

## Environmental Assessment Checklist

**Project Name: South Bench Timber Permit**  
**Proposed Implementation Date: August 2019**  
**Proponent: Lewistown Unit, Northeast Land Office, Montana DNRC**  
**County: Fergus**

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### Type and Purpose of Action

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**Description of Proposed Action:**

The Lewistown Unit of the Montana Department of Natural Resources and Conservation (DNRC) is proposing the South Bench Timber Permit. The project is located 23 miles Southeast of Lewistown (refer to Attachments vicinity map A-1 and project map A-2) and includes the following sections:

| Beneficiary                                | Legal Description           | Total Acres | Treated Acres |
|--|-----------------------------|-------------|---------------|
| Common Schools                             | <b>Section 16 T12N R21E</b> | <b>640</b>  | <b>200</b>    |
| 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:

- Generating revenue for the common school trust.
- Commercial thinning overstocked Ponderosa Pine stands to promote growth of leave trees, reducing potential for crown fire, reducing potential for beetle outbreak and supporting natural regeneration.

Proposed activities include:

| Action                                       | Quantity   |
|--|------------|
| <b>Proposed Harvest Activities</b>           |            |
|  | # Acres    |
| Clearcut                                     |            |
| Seed Tree                                    |            |
| Shelterwood                                  |            |
| Selection                                    | 200        |
| Commercial Thinning                          |            |
| Salvage                                      |            |
|  |            |
| <b>Total Treatment Acres</b>                 | <b>200</b> |
| <b>Proposed Forest Improvement Treatment</b> |            |
|  | # Acres    |
| Pre-commercial Thinning                      |            |
| Planting                                     |            |
|  |            |
| <b>Proposed Road Activities</b>              |            |
|  | # Miles    |
| New permanent road construction              |            |
| New temporary road construction              |            |
| Road maintenance                             | .10        |
| Road reconstruction                          | .70        |
| Road abandoned                               |            |
| Road reclaimed                               |            |
|  |            |
| <b>Other Activities</b>                      |            |
|  |            |
|  |            |

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:
  - March 28<sup>th</sup>, 2018
- PUBLIC SCOPED:
  - The scoping notice was posted on the DNRC Website: <http://dnrc.mt.gov/public-interest/public-notice>

- Lewistown News-Argus
- DNRC Statewide Scoping list.
- DNRC Northeastern Land office scoping list
- Adjacent landowners
- AGENCIES SCOPED:
  - Salish-Kootenai Tribe
  - Clint Smith, Montana FWP Fisheries Biologist Region 4
- COMMENTS RECEIVED:
  - How many: 3
  - Concerns: Please see Attachment B – Public Comment and Attachment C – Responses to Comments
  - Results (how were concerns addressed): All comments were provided responses as documented in Attachment C. Substantive issues were carried forward through the environmental assessment for analysis.

DNRC specialists were consulted, including: Patrick Rennie DNRC Archeologist, Ross Baty Wildlife Biologist, Mike Anderson DNRC fisheries Biologist, Tim Spoelma DNRC Silviculturist/Forest Ecologist. 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.)*

- **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). 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:** The no action alternative would postpone any timber harvest at this time. Potential effects of this alternative include reduced tree growth rates, declining forage and grazing potential and increased risk of stand replacing wildfire. Additionally, revenue may be lost as dead and dying timber is subjected to pine beetle outbreaks, windthrow, and wildfire.

**Action Alternative:** The proposed action would mechanically harvest 400 MBF (thousand board feet) from approximately 200 acres. No new road construction will be necessary. Road reconstruction will be needed to address some flaws in the existing roads. The sale of products would produce revenue for the Common School Trust, while ensuring the long-term productivity and revenue generating capacity. The sale would utilize uneven-aged management practices to reduce competition between residual trees and improve stand and forage productivity. A reduction in fuel loads would reduce the possibility of stand replacing fire.

## 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:** The timber stand in the proposed project area are composed of Ponderosa Pine and Douglas fir with ages ranging from 100-200 years old. Small areas of old growth ponderosa pine are located throughout the section. Noxious weeds are present on this section, including large patches of Leafy Spurge.

| 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   |      |           |     |     |      |            |     |     |      |                          | 1              |
| Rare Plants          | X      |     |     |      |           |     |     |      |            |     |     |      |                          |                |
| Vegetative community |        | X   |     |      |           |     |     |      |            |     |     |      |                          | 2              |
| Old Growth           |        | X   |     |      |           | X   |     |      |            | X   |     |      |                          |                |
| <b>Action</b>        |        |     |     |      |           |     |     |      |            |     |     |      |                          |                |
| Noxious Weeds        |        |     | X   |      |           |     |     |      |            |     |     |      |                          | 3              |
| Rare Plants          | X      |     |     |      |           |     |     |      |            |     |     |      |                          |                |
| Vegetative community |        |     | X   |      |           |     |     |      |            |     |     |      |                          | 4              |
| Old Growth           |        | X   |     |      |           | X   |     |      |            | X   |     |      |                          |                |

**Comments:**

- (1) This area is mix of rolling rangeland with forested areas interspersed; therefore, a small population of noxious weeds such as hounds tongue and thistle are established on site.
- (2) Reduced growth and increased mortality of even-aged Ponderosa Pine continue due to an overstocked condition.
- (3) Mechanical treatment would increase ground disturbance and increase the potential spread of noxious weeds
- (4) Species composition will be unaffected as harvesting activities will replicate natural disturbance regimes of the Ponderosa pine cover type.

