

Environmental Assessment Checklist

Project Name: Dunn Creek Land Use License
Proposed Implementation Date: January, 2016
Proponent: Plum Creek Timberlands L.P.
County: Lincoln

Type and Purpose of Action

Description of Proposed Action:

The Libby Unit of the Montana Department of Natural Resources and Conservation (DNRC) is responding to an application by Plum Creek Timberlands L.P. requesting to use two open, existing, state roads for log hauling in calendar year 2016. The Dunn Creek LUL project is located approximately 2 miles north of Libby Unit (refer to Attachment A maps) and includes the following sections:

Beneficiary	Legal Description	Total Acres	Treated Acres
Common Schools	s.36 T31N R29W	640	
Public Buildings	s.34 T31N R29W	480	
MSU 2 nd 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:

- Adjacent land owner has requested use of two state roads to haul 175MBF of logs. Objectives include ensuring the use is authorized and trust is compensated.

Proposed activities include:

Action	Quantity
Proposed Harvest Activities	# Acres
Clearcut	
Seed Tree	
Shelterwood	

Action	Quantity
Selection	
Commercial Thinning	
Salvage	
Total Treatment Acres	
Proposed Forest Improvement Treatment	# Acres
Pre-commercial Thinning	
Planting	
Proposed Road Activities	# Miles
New permanent road construction	
New temporary road construction	
Road maintenance	
Road reconstruction	
Road abandoned	
Road reclaimed	
Other Activities	
Authorize use of existing open state road for log hauling in 2016 to Plum Creek	0.6 miles

Duration of Activities:	12 months
Implementation Period:	January 2016

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),
- The Montana DNRC Forested State Trust Lands Habitat Conservation Plan (HCP) (DNRC 2010)
- and all other applicable state and federal laws.

Project Development

SCOPING:

- DATE:
 - No external scoping was performed
- PUBLIC SCOPED:
 - No external scoping was performed
- AGENCIES SCOPED:
 - No external scoping was performed

- **COMMENTS RECEIVED:**
 - No external scoping was performed

DNRC specialists were consulted, including: Hydrologist & Soil scientist Marc Vessar; Wildlife Biologist Leah Breidinger; Forester and Project Leader Jeremy Rank

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.*)

- **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 www.dnrc.mt.gov/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-** 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.
- **Montana Department of Fish, Wildlife and Parks (DFWP)-** A Stream Protection Act Permit (124 Permit) is required from DFWP for activities that may affect the natural shape and form of a stream's channel, banks, or tributaries.

ALTERNATIVES CONSIDERED:

No-Action Alternative: Do not issue license that authorized use of state road. This would cause Plum Creek to not have access to ≈90 acres of harvest unit.

Action Alternative: Issue License authorizing the use of existing state road generating revenue for both Public Buildings and Common School trusts and working toward a comprehensive transportation plan that minimizes roads on the landscape.

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: Road surface is vegetated with grasses and cut/fill slopes are fully vegetated by grasses, forbes and 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				y	V-1
Rare Plants	x				x				x					
Vegetative community	x				x				x					
Old Growth	x				x				x					

Comments: V-1 Low direct impact is expected as this is an open road with existing populations of weeds common to the area (spotted knapweed). Noxious weeds would be monitored and addressed through an integrated weed management program.

Vegetation Mitigations: No travelling off of existing road surface

SOIL DISTURBANCE AND PRODUCTIVITY:

Soil Disturbance and Productivity Existing Conditions: The roads requested for temporary use are existing and would not require reconstruction. Roads were reconstructed in the late 1980's with surface drainage installed.

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														

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					1
Erosion	X				X					X							2
Nutrient Cycling	X				X				X								
Slope Stability	X				X				X								
Soil Productivity	X				X				X								
Action																	
Physical Disturbance (Compaction and Displacement)		X				X							X				1
Erosion		X				X				X							2
Nutrient Cycling	X				X				X								
Slope Stability	X				X				X								
Soil Productivity	X				X				X								

Comments:

- 1) Road prisms are intentionally compacted for durability and safety. Additional compaction from use would be expected but very limited.
- 2) Removal of vegetation from road surface during maintenance activities would likely result in a higher risk of erosion than a fully vegetated road prism. As long as Forestry BMPs are followed, a low risk of adversely impacting water quality would be expected.

