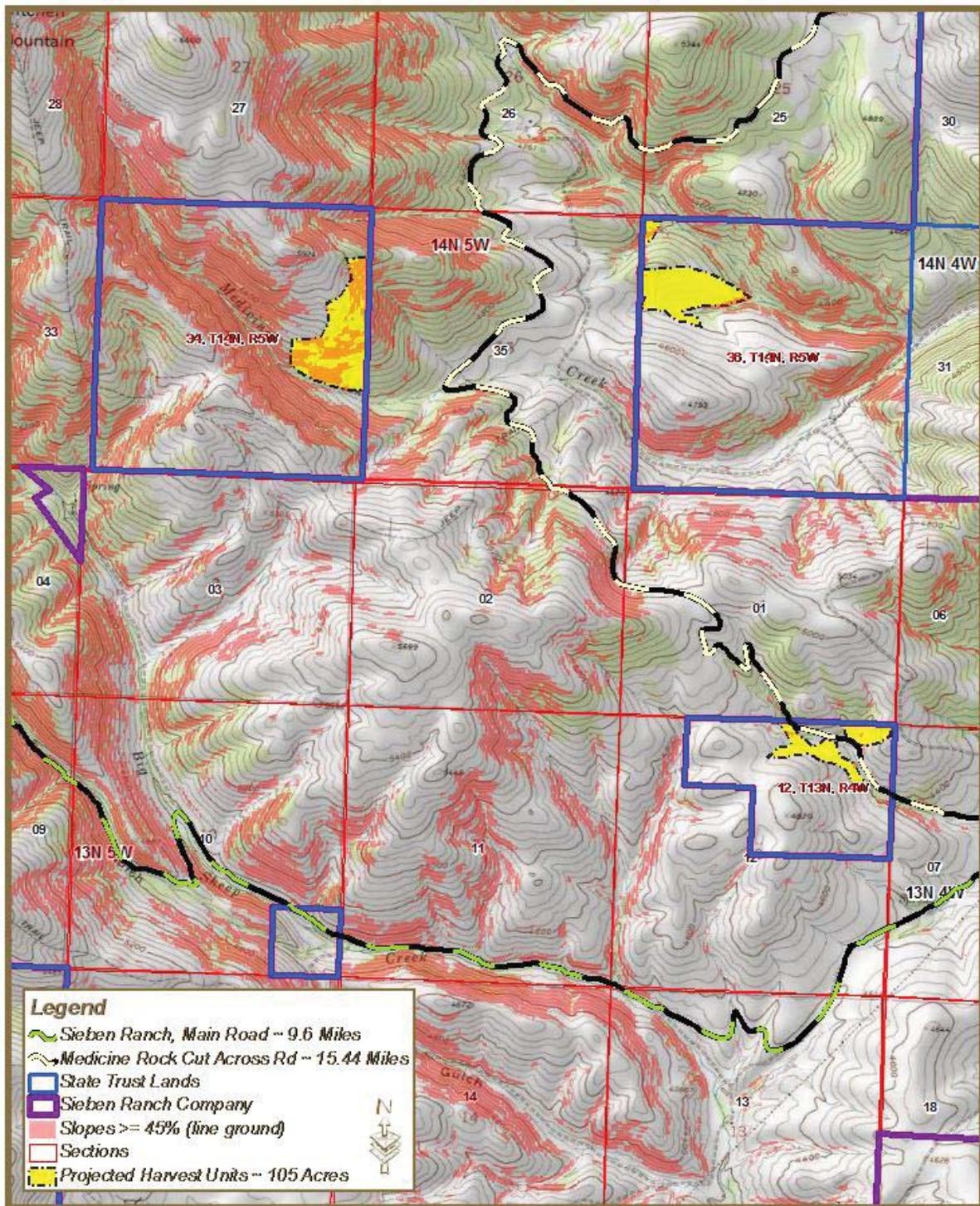
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Mapped By: Shawn Morgan, August 14, 2012





Mohican Medicine Rock
Section 12, T13N, R5W
Section 34, 36, T14N, R5W



T13N, R5W, SECTION 12 & T14N, R5W, SECTION 34, 36

Mapped By: Shawn Morgan, August 14, 2012

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