**Vegetation Mitigations:**

- Noxious weeds will be sprayed with in 60' of haul roads, slash piles and other timber harvest activities for three years following timber harvest
- No rare plants were identified in the project area.
- Disturbed areas will be replanted using native seed source

**SOIL DISTURBANCE AND PRODUCTIVITY:**

**Existing Conditions:** The two soil types identified in the proposed harvest areas are Hughesville-Tibs-Whitecow Complex and Tibs-Whitecow Cobbly clay loams. The productivity of these types of soil is low and due to the high fraction of coarse fragments, the risk of compaction from equipment operations is considered moderate if operations are conducted during dry or frozen conditions. These soils are moderately erosive when the forest floor is removed and only moderately prone to displacement.

| 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          |     |     |      | N/A                      |                |
| Erosion  | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| Nutrient Cycling                                   | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| Slope Stability                                    | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| Soil Productivity                                  | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| <b>Action</b>                                      |        |     |     |      |           |     |     |      |            |     |     |      |                          |                |
| Physical Disturbance (Compaction and Displacement) |        | X   |     |      |           | X   |     |      |            | X   |     |      | Yes                      | 1              |
| Erosion  |        | X   |     |      |           | X   |     |      |            | X   |     |      | Yes                      | 1              |
| Nutrient Cycling                                   |        | X   |     |      |           | X   |     |      |            | X   |     |      | Yes                      | 2              |
| Slope Stability                                    | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      | 1              |
| Soil Productivity                                  |        | X   |     |      |           | X   |     |      |            | X   |     |      | Yes                      | 2              |

*Comments:*

- (1) Soil displacement and compaction will be limited to 20% of all harvest units if mitigations and operating conditions are implemented correctly. Standard erosion control measures will provide effective erosion prevention. No unstable slopes were observed in the project area.
- (2) 5-10 tons of coarse woody material (>3.0") with as many fines (<3.0") will be retained on site to retain nutrients critical for soil productivity.

*Soil Mitigations:*

- Limit equipment operations to periods when soils are dry (<20% soil moisture), frozen or snow covered (12" packed, 18" unconsolidated)
- Limit equipment operations to slopes <45%.
- Retain 5-10 tons/acre of coarse woody material
- Apply BMP's for forestry concurrent with all activities.

## WATER QUALITY AND QUANTITY

**Existing Conditions:** The South Bench timber permit project area (20-25" of annual precipitation) is located in between the Flatwillow creek and Willow creek watersheds which are both tributaries to the Musselshell river. One Class I stream exists on this state section, but not in the proposed project area. This stream does not support a fishery on state owned land.

| 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          |     |     |      | N/A                      |                |
| Water Quantity           | x      |     |     |      | x         |     |     |      | x          |     |     |      | N/A                      |                |
| <b>Action</b>            |        |     |     |      |           |     |     |      |            |     |     |      |                          |                |
| Water Quality            | x      |     |     |      | x         |     |     |      | x          |     |     |      | N/A                      |                |
| Water Quantity           | x      |     |     |      | x         |     |     |      | x          |     |     |      | N/A                      |                |

*Comments:* No cumulative impacts to water quality or quantity are likely to occur because of the action alternative.

### Water Quality & Quantity Mitigations:

- BMP's for forestry will be applied concurrent with all logging and hauling operations to mitigate sediment production and transport to water bodies or stream courses.
- The Streamside Management Zone Law will be applied to all stream in the project area. No SMZ harvest is proposed.
- Montana Administrative Rules for Forest Management will be applied throughout the implementation of this project.

## FISHERIES:

**Existing Conditions:** There are no fish bearing streams in the proposed project area. Two ephemeral draws which lead to Flatwillow Creek are in the project area.

**No-Action:** Negligible 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 |                          |                |
| <b>No-Action</b> |        |     |     |      |           |     |     |      |            |     |     |      |                          |                |
| Sediment         | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |

| 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          |     |     |      | N/A                      |                |
| Woody Debris       | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| Stream Shading     | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| Stream Temperature | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| Connectivity       | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| Populations        | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| <b>Action</b>      |        |     |     |      |           |     |     |      |            |     |     |      |                          |                |
| Sediment           |        | X   |     |      | X         |     |     |      |            | X   |     |      | Yes                      | 1              |
| Flow Regimes       | X      |     |     |      | X         |     |     |      | X          |     |     |      | Yes                      | 1              |
| Woody Debris       | X      |     |     |      | X         |     |     |      | X          |     |     |      | Yes                      | 1              |
| Stream Shading     | X      |     |     |      | X         |     |     |      | X          |     |     |      | Yes                      | 1              |
| Stream Temperature | X      |     |     |      | X         |     |     |      | X          |     |     |      | Yes                      | 1              |
| Connectivity       | X      |     |     |      | X         |     |     |      | X          |     |     |      | Yes                      | 1              |
| Populations        | X      |     |     |      | X         |     |     |      | X          |     |     |      | Yes                      | 1              |

*Comments:*

- (1) The nearest fish bearing stream is .3 miles away from the proposed project area. Best management practices will be utilized to prevent sediment delivery during spring runoff and during heavy rainfall.

*Fisheries Mitigations:*

- Apply all BMP's for forest management activities concurrent with road construction, hauling and harvesting. Apply SMZ law to all streams within the project area and haul route.

