

## CHECKLIST ENVIRONMENTAL ASSESSMENT

**Project Name:** Kirby Timber Sale  
**Proposed Implementation:** June 2015 – December 2015  
**Proponent:** Eastern Land Office of the Department of Natural Resources and Conservation  
**Location:** Section 16 Township 6S Range 39E in the Dale Creek drainage in Southeastern Montana. Sections 1,12 Township 7S Range 38E, Sections 6,7 Township 7S Range 39E, Section 31 Township 6S Range 39E in the Indian and Rosebud Creek drainage's.  
**County:** Big Horn

### I. TYPE AND PURPOSE OF ACTION

The Eastern Land Office (ELO) of the Montana Department of Natural Resources and Conservation (DNRC) is conducting a limited access timber sale, and encroachment/fuel reduction of ponderosa pine from a harvest area which includes approximately 555 acres of timber land with approximately 6,000-7,500 tons of considered for harvest fiber. The purpose of the action is to generate revenue for the school trust while promoting appropriate cover types in the area. The treatment area is located on State land in Southeastern Montana (Attachment B, Vicinity Map). The treatment will remove trees from a large range of size classes, while maintaining a healthy stand of ponderosa pine. Approximately 2-5 miles of existing road on both state and private land may be used as designated haul routes. Approximately 1.5-2 miles of new road construction is anticipated. Approximately 1-3 miles of temporary spur roads may be constructed to further accommodate log hauling. Temporary spur roads would be reclaimed through moving the berm back onto the road surface. An estimated \$24,000-\$30,000 in revenue to the school trust fund is predicted through the implementation of the Action Alternative.

### 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 mailed in March of 2015 to all interested persons and/or parties on Montana's DNRCs scoping list seeking comment on this proposed action. A public notice was also placed in the Big Horn County Times that ran for two consecutive weeks. Two comments were received and documented.

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

A 310 permit may be required from Big Horn County's conservation district.

#### 3. ALTERNATIVES CONSIDERED:

**NO ACTION:** Current land use activities of grazing would continue without change. Increased fire hazard may occur as more ponderosa pine encroachment invades native range sites.

**TIMBER HARVEST ALTERNATIVE:** This alternative would continue the current land use of grazing and would also incorporate a timber harvest of 6,000-7,500 tons of ponderosa pine from approximately 555 acres (Attachment A). The timber harvest would be an individual tree selection attempting to reduce stocking and fuel levels to a more historic pre-fire suppression stand density, while maintaining a healthy stand size and age class. The harvest activity may require the construction of approximately 1-3 miles of temporary spur roads, 1.5-2 miles of new road, and the use of approximately 2-5 miles of existing road on both state and private land as designated haul routes. All temporary spur roads would be closed and reclaimed upon completion of the sale.

### 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. Soils on forest sites are shallow to moderate deep sandy to clayey in texture with moderate to high erosion risk. Soils disturbance would occur on new temporary roads and to a lesser extent in the skid trail locations. Impacts from skidding activities would be mitigated mostly by the scattered nature of the timber, dispersing the skidding activity over a large area. Planned ground skidding operations should have to low risk of direct, in-direct and cumulative impacts based on the implementation of BMP's and mitigation measures. Mitigations include temporary use roads, season of use restrictions, general skid trail planning for selected draw crossing and avoiding steep slopes, protecting isolated wetlands and prompt re-vegetation of roads and landings to protect soil resources.

#### 5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

*Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.*

The project area encompasses 2 tributary drainages to Rosebud Creek. No perennial, Class I streams are present within any of the watersheds analysis areas. Class III stream segments are present along the entire reach of all tributary drainages but are discontinuous in nature. The area is characterized by low precipitation and tributary streams that flow in spring, but are dry most of the year. All class III stream segments located within harvest unit boundaries would be marked as exclusion or restriction zones on the ground where needed. Due to the low precipitation, the lack of perennial streams, temporary road construction and closure of the temporary roads will take place after use, and the scattered nature of the harvest, 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. Planned harvest operations and temporary roads present low risk of direct, in-direct and cumulative impacts based on the implementing BMP's and mitigation measures. Mitigations include temporary use roads, season of use restrictions, protecting isolated wetlands and prompt re-vegetation of roads and landings to protect soil resources.

