

## Environmental Assessment Checklist

**Project Name:** Tuppers Lake Land Use License  
**Proposed Implementation Date:** July 2016  
**Proponent:** Clearwater Unit, Southwestern Land Office, Montana DNRC  
**County:** Missoula

### Type and Purpose of Action

**Description of Proposed Action:**

The Nature Conservancy (TNC) is proposing to construct and maintain a non-winter, non-motorized trail on DNRC-managed lands under a Land Use License (LUL) authorization. The project is located north of Tuppers Lake in S ½ NE ¼ Section 8, Township 16 North, Range 15 West (refer to A-2: Project Area map) and includes the following DNRC-managed sections:

Beneficiary	Legal Description	Total Acres	Miles of Trail
Montana State University	S ½ NE ¼ Section 8, T16N R15W	80	0.233

This proposal would occur in conjunction with trail construction by TNC on their Clearwater Blackfoot LLC lands in N ½ SE ¼ Section 8, Township 16 North, Range 15 West. Once complete, a trail system would encircle Tuppers Lake across two ownerships and be open for public use under TNC’s management.

Proposed activities include:

Action	Quantity
<b>Proposed Activities</b>	<b># Miles</b>
New trail construction, maintenance, and land use license issuance	0.233
<b>Duration of Activities:</b>	Into perpetuity, barring land use license cancellation
<b>Implementation Period:</b>	Summer 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 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).

DNRC manages the 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.

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## Project Development

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### SCOPING:

- DATE:
  - June 17, 2016
- PUBLIC SCOPED:
  - Adjacent landowners, TNC, trail-user groups
- AGENCIES SCOPED:
  - Montana Fish, Wildlife and Parks (FWP), Missoula County
- COMMENTS RECEIVED:
  - How many: 5 comments and 2 requests for additional information.
  - Comments and requests:
    - 1) Rachel Feigley, US Forest Service Seeley Lake District Ranger, asked if handicap access would be provided.
    - 2) Ladd Knotek, FWP Fisheries Biologist, noted that they are no longer stocking fish in Tuppers Lake.
    - 3) Sharon Rose, FWP Administrative Support, asked for clarification on the following:
      - a. It's a non-winter trail. Does this mean no one can use it in the winter--not XC skiers, snowshoers, and/or fat-tire bicycles?
      - b. If it's closed part of the year, what season/s or dates would it be open to public use?
      - c. It's non-motorized, so bicycles are OK?
      - d. On the aerial map, are the little double-yellow symbols and the one double-blue symbol gates?
    - 4) Kali Becher, Missoula County Rural Landscape Scientist, sent a letter in support of the project.
    - 5) Chris Lorentz, Seeley Lake ROCKS, sent an email in support of the project.
    - 6) Carol Fowler and Jeff Turek sent an email expressing opposition to further development at Tuppers Lake.

'My husband and I are residents of Seeley Lake who live less than 2 miles from Tuppers Lake. We hike there often so I can offer my insight of a frequent visitor. We are adamantly opposed to any further development of that lake. As of now, it is the only undeveloped lake in the area yet still has access by dirt road. During my visits, I have noted that many water birds nest there and raise their young on the lake. Sandhill cranes also use the lake and surrounding areas for hunting and possible nesting. The wildlife will definitely be adversely impacted by increased ATV noise, fishing activities and camping by the lake. With so many other lakes available for use and already developed (especially Placid Lake which is very close by), it appears not only unnecessary to develop Tuppers Lake, but would be beneficial for the wildlife to try to leave them ONE lake undeveloped. Bears, deer and elk frequent the area and

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also use the lake. Other areas are gated to decrease motorized and human impact on the animals, so it seems that Tuppers Lake would be a good area to exempt from development because of the extensive wildlife in the area that it would affect.'

- 7) Carol Fowler sent a second email expressing opposition to the work that has been completed on the existing road and TNC ground.