**WILDLIFE:** The project area is dominated by mature ponderosa pine forest with patches of Douglas-fir trees of various ages. Much of the existing forested area on the project area is present due to range encroachment during the last 50 years. Mature forested stands on the project area are generally well-stocked and are providing good to hiding and escape cover for wildlife. However, large snags occur in relatively low numbers (<1.0 per ac) due to the relatively young age of most stands on the project area. Coarse woody debris amounts are moderate at approximately 5 – 10 tons per acre as some natural tree mortality has occurred during the last several decades. The project area occurs along a forest grassland ecotone providing habitat for many native song birds, raptors, big game species, and predators. The project area occurs in Montana FWP Hunting District 530. Both Hunting District 530 and 411, which lies immediately north of the project area have very liberal deer and elk hunting quotas.

**Cumulative Effects:** Cumulative effects were evaluated for the South Bench Timber Sale project by considering the effects of the proposed action in addition to those likely impacts associated with the surrounding 8 sections (5,760 ac. total). Livestock grazing, timber harvesting and public recreation are identified activities in the cumulative effects analysis area.

The U.S. Forest Service Little Snowy Mountains Restoration Project Area lies adjacent to the DNRC South Bench Timber Permit Project Area and it contains approximately 13,000 acres (USFS 2014). In the Little Snowy Mountains Restoration Project vegetation would be treated and altered on approximately 8,302 acres. Treatments would include thinning, masticating, prescribed burning, and commercial logging. Security and hiding cover would be reduced on treated acres and direct disturbance in active portions of the project area have been ongoing since 2014. Effects associated with proposed logging treatments in mature forest on 200 acres in the DNRC South Bench Timber Permit would be cumulative to those associated with the Little Snowy Mountains Restoration Project on U.S. Forest Service lands. This would slightly expand the overall acreage of cover and vegetation treated and associated wildlife habitat-related effects to 8,502 acres overall. Any additional habitat-related effects would be expected to be minimal and pose minimal additional adverse effects to wildlife.

**No-Action:** No potential for disturbance to wildlife would be anticipated. No timber management activities would be conducted, thus no appreciable changes to existing habitats would occur. No changes in snag or large live tree availability would be anticipated. Continued maturation within existing stands could improve hiding cover and thermal cover for elk and mule deer, and other wildlife species that use forest cover to meet their life requisites. No direct effects would occur and negligible indirect, or cumulative effects would occur.

**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>Canada lynx</b><br>( <i>Felix lynx</i> )<br>Habitat: Subalpine fir habitat types, dense sapling, old forest, deep snow zone | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      | 1              |
| <b>Wolverine</b><br>( <i>Gulo gulo</i> )   | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      | 1              |
| <b>Sensitive Species</b>   |        |     |     |      |           |     |     |      |            |     |     |      |                          |                |
| <b>Bald eagle</b><br>( <i>Haliaeetus leucocephalus</i> )<br>Habitat: Late-successional forest within 1 mile of open water      | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      | 2              |
| <b>Black-tailed prairie dog</b><br>( <i>Cynomys ludovicianus</i> )   | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      | 2              |

| Wildlife   | Impact |     |     |      |           |     |     |      |            |     |     |      | Can Impact be Mitigated? | Comment Number |   |
|--|--------|-----|-----|------|-----------|-----|-----|------|------------|-----|-----|------|--------------------------|----------------|---|
|  | Direct |     |     |      | Secondary |     |     |      | Cumulative |     |     |      |                          |                |   |
|  | No     | Low | Mod | High | No        | Low | Mod | High | No         | Low | Mod | High |                          |                |   |
| Habitat:<br>grasslands, short-grass prairie, sagebrush semi-desert   |        |     |     |      |           |     |     |      |            |     |     |      |                          |                |   |
| <b>Gray Wolf</b><br>( <i>Canis lupus</i> )<br>Habitat: Ample big game populations, security from human activities            | X      |     |     |      | X         |     |     |      |            | X   |     |      |                          | N/A            | 2 |
| <b>Harlequin duck</b><br>( <i>Histrionicus histrionicus</i> )<br>Habitat: White-water streams, boulder and cobble substrates | X      |     |     |      | X         |     |     |      |            | X   |     |      |                          | N/A            | 2 |
| <b>Mountain plover</b><br>( <i>Charadrius montanus</i> )<br>Habitat: short-grass prairie & prairie dog towns                 | X      |     |     |      | X         |     |     |      |            | X   |     |      |                          | N/A            | 2 |
| <b>Peregrine falcon</b><br>( <i>Falco peregrinus</i> )<br>Habitat: Cliff features near open foraging areas and/or wetlands   | X      |     |     |      | X         |     |     |      |            | X   |     |      |                          | N/A            | 2 |
| <b>Greater Sage grouse</b><br>( <i>Centrocercus urophasianus</i> )<br>Habitat: sagebrush semi-desert                         | X      |     |     |      | X         |     |     |      |            | X   |     |      |                          | N/A            | 2 |
| <b>Townsend's big-eared bat</b><br>( <i>Plecotus townsendii</i> )<br>Habitat: Caves, caverns, old mines                      | X      |     |     |      | X         |     |     |      |            | X   |     |      |                          | N/A            | 2 |
| <b>Big Game Species</b>  |        |     |     |      |           |     |     |      |            |     |     |      |                          |                |   |
| <b>Elk</b>   |        | X   |     |      |           | X   |     |      |            |     | X   |      |                          | Yes            | 4 |
| <b>Whitetail</b>   |        | X   |     |      |           | X   |     |      |            |     | X   |      |                          | Yes            | 4 |
| <b>Mule Deer</b>   |        | X   |     |      |           | X   |     |      |            |     | X   |      |                          | Yes            | 4 |
| <b>OTHER</b>   |        |     |     |      |           |     |     |      |            |     |     |      |                          |                |   |
| <b>Goshawk</b>   |        | X   |     |      |           | X   |     |      |            |     | X   |      |                          | Yes            | 5 |

