

## Environmental Assessment Checklist

**Project Name: Short Skid Timber Sale**  
**Proposed Implementation Date: February 2017**  
**Proponent: Helena Unit, Central Land Office, Montana DNRC**  
**County: Broadwater**

### Type and Purpose of Action

**Description of Proposed Action:**

The Helena Unit of the Montana Department of Natural Resources and Conservation (DNRC) is proposing the Short Skid Timber Sale. The project is located 14 miles east of Townsend, MT (refer to Attachments A-1 and A-2) and includes the following sections:

Beneficiary	Legal Description	Total Acres	Treated Acres
Common Schools	Section 16 T7N R5E	640	119
Public Buildings			
MSU 2 <sup>nd</sup> Grant			
MSU Morrill			
Eastern College-MSU/Western College-U of M			
Montana Tech			
University of Montana			
School for the Deaf and Blind			
Pine Hills School			
Veterans Home			
Public Land Trust			
Acquired Land			

Objectives of the project include:

- Improve the health, vigor, and productivity of the forest stands through the removal of defect, dead, and diseased timber.
- Reduce the potential for catastrophic wildfire associated with high fuel loading adjacent to private lands.
- Generate revenue for the Common School Trust.

Proposed activities include:

Action	Quantity
<b>Proposed Harvest Activities</b>	<b># Acres</b>
Clearcut	
Seed Tree	119

Action	Quantity
Shelterwood Selection	
Commercial Thinning	
Salvage	
<b>Total Treatment Acres</b>	
<b>Proposed Forest Improvement Treatment</b>	<b># Acres</b>
Pre-commercial Thinning	20
Planting	
<b>Proposed Road Activities</b>	<b># Miles</b>
New permanent road construction	.3
New temporary road construction	.2
Road maintenance	4
Road reconstruction	
Road abandoned	
Road reclaimed	
<b>Other Activities</b>	
Noxious Weed Control	119 Acres
Prescribed Burning	119 Acres
<b>Duration of Activities:</b>	2 years
<b>Implementation Period:</b>	4 years

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.

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## Project Development

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### SCOPING:

- DATE:
  - July 26<sup>th</sup>, 2016
- PUBLIC SCOPED:
  - The scoping notice was posted on the DNRC Website: <http://dnrc.mt.gov/public-interest/public-notice>
  - Public scoping for this project was solicited through legal publications in the *Helena Independent Record* and the *Broadwater Reporter*. Project details were posted on the DNRC website on July 26th, 2016. Scoping letters were mailed

and emailed on July 26, 2016 to a comprehensive list of interested parties including individuals, private organizations, tribal nations, and agency representatives.

- AGENCIES SCOPED:
  - US Forest Service
- COMMENTS RECEIVED:
  - How many: 1
  - Concerns: 0
  - Results (how were concerns addressed): The Confederated Salish and Kootenai Tribes wrote a letter stating they approved of the project.

DNRC specialists were consulted, including: Gary Frank, Resource Management Supervisor; Ross Baty, Wildlife Biologist; Jeff Schmalenberg, Soil Scientist; Patrick Rennie, Archaeologist; John Huston, Helena Unit Fire Management Officer.

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:**

- **United States Fish & Wildlife Service-** DNRC is managing the habitats of threatened and endangered species on this project by implementing the Montana DNRC Forested Trust Lands HCP and the associated Incidental Take Permit that was issued by the United States Fish & Wildlife Service (USFWS) in February of 2012 under Section 10 of the Endangered Species Act. The HCP identifies specific conservation strategies for managing the habitats of grizzly bear, Canada lynx, and three fish species: bull trout, westslope cutthroat trout, and Columbia redband trout. This project complies with the HCP. The HCP can be found at <http://dnrc.mt.gov/divisions/trust/forest-management/hcp>.
- **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-** 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, the timber harvest would be deferred. Logging and related activities would not occur in the near future. However, grazing under existing leases would continue. Revenue from dead and dying trees would not be realized and infested areas would not be managed. Present and impending insect and disease infestations would continue to escalate with reduced timber growth rates, and increased mortality. Douglas-fir regeneration would continue to be suppressed.