'I was just by Tuppers Lake today and spoke to a Nature Conservancy worker who was working on a trail. Although you asked for public comment until July 19 on proposed trail and road construction on the site by Nature Conservancy ( which I sent to you yesterday), it appears that many of the proposed changes are already finished. It appears that the public input is moot.'

o Results:

- 1) Handicap access is not anticipated to be provided on the DNRC-portion of the proposed trail construction. Chris Bryant, TNC W. MT Land Protection Director, committed to providing handicap access to a picnic area which accesses Tupper Lake on their managed property to the south.
- 2) No changes to the proposed project.
- 3) The following clarifications were provided:
  - a. The proposed trail width is 12 to 18 inches. Non-winter, non-motorized means that no non-winter, motorized vehicles (i.e. motorcycles, ATVS, etc.) would be authorized. Some motorized, winter use such as snowmobiles *may* occur but the trail wouldn't be designed for it. XC skiers, snowshoers, and/or fat-tire bicycles could potentially use the trail. But, the route into Tuppers Lake isn't plowed past Riverview Drive and is frequently used as a snowmobile route. There are no plans to change this. As such, anecdotally, there isn't much winter, non-motorized use in the vicinity nor is a future increase anticipated.
  - b. Seasonal closures due to soft trail conditions may be considered. Spring and/or fall restrictions are a possibility.
  - c. Bicycle use would be authorized during appropriate trail conditions. If user-conflict occurred, uses could be altered as needed.
  - d. On the aerial map, the double-yellow symbols and one double-blue symbol are located on TNC and will not be directly analyzed as part of this project proposal. To DNRC's understanding, the double-yellow symbols denote the boundaries where the existing road is proposed to be converted into a trail and the double-blue symbol is a gate. Please contact Chris Bryant, TNC W. MT Land Protection Director, for more information.
- 4) No changes to the proposed project.
- 5) No changes to the proposed project.
- 6) The proposed trail would be developed for non-motorized use. No changes to existing camping or ATV access on DNRC are proposed. No increased fishing activities are anticipated due to the lack of fish stocking noted by Ladd Knotek in comment 2. Please review the Wildlife section to review anticipated impacts to wildlife.

- 7) We apologized for any misunderstanding. In this instance, the public comment request was limited to the proposed non-motorized trail construction on DNRC which has not occurred prior to completion of the environmental analysis. The scoping request didn't include routine road maintenance which occurred on the access road or any trail construction which may have occurred on TNC-managed ground.

DNRC specialists were consulted, including: Garrett Schairer, Jeff Collins, and Patrick Rennie.

Internal and external issues and concerns were incorporated into project planning and design and will be implemented in the associated Land Use License.

**OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:**

*(Conservation Easements, Army Corps of Engineers, road use permits, etc.)*

- None.

**ALTERNATIVES CONSIDERED:**

**No-Action Alternative:** A Land Use License would not be issued; the trail would not be constructed or maintained. General recreational use would occur in the area on existing primitive camping sites and open roads. TNC would perform additional trail construction on TNC-managed land.

**Action Alternative:** A Land Use License would be issued; the trail would be constructed and maintained by TNC. The trail construction on DNRC would connect to additional trail construction on TNC-managed land.

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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:** Existing vegetation is a forested setting including riparian areas. Some noxious weeds are present as well.

**No-Action Alternative:** No change in vegetation would result beyond firewood cutting and any future forest management.

**Action Alternative:** Low direct impacts to the existing vegetative community are expected to occur as a result of 1,231 feet of proposed new trail construction. This would result in approximately 0.28 acres of disturbance on the DNRC-managed lands assuming a 12- to 18-inch trail located within a 10-foot total right-of-way width in which additional brushing or tree removal may occur. Trail construction, maintenance, and a land use license may increase overall weed presence without active management. However, project implementation is not expected to impact traditional overall forest management because recreational use would remain a secondary land use under the terms of the land use license.

Low secondary and cumulative impacts to the existing vegetative community are expected to occur as a result of the proposed work on TNC. This is based upon the small acreage expected to be impacted by the activities relative to the overall parcel.

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				Y	V1
Rare Plants	X				X				X					
Vegetative community	X				X				X					
Old Growth	X				X				X					
<b>Action</b>														
Noxious Weeds			X		X				X				Yes	V2
Rare Plants	X				X				X					
Vegetative community		X				X				X			Yes	V2
Old Growth	X				X				X					

*Comments:* Jeff Collins, DNRC Hydrologist, expressed concerns that the trail construction, maintenance, and Land Use License would conflict with Forest Management and may result in noxious weed spread.

*Vegetation Mitigations:*

V1. Noxious weeds would continue to be present and may multiply. Weed spraying or biocontrol placement may occur as current budgets are made available.

V2. Grass seeding the new trail construction is expected to mitigate for disturbance to the vegetative community through minimization of noxious weed establishment. The small amount of disturbance associated with the new trail construction is otherwise not expected to alter the landscape vegetative communities. Weed spraying requirements associated with the Land Use License may decrease overall weed presence in the project area.

The proposed trail work on TNC can't be mitigated by DNRC actions. However, it is assumed that TNC would carry out mitigation measures similar to those proposed on DNRC-managed land.