| Wildlife                      | Impact |     |     |      |           |     |     |      |            |     |     |      | Can Impact be Mitigated? | Comment Number |
|-------------------------------|--------|-----|-----|------|-----------|-----|-----|------|------------|-----|-----|------|--------------------------|----------------|
|                               | Direct |     |     |      | Secondary |     |     |      | Cumulative |     |     |      |                          |                |
|                               | No     | Low | Mod | High | No        | Low | Mod | High | No         | Low | Mod | High |                          |                |
| Old Growth Associated Species |        | X   |     |      |           | X   |     |      |            | X   |     |      | Yes                      | 6              |
| Forest-nesting Birds          |        | X   |     |      |           | X   |     |      |            | X   |     |      | Yes                      | 7              |
| Golden Eagle                  |        | X   |     |      |           | X   |     |      |            | X   |     |      | Yes                      | 8              |

**Comments:**

- (1) The project area occurs outside of the normal distribution of Canada Lynx and Wolverine in Montana. Thus, no direct, secondary or cumulative effects to these species would be anticipated.
- (2) The project area is either out of the range of the normal distribution for this species, suitable habitat is not present, or habitat would not be altered in a manner that would adversely affect this species. Thus, no direct, secondary or cumulative effects would be anticipated.
- (3) The project area is not located in Greater Sage Grouse general habitat or core habitat and the nearest known lek site occurs ~8.5 miles southeast of the project area (survey date 1999).
- (4) For elk, mule deer and white-tailed deer, the project duration would be short and ample hiding cover would be retained in thinned stands. Winter cover would be reduced on all treated acres, Disturbance associated with thinning activities could temporarily displace individual animals in the area, however the project would be short and effect a small number of acres, thus minor adverse direct, secondary, and cumulative effects to these species would be expected.
- (5) Active goshawk territories have been detected on neighboring US Forest Service lands near the project area (USFS 2014). Northern goshawks are likely to occur in the local area, and nest site protections would be put in place in the event that a nesting pair is located. Their habitat needs are primarily addressed through DNRC's coarse filter management approach. Proposed treatments would create more sustainable habitat conditions for the goshawks over the next several decades. Given the type, scope and scale of the proposed treatments, minor adverse direct, indirect, and cumulative effects to goshawks would be expected.
- (6) Old Growth-associated species in this geographic region that are relatively dependent on habitat attributes found in old growth ponderosa pine stands are primarily cavity-nesting/using species that may use similar habitat attributes (snags and downed logs) in younger mature forest stands as well. Many, such as the northern flicker, downy woodpecker, hairy woodpecker, nuthatches, and black-capped and mountain chickadees are also common. Proposed activities could disturb and displace such species found in affected stands for one operating season. Reduction of tree density could make stands less appealing for some species such as kinglets, but more favorable for species such as Lewis's Woodpecker. Removal of some lower and mid-story tree canopy could reduce habitat attributes for some foliage-gleaning species, as well as species such as evening grosbeaks, which often follow outbreaks of insects such as spruce budworm. Reducing tree density in patches of old forest would be expected to improve the long-term sustainability of these stands. Given these considerations and the small scope and short duration of the project, low adverse direct, indirect and cumulative effects would be expected to associated species, while minor long-term

(several decades) benefits for these species would be expected due to improved sustainability of the treated stands.

- (7) Forest-nesting birds would likely be present in the project area, and harvest activities during in the spring season could potentially disturb or harm active nests. Mechanized operations would be restricted from April 1 to June 15 to minimize risk of disturbance to nesting birds and calving areas, which would minimize adverse effects to potentially-affected species. Given these considerations and the small scope and short duration of the project, low adverse direct, indirect and cumulative effects would be expected to associated species.
- (8) Golden eagles may periodically use the project area and surrounding vicinity. The project area does not contain preferred cliff nesting habitat, however, open forest and prairie habitat is present. Such habitat is abundant in the cumulative effects analysis area and is likely not limiting for golden eagles. Numerous large live trees that could serve as potential perch and nest trees would be retained following proposed treatments, which would minimize potential for adverse effects. Minor disturbance potential would also be present during proposed harvest activities that could cause short-term displacement (one operating season), should eagles be in the area.

***Wildlife Mitigations:***

-A minimum of one snag and one snag recruitment tree 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.

-Maintain screening cover along riparian areas for wildlife security and habitat connectivity.

-Retain coarse woody debris amounts in harvest units following recommendations of Graham et al. (1994) (i.e., 5 – 10 tons of coarse woody debris per acre).

-Contact DNRC wildlife biologist if any threatened or endangered species are encountered within the proposed project area.

-Contact DNRC wildlife biologist should an active raptor nest be encountered within or within ½ mile of the proposed project area.

-Where opportunities exist, retain leave trees and retention areas in a clumped fashion to emulate natural disturbance patterns and reduce sight distances for wildlife.

-Restrict mechanized operations from April 1 to June 15 to minimize risk of disturbance to calving areas and nesting birds.

-Goshawk Active Nest Site Mitigation – In an active northern goshawk nest is located, operations within 0.25 miles of the nest would cease and a DNRC biologist would be contacted. Site-specific measures would be developed and implemented to protect the nest and birds prior to re-starting activities.

**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          |     |     |      | N/A                      |                |
| Dust             | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| <b>Action</b>    |        |     |     |      |           |     |     |      |            |     |     |      |                          |                |
| Smoke            |        | X   |     |      |           | X   |     |      |            | X   |     |      | Yes                      | 1              |
| Dust             |        | X   |     |      |           | X   |     |      |            | X   |     |      | Yes                      | 2              |

**Comments:**

1) Under the Action Alternative, slash piles consisting of tree limbs and tops and other vegetative debris would be created throughout the project area during harvesting. These slash piles would ultimately be burned after harvesting operations have been completed.

The project area is located within Montana Airshed Group 9 which encompasses major portions of eastern Montana. Few residential properties are found within the vicinity of this project.

(2) Harvesting and hauling logs could create dust, which may affect local air quality. However, because dust would be localized to skid trails and haul roads and operating seasons would be brief, effects to air quality because of dust generated during harvest activities are expected to be low.

**Air Quality Mitigations:**

- Burning within the project area would be short in duration and would be conducted when conditions favored 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      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| Aesthetics                                       | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| Demands on Environmental                         | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |

| 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 |                          |                |
| Resources of Land, Water, or Energy                          |        |     |     |      |           |     |     |      |            |     |     |      |                          |                |
| <b>Action</b>  |        |     |     |      |           |     |     |      |            |     |     |      |                          |                |
| Historical or Archaeological Sites                           | X      |     |     |      | X         |     |     |      | X          |     |     |      | yes                      | 1              |
| Aesthetics   | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| Demands on Environmental Resources of Land, Water, or Energy | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |

*Comments:*

- (1) There is a historic homestead site located on the Southeast corner of this section. Harvest activities will not be allowed within 100 feet of the cabins.

**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.

| 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          |     |     |      | N/A                      |                |
| Industrial, Commercial and Agricultural Activities and Production | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| Quantity and Distribution of Employment                           | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| Local Tax Base and Tax Revenues                                   | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| Demand for Government Services                                    | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |

| 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 |                          |                |
| Access to and Quality of Recreational and Wilderness Activities   | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| Density and Distribution of population and housing                | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| Social Structures and Mores                                       | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| Cultural Uniqueness and Diversity                                 | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| <b>Action</b>   |        |     |     |      |           |     |     |      |            |     |     |      |                          |                |
| Health and Human Safety   |        | X   |     |      |           | X   |     |      |            | X   |     |      | Yes                      | 1              |
| Industrial, Commercial and Agricultural Activities and Production | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| Quantity and Distribution of Employment                           | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| Local Tax Base and Tax Revenues                                   | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| Demand for Government Services                                    | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| Access To and Quality of Recreational and Wilderness Activities   |        | X   |     |      |           | X   |     |      |            | X   |     |      | N/A                      | 2              |
| Density and Distribution of population and housing                | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| Social Structures and Mores                                       | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |
| Cultural Uniqueness and Diversity                                 | X      |     |     |      | X         |     |     |      | X          |     |     |      | N/A                      |                |

*Comments:*

(2) State Land associated with this project has legal public access. The project would be implemented during times when recreation is minimal. This would limit conflict of the public to recreate on these lands.

*Mitigations:*

(1) Signs at appropriate locations on county roads and access roads would be used to warn motorist and residents.

**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 Permits have similar species, quality, average diameter, product mix, terrain, date of sale, distance from mills, road building and logging systems, terms of sale, or anything that could affect a buyer's willingness to pay.

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

**Action:** The timber harvest would generate additional revenue for the Common School Trust. The estimated return to the trust for the proposed harvest is \$11,200 based on an estimated harvest of 400,000 board feet (2800 tons) and an overall stumpage value of \$4.00 per ton. Costs, revenues, and estimates of return are estimates intended for relative comparison of alternatives, they are not intended to be used as absolute estimates of return.

**References**

DNRC 1996. State forest land management plan: final environmental impact statement (and appendixes). Montana Department of Natural Resources and Conservation, Forest Management Bureau, Missoula, Montana.

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.

USFS 2014. Little Snowy Mountains restoration project. Environmental assessment. Musselshell Ranger District, Lewis and Clark National Forest. Harlowton, MT.

**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: Joshua Stoychoff**

**Title: Area Forester**

**Date: May 30<sup>th</sup>, 2019**

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## Finding

### Alternative Selected

Action Alternative

### Significance of Potential Impacts

N/A

### Need for Further Environmental Analysis

EIS

More Detailed EA

No Further Analysis

### Environmental Assessment Checklist Approved By:

Name: Clive Rooney

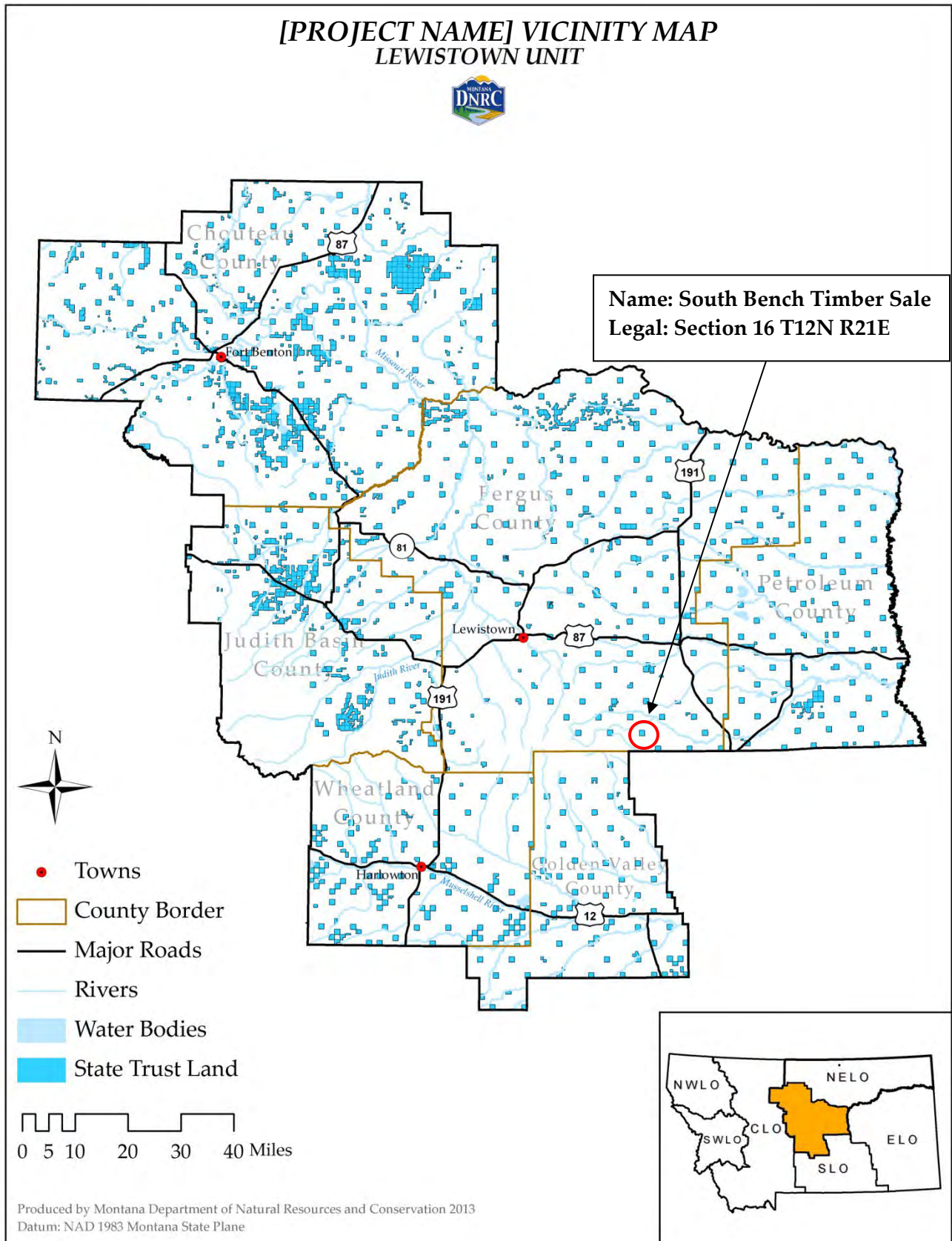
Title: NELO Area Manager

Date: 2/10/14

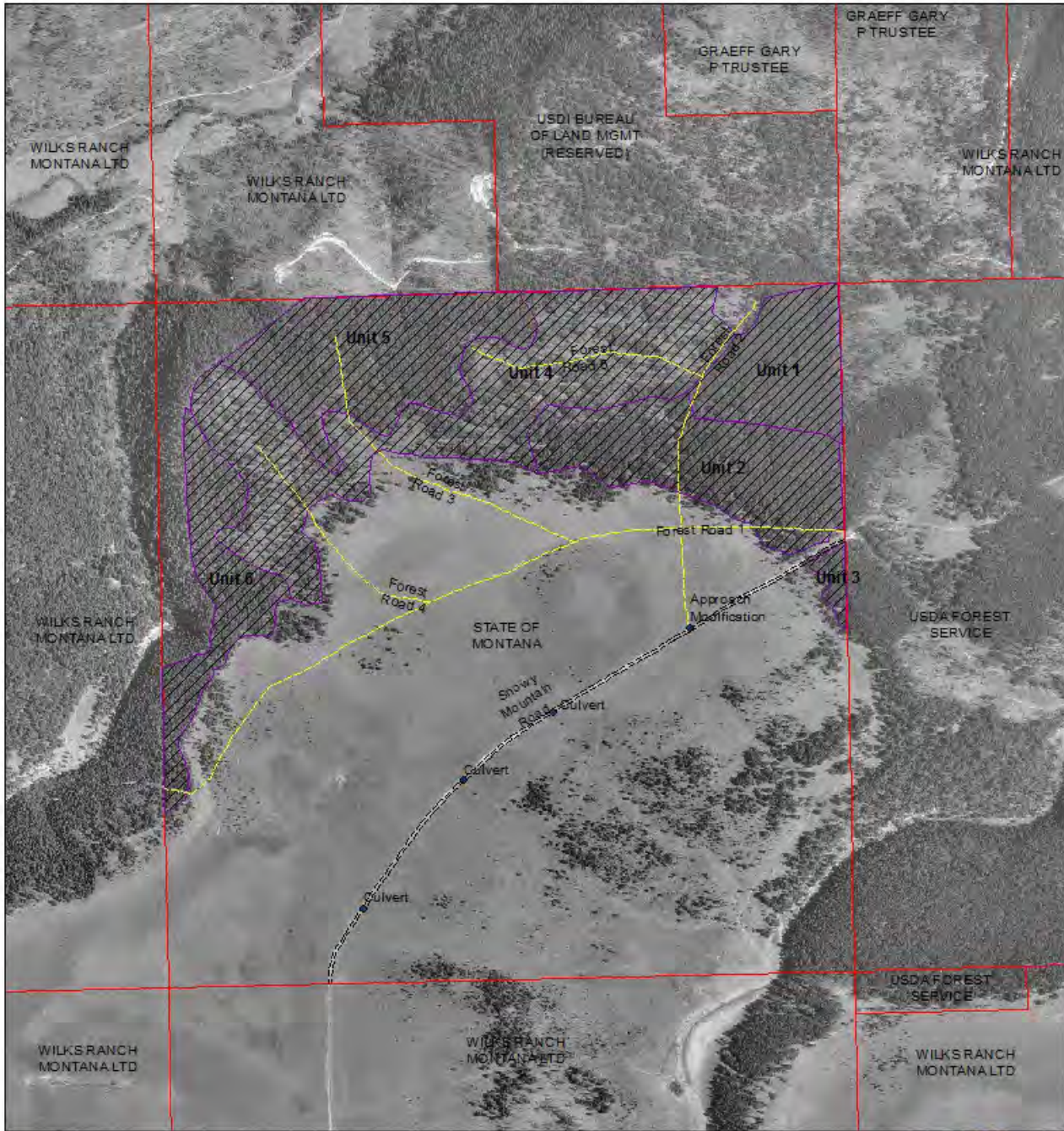
Signature: 

## **Attachment A - Maps**

A-1: Timber Sale Vicinity Map



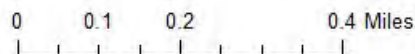
A-2: Timber Sale Harvest Units



**Legend**

- ◆ SBTSRoadImprovements
- SB Existing Harvest Roads
- ===== SBCountyRoad
- ▨ SBTS\_UNITS
- ▭ FergusOwnerParcel\_shp

South Bench State Section  
 Section 16 T12N R21E  
 1 inch equals 1,000 feet



JRS 03/15/2019

Attachment B – Public Comment

April 15, 2018

TO: Joshua Staychoff - Forester  
Northeastern Land Office  
P.O. Box 1021  
Lewistown, MT 59457

FROM: David J. Munnion  
1333 Ancient Tr.  
Forest Grove, MT 59441

Thank you for your letter of March 28, 2018, mailed April 3, 2018 and delivered to my mailbox April 6, 2018 informing me the Northeastern Land Office's initial proposal to remove 300 thousand board feet of Ponderosa pine from approximately 150 acres on South Bench State Section 16 T 12 N R 21 E.

I hereby request an Environmental Assessment (EA) on this project.

Conducting tree removal at such a volume during the summer months using extremely heavy equipment would cause irreparable soil structure damage and consequent soil erosion. The soil structure disturbance would invite noxious weed invasions like leafy spurge (presently non-existent in South Bench State Section) within the first six months. The leafy spurge invasions would inspire NELD personnel to spray deadly herbicide chemicals on the noxious weeds.

During the past eighteen years I have witnessed area residents spraying deadly chemicals on leafy spurge. These deadly herbicides have killed: Sage grouse and sharp-tail chicks, pheasants for 12 miles along the Flatwillow County Road and along winding Flatwillow Creek, Hungarian partridge, several species of butterflies, several species of honey bees, some songbirds, some whitetail fawns and even an elk calf now and then.

Deadly chemical herbicides should never be sprayed on noxious weeds when there are so many biological controls available: Overgrazing with sheep, leafy spurge beetles, seeding strong native competitive grasses on noxious weed sites.

There are possible habitat trees for the Saw Whet owl and the Flammulated owl among half a dozen other owl species in and around the South Bench State Section.

I have sighted both the Saw Whet and Flammulated in various parts of forest throughout the Little Snowies ecosystem.

There are Northern Goshawks in and around the South Bench State Section.

All through the Durfee Hills, National Forest, BLM, State Lands and private lands in the Little Snowies, there are countless ancient Native American cultural sites.

I have seen ancient Native American artifacts on the ground near South Bench State Section.

My wife Jacqueline and I are certified Site Stewards through Archeology Department of MSU Bozeman. We unofficially monitor numerous ancient Native American cultural sites throughout the Little Snowies.

NELO

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There must be a thorough and honest archeological assessment completed on the South Bench State Section before any segment of the timber harvest proposal is enacted.

That archeological assessment must include the negative effects that road building, road maintenance, clear cuts for giant slash piles, clear cuts for so-called "landing zones", heavy equipment operation would have on any ancient Native American cultural sites.

My wife Jacqueline has a Masters Degree in Botany/Zoology.

We have observed certain areas in the Little Snowies that serve as prime habitat for the Black backed three-toed woodpecker.

Any operation of any equipment in the South Bench State Section would need to be conducted during times of frozen ground and/or adequate snow cover -- 8 to 10 inches -- to prevent soil structure damage.

Operating feller-buncher, de-limber, huge skidder, Caterpillar or grader kills thousands of resource replacement trees in a forest. This is unacceptable.

The huge so-called "slash piles" I have observed on numerous State School Trust Lands in Fergus County (administered by NELO) during the past 20 years (since 1998) have been largely comprised of perfectly good trees that were "in the way" of the feller-buncher, killed, piled and burned two years later. An appalling waste.

The huge "slash piles" mostly comprised of freshly killed trees sit for two years and serve as prime breeding grounds for the Rocky Mountain pine beetle. At least two full cycles of pine beetles hatch and propagate from each huge slash pile.

In any given square mile of healthy forest, there will be less than 1% of the trees infested with pine beetles. In healthy ecosystems -- such as the Big Snowies Wilderness Study Area for example, located west of the South Bench State Section -- there are natural controls of the small number of trees infested by pine beetles; Flickers, woodpeckers, sap suckers, crossbills, nuthatches, bears, even some species of owl, will all work on an infested tree to feed on pine beetle larvae.

With the sudden disappearance of much of the forest in a logging operation and the sudden appearance of numerous large slash piles comprised of freshly killed trees, the very few pine beetles always present in any healthy forest gravitate towards sick or dying trees. To a pine beetle, a freshly killed tree in a huge slash pile is a sick or dying tree, and they will congregate on the slash piles as a result, lay eggs by the thousands, setting the stage for a huge hatch. Entomologists have observed the pine beetles can smell or sense a dying tree and will attack it. To a pine beetle, a freshly killed tree in a slash pile smells like a dying tree.

Natural predators of the pine beetle cannot access but a small percentage of eggs and larvae in a huge slash pile. Consequently, the slash piles provide prime breeding grounds for the pine beetle. Where there were a few dozen pine beetles in a square mile of forest before the logging,

NELD

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There are millions of pine beetles after the logging and after the creation of numerous huge slash piles.

The millions of pine beetles spread out for up to a mile in radius, much further on a favorable wind. That many pine beetles travelling en masse attack entire segments of healthy forest. First they attack the few remaining trees standing after a logging operation, then they move further onto adjoining forests.

This is the primary reason for the massive kill-offs of trees by pine beetles on hundreds of miles of forest in Idaho, Colorado, parts of Montana, parts of Wyoming, Utah, New Mexico.

The NELD practice of killing and piling freshly killed trees in huge "slash piles" is no longer acceptable.

Given the probability of two Sensitive owl species, the Northern Goshawk, the Black-backed three-toed woodpecker and over 150 other species of birds in and around the South Bench State Section, a thorough wildlife biology study must be completed before any action is taken on this proposal.

Every DNRC timber sale loses money. Since DNRC is exempt from the legal and honest business practice of accounting for expenses incurred during the planning, implementing and conducting any of its timber sales, DNRC conveniently states (many times over the years), "The gross income is the net income." (Don't we all wish we could do business like that!) Even so, the Gross Income from all DNRC timber sales in any given year constitutes less than one half of one percent of the annual income to the School Trust Fund.

No wonder the State of Montana has serious budget deficits: After 20 years of this highly unethical practice, it has finally caught up to the STATE of MONTANA as a whole, and as a consequence, Montana school children and Montana school teachers are the ones suffering.

This is unacceptable business practice.

NELD must account for all expenses incurred in planning, implementation, and development of the South Bench Timber Sale Proposal.

Bald eagles and Golden eagles populate Central Montana. We have witnessed both eagle species four seasons a year in some years. We have witnessed bald eagles nesting in particularly tall old growth Ponderosa pine in the Durphy Hills. Bald eagles and golden eagles frequent the South Bench State Section.

The most important trees in a forest are the old growth and advanced second growth Ponderosa pine, which provide thermal cover during cold months for white tail deer, wild turkey, blue grouse, ruffed grouse, mule deer, white breasted and red breasted nut hatches, and mountain chickadee. Over harvesting of old growth and advanced second growth pines results in serious deterioration of vital winter habitat for these species.

For the last thirty years we have observed cow elk spreading out in the forests of the Little Snowies, on National Forest, State Land forests,

NELO

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BLM forests, private land forests on all three divides of this mountain range (Durfee, Middle Bench, Alaska-Bonaface) in May to establish themselves for calving. It cannot be overstated the importance of intact forests as cow elk calving grounds.

Due to the hateful (according to the manager at the time) logging practices of the N-Bar Ranch from 2001 - 2011, to the abusive logging on several state sections in the Little Snowies since 1998, to the vengeful (according to a confidential opinion of one BLM employee) logging conducted on some BLM forests in the Little Snowies, and the ignorant logging practices by the White Pine and Curlew Ranches in the Little Snowies from 2004 - 2009 -- cow elk calving grounds have been seriously diminished. White tail security cover and thermal cover have been seriously diminished, songbird habitat has been seriously diminished, owl habitat has been seriously diminished.

Remaining forests in the Little Snowies is essentially valuable and vital for cow elk calving grounds and habitat for countless other species at this time.

It appears NELO is overlooking the heavy impacts of the cumulative effects of all other logging in the Little Snowies during the past 20 years, much of it has not come close to recovering -- the damage is that great. In designing a 300,000 board feet harvest on 150 acres in the South Bench State Section would be a hard ecological hit.

Considering the cumulative effects of all heavy logging I have just listed, it is imperative at this time that NELO scale back the harvest quota on the 150 acres of the South Bench State Section. Possibly fifty thousand board feet could be harvested from that 150 acres without too much diminishment of the vital bird and wildlife habitats, providing there were no new roads, providing the harvest was done without the use of feller-buncher, heavy skidder and de-limber -- all of which destroy soil structure, destroy bushes and shrubbery necessary for upland ground birds, providing the harvesting was done after the ground freeze in the fall and an adequate snow cover to prevent soil structure damage.

And providing real science was applied to actually selectively log in a way that benefits the forest instead of ruining it for decades.

We will shortly conduct our own review of the South Bench Forest to assess how much harvest is sustainably feasible on that 150 acres.

In every state section in the Little Snowies that has been logged since 1997, there is irreparable soil structure damage. This is unacceptable and must stop NOW.

Since about 1985, there has been a 40% decrease in bird populations in the United States. The causes of this alarming decrease in songbird, tree clinging bird, perching bird, owl and raptor populations is due to widespread application of deadly, chemical herbicides and pesticides, large scale loss of natural forests, deterioration of wetlands, conