

## Environmental Assessment Checklist

**Project Name: Blowout Creek Limited Access Timber Sale**

**Proposed Implementation Date: March, 2017**

**Proponent: Eastern Land Office, Montana DNRC**

**County: Carter**

### Type and Purpose of Action

**Description of Proposed Action:**

The Eastern Land Office of the Montana Department of Natural Resources and Conservation (DNRC) is proposing the Blowout Creek Limited Access Timber Sale. The project is located approximately 7 miles southwest of Hammond, MT. (refer to Attachments vicinity map A-1 and project map A-2) and includes the following sections:

Beneficiary	Legal Description	Total Acres	Treated Acres
Common Schools	S16 T8S R55E	640	225

Objectives of the project include:

- Generate funds for the Common Schools Trust.
- Manage for appropriate cover types.

Proposed activities include:

Action	Quantity
<b>Proposed Harvest Activities</b>	<b># Acres</b>
Clearcut	
Seed Tree	
Shelterwood	
Selection	225
Commercial Thinning	
Salvage	
<b>Total Treatment Acres</b>	<b>225</b>
<b>Proposed Forest Improvement Treatment</b>	<b># Acres</b>
Pre-commercial Thinning	
Planting	
<b>Proposed Road Activities</b>	<b># Miles</b>
New permanent road construction	
New temporary road construction	1-2
Road maintenance	3-5
Road reconstruction	

Action	Quantity
Road abandoned	
Road reclaimed	
<b>Other Activities</b>	

<b>Duration of Activities:</b>	3 years or less
<b>Implementation Period:</b>	March 2017-March 2020

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:
  - 8/08/2016 to 8/30/2016
- PUBLIC SCOPED:
  - The scoping notice was posted on the DNRC Website:  
<http://dnrc.mt.gov/public-interest/public-notice>
  - Adjacent landowners, statewide scoping list, *Powder River Examiner, Miles City Star*
- AGENCIES SCOPED:
  - Montana Fish, Wildlife & Parks
  - Montana Tribal Nations
- COMMENTS RECEIVED:
  - How many: 1
  - Concerns: 0
  - Results (how were concerns addressed): A Tribal Historic Preservation Office sent a letter asking if archaeological materials or human remains are encountered, that the State Historic Preservation Office and applicable Tribes be notified.

DNRC specialists were consulted, including: Patrick Rennie (archaeologist)

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:**

- **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 this alternative, no timber would be harvested and therefore no revenue would be generated from the project area for the Common Schools Trust at this time. The current land use activities of grazing would continue without change.

**Action Alternative:** This alternative would continue the current land use of grazing and would also incorporate a selective harvest of 3,300-4,000 tons of ponderosa pine from approximately 225-250 acres (Attachment A-2). The selection harvest would be an individual tree selection attempting to reduce fuel levels. The harvest would reduce the current and future stocking levels on this site. The remaining stand would consist of healthy green trees. Green trees exhibiting good form, crown, and vigor would be retained. The harvest activity may require the construction of approximately 1-2 miles of temporary spur roads and the use of approximately 3-5 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.

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## **Impacts on the Physical Environment**

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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:** The project area consists of mixed grass and a large amount of ponderosa pine. Ponderosa pine occurs along the upland areas and in the swale and draw features associated with the uplands.

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

*Comments:*

1. The lessee actively manages weeds on both the deeded neighboring land and this lease. No noxious weeds were observed on this lease.

*Vegetation Mitigations:* To prevent introduction of new weeds, off-road equipment would be cleaned and inspected prior to entry into harvest areas.

**SOIL DISTURBANCE AND PRODUCTIVITY:**

**Soil Disturbance and Productivity Existing Conditions:** 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.

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		
<b>No-Action</b>														
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					
<b>Action</b>														

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			
Physical Disturbance (Compaction and Displacement)		X				X				X				Y	1.
Erosion	X				X				X						
Nutrient Cycling		X				X					X			Y	1.
Slope Stability	X				X				X						
Soil Productivity		X				X					X			Y	1.

*Comments:*

1. Exposing the bare mineral soil to the live green trees would increase regeneration. Impacts are unlikely due to the scattered nature of the timber and dispersed skidding activity over a large area.

*Soil Mitigations:* Planned ground skidding operations should have to low risk of direct, secondary, and cumulative impacts based on the implementing 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.

**WATER QUALITY AND QUANTITY:**

**Water Quality and Quantity Existing Conditions:** 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.

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			
<b>No-Action</b>															
Water Quality	X				X				X						
Water Quantity	X				X				X						
<b>Action</b>															
Water Quality		X				X			X					Y	1.
Water Quantity	X				X				X						

*Comments:*

1. Due to the low precipitation, the lack of perennial streams, temporary road construction and closure of the temporary roads after use, and the scattered nature of the harvest, there would be a low risk of direct or secondary impacts to water quality, and cumulative impacts are not

likely.

**Water Quality & Quantity Mitigations:** 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, secondary, 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.

**WILDLIFE:**

**No-Action:** No changes in habitat attributes for any wildlife species would be affected under this alternative.

**Action Alternative (see Wildlife table below):** Under the action alternative, snags and coarse woody debris would be reduced on 125 acres, which would reduce the presence of important cavity nesting habitat for some species. At least one large snag >21 inches dbh and one recruitment tree >21 inches dbh would be retained following salvage activities. Approximately 5 tons of coarse woody debris per acre would be retained post-harvest. If >21 inch snags and snag recruitment trees are not available, the largest sizes available would be retained in their place.

