Environmental Assessment Checklist

Project Name: Seeley Airport Fuels Piling Project
Proposed Implementation Date: August, 2016
Proponent: Clearwater Unit, Southwest Land Office, Montana DNRC
County: Powell

Type and Purpose of Action

Description of Proposed Action:

The Clearwater Unit of the Montana Department of Natural Resources and Conservation (DNRC) is proposing the Seeley Airport Fuels Piling Project. The project is located approximately 1.5 miles east of the town of Seeley Lake. (refer to Attachments vicinity map Attachment A-**1** and project map A-**2**) and includes the following sections:

Beneficiary	Legal Description	Total Acres	Treated Acres
Common Schools	**Section 36 T17N R 15W**	**640**	**Up to 125**

Objectives of the project include:

- To reduce ground and ladder fuels.

Proposed activities include:

Action	Quantity
Proposed Harvest Activities	# Acres
Optional salvage harvest of scattered blowdown and standing dead trees	Up to 100
Proposed Forest Improvement Treatment	# Acres
Pre-commercial Thinning	0
Planting	0
Machine Piling	25
Proposed Road Activities	# Miles
Total Roadwork	0.0

Duration of Activities:	One month
Occuring between:	August 2016 – September 2017

The lands involved in this proposed project are held in trust by the State of Montana. (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),
- Administrative Rules for Forest Management (ARM 36.11.401 through 471),
- and all other applicable state and federal laws.

Project Development

SCOPING:

- DATE:
  - June 14, 2016
- PUBLIC SCOPED: A letter notifying adjacent landowners was mailed on June 14, 2016
- AGENCIES SCOPED: None
- COMMENTS RECEIVED:
  - How many: 2
  - Concerns: Both comments were verbal comments from adjacent property owners. They were both supportive of the project and asked us to cut additional trees.
  - Results (how were concerns addressed): Green tree harvest is not a component of this project.

DNRC specialists were consulted, including: Garrett Schairer, Wildlife Biologist. Jeff Collins, Soils Scientist

Internal and external issues and concerns were incorporated into project planning and design and will be implemented in associated contracts.

OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED: *(Conservation Easements, Army Corps of Engineers, road use permits, etc.)*

- **Montana Department of Environmental Quality (DEQ)-** DNRC is classified as a major open burner by DEQ and is issued a permit from DEQ to conduct burning activities on state lands managed by DNRC. As a major open-burning permit holder, DNRC agrees to comply with the limitations and conditions of the permit.

- **Montana/Idaho Airshed Group-** 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). As a member of the Airshed Group, DNRC agrees to burn only on days approved for good smoke dispersion as determined by the Smoke Management Unit.

ALTERNATIVES CONSIDERED:

No-Action Alternative: Under the no-action alternative no fuels reduction project would take place. Large and fine woody debris would remain on the forest floor until they naturally decompose. Standing dead trees would fall over and continue to add to the existing fuel loading. In the event of a wildfire large woody debris and fine slash would hinder firefighter's ability to successfully suppress a wildfire. Existing uses such as firewood permits or small timber permits would continue.

Action Alternative On approximately 25 acres the proposed action alternative would reduce fuel loading that is currently on the ground from beetle killed trees falling over, and in some areas from past pre-commercial thinning. Standing dead trees would be cut and piled so they do not fall over and re-create the problem. Some live trees may be cut if, in the event of a wildfire, they would allow the fire to climb from the forest floor into the tree canopy.

As part of the action alternative the contractor may elect to salvage scattered blow down and standing dead material on up to an additional 100 acres.

Impacts on the Physical Environment

Evaluation of the impacts on the No-Action and Action Alternatives including **direct, secondary, and cumulative** impacts on the Physical Environment.

VEGETATION:

Vegetation Existing Conditions: Currently there is a generally open forest. Many trees have been killed by the mountain pine beetle. Most of these trees have fallen over but some remain standing. Standing live trees are mix of ponderosa pine, western larch, Douglas-fir, and lodgepole pine. Illegal firewood cutting of blow down and standing dead trees is a problem. Illegal off road use is frequently used to access these trees.

Vegetation	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Noxious Weeds	**X**				**X**				**X**					
Rare Plants	**X**				**X**				**X**					
Vegetative community	**X**				**X**				**X**					
Old Growth	**X**				**X**				**X**					
Action														
Noxious Weeds			**X**			**X**				**X**			partially	1.
Rare Plants	**X**				**X**				**X**					
Vegetative community	**X**				**X**				**X**					

Vegetation	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Old Growth	X				X				X					

Comments: 1. It is likely noxious weeds that currently exist in the project area will propagate in pile burn areas.

Vegetation Mitigations: To prevent the introduction of new weed species heavy equipment would be cleaned prior to entering the project area. If burn piles become heavily infested with weeds herbicide spraying would likely be used to control the spread of noxious weeds.

SOIL DISTURBANCE AND PRODUCTIVITY:

Soil Disturbance and Productivity Existing Conditions: Soils on the project area consist of excessively drained Krause family outwash fans and terraces. Numerous old roads exist within the project area and illegal four wheeler trails are common.

Soil Disturbance and Productivity	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Physical Disturbance (Compaction and Displacement)	X				X				X					
Erosion	X				X				X					
Nutrient Cycling	X				X				X					
Slope Stability	X				X				X					
Soil Productivity	X				X				X					
Action														
Physical Disturbance (Compaction and Displacement)		X											Yes	1
Erosion	X													
Nutrient Cycling	X												Yes	1
Slope Stability	X													
Soil Productivity	X												Yes	1

Comments: 1. Heavy equipment operations would take place under dry or frozen ground conditions. There would be a low risk of soil erosion, displacement, or compaction. No new roads are proposed and several illegal four wheeler trails will be disturbed in an attempt to discourage future use. Activities should have a low to moderate risk of direct, in-direct, or cumulative impacts based on implementing BMP's.

Soil Mitigations: 1. Precommercial thinning slash has been left on site for approximately 3 years, therefore much this slash's nutrients have already been returned to the soil. If old, decayed coarse woody debris that does not pose a fire safety hazard is found it will be left on site for

moisture retention and nutrient recycling. Slash piling will reduce the amount of fine and coarse woody debris on site. However, this fuels management project is located directly adjacent to private homes and woody debris removal for fire safety is necessary. There would be a moderate short term impact to soil nutrients and potential productivity from the removal of woody debris. This action is on a small area and the effects would be short term.

WATER QUALITY AND QUANTITY:

Water Quality and Quantity Existing Conditions: The nearest water, Morrell Creek, is over ½ a mile from the project area. No stream crossings or new road construction is planned.

Water Quality & Quantity	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Water Quality	**X**				**X**				**X**					
Water Quantity	**X**				**X**				**X**					
Action														
Water Quality	**X**				**X**				**X**					
Water Quantity	**X**				**X**				**X**					

Comments:

Water Quality & Quantity Mitigations:

FISHERIES:

Fisheries Existing Conditions: The nearest fish bearing stream, Morrell Creek, is over ½ a mile from the project area.

No impacts would be expected under either alternative.

WILDLIFE:

Wildlife Existing Conditions: The proposed project area is a relatively open forested stand of Douglas-fir and ponderosa pine with some scattered western larch. Potential habitat exists for grizzly bears, bald eagles, flammulated owls, gray wolves, and pileated woodpecker in the project area. Big game summer range exists in the project area; big game winter range is not present in the project area.

No-Action: No disturbance to wildlife would be anticipated. No appreciable changes to habitats for grizzly bears, bald eagles, flammulated owls, gray wolves, pileated woodpeckers, or big game species would occur. Generally, negligible direct, indirect, or cumulative effects would occur for all these species.

Action Alternative (see Wildlife table below):

Wildlife	Impact								Can Impact be Mitigated?	Comment Number
	Direct and Indirect				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High		
Threatened and Endangered Species										
Grizzly bear *(Ursus arctos)* Habitat: Recovery areas, security from human activity		**X**				**X**				**W-1**
Canada lynx (*Felix lynx)* Habitat: Subalpine fir habitat types, dense sapling, old forest, deep snow zone	**X**				**X**					
Yellow-billed Cuckoo (*Coccyzus americanus)* Habitat: Deciduous forest stands of 25 acres or more with dense understories and in Montana these areas are generally found in large river bottoms	**X**				**X**					
Sensitive Species										
Bald eagle *(Haliaeetus leucocephalus)* Habitat: Late-successional forest within 1 mile of open water		**X**				**X**				**W-2**
Black-backed woodpecker *(Picoides arcticus)* Habitat: Mature to old burned or beetle-infested forest	**X**				**X**					
Coeur d'Alene salamander *(Plethodon idahoensis)* Habitat: Waterfall spray zones, talus near cascading streams	**X**				**X**					
Columbian sharp-tailed grouse *(Tympanuchus Phasianellus columbianus)* Habitat: Grassland, shrubland, riparian, agriculture	**X**				**X**					

Wildlife	Impact								Can Impact be Mitigated?	Comment Number
	Direct and Indirect				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High		
Common loon *(Gavia immer)* Habitat: Cold mountain lakes, nest in emergent vegetation	**X**				**X**					
Fisher *(Martes pennanti)* Habitat: Dense mature to old forest less than 6,000 feet in elevation and riparian	**X**				**X**					
Flammulated owl *(Otus flammeolus)* Habitat: Late-successional ponderosa pine and Douglas-fir forest	**X**				**X**					**W-3**
Gray Wolf *(Canis lupus)* Habitat: Ample big game populations, security from human activities	**X**				**X**					
Harlequin duck *(Histrionicus histrionicus)* Habitat: White-water streams, boulder and cobble substrates	**X**				**X**					
Northern bog lemming *(Synaptomys borealis)* Habitat: Sphagnum meadows, bogs, fens with thick moss mats	**X**				**X**					
Mountain plover (*Charadrius montanus*) Habitat: short-grass prairie & prairie dog towns	**X**				**X**					
Peregrine falcon *(Falco peregrinus)* Habitat: Cliff features near open foraging areas and/or wetlands	**X**				**X**					
Pileated woodpecker *(Dryocopus pileatus)* Habitat: Late-successional ponderosa pine and larch-fir forest	**X**				**X**					**W-4**
Townsend's big-eared bat *(Plecotus townsendii)* Habitat: Caves, caverns, old mines	**X**				**X**					

Wildlife	Impact								Can Impact be Mitigated?	Comment Number
	Direct and Indirect				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High		
Wolverine *(Gulo gulo)* Habitat: Alpine tundra and high-elevation boreal and coniferous forests with deep persistent spring snow	**X**				**X**					
Big Game Species										
Elk		**X**				**X**				**W-5**
Whitetail		**X**				**X**				**W-5**
Mule Deer		**X**				**X**				**W-5**
Bighorn Sheep	**X**				**X**					
Other										

Comments:

W-1. The project area is 3.5 miles west of the Northern Continental Divide Ecosystem grizzly bear recovery area and is in the `occupied' grizzly bear habitat as mapped by grizzly bear researchers and managers to address increased sightings and encounters of grizzly bears in habitats outside of recovery zones (Wittinger et al. 2002). Individual animals could occasionally use the project area while dispersing or foraging, and they could be displaced by project-related disturbance if they are in the area during proposed activities. Some disturbance of grizzly bears could be possible with activities that occur during the non-denning period. Hiding cover would be reduced on approximately 20 acres; discouraging grizzly bear use of this area adjacent to human residences would likely be beneficial for grizzly bears in the long run as potential negative bear-human interactions could be reduced. No changes in open or restricted roads would be anticipated; illegal motorized activities associated with firewood gathering would likely continue contributing to disturbance of grizzly bears. Effects to grizzly bears associated with habitat modification and increases in non-motorized access would be additive to the effects associated with past timber harvesting in the cumulative-effects analysis area as well as any ongoing harvesting. Given their large home range sizes, size of the proposed project area, and manner in which they use a broad range of forested and non-forested habitats, the proposed activities and alterations of forest vegetation on the project area would have minor effects on grizzly bears.

W-2. The proposed project area is over 4 miles from the nearest known bald eagle territory, but within 1.5 miles of Seeley Lake, which would be suitable foraging habitats and has an existing territory on the north end of the lake. Given the likely timing of proposed activities coupled with the distance from the lake and the other forms of disturbance in the vicinity, no disturbance to bald eagles would be anticipated. Similarly, changes in vegetation that would alter eagle use of the project area for nesting or perching would not occur.

W-3. There are approximately 20 acres of potential flammulated owl habitats in ponderosa pine and dry Douglas-fir stands across the project area. Portions of the project area and cumulative effects analysis area have been harvested in the recent past, potentially improving flammulated

owl habitat by creating foraging areas and reversing a portion of the Douglas-fir encroachment and opening up stands of ponderosa pine; however retention of large ponderosa pine and/or Douglas-fir was not necessarily a consideration in some of these harvest units, thereby minimizing the benefits to flammulated owls. Flammulated owls can be tolerant of human disturbance (McCallum 1994), however the elevated disturbance levels associated with proposed activities could negatively affect flammulated owls should activities occur when flammulated owls are present. Proposed activities could overlap the nestling and fledgling period. Since limited snags would be retained, loss of nest trees would be expected to affect flammulated owls using the project area. The more open stand conditions would be beneficial for flammulated owl foraging into the future.

W-4. Roughly 10 acres of pileated woodpecker nesting habitat exist in the project area. Disturbance to pileated woodpeckers could occur if proposed activities occur during the nesting period. No appreciable changes to nesting habitats would occur, but changes in availability of dead wood in the project area could alter foraging opportunities for pileated woodpeckers. Since pileated woodpecker density is positively correlated with the amount of dead and/or dying wood in a stand (McClelland 1979), pileated woodpecker densities in the project area would be expected to be reduced on 20 acres. Across the cumulative effects analysis area, reductions to pileated woodpecker associated with this alternative would be additive to the effects of past timber management as well as any ongoing harvesting.

W-5. The project area contains spring, summer, and fall range for deer and elk. No winter range for deer, elk, or moose exists in the project area. Disturbance created by proposed activities could temporarily displace big game animals during periods of operation. Proposed activities would not prevent big game movement through the project area and could stimulate browse production in the proposed units. Hiding cover would be decreased, which could increase sight distances and potential for increased disturbance to big game. Modifications to big game habitats would be additive to the effects of past timber management as well as any ongoing harvesting.

AIR QUALITY:

Air Quality Existing Conditions: 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 fuel hazard reduction.

The project area is located in airshed 3B which encompasses portions of Missoula and Powell Counties. There is an airshed impact zone surrounding the town of Seeley Lake. This impact zone borders the south and west sides of the project area.

Air Quality	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Smoke	**X**				**X**				**X**					

Air Quality	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Dust	**X**				**X**				**X**					
Action														
Smoke		**X**			**X**					**X**			**Y**	**1**
Dust		**X**			**X**				**X**					

Comments:1. Dust may be visible while equipment is working on the project. Burning slash piles will produce smoke.

Air Quality Mitigations: 1. As a member of the Montana/Idaho Airshed Group, DNRC agrees to burn only on days approved for good smoke dispersion as determined by the Smoke Management Unit.

ARCHAEOLOGICAL SITES / AESTHETICS / DEMANDS ON ENVIRONMENTAL RESOURCES:

Will Alternative result in potential impacts to:	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Historical or Archaeological Sites	**X**				**X**				**X**					
Aesthetics	**X**				**X**				**X**					
Demands on Environmental Resources of Land, Water, or Energy	**X**				**X**				**X**					
Action														
Historical or Archaeological Sites	**X**				**X**				**X**					
Aesthetics	**X**				**X**				**X**					
Demands on Environmental Resources of Land, Water, or Energy	**X**				**X**				**X**					

Comments: During the Sleepy Haller and Overhall Timber Permit Environmental Analysis the area was surveyed for large ponderosa pine that may have been used as "sugar trees." If these existed they could be of significance to the Confederated Salish and Kootenai Tribes. No large ponderosa pine trees would be cut under the action alternative.

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.*

- Landing Strip Precommercial Thinning, 2011

- Overhall Timber Permit, 2011
- Sleepy Haller Timber Permit,

Impacts on the Human Population

Evaluation of the impacts on the proposed action including **direct, secondary, and cumulative** impacts on the Human Population.

Will Alternative result in potential impacts to:	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Health and Human Safety							**X**				**X**		**Yes**	**1.**
Industrial, Commercial and Agricultural Activities and Production	**X**				**X**				**X**					
Quantity and Distribution of Employment	**X**				**X**				**X**					
Local Tax Base and Tax Revenues	**X**				**X**				**X**					
Demand for Government Services	**X**				**X**				**X**					
Access To and Quality of Recreational and Wilderness Activities	**X**				**X**				**X**					
Density and Distribution of population and housing	**X**				**X**				**X**					
Social Structures and Mores	**X**				**X**				**X**					
Cultural Uniqueness and Diversity	**X**				**X**				**X**					
Action														
Health and Human Safety			**X**				**X**				**X**		**Yes**	**1**
Industrial, Commercial and Agricultural Activities and Production	**X**				**X**				**X**					
Quantity and Distribution of Employment	**X**				**X**				**X**					
Local Tax Base and Tax Revenues	**X**				**X**				**X**					

Will Alternative result in potential impacts to:	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Demand for Government Services	**X**				**X**				**X**					
Access To and Quality of Recreational and Wilderness Activities	**X**				**X**				**X**					
Density and Distribution of population and housing	**X**				**X**				**X**					
Social Structures and Mores	**X**				**X**				**X**					
Cultural Uniqueness and Diversity	**X**				**X**				**X**					

Comments: 1. Under the no action alternative the existing heavy fuel concerns would not be reduced. The proposed action alternative would pile and burn these fuels. In the event of a wildfire the no action alternative would result in a more intense fire than the proposed action alternative. Under the no action alternative a fire would be harder to suppress and could threaten structures adjacent to the project area. The action alternative would reduce, but not eliminate this risk.

Mitigations: The proposed action alternative is designed as a hazardous fuels mitigation project.

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.*

- Seeley Swan Fire Plan

Other Appropriate Social and Economic Circumstances: None

References

DNRC 1996. State forest land management plan: final environmental impact statement (and appendixes). Montana Department of Natural Resources and Conservation, Forest Management Bureau, Missoula, Montana.

Does the proposed action involve potential risks or adverse effects that are uncertain but extremely harmful if they were to occur? No

Does the proposed action have impacts that are individually minor, but cumulatively significant or potentially significant? No

Environmental Assessment Checklist Prepared By:

Name: Neil Simpson
Title: Service Forester
Date: July 5, 2016

Finding

Alternative Selected

Following a review of the document as well as the corresponding Department policies and rules, the Action Alternative has been selected because it meets the intent of the project objectives outlined in Section I – Type and Purpose of Action. This includes but is not limited to the need to reduce the wildland fire threat to an area and the requirement that DNRC 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).

Significance of Potential Impacts

I find that the Action Alternative will not have significant impacts for the following reasons:

- The Action Alternative is in compliance with the existing laws, rules, policies, and standards applicable to this type of proposed action.
- Appropriate mitigations have been proposed to minimize potential impacts to resources such as vegetation, soil, and wildlife.