**SOIL DISTURBANCE AND PRODUCTIVITY:**

**Soil Existing Conditions:** Existing soil conditions are consistent with active resource management. Disturbance has occurred but overall soil productivity is at acceptable levels. Erosion associated with an open road is evident on the south side of Tuppers Lake on TNC-managed ground.

**No-Action Alternative:** No change in soil disturbance and productivity on DNRC would result, existing use of primitive camp sites and open roads would continue with some erosion consistent with the intensity of use and levels of maintenance.

Low secondary and cumulative impacts to physical disturbance, erosion, and soil productivity are expected to occur as a result of the proposed work on TNC. No slope instability identified. This is based upon the net positive impacts anticipated as a result of converting an existing open road located on the south shore of Tuppers Lake into primarily a non-winter, non-motorized trail with a portion of trail designated handicap accessible.

**Action Alternative:** Low direct impacts to physical disturbance, erosion, and soil productivity are expected to occur as a result of 1,231 feet of proposed new trail construction with a narrow width of construction.

Low secondary and cumulative impacts to physical disturbance, erosion, slope stability, and soil productivity are expected to occur as a result of the proposed work on TNC. This is based upon the net positive impacts anticipated as a result of converting an existing open road located on the south shore of Tuppers Lake into primarily a non-winter, non-motorized trail with a portion of trail designated handicap accessible.

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			Yes	S1
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	S1
Erosion		X				X			X	X			Yes	S1
Nutrient Cycling	X				X				X					
Slope Stability	X				X				X					
Soil Productivity		X				X				X			Yes	S1

Comments:

Soil Mitigations:

S1: New trail construction on DNRC would have adequate drainage installed and disturbed areas would be grass seeded. This is expected to mitigate for disturbance to soil stability or erosion by providing timely vegetative cover. Physical disturbance and soil productivity impacts would be minimized through trail width management.

On TNC, the road to trail conversion is expected to reduce existing impacts to soils. The proposed trail work on TNC can't be mitigated by DNRC actions. However, it is assumed that TNC would carry out mitigation measures similar to those proposed on DNRC-managed land.

**WATER QUALITY AND QUANTITY:**

**Water Quality and Quantity Existing Conditions:** Tuppers Lake, a fish-bearing waterbody, is associated with the proposed project.

**No-Action Alternative:** No change in water quality and quantity on DNRC would result, existing use of primitive camp sites and open roads would continue. Wetlands occur adjacent to Tupper's Lake but are not located along the proposed trail.

Low secondary and cumulative impacts to water quality and quantity are anticipated to occur as a result of the proposed work on TNC. This is based upon the net positive impacts anticipated as a result of

converting an existing open road located on the south shore of Tuppers Lake into primarily a non-winter, non-motorized trail with a portion of trail designated handicap accessible.

**Action Alternative:** No change in water quality and quantity on DNRC is expected to result from the proposed trail construction and maintenance due to the trail's location away from Tuppers Lake.

Low secondary and cumulative impacts to water quality and quantity are anticipated to occur as a result of the proposed work on TNC. This is based upon the net positive impacts anticipated as a result of converting an existing open road located on the south shore of Tuppers Lake into primarily a non-winter, non-motorized trail with a portion of trail designated handicap accessible.

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			Yes	WQ1
Water Quantity	X					X				X			Yes	WQ1
<b>Action</b>														
Water Quality	X					X				X			Yes	WQ1
Water Quantity	X					X				X			Yes	WQ1

Comments:

Water Quality & Quantity Mitigations:

WQ1: The proposed trail is located away from the lake edge and has low potential for sediment runoff based on location and installing trail drainage where needed. The proposed trail work on TNC can't be mitigated by DNRC actions. However, it is assumed that TNC would carry out mitigation measures similar to those DNRC would typically follow.

**FISHERIES:**

**Fisheries Existing Conditions:** Westslope cutthroat trout and rainbow trout occur in Tupper's Lake, but no Bull trout or T&E aquatic species, (MFISH 2016).

**No-Action Alternative:** On DNRC, there are no stream crossings or sources of sediment delivery to surface waters, no direct effects to fisheries would occur.

On TNC, low secondary and cumulative impacts to sediment are anticipated to occur as a result of converting an existing open road located on the south shore of Tuppers Lake into primarily a non-winter, non-motorized trail.

**Action Alternative:** On DNRC, there are no proposed stream crossings or sources of sediment delivery to surface waters nor would the trail construction alter vegetation in a manner to impact woody debris, shading or temperature; no direct effects to fisheries would occur.

