

## CHECKLIST ENVIRONMENTAL ASSESSMENT

<b>Project Name:</b>	Pine Hills Hazardous Fuels Reduction Thinning
<b>Proposed Implementation Date:</b>	August – December 2010
<b>Proponent:</b>	Eastern Land Office of the Department of Natural Resources and Conservation
<b>Location:</b>	Section 36 Township 8N Range 48E
<b>County:</b>	Custer

### I. TYPE AND PURPOSE OF ACTION

The Montana Department of Natural Resources and Conservation(DNRC) , Eastern Land Office(ELO) is proposing a hazardous fuels reduction project on state trust lands in the Pine Hills area near Miles City MT, specifically Section 36 Township 8N Range 48E.

The proposed project is intended to reduce the risk of wildfire to the homes in the Pine Hills Subdivision, provide greater defensible space for the communication towers located on the state land and to enhance the hazardous fuel reduction activities that have occurred on neighboring private and BLM lands. These objectives would be accomplished by removing mostly small diameter ponderosa pine and rocky mountain juniper from approximately 83 acres in the proposed project area.

Treatment level will vary depending on the existing stand density, but overall the intent of the project is to reduce the overall stocking level, create spacing between tree canopies of 20 – 40 feet, and to remove small trees in the understory that could act as ladder fuels.

The proposed treatment activity will be accomplished mostly through hand cutting with chainsaws mechanical thinning and the slash generated from the proposed project would be hand or machine piled and burned when conditions are appropriate to allow for safe burning and good smoke disbursement. The proposed project is a cooperative effort between the DNRC, Miles City Fire, and the Bureau of Land Management and will use grant monies secured through the Custer County Community Wildfire Protection Plan

### II. PROJECT DEVELOPMENT

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

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

Letters were sent in June 2010 interested parties seeking comment on the proposed action. A public notice was placed in the Miles City Star, and ran for two consecutive weeks. Comments were received from several neighboring landowners and the lessee of the state parcel, all expressing support of the project.

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

None required

#### 3. ALTERNATIVES CONSIDERED:

**NO ACTION:** Current land use activities of grazing and recreation would continue without change. Increased fire hazard may occur as more ponderosa pine encroachment invades grassland areas and as stands become more heavily stocked and stagnated.

**HAZARDOUS FUELS REDUCTION THINNING ALTERNATIVE:** This alternative would continue the current land uses of grazing and recreation and would also incorporate a hazardous fuels reduction treatment on approximately 83 acres (Attachment 2, vicinity and project maps). The hazardous fuels reduction treatment will be primarily a thinning from below attempting to reduce stocking levels to a more historic, pre-fire suppression stand density, eliminate ladder fuels, create greater defensible space around the communication sites and

homes and to reduce areas of encroachment into grassland meadows. The thinning would attempt to emulate a low intensity high frequency or Non Lethal fire regime that would historically have been expected on this site. A target stocking rate for these stands would range from 50-100 trees per acre depending on existing stocking levels and stand structure. The remaining stand would consist of trees of all size classes favoring trees with good form, crown, and vigor. No new or temporary road construction will be required for this propose project.

### 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 of the area is Fort Union Formation, siltstones, sandstones, clay shale and scoria (porcellinite) which are exposed on ridges. There are several badland bluffs in the area that have natural high rates of erosion, but no unusual geologic features occur on the state tract and slope stability is not expected to be affected by this project. Soils on forest sites are shallow to moderate deep sandy to clayey in texture with moderate to high erosion risk. Soils disturbance should be minimal due to the limited amount of mechanical activity and the fact that if there is any mechanical activity it will be completed on only dry and or frozen conditions.

#### 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.*

There are no water features associated with the proposed project area. Due to the low precipitation, the lack of perennial streams, no new or temporary road construction, , and the selective nature of the thinning, there would be a low risk of direct or indirect impacts to water quality, and cumulative impacts are not likely. BMPs and site specific mitigations, to control erosion and protect water quality would be implemented.

#### 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.*

Particulate would be released into the atmosphere when the Slash piles are burned. Slash would only be ignited when ambient air conditions are suitable and air dispersal flows are adequate to lift the smoke into the winds aloft for rapid and thorough dispersal. Environmental conditions required prior to ignition must include adequate snow cover on the ground surface with a long-term forecast of continued low temperatures during daylight hours. There would likely be no cumulative impacts on air quality as a result of the proposed action.

#### 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.*

The project area consists of mixed grass and Ponderosa Pine types with smaller amounts of Rocky Mountain Juniper interspersed throughout. The Ponderosa Pine generally occurs along the upland areas and in the swale and draw features associated with the uplands. Tree ages range from very young trees of 25-30 years to trees that were 150+ years old. Old trees are generally scattered throughout each strata typically being found in stringers along draws and in small clumps on ridges and hillsides. There are no stands within the project area

that meet the definition of old growth. DNRC has adopted the old-growth definitions proposed by Green et al (Old Growth Forest Types of the Northern Region, R-1 SES 4/92, USDA Forest Service, Northern Region, Missoula, MT) None of the proposed thinning units are in stands meeting the definition of old growth based on Green et al. Only smaller size class trees will be thinned and all old age trees would be retained in all thinning units where they occur. The silvicultural prescription calls for thinning from below of trees in generally smaller size classes in an attempt to emulate a low intensity high frequency or Non-Lethal fire regime that would have historically occurred on this site prior to intensive fire suppression efforts that the stand has evolved in. The thinning prescription calls for reducing stocking levels to reduce ladder fuels, create canopy spacing of approximately 10-30 feet depending on current stocking levels. In areas where Rocky Mtn. Juniper and Ponderosa Pine have encroached into grassland openings a majority of those trees would be removed from those sites retaining only the best trees with excellent form, crown and vigor.

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#### **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.*

These sections hold the potential for a wide variety of wildlife species. The primary species that inhabit the area are mule deer, whitetail deer, elk, Merriams turkey, toads, cottontail rabbits, raptors, migratory prairie birds and others. The hazardous fuels reduction thinning should produce only minor environmental impacts to wildlife species because of the operational season of use and the layout/location of the thinning units. The operating season (June 15 – April 1) should not interfere with fawning, or nesting activities. The thinning plan calls for thinning from below of mostly smaller sized ponderosa pine and rocky mountain juniper. This should result in a very healthy remaining stand of ponderosa pine. Elk, Mule deer and to a lesser extent, whitetail deer may be temporarily displaced during thinning activities but their inherent mobility coupled with surrounding un-thinned areas should provide security and biological needs during the displacement period. Due to the selective nature of this thinning, the selective nature of thinning on surrounding ownership, and the surrounding large un-thinned areas, no cumulative impacts on terrestrial, avian, and aquatic habitats are likely to occur as a result of the proposed action.

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#### **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.*

There are no known threatened and endangered species in this general area. There are no documented studies suggesting the existence of T&E species in this area. There are no limited environmental resources within this area. The small size and selective nature of the thinning and the existing surrounding habitat would create no cumulative impacts as a result of the proposed activity.

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#### **10. HISTORICAL AND ARCHAEOLOGICAL SITES:**

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

No cultural or paleontological resources were identified within areas of project related potential ground disturbance. Should any cultural or paleontological resources be discovered the area will be avoided and documented.

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#### **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 thinning would produce temporary visual impacts. This effect would be mitigated over time as the disturbed sites recover and the Slash piles are burned. The surrounding region is lightly populated which would result in the temporary visual impact distributed over a limited population size. For these reasons, along with the small size of the thinning unit no cumulative impacts are anticipated as a result of the proposed activity.

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**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.*

The project would not use resources that are limited in the area. The selective thinning on adjacent ownership and vast un-harvested areas would have no cumulative effects on limited resources.

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**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.*

This section is leased for livestock grazing and is a classified grazing tract. The lessee was contacted by letter requesting comments and concerns. The lessee comments and concerns have been documented and have been incorporated in the project design. No concerns were received from the lessee. No cumulative impacts are likely to occur as there are no other current private, state or federal actions occurring. No other state actions are under MEPA scoping that pertain to this analysis area.

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



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**14. HUMAN HEALTH AND SAFETY:**

*Identify any health and safety risks posed by the project.*

Human health and safety would likely be improved through implementation of the proposed project by reducing the risk of wildfire and creating a greater defensible space for homeowners in the area. Safety considerations and temporary risks would increase for the people working within the thinning area. There are no unusual safety considerations associated with the project. The general public or local residents should not face increased health or long term safety hazards because of the proposed timber sale.

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**15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:**

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

The section involved with the proposed project is classified grazing land. The primary grazing period or season of use is late May through late summer. The current amount of available livestock forage should not be impacted by the proposed project.

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**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.*

Due to the relatively small size of the proposed project, there would be no measurable cumulative impact from this proposed action on employment.

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**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.*

Due to the relatively small size of the proposed project, there would be no measurable cumulative impact from this proposed action on tax revenues.

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**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 would be no measurable cumulative impacts related to demand for government services due to the relatively small size of the proposed project, the short.

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**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.*

None

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**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.*

This tract is legally accessible to the public by county road and according to the DNRC Rules for Recreational Use of State Lands walk in recreation is allowed on this parcel. This tract receives a substantial amount of recreation use from the general public. Due to the small size and selective nature of the proposed project there should be little or no impact to the recreation potential of this area. Cumulative effects are not likely to occur as a result of the proposed action.

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**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 cumulative impacts related to population and housing due to relatively small size of the proposed project, and the fact that people are already employed in this occupation in the region

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**22. SOCIAL STRUCTURES AND MORES:**

*Identify potential disruption of native or traditional lifestyles or communities.*

No impacts would be expected with either alternative.

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**23. CULTURAL UNIQUENESS AND DIVERSITY:**

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

No impacts would be expected with either alternative.

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**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 project should enhance the future income generating capacity of this parcel by reducing the risk of catastrophic wildfire, increasing grass production, reducing stocking levels and the selection of genetically superior trees as leave trees, thus improving the overall health and vigor of both the forested stands and grass stands.

<b>EA Checklist Prepared By:</b>	<b>Name:</b> Chris Pileski	<b>Date:</b> July 21, 2010
	<b>Title:</b> Area Manager	

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<b>V. FINDING</b>
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**25. ALTERNATIVE SELECTED:**

The hazardous fuels reduction thinning alternative is the selected Alternative.

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**26. SIGNIFICANCE OF POTENTIAL IMPACTS:**

The proposed hazardous fuels reduction thinning on approximately 83 acres of state owned trust lands would not result in nor cause significant environmental impacts. The predicted environmental impacts would be adequately mitigated through the proposed thinning prescription, operating period, and unit boundaries, For these reasons, an environmental assessment checklist is the appropriate level of analysis for the proposed action. The general public was officially notified of the proposed timber sale by published public notice and appropriate comments and concerns were incorporated into the hazardous fuels reduction thinning plan. The lessee of record was contacted and his comments and or concerns were also incorporated into the proposed project plan.

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**27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:**

EIS       More Detailed EA       No Further Analysis

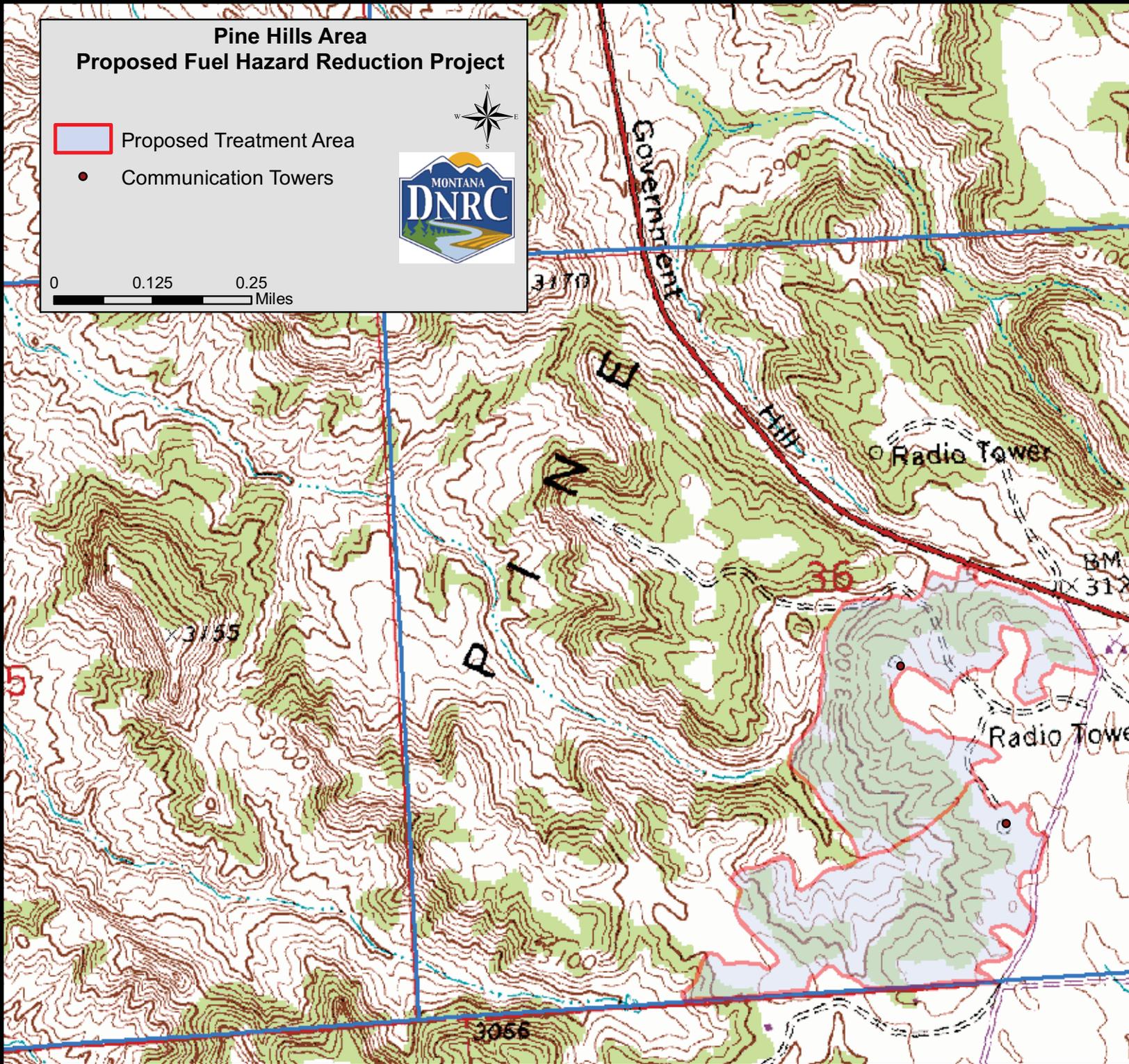
<b>EA Checklist Approved By:</b>	<b>Name:</b> Randy Sanders
	<b>Title:</b> Fire Program Manager
<b>Signature:</b> /s/ Randy Sanders	<b>Date:</b> July 21, 2010