Wildlife	Impact												Can Impact be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
<b>Sensitive Species</b>														
<b>Bald eagle</b> <i>(Haliaeetus leucocephalus)</i> Habitat: Late-successional forest within 1 mile of open water	X				X				X					
<b>Black-tailed prairie dog</b> <i>(Cynomys ludovicianus)</i> Habitat: grasslands, short-grass prairie, sagebrush semi-desert	X				X				X					
<b>Mountain plover</b> <i>(Charadrius montanus)</i> Habitat: short-grass prairie & prairie dog towns	X				X				X					
<b>Peregrine falcon</b> <i>(Falco peregrinus)</i> Habitat: Cliff features near open	X				X				X					

Wildlife	Impact												Can Impact be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
foraging areas and/or wetlands														
<b>Greater Sage grouse</b> ( <i>Centrocercus urophasianus</i> ) Habitat: sagebrush semi-desert	X				X				X					1.
<b>Townsend's big-eared bat</b> ( <i>Plecotus townsendii</i> ) Habitat: Caves, caverns, old mines	X				X				X					
<b>Spotted Bat</b> ( <i>Euderma maculatum</i> ) Habitat: rock outcrops, cliffs, caves, old mines	X				X				X					
<b>Big Game Species</b>														
<b>Elk</b>		X			X				X					2.
<b>Whitetail</b>		X			X				X					2.
<b>Mule Deer</b>		X			X				X					2.
<b>Other</b>														

*Comments:*

1. This project is not located in Sage Grouse Habitat.
2. Elk or deer could be present in the project area. Motorized disturbance associated with proposed activities could displace big game species, resulting in minor negative effects.

*Wildlife Mitigations:*

- A minimum of one snag and one snag recruitment tree per acre, of the largest diameter class, would be retained.
- If a threatened or endangered species is encountered, consult a DNRC biologist immediately.

**AIR QUALITY:**

Air Quality	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
<b>No-Action</b>														
Smoke	X				X				X					
Dust	X				X				X					
<b>Action</b>														

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

*Comments:*

1. Slash piles consisting of tree limbs and tops and other vegetative debris would be created throughout the project area during harvesting. These slash piles would ultimately be burned after harvesting operations have been completed. The project area is located within Montana Airshed Group 10 which encompasses major portions of eastern Montana.
2. Harvesting and hauling logs could create dust, which may affect local air quality. However, because dust would be localized to skid trails and haul roads and operating seasons would be short in duration, effects to air quality as a result of dust generated during harvest activities are expected to be low.

*Air Quality Mitigations:* 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. Due the lack of dwellings, any dust that would be kicked up would not interfere with anyone's day to day actions. There would likely be no cumulative impacts on air quality as a result of the proposed action.

**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		
<b>No-Action</b>														
Historical or Archaeological Sites	X				X				X					
Aesthetics	X				X				X					
Demands on Environmental Resources of Land, Water, or Energy	X				X				X					
<b>Action</b>														
Historical or Archaeological Sites	X								X					
Aesthetics			X				X		X				Y	1.
Demands on Environmental Resources of Land, Water, or Energy	X				X				X					



*Comments:*

1. The proposed salvage would produce temporary visual impacts.

*Mitigations:* Over time the disturbed sites would recover and slash piles would be burned. The surrounding region is lightly populated which would result in the temporary visual impacts 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.

**OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:**

This section is leased for livestock grazing and is classified as a grazing tract. The lessee was contacted requesting comments and concerns. No concerns were received from the lessee. With the large areas of unharvested timber, no cumulative impacts are likely.

**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		
<b>No-Action</b>														
Health and Human Safety	X				X				X					
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					

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			
Social Structures and Mores	X				X				X						
Cultural Uniqueness and Diversity	X				X				X						
<b>Action</b>															
Health and Human Safety		X				X				X				1.	
Industrial, Commercial and Agricultural Activities and Production		X				X				X				2.	
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						

*Comments:*

1. 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.
2. People are currently employed in the wood products industry in the region.

*Mitigations:* There are no unusual safety considerations associated with this sale. The general public or local residents should not face increased health or long term safety hazards because of the sale. Timber sale and log truck entering signs would be placed at appropriate locations.

**Locally Adopted Environmental Plans and Goals:**

- None.

**Other Appropriate Social and Economic Circumstances:**

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

stumpage is based on comparable sales analysis. This method compares recent sales to find a market value for stumpage. These sales have similar species, quality, average diameter, product mix, terrain, date of sale, distance from mills, road building and logging systems, terms of sale, or anything that could affect a buyer's willingness to pay.

**No Action:** The No Action alternative would not generate any return to the trust at this time.

**Action:** The timber harvest would generate additional revenue for the Common School Trust. The estimated return to the trust for the proposed harvest is \$13,500 based on an estimated harvest of 2.25MBF (2,250 tons) and an overall stumpage value of \$6.00 per ton. Costs, revenues, and estimates of return are estimates intended for relative comparison of alternatives, they are not intended to be used as absolute estimates of return.

## 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 impacts would be expected.

**Does the proposed action have impacts that are individually minor, but cumulatively significant or potentially significant?**

No impacts would be expected.

**Environmental Assessment Checklist Prepared By:**

**Name: Andy Miller**  
**Title: Forester**  
**Date: February 27, 2017**

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**Finding**

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**Alternative Selected**

The timber harvest alternative is the selected Alternative.

**Significance of Potential Impacts**

Low

**Need for Further Environmental Analysis**

EIS

More Detailed EA

No Further Analysis

**Environmental Assessment Checklist Approved By:**

**Name: Chris Pileski**  
**Title: Area Manager**  
**Date: 2/27/2017**  
**Signature:**



## **Attachment A- Maps**

A-1: Timber Sale Vicinity Map