**Action Alternative:** Under the Action Alternative, DNRC would harvest approximately 300 thousand board feet (MBF) from 119 acres. A seed tree silvicultural prescription would be applied to primarily Douglas-fir trees. Merchantable Douglas-fir trees that exhibit a resistance to western spruce budworm and Douglas-fir beetle will be reserved.

Forest fire fuels will be reduced substantially (50-60%) within the harvest units providing contiguous fuel breaks on the portions of state land being treated, thus reducing the potential for catastrophic loss of resources on state and adjacent private lands.

Pre-commercial thinning activities would take place on 20 acres to improve growth and vigor in treated stands.

New road construction and road maintenance activities would also take place to improve access and bring existing roads up to Best Management Practices (BMP's) standards.

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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 cover type is Douglas-fir and the majority of forested stands are included in fuel model eight. Open grassy stands of timber are included in fuel model 2.<sup>1</sup>

The proposed harvest area, approximately 119 acres, is composed predominately of mature stands of Douglas-fir exhibiting poor growth. This is due to defoliation from western spruce budworm infestations. The understory is virtually nonexistent in large portions of the harvest area due to western spruce budworm.

Vegetation	Impact			Can Impact Be Mitigated?	Comment Number
	Direct	Secondary	Cumulative		

<sup>1</sup> Anderson, Hal E. Aids to Determining Fuel Models for Estimating Fire Behavior USDA Forest Service General Technical Report INT-122 1982.

	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				Yes	1
Old Growth	x				x				x					
<b>Action</b>														
Noxious Weeds		x			x				x				Yes	2
Rare Plants	x				x				x					
Vegetative community		x				x			x				Yes	3
Old Growth	x				x				x					

*Comments:*

- 1) There is continued mortality and defoliation due to spruce budworm and Douglas-fir beetle. The goal will be to encourage regeneration that is resistant to western spruce budworm by utilizing a seed tree harvest to reach the desired future condition.
- 2) Disturbed sites are receptive seed beds for noxious weeds.
- 3) We will be removing approximately 300 MBF of Douglas-fir, and temporarily disturbing grasses and forbs present on the site.

*Vegetation Mitigations:*

- One snag and one snag recruit per acre, of the largest diameter class, would be retained. Cull live trees and cull snags would be retained where possible given human safety considerations.
- Retain live, healthy older trees and stand attributes suitable for old growth development where available and applicable.
- Treat noxious weeds in sale area. Apply herbicide prior to commencement of timber sale if there are observed noxious weeds. Post-harvest herbicide would be applied to disturbed sites. All herbicide applications would follow label instructions.
- Grass seed disturbed sites (landings, slash piles, major skid trails) at the completion of each harvest unit. Seed mix used would be appropriate for site applied.
- All road and logging equipment would be power washed and inspected prior to being brought on site.

**SOIL DISTURBANCE AND PRODUCTIVITY:**

**Soil Disturbance and Productivity Existing Conditions:**

The sale area is located on moderate to steep slopes with shallow to moderately deep extremely gravelly soils weathering from argillite bedrock. This is a moderate precipitation area with underlying geologic structure forming the terrain and abrupt draws. There are no especially unusual or unique geologic features in the proposed harvest area. Slopes are generally stable. Rock outcrops occur on ridges and convex slopes and limit equipment operation and skid trail location in some sites, Bedrock is mainly well fractured and makes excellent road material. Bedrock may require ripping on some sites.

Soils have a very shallow surface and are easily displaced. Primary Soils are a complex of Whitore type, which are extremely channery loams on 25-60% slopes with included, deeper soils on more moderate slopes of 15-35%. Erosion and displacement risk are moderate for slopes 15-35%. Erosion and displacement risk are high for steep slopes over 40%. Subsoils

have carbonates at 2 to 3 feet depth. These high gravel soils are well drained and tend to be droughty. These are low to moderate productivity soils that are limited by soil depth and droughty site conditions. Primary soil concern is limiting displacement of the shallow surface soils during harvesting and slash disposal.

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>														
Physical Disturbance (Compaction and Displacement)		x			x				x				Yes	1
Erosion		x			x				x				Yes	2
Nutrient Cycling		x			x				x				Yes	3
Slope Stability	x				x				x				Yes	4
Soil Productivity	x					x				x				

**Comments:**

- 1) Soil monitoring of DNRC timber harvest has shown that the expected level of total soil impacts for these soil types, slopes and prescription ranged from 5.6 to 10% of a harvested area (DNRC 2011). Detrimental soil impacts are considered detrimental when they exceed 20 percent of a harvest area (DNRC 1996). Limiting operations to generally dry (<20% soil moisture), snow covered, or frozen ground conditions will provide adequate mitigation against detrimental soil impacts.
- 2) Install adequate road drainage to control erosion concurrent with harvest activities.
- 3) Major skid trails would be closed with slash and debris and/or barriers, and adequate drainage provided.
- 4) Slash greater than 3" in diameter would be left at a rate of 5-10 tons an acre within the harvest units where feasible due to existing timber volume limitations.

**Soil Mitigations:** Soil impacts would be minimized by implementing BMP's for forest management as well as the following mitigation measures. Equipment operations would be limited to slopes less than 45% and the season of use to periods when soils are relatively dry (less than 20% soil moisture), frozen or snow covered to minimize soil compaction and rutting and maintain drainage features. The Forest Officer and Purchaser will agree to a general skidding plan prior to equipment operations and designate skid trails on complex areas. Road drainage would be improved. Road reconstruction and new construction would be completed to comply with BMP's.

**WATER QUALITY AND QUANTITY:**

**Water Quality and Quantity Existing Conditions:** The proposed timber sale is located in an area that is drained by two unnamed, first order, intermittent tributaries, and one unnamed, third order, perennial tributary to the Castle Fork of Deep Creek. Deep Creek is a large perennial tributary to the Missouri River. The unnamed tributary drainages are a combined watershed area of approximately 1947 acres. Less than 30% of the watershed area is forested. The watershed area consists of predominately south aspects with primarily grassland and rangeland vegetative cover. Due to the relatively small size, and amount of volume being removed, and location of harvest units no direct, secondary, or cumulative watershed impacts are anticipated.

This portion of the Missouri River basin, including Deep Creek and its tributaries, is classified as B-1 in the Montana Surface Water Quality Standards. The B-1 classification is for multiple use waters suitable for domestic use after conventional treatment, growth and propagation of cold-water fisheries, associated aquatic life and wildlife, agricultural, and industrial uses. Among other criteria for B-1 waters, no increases are allowed above naturally occurring concentrations of sediment, which will prove detrimental to fish or wildlife. Naturally occurring includes conditions or materials present from runoff on developed land where all reasonable land, soil, and water conservation practices have been applied. Reasonable practices include methods, measures, or practices that protect present and reasonably anticipated beneficial uses. The State has adopted Forestry Best Management Practices through its Nonpoint Source Management Plan as the principle means of controlling nonpoint source pollution from silvicultural activities. The most sensitive downstream beneficial uses in Deep Creek are cold- water fisheries and aquatic life support.

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					
Water Quantity	x				x				x					

*Comments:* Due to the relatively small size, amount of volume being removed, and location of harvest units no direct, secondary, or cumulative watershed impacts are anticipated. No impacts due to cumulative watershed effects are anticipated under the proposed action. Forest stands are not likely to be a major influence on the hydrology and flow regimes of the streams draining the proposed timber sale area. Many of the trees in the proposed harvest units have been affected by spruce budworm. The proposed harvest is not expected to substantially decrease the levels of canopy interception or evapotranspiration potential over that likely to occur in these watersheds under no action. The levels of harvest proposed are also well below those cumulative levels associated with detrimental increases in water yield. There is no evidence of channel instability or existing cumulative watershed impacts in the drainage.

*Water Quality & Quantity Mitigations:*

- 1) Montana BMP's for Forest Management will be implemented.

- 2) Major skid trails would be grass seeded, closed with slash and debris and/or barriers, and adequate drainage provided.

**FISHERIES:**

**Fisheries Existing Conditions:** There are no fisheries within the project area. The mainstream of Deep Creek contains brook trout, brown trout, rainbow trout, mottled sculpin, flathead chub, longnose dace, longnose sucker, and white sucker. There are no known fish surveys in the Castle Fork of Deep Creek (MFISH 2016).

**No-Action:** No direct or secondary impacts would occur to affected fish species or affected fisheries resources beyond those described in Fisheries Existing Conditions. Cumulative effects (other related past and present factors; other future, related actions; and any impacts described in Fisheries Existing Conditions) would continue to occur.

**Action Alternative (see Fisheries table below):**

Fisheries	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>														
Sediment	x				x				x					
Flow Regimes	x				x				x					
Woody Debris	x				x				x					
Stream Shading	x				x				x					
Stream Temperature	x				x				x					
Connectivity	x				x				x					
Populations	x				x				x					
<b>Action</b>														
Sediment	x				x				x					1
Flow Regimes	x				x				x					1
Woody Debris	x				x				x					1
Stream Shading	x				x				x					1
Stream Temperature	x				x				x					1
Connectivity	x				x				x					1
Populations	x				x				x					1

*Comments:* No direct, secondary, or cumulative effect to fisheries resources is expected resulting from the implementation of the action alternative.

*Fisheries Mitigations:* Montana SMZ laws would be implemented on all stream channels within the project area and Montana BMP's for water quality will be applied concurrent with harvest and hauling activities.

**WILDLIFE:**

**No-Action:** Under the No Action Alternative, the proposed timber sale activities would not occur. Thus, no disturbance or habitat altering direct, secondary, or cumulative impacts for any species would be anticipated.

**Action Alternative (see Wildlife table below):**

Wildlife	Impact												Can Impact be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
<b>Threatened and Endangered Species</b>														
<b>Grizzly bear</b> <i>(Ursus arctos)</i> Habitat: Recovery areas, security from human activity	x				x				x					
<b>Canada lynx</b> <i>(Felix lynx)</i> Habitat: Subalpine fir habitat types, dense sapling, old forest, deep snow zone	x				x				x					
<b>Wolverine</b> <i>(Gulo gulo)</i>	x				x				x					
<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-backed woodpecker</b> <i>(Picoides arcticus)</i> Habitat: Mature to old burned or beetle-infested forest	x				x				x					
<b>Black-tailed prairie dog</b> <i>(Cynomys ludovicianus)</i> Habitat: grasslands, short-	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			
grass prairie, sagebrush semi-desert															
<b>Flammulated owl</b> <i>(Otus flammeolus)</i> Habitat: Late-successional ponderosa pine and Douglas-fir forest	x				x					x					
<b>Gray Wolf</b> <i>(Canis lupus)</i> Habitat: Ample big game populations, security from human activities	x				x					x					
<b>Harlequin duck</b> <i>(Histrionicus histrionicus)</i> Habitat: White-water streams, boulder and cobble substrates	x				x					x					
<b>Northern bog lemming</b> <i>(Synaptomys borealis)</i> Habitat: Sphagnum meadows, bogs, fens with thick moss mats	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 foraging areas and/or wetlands	x				x					x					
<b>Pileated woodpecker</b> <i>(Dryocopus pileatus)</i> Habitat: Late-successional ponderosa pine and larch-fir forest	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				
<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>Big Game Species</b>																
<b>Elk</b>		x				x					x				Yes	2
<b>Whitetail</b>		x				x					x			Yes	2	
<b>Mule Deer</b>		x				x					x			Yes	2	
<b>Other</b>																
<b>Red Tail Hawk</b>		x				x				x				Yes	3	

*Comments:*

1. Harvest area is outside of the general habitat boundary for the greater sage-grouse.
2. During harvest, increased vehicular traffic and human activity may impact big game species. Hiding cover will be reduced with the harvest area.
3. A suspected unused red-tail hawk nest was found in the harvest area. It was not occupied during July/August when field work was being conducted. An approximately 1 acre area around the nest will not have any timber harvest. Should the nest be found to be active, a wildlife seasonal operational restriction will be put in place to mitigate effects to nesting hawks and fledglings.

*Wildlife Mitigations:* Seasonal operational restrictions to minimize adverse impacts to wildlife usage.

**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						

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>Action</b>														
Smoke		x			x				x				Yes	1
Dust	x				x				x					

*Comments:*

- 1) Slash consisting of tree limbs and tops and other vegetative debris would be piled throughout the project area during harvesting. Slash would ultimately be burned after harvesting operations have been completed. Burning would introduce particulate matter into the local airshed, temporarily affecting local air quality. Over 70% of emissions from prescribed burning are less than 2.5 microns (National Ambient Air Quality PM 2.5). High, short-term levels of PM 2.5 may be hazardous. Within the typical column of biomass burning, the chemical toxics are: Formaldehyde, Acrolein, Acetaldehyde, 1,4 Butadiene, and Polycyclic Organic Matter.

*Air Quality Mitigations:* Burning within the project area would be short in duration and would be conducted when conditions favor good to excellent ventilation and smoke dispersion as determined by the Montana Department of Environmental Quality and the Montana/Idaho Airshed Group. The DNRC, as a member of the Montana/Idaho Airshed Group, would burn only on approved days.

**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													
Aesthetics	x													
Demands on Environmental Resources of Land, Water, or Energy	x													
<b>Action</b>														
Historical or Archaeological Sites	x													
Aesthetics	x													
Demands on Environmental Resources of Land, Water, or Energy	x													

*Comments:*

Native American Tribes in Montana were scoped but none identified a specific cultural resource concern. A Class I (literature review) level review was conducted by the DNRC staff archaeologist for the area of potential effect (APE). This entailed inspection of project maps, DNRC's sites/site leads database,

land use records, General Land Office Survey Plats, and control cards. The Class I search revealed that no cultural or paleontological resources have been identified in the APE. Because of the overall steep terrain (from an archaeological perspective), a lack of springs, and the lack of geology that would suggest caves, rock shelters, or sources of tool stone, no additional archaeological investigative work will be conducted in response to this proposed development.

*Mitigations:* If previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.

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

- Grazing Lease

**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													
Industrial, Commercial and Agricultural Activities and Production	x													
Quantity and Distribution of Employment	x													
Local Tax Base and Tax Revenues	x													
Demand for Government Services	x													
Access To and Quality of Recreational and Wilderness Activities	x													
Density and Distribution of population and housing	x													
Social Structures and Mores	x													
Cultural Uniqueness and Diversity	x													
<b>Action</b>														
Health and Human Safety	x													
Industrial,	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			
Commercial and Agricultural Activities and Production															
Quantity and Distribution of Employment	x														
Local Tax Base and Tax Revenues	x														
Demand for Government Services	x														
Access To and Quality of Recreational and Wilderness Activities	x														
Density and Distribution of population and housing	x														
Social Structures and Mores	x														
Cultural Uniqueness and Diversity	x														

Comments: N/A

Mitigations: N/A

**Locally Adopted Environmental Plans and Goals:**

- Grazing Lease

**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 monetary return to the trust at this time.

**Action:** The timber harvest would generate additional revenue for the Common Schools Trust. The estimated return to the trust for the proposed harvest is \$39,000 based on an estimated harvest of 300,000 board feet (1,950 tons) and an overall stumpage value of \$20 per ton. An estimated \$2,598 in forest improvement funds would also be generated. 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.

DNRC. 2010. Montana Department of Natural Resources and Conservation Forested State Trust Lands Habitat Conservation Plan: Final EIS, Volume II, 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: Devin Healy**  
**Title: Helena Unit Forester**  
**Date: September 16<sup>th</sup> 2016**

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## Finding

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### Alternative Selected

The action alternative-DNRC would harvest approximately 300 thousand board feet (MBF) from 119 acres.

### Significance of Potential Impacts

No substantial or unacceptable, detrimental impacts to water, soil, fisheries or T & E or Sensitive Species are anticipated as a result of the proposed action.

The proposed timber sale complies with the following:

- ✓ The State Forest Land Management Plan (DNRC 1996),
- ✓ Administrative Rules for Forest Management (ARM 36.11.401 through 471),
- ✓ All other applicable state and federal laws

**Need for Further Environmental Analysis**

EIS

More Detailed EA

No Further Analysis

**Environmental Assessment Checklist Approved By:**

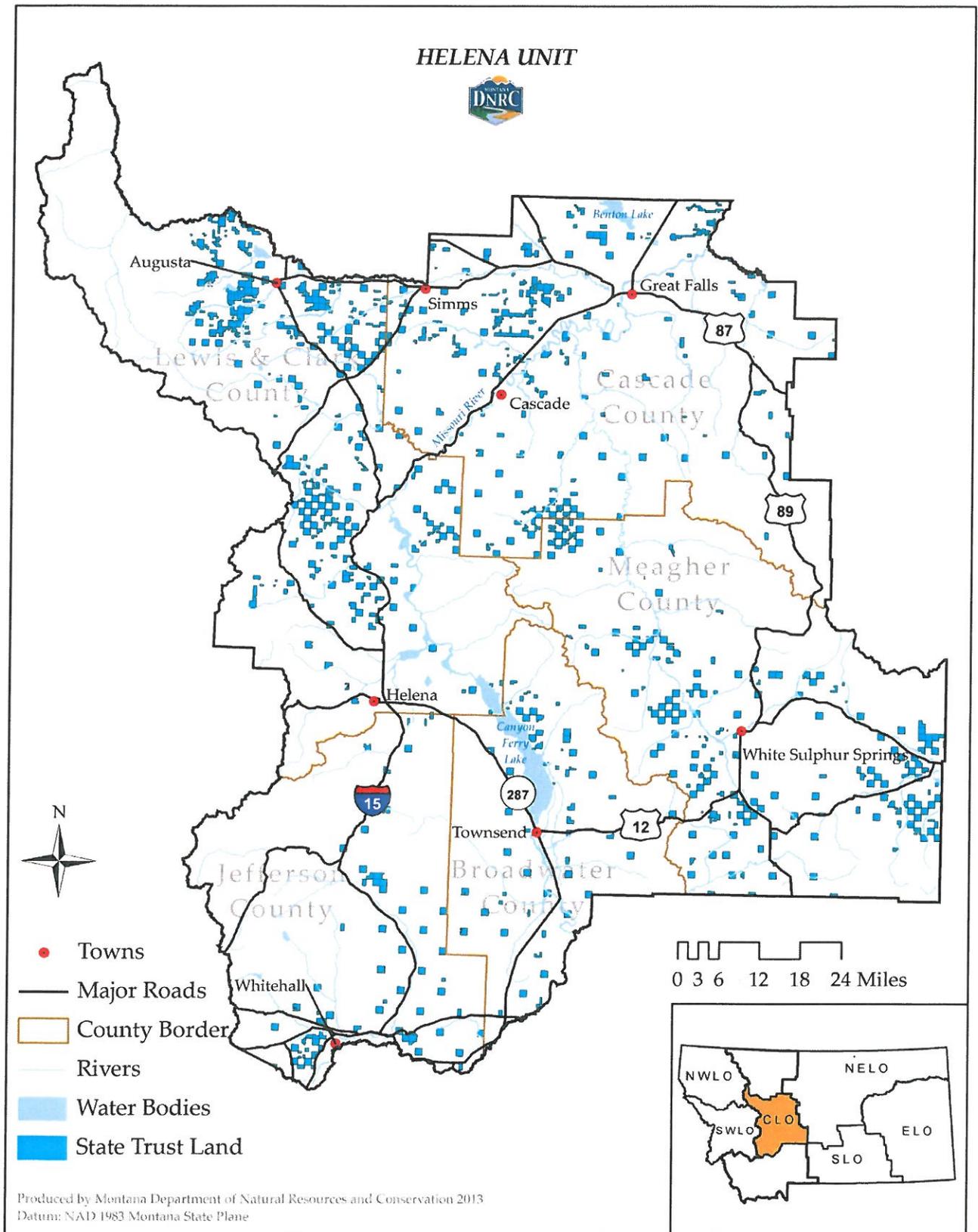
**Name: Andy Burgoyne**  
**Title: Helena Unit Manager**  
**Date: October 12, 2016**

**Signature:**



**Attachment A - Maps**

A-1: Timber Sale Vicinity Map



A-2: Timber Sale Harvest Units

Short Skid Timber Sale  
T7N R5E Section 16  
Broadwater County, MT