# Pine Hills Area Proposed Fuel Hazard Reduction Project

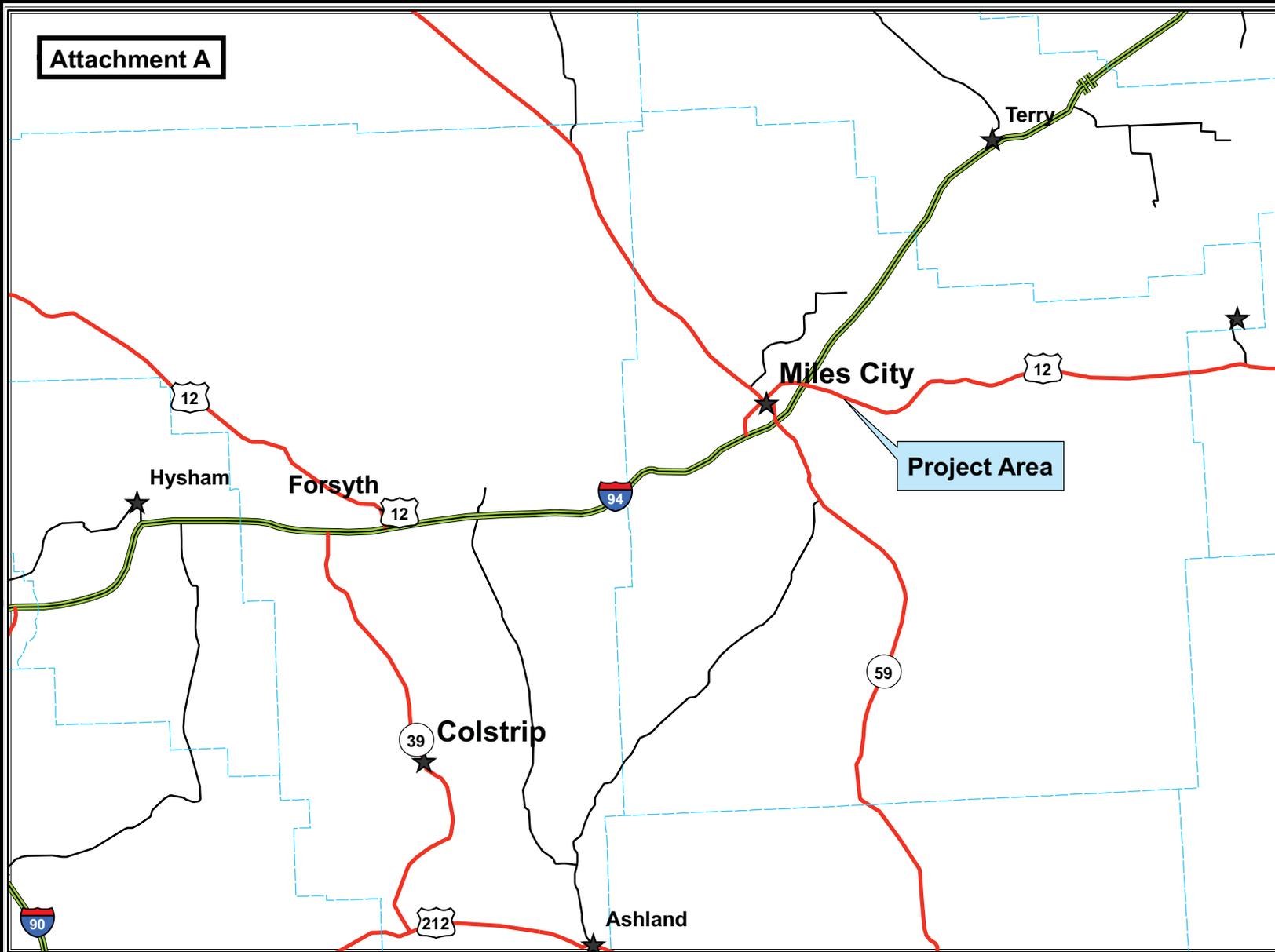
- Proposed Treatment Area
- Communication Towers



0 0.125 0.25 Miles



**Attachment A**



**Legend**

- ★ Cities and Towns
- Interstate Highway
- County Boundary
- State Highway
- U.S. Route
- Secondary Highway



Map created 07/21/2010  
DNRC/ELO/CP