Soil Mitigations:

Follow Forestry BMPs for all road activities including managing season of use.

WATER QUALITY AND QUANTITY:

The project does not include any vegetation removal or disturbance beyond routine road maintenance.

Water Quality and Quantity Existing Conditions: The existing roads requested for use cross only one Class 2 stream in section 36 T31N, R29W. This channel flows less than 6 months of the year and does not provide fisheries habitat near the road location.

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							1
Water Quantity																	2

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		
Action														
Water Quality	X				X					X				1
Water Quantity														2

Comments:

- 1) Road crossings in general present a higher risk of sediment than an undisturbed channel. The implementation of Forestry BMPs and the characteristics of the stream maintains a low risk of low impacts to fisheries from sediment delivery.
- 2) Because this Temporary Road Use would not negatively or positively affect water quantity and therefore is not analyzed.

Water Quality & Quantity Mitigations:

Follow Forestry BMPs for all road activities including managing season of use.

FISHERIES:

Fisheries Existing Conditions: The existing roads cross to channel identified as intermittent on USGS maps. Field recon by Libby Unit personnel identified no scoured channel and no culvert on the road in section 34, which field verifies this as an ephemeral draw. The channel in section 36 utilizes an 18-inch culvert on a stream estimated to flow less than 6 months of the year. Due to the steepness of the channel (~20%) and the intermittent flow characteristics, this channel does not provide fisheries habitat near the requested road use location.

No-Action: No direct or indirect 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		
No-Action														
Sediment	X				X					X				1
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					
Action														
Sediment		X				X				X				1

Fisheries	Impact												Can Impact Be Mitigated?	Comment Number	
	Direct				Secondary				Cumulative						
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High			
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						

Comments:

- 1) Road crossings in general present a higher risk of sediment than an undisturbed channel. The implementation of Forestry BMPs and the characteristics of the stream maintains a low risk of low impacts to fisheries from sediment delivery.

Fisheries Mitigations: Follow Forestry BMPs for all road activities including managing season of use

WILDLIFE:

No-Action: None of the proposed activities would occur and no disturbance associated with log hauling would occur.

Action Alternative (see Wildlife table below): The following impacts would be anticipated (see 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			
Threatened and Endangered Species															
Grizzly bear <i>(Ursus arctos)</i> Habitat: Recovery areas, security from human activity		X				X				X				Y	WI-1
Canada lynx <i>(Felix lynx)</i> Habitat: Subalpine fir habitat types, dense sapling, old forest, deep snow zone	X				X				X						
Wolverine <i>(Gulo gulo)</i>	X				X				X						
Sensitive Species															
Bald eagle	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		
<i>(Haliaeetus leucocephalus)</i> Habitat: Late-successional forest within 1 mile of open water														
Black-backed woodpecker <i>(Picooides arcticus)</i> Habitat: Mature to old burned or beetle-infested forest	X				X				X					
Coeur d'Alene salamander <i>(Plethodon idahoensis)</i> Habitat: Waterfall spray zones, talus near cascading streams	X				X				X					
Columbian sharp-tailed grouse <i>(Tympanuchus Phasianellus columbianus)</i> Habitat: Grassland, shrubland, riparian, agriculture	X				X				X					
Common loon <i>(Gavia immer)</i> Habitat: Cold mountain lakes, nest in emergent vegetation	X				X				X					
Fisher <i>(Martes pennanti)</i> Habitat: Dense mature to old forest less than 6,000 feet in elevation and riparian	X				X				X					
Flammulated owl <i>(Otus flammeolus)</i> Habitat: Late-successional ponderosa pine and Douglas-fir forest	X				X				X					
Gray Wolf <i>(Canis lupus)</i>	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			
Habitat: Ample big game populations, security from human activities															
Harlequin duck <i>(Histrionicus histrionicus)</i> Habitat: White-water streams, boulder and cobble substrates	X				X				X						
Northern bog lemming <i>(Synaptomys borealis)</i> Habitat: Sphagnum meadows, bogs, fens with thick moss mats	X				X				X						
Peregrine falcon <i>(Falco peregrinus)</i> Habitat: Cliff features near open foraging areas and/or wetlands	X				X				X						
Pileated woodpecker <i>(Dryocopus pileatus)</i> Habitat: Late-successional ponderosa pine and larch-fir forest	X				X				X						
Townsend's big-eared bat <i>(Plecotus townsendii)</i> Habitat: Caves, caverns, old mines	X				X				X						
Big Game Species															
Elk		X				X				X				Y	WI-2
Whitetail		X				X				X				Y	WI-2
Mule Deer		X				X				X				Y	WI-2
Other															

Comments:

WI-1 Grizzly Bear – The Project Area is located outside of recovery zone and non-recovery occupied habitat (USFWS 1993, Wittinger 2002); however, grizzly bears may occasionally pass

through the area. Hauling would occur for a short time period over the course of one year on 0.6 miles of roads on DNRC lands. Considering the short time period, that no new roads would be constructed, and that no changes to habitat would occur adverse impacts are anticipated to be minimal.

WI-2 Big game – The area proposed for a road use permit is considered big game winter range by DFWP (2008)(DFWP 2008). The proposed activities may displace local deer and elk using nearby stands for portions of the 2015/2016 and 2016/2017 winters.

Wildlife Mitigations:

- If a threatened or endangered species is encountered, consult a DNRC biologist immediately. Similarly, if undocumented nesting raptors or wolf dens are encountered within ½ mile of the Project Area contact a DNRC biologist.

References:

DFWP. 2008. Maps of moose, elk, mule deer, and white-tailed deer distribution in Montana. Individual GIS data layers. Available online at:
<http://fwp.mt.gov/gisData/imageFiles/distributionElk.jpg>
<http://fwp.mt.gov/gisData/imageFiles/distributionMoose.jpg>
<http://fwp.mt.gov/gisData/imageFiles/distributionMuleDeer.jpg>
<http://fwp.mt.gov/gisData/imageFiles/distributionWhiteTailedDeer.jpg>.
 USFWS. 1993. Grizzly bear recovery plan. Missoula, MT.
 Wittinger, W. 2002. Grizzly bear distribution outside of recovery zones. Unpublished memorandum on file at USDA Forest Service, Region 1, Missoula, MT.

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		
No-Action														
Smoke	x				x				x					
Dust	x				x				x					
Action														
Smoke	x				x				x					
Dust	x				x				x					

Comments: No impacts are expected with the proposed action.

Air Quality Mitigations: no mitigations are required

ARCHAEOLOGICAL SITES / AESTHETICS / DEMANDS ON ENVIRONMENTAL RESOURCES:

Will Alternative result in potential	Impact						Can Impact Be Mitigated?	Comment Number
	Direct		Secondary		Cumulative			

impacts to:	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: No impacts are expected with the proposed action.

Mitigations: No mitigations are required.

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.*

- There are no other MEPA actions, studies, plans or projects on these tracts.

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				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						

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						
Action															
Health and Human Safety	x				x				x						
Industrial, Commercial and Agricultural Activities and Production		x			x				x						HP-1
Quantity and Distribution of Employment		x			x				x						HP-1
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: HP-1 Authorizing the use of these roads will allow a logging crew of ≈6 people to continue working and producing in this area for another 2 months.

Mitigations: No mitigations are required.

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.

- There are no known locally adopted environmental plans and goals for the tracts under the proposed license.

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 issuance of a license would generate additional revenue for the Public Buildings and Common School Trusts. The estimated return to the trust for the proposed harvest is \$150.00 for PB, \$375.00 for CS based on an estimated haul of 50,000 and 125,000 board feet at a rental rate of \$3.00/MBF. 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: Jeremy Rank
Title: Management Forester
Date: January 25, 2016

Finding

Alternative Selected

The proposed action alternative has been selected and it is recommended that a LUL be granted to Plum Creek for the temporary use of the existing state road.

Significance of Potential Impacts

The potential for significant impacts to the trust land is minimal due to the nature of the proposed action which is to grant permission to use an existing forest access road for a limited duration of time.

Need for Further Environmental Analysis

EIS

More Detailed EA

No Further Analysis

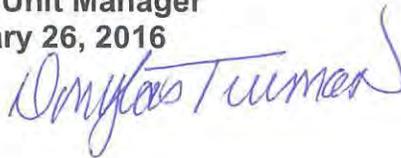
Environmental Assessment Checklist Approved By:

Name: Douglas Turman

Title: Libby Unit Manager

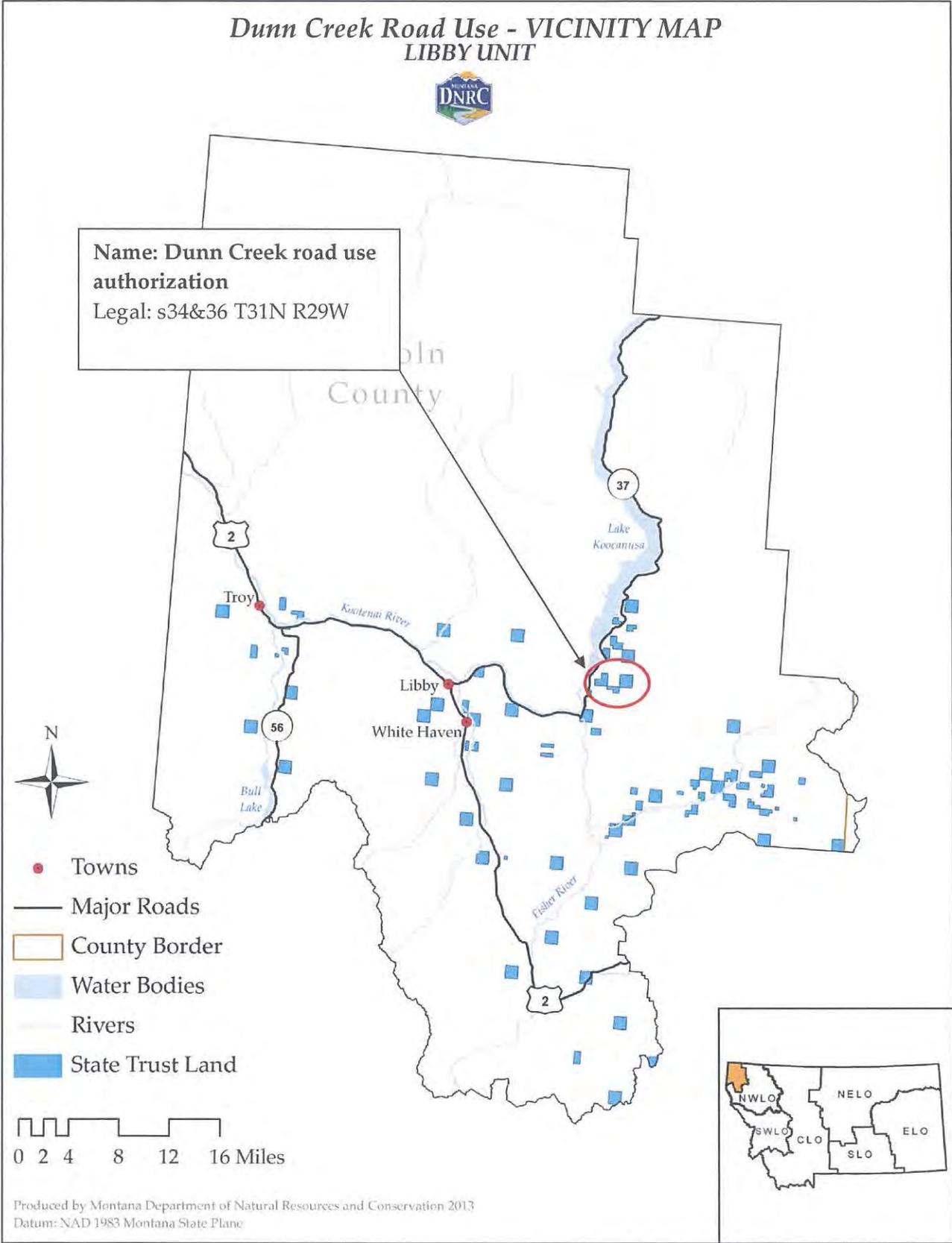
Date: January 26, 2016

Signature:



Attachment A- Maps

A-1: Vicinity Map



A-2: Area Map

attachment A