On TNC, low secondary and cumulative impacts to sediment are anticipated to occur as a result of converting an existing open road located on the south shore of Tuppers Lake into primarily a non-winter, non-motorized trail.

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			Yes	F1
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			Yes	F1
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:

Fisheries Mitigations:

F1: The proposed trail work on TNC can't be mitigated by DNRC actions. However, it is assumed that TNC would carry out mitigation measures similar to those DNRC would typically follow.

**WILDLIFE:**

**Wildlife Existing Conditions:** The project area is a mix of forested ponderosa pine and Douglas-fir-western larch stands. The project area partially includes Tuppers Lake, which is a relatively small freshwater pothole lake. Generally the area supports a variety of native wildlife species that rely on relatively mature dry upland ponderosa pine and Douglas-fir stands. Additionally, the area supports a variety of wildlife species that use the aquatic habitats in Tuppers Lake and could concentrate some terrestrial wildlife using the surrounding uplands due to the presence of water and aquatic habitats. The project area is 6-7 miles from the 2 different subunits of the Northern Continental Divide Ecosystem grizzly bear recovery area and is in occupied' grizzly bear habitat as mapped by grizzly bear researchers and managers to address increased sightings and encounters of grizzly bears in habitats outside of recovery zones (Wittinger et al. 2002). Individual animals likely use the project area while dispersing and/or foraging. Potential lynx habitat exists in the section, but the proposed trail construction, maintenance and use LUL would not occur in those areas identified as suitable Canada lynx habitats. The nearest known bald eagle territory is more than 2 miles away from the proposed project, however some use of the project area by bald eagles could occur given the proximity of Tuppers Lake. Potential habitat exists for flammulated owls and pileated woodpeckers in the project area. The Belmont wolf pack has been in the vicinity in the past, but use of the project area has not been documented. Big game summer habitat exists in the vicinity, but winter range is absent from the project area and big game security habitat does not exist in the vicinity of the proposed trail.

**No-Action Alternative:**

No changes to human access would occur. Existing levels of human disturbance and displacement would likely continue into the future. Existing potential for wildlife/conflict would not change. No changes to existing potential for humans introducing wildlife attractants would occur. No appreciable changes to wildlife use of the project area would be anticipated. No alterations to existing habitats would occur. Continued forest maturation could improve pileated woodpecker habitats, but could reduce habitat quality for flammulated owls over the long term. Generally, negligible direct, indirect, or cumulative effects would occur.

**Action Alternative:**

Non-motorized human access would increase in the project area. Roughly 0.25 mile of additional non-motorized access would facilitate mountain biking, hiking, running, and equestrian uses, all which may further disturb wildlife in the project area. Elevated disturbance levels would likely cause some wildlife to abandon the area, some wildlife would be habituated to the use, and some would likely alter their use patterns to avoid the disturbance. Much of the proposed trail would exist behind a vegetative buffer from the lake, affording wildlife using the aquatic habitats associated with Tuppers Lake some screening from any potential human disturbance. Collectively, a minor reduction in use of the area by certain wildlife would be anticipated given the elevated human access and disturbance. In general, the additional human access could increase the potential for wildlife/human conflicts in the project area. The increased human access would also facilitate the introduction of wildlife attractants to the project area, which could habituate resident wildlife. A small amount of dry coniferous forested habitats would be removed with the proposed trail construction, but these reductions would not appreciably alter the availability of these habitats in the project area. Associated activities on adjacent ownerships to reduce disturbance near Tuppers Lake has benefitted wildlife using those aquatic habitats and shows the willingness of the proponent to try to exclude motorized uses that could unnecessarily disturb wildlife in the vicinity; efforts to preclude motorized activities and the associated disturbance of wildlife would be expected to continue onto the DNRC parcel as the proposed trail construction and use would pass onto the DNRC managed parcel.

Wildlife	Effects								Can Impact be Mitigated?	Comment Number
	Direct and Indirect				Cumulative					
	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			Y	W-1
<b>Canada lynx</b> ( <i>Felix lynx</i> ) Habitat: Subalpine fir habitat types, dense sapling, old forest, deep snow zone	X				X					