#### 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 the 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. Ponderosa Pine generally occurs along the upland areas and in the swale and draw features associated with the uplands. The long-term plan for these stands is to decrease fuel levels, retain

healthy well-formed seed trees, and to promote multi age class structure in saw timber stands. Noxious weeds were limited to spot infestations of Canada thistle. To prevent introduction of new weeds, off-road equipment would be cleaned and inspected prior to entry into salvage areas.

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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.*

This section holds 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 harvest operation should produce only minor environmental impacts to wildlife species because of the operational season of use and the layout/location 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 or endangered species in the project 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 Natural Heritage Program shows one listed sensitive species near the project area. It is the snapping turtle. If any snapping turtles are encountered they will be left alone. The small size and selective nature would have 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 the project area of potential effect. The proposed timber sale will have No Effect to Heritage Properties.

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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 harvest 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 scattered nature of the timber and grasslands 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 harvests on adjacent ownerships 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.*

These sections are leased for livestock grazing and are classified as grazing tracts. The lessee's were contacted by letter requesting comments and concerns. All lessee comments and concerns have been

documented and have been incorporated in the project design. No concerns were received. No cumulative impacts are likely. No other state actions are under MEPA scoping that pertain to this analysis area.

#### **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, and possibly for public vehicle traffic on the highway and the county road while log trucks are hauling. There are no unusual safety considerations associated with the proposed timber sale. The general public or local residents should not face increased health or long term safety hazards because of the sale.

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

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

The sections involved with the proposed timber sale are classified grazing land. The primary grazing period or season of use is late May through late summer. The current amount of available livestock forage would temporarily be reduced. Over a short period of time the disturbed sites will recover and forage levels should return to their present levels or beyond.

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

#### **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 from the wood products industry in the region. Due to the relatively small size of the harvest, there would be no measurable cumulative impact from this proposed action on tax revenues.

#### **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 timber sale program, the short-term impacts to traffic, the small possibility of a few people temporarily relocating to the area, and the lack of other timber sales in the adjacent area.

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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.*

On June 17, 1996, the Land Board approved the State Forest Land Management Plan (SFLMP). The SFLMP provides the philosophy adopted by DNRC through programmatic review (DNRC, 1996). The DNRC will manage the lands in this project according to this philosophy, which states:

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

On March 13, 2003, the DNRC adopted Administrative Rules for Forest Management (Rules) (Administrative Rules of Montana [ARM] 36.11.401 through 450). The Rules provide DNRC personnel with consistent policy, direction, and guidance for the management of forested trust lands. Together, the SFLMP and Rules define the programmatic framework for this project.

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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.*

Some of the sections in this proposal have legal access through the Rosebud Battle Field State Park.

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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 timber sale program, 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 economic return to the trust for this sale would be approximately \$24,000-\$30,000, which was calculated by taking the estimated 6,000-7,500 tons multiplied by the \$4.00 a ton rate.

Costs, revenues, and estimates of return are estimates intended for relative comparison of alternatives. They are not to be used as absolute estimates of return.

<b>EA Checklist Prepared By:</b>	<b>Name:</b> Andy Miller	<b>Date:</b> June 5 <sup>th</sup> 2015
	<b>Title:</b> Forester	

**V. FINDING**

**25. ALTERNATIVE SELECTED:**

The harvest alternative is the selected Alternative.

**26. SIGNIFICANCE OF POTENTIAL IMPACTS:**

The salvage of approximately 6,000-7,500 Tons of commercial size ponderosa pine on the State section within approximately 555 acres would not result in nor cause significant environmental impacts. Any environmental impacts would be adequately mitigated through the contract stipulations. For these reasons, an environmental assessment checklist is the appropriate level of analysis for the salvage.

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

EIS     
  More Detailed EA     
  No Further Analysis

<b>EA Checklist Approved By:</b>	<b>Name:</b> Chris Pileski	
	<b>Title:</b> Area Manager	
<b>Signature:</b>	<i>Chris Pileski</i>	<b>Date:</b> 6/12/15