Need for Further Environmental Analysis

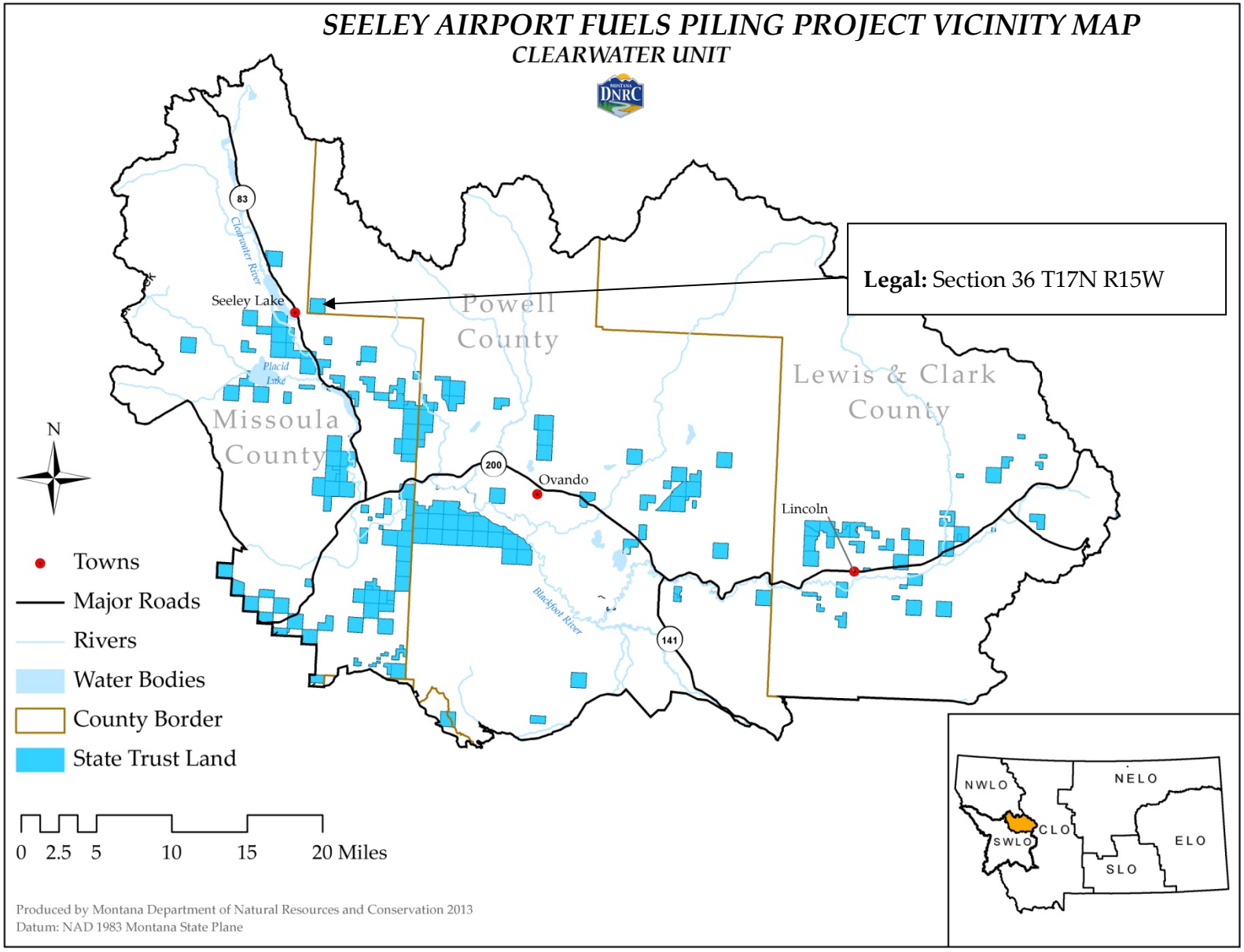
[ ]	EIS	[ ]	More Detailed EA	[X]	No Further Analysis

Environmental Assessment Checklist Approved By:

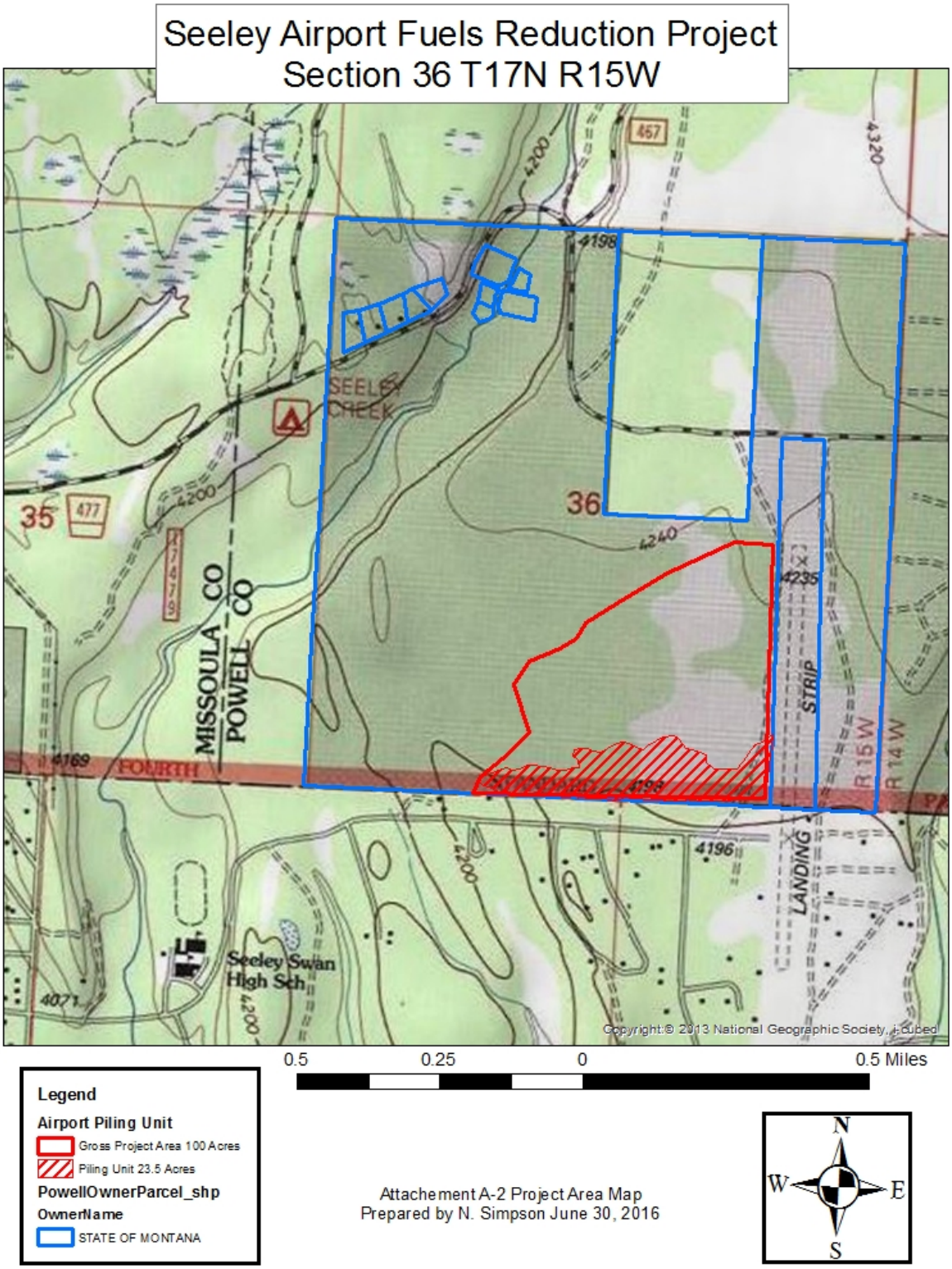
Name: Kristen S. Baker-Dickinson
Title: Clearwater Unit Manager
Date: August 2, 2016
Signature: *Isl* *K. Baker-Dickinson*

Attachment A- Maps

A-1: Timber Sale Vicinity Map



A-2: Timber Sale Harvest Units



Attachement A-2 Project Area Map
Prepared by N. Simpson June 30, 2016