Wildlife	Effects								Can Impact be Mitigated?	Comment Number
	Direct and Indirect				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High		
<b>Sensitive Species</b>										
<b>Bald eagle</b> <i>(Haliaeetus leucocephalus)</i> Habitat: Late-successional forest less than 1 mile from open water		X				X				W-2
<b>Black-backed woodpecker</b> <i>(Picoides arcticus)</i> Habitat: Mature to old burned or beetle-infested forest	X				X					
<b>Coeur d'Alene salamander</b> <i>(Plethodon idahoensis)</i> Habitat: Waterfall spray zones, talus near cascading streams	X				X					
<b>Columbian sharp-tailed grouse</b> <i>(Tympanuchus Phasianellus columbianus)</i> Habitat: Grassland, shrubland, riparian, agriculture	X				X					
<b>Common loon</b> <i>(Gavia immer)</i> Habitat: Cold mountain lakes, nest in emergent vegetation	X				X					
<b>Fisher</b> <i>(Martes pennanti)</i> Habitat: Dense mature to old forest less than 6,000 feet in elevation and riparian	X				X					
<b>Flammulated owl</b> <i>(Otus flammeolus)</i> Habitat: Late-successional ponderosa pine		X				X			Y	W-3

Wildlife	Effects								Can Impact be Mitigated?	Comment Number
	Direct and Indirect				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High		
and Douglas-fir forest										
<b>Gray Wolf</b> ( <i>Canis lupus</i> ) Habitat: Ample big game populations, security from human activities		X				X			Y	W-4
<b>Harlequin duck</b> ( <i>Histrionicus histrionicus</i> ) Habitat: White-water streams, boulder and cobble substrates	X				X					
<b>Northern bog lemming</b> ( <i>Synaptomys borealis</i> ) Habitat: Sphagnum meadows, bogs, fens with thick moss mats	X				X					
<b>Mountain plover</b> ( <i>Charadrius montanus</i> ) Habitat: short-grass prairie & prairie dog towns	X				X					
<b>Peregrine falcon</b> ( <i>Falco peregrinus</i> ) Habitat: Cliff features near open foraging areas and/or wetlands	X				X					
<b>Pileated woodpecker</b> ( <i>Dryocopus pileatus</i> ) Habitat: Late-successional ponderosa pine and larch-fir forest		X				X			Y	W-5
<b>Townsend's big-eared bat</b> ( <i>Plecotus townsendii</i> ) Habitat: Caves, caverns, old mines	X				X					

Wildlife	Effects								Can Impact be Mitigated?	Comment Number
	Direct and Indirect				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High		
<b>Wolverine</b> ( <i>Gulo gulo</i> ) Habitat: Alpine tundra and high-elevation boreal forests that maintain deep persistent snow into late spring	X				X					
<b>Big Game Species</b>										
<b>Elk</b>		X				X			Y	W-6
<b>Whitetail</b>		X				X			Y	W-6
<b>Mule Deer</b>		X				X			Y	W-6
<b>Moose</b>		X				X			Y	W-6
<b>Other</b>	X				X					

*Comments:*

W-1. This alternative might affect grizzly bears directly through increased noise and human activity. Activities in grizzly bear habitats reduce grizzly bear security, possibly resulting in increased stress and/or energy expenditure to endure the disturbance or to move from the area. Trail construction, maintenance, and use would likely disturb grizzly bears should they be using the area. Negligible changes to grizzly bear hiding cover would be anticipated with the anticipated clearing along the trail. No changes to motorized human access would occur since no new roads would be constructed or opened to motorized access. However, long-term use of roughly 0.25 miles of trail in the project area would increase open-road density (which includes high-use trails) in the project area from 3.26 miles per square mile (simple linear calculation) to 3.72 miles per square mile (simple linear calculation). People using the trail could also introduce unnatural bear foods or attractants (such as garbage); mitigations requiring any of these unnatural bear foods or attractants be kept in a bear resistant manner should minimize any added risk to grizzly bears associated with unnatural bear foods or attractants.

W-2 The proposed easement and associated trail construction and use would not likely affect the nesting pair of bald eagles on Placid Lake. It is unknown how much this pair utilizes Tuppers Lake, but likely only uses the vicinity for foraging. Proposed construction activities could occur during the nesting season (February 1 –August 15), or the non-nesting (August 16-February 1) season. Negligible levels of disturbance to potential bald eagle foraging areas could occur should any activities be conducted during the nesting period. Conversely, should activities be conducted during the non-nesting period, no disturbance to bald eagles would be anticipated. Non-motorized trail use would be expected to have negligible effects to any potential bald eagle foraging that may occur on Tuppers Lake. Negligible reductions in the availability of large snags or emergent trees that could be used as nest or perch trees could occur in the home range. Within the cumulative effects analysis area, similar effects would be anticipated with the continuation of the trail on adjacent ownerships. A variety of other forms of human disturbance exist within the territory, and proposed disturbance associated with trail construction and use would have negligible cumulative effects to nesting bald eagles.

W-3 There are approximately 150 acres of potential flammulated owl habitats in ponderosa pine and dry Douglas-fir stands across the project area. Portions of the project area and cumulative effects analysis area have been harvested in the recent past, potentially improving flammulated owl habitat by creating foraging areas and reversing a portion of the Douglas-fir encroachment and opening up stands of ponderosa pine; however retention of large ponderosa pine and/or Douglas-fir was not necessarily a consideration in some of these harvest units, thereby minimizing the benefits to flammulated owls. Flammulated owls can be tolerant of human disturbance (McCallum 1994), however the potential for slightly elevated disturbance levels during proposed trail construction activities could negatively affect flammulated owls should activities occur when flammulated owls are present. Negligible or no effects to flammulated owls would be anticipated from non-motorized trail use. No changes in snag availability would be anticipated, thus no appreciable changes in nesting habitats would be expected. Elevated human disturbance in the cumulative-effects analysis area would be additive to disturbance associated with the ongoing timber management projects as well as any disturbance from the use of the open roads and general recreational use of the area.

W-4 Although the project area has not been included in the annual home ranges of any known wolf packs, a couple of wolf packs are in the vicinity, including the Belmont pack to the west and the Inez and Morrell Mountain wolf packs to the east. No known den or rendezvous sites occur in the project area, but some use of the project area by wolves could occur for breeding, hunting, or other life requirements. Big game species exist in the vicinity of the project area. Wolves using the area could be disturbed by proposed activities and are most sensitive at den and rendezvous sites, which are not known to occur in the project area or within 1 mile of the project area. Disturbance at potential den sites and rendezvous sites could occur if construction were to occur during the spring period. Some potential for disturbance at den and rendezvous sites would be possible associated with potential spring use of the trail. Should either a den or rendezvous site be identified within 1 mile of the project area, a DNRC biologist would be consulted to determine if additional mitigations would be necessary. In the short-term, the proposed activities could lead to slight shifts in big game use, which could lead to a shift in wolf use of the area. No appreciable changes in big game habitats would occur, thus no changes in wolf prey abundance would be expected. Elevated human-disturbance levels would be anticipated in a small portion of the cumulative effects analysis area. No substantive change in wolf use of the cumulative-effects analysis area would be expected; wolves could continue to use the area in the long-term.

W-5 Roughly 91 acres of pileated woodpecker nesting habitat exist in the project area. Minor disturbance to pileated woodpeckers could occur if proposed trail construction activities occur during the nesting period; negligible disturbance to pileated woodpeckers would be anticipated with non-motorized use of the trail in the future. No appreciable changes to snags, snag recruits or overall forested canopy closure would be anticipated, thus negligible effects to pileated woodpecker habitats would be anticipated associated with the proposed trail construction. Elevated human disturbance in the cumulative-effects analysis area would be additive to disturbance associated with the ongoing timber management projects as well as any disturbance from the use of the open roads and general recreational use of the area.

W-6 No big game winter range exists in the project area; summer range for white-tailed deer, mule deer, elk, and moose is present in the vicinity of the proposed activities. Minor disturbance to big game species could occur associated with the proposed trail construction. Some continued disturbance to big game during the non-winter period would be anticipated from the non-motorized use of the trail. Slight reductions in big game hiding cover would be anticipated with proposed trail construction that would contribute to the elevated potential for disturbance to big game from ongoing trail use. Otherwise negligible changes to existing habitats would be anticipated. Elevated human disturbance in the cumulative-effects analysis area would be additive to disturbance associated with the ongoing timber

management projects as well as any disturbance from the use of the open roads and general recreational use of the area.

*Wildlife Mitigations:*

- A DNRC biologist will be consulted if a threatened or endangered species is encountered to determine if additional mitigations that are consistent with the administrative rules for managing threatened and endangered species (ARM 36.11.428 through 36.11.435) are needed.
- Snags, snag recruits, and coarse woody debris will be managed according to ARM 36.11.411 through 36.11.414, particularly favoring western larch and ponderosa pine.
- Contractors conducting operations will be prohibited from carrying firearms while on duty.
- Food, garbage, and other attractants will be stored in a bear-resistant manner.

*Wildlife References:*

McCallum, D. A. 1994. Review of technical knowledge: flammulated owls. Pages 14-46 in G. D. Hayward and J. Verner, tech eds. Flammulated, boreal, and great gray owls in the United States: a technical conservation assessment. USDA Forest Service Gen. Tech. Rep. RM-253. Fort Collins, Colorado.

Wittinger, W.T. 2002. Grizzly bear distribution outside of recovery zones. Unpublished memorandum on file at USDA Forest Service, Region 1. Missoula, Montana.2pp.

**AIR QUALITY:**

**Air Quality Existing Conditions:** Air quality in the project area is consistent with conditions associated with resource management and limited residential development. Smoke and dust conditions vary depending on activities.

**No-Action Alternative:** No effects to air quality are expected.

**Action Alternative:** Slash created through the trail construction would be burned. Negligible effects to air quality are expected.

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><i>No-Action</i></b>														
Smoke	X				X				X					
Dust	X				X				X					
<b><i>Action</i></b>														
Smoke	X				X				X					
Dust		X			X				X				Yes	AQ1

*Comments:*

*Air Quality Mitigations:*

AQ1: As a member of the Montana/Idaho Airshed Group, DNRC agrees to burn only on days approved for good smoke dispersion as determined by the Smoke Management Unit.

**ARCHAEOLOGICAL SITES / AESTHETICS / DEMANDS ON ENVIRONMENTAL RESOURCES:**

**Existing Conditions:** Historical uses including forest management have occurred within the project area. An old mill site is present and has been documented. It is possible that other building remnants may be present in the project area as well but they haven't been identified at this time. Current aesthetics are consistent with resource management. Signs of management such as stumps, varying tree densities and road prisms are visible across the landscape. Demands on environmental resources are consistent with resource management.

**No-Action Alternative:** No effects to historical uses, archaeological sites, aesthetics, or demands on environmental resources are expected.

**Action Alternative:** No impacts to the old mill site are anticipated, additional remnants may be discovered during trail construction.

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				X				Yes	A1
Aesthetics	X				X				X					
Demands on Environmental Resources of Land, Water, or Energy	X				X				X					

Comments:

Archeological Site/Aesthetics/Demands on Environmental Resources Mitigations:

A1: If additional remnants are discovered, local resources would consult with Patrick Rennie to ensure documentation or additional appropriate action occurs.

**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.

- None.

## Impacts on the Human Population

Evaluation of the impacts on the proposed action including **direct, secondary, and cumulative** impacts on the Human Population.

**Existing Conditions:** Forest management occurs within the direct, secondary, and cumulative effects areas. Limited residential development is present within the cumulative effects area as well.

**No-Action Alternative:** On DNRC, no effects to the Human Population are expected.

On TNC, low secondary and cumulative impacts to recreational use as well as low cumulative impacts to human safety are anticipated to occur as a result of converting an existing open road located on the south shore of Tuppers Lake into primarily a non-winter, non-motorized trail.

**Action Alternative:** Low direct, secondary, and cumulative impacts to recreational use as well as low cumulative impacts to human safety may occur as a result of increased use of the area due to the trail construction and maintenance on both properties.

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				Yes	H1
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				Yes	H1
Density and Distribution of population and housing	X				X				X						
Social Structures and Mores	X				X				X						
Cultural Uniqueness and Diversity	X				X				X						
<b>Action</b>															
Health and Human Safety	X				X					X				Yes	H2
Industrial, Commercial and Agricultural Activities and Production	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			
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				Yes	H2
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:* Jeff Collins, DNRC Hydrologist, expressed concerns regarding the trail construction and maintenance and Land Use License authorization and the potential for it to produce trash.

*Mitigations:*

H1: The proposed trail work and associated recreational use increase on TNC can't be mitigated by DNRC actions. However, it is assumed that TNC would carry out mitigation measures similar to those DNRC would typically follow.

H2: Mitigations for human safety concerns may include routine roadwork, such as grading or brushing, and signage placement to address the anticipated increase in recreational use traffic. Mitigations for access to and quality of recreational activities may include trail maintenance and trash bag issuance requirements within the Land Use License specifications.

**Locally Adopted Environmental Plans and Goals:** *List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.*

- None.

**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.

**No-Action Alternative:** No effects to the Other Appropriate Social and Economic Circumstances are expected, there wouldn't be any return to the trust at this time.

**Action Alternative:** The Land Use License would generate minor short-term and potentially minor long-term revenue for the Montana State University Trust through the issuance of a Land Use License to authorize the trail construction and maintenance.

**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: Kristen S. Baker-Dickinson**  
**Title: Clearwater Unit Manager**  
**Date: July 21, 2016**

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**Finding**

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**Alternative Selected:**

I select the Action Alternative as described above involving the issuance of a Land Use License (LUL) for the construction and designated use of a non-winter non-motorized trail approximately 1,231' long located on school trust land in the S ½ NE ¼ of Section 8, Township 16 North, Range 15 West as roughly shown on Attachment A-2: Project Area map.

**Significance of Potential Impacts:**

I find there are no significant environmental impacts associated with selection of this action alternative.

**Need for Further Environmental Analysis**

EIS       More Detailed EA       No Further Analysis

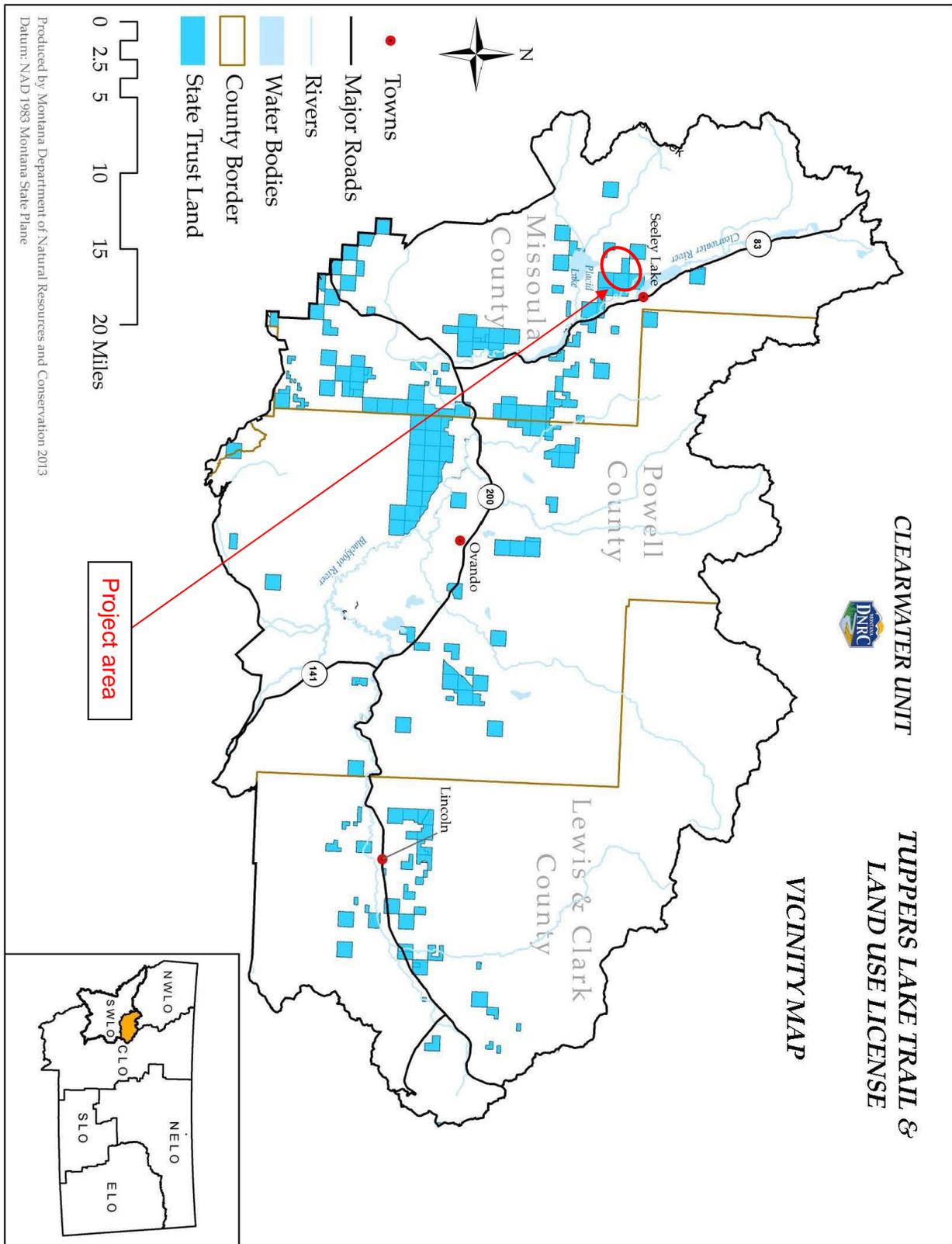
**Environmental Assessment Checklist Approved By:**

**Name: Robert H Storer**  
**Title: SW Land Office Trust Land Management Program Manager**  
**Date: July 21, 2016**  
**Signature:**



## **Attachment A- Maps**

A-1: Vicinity Map



A-2: Project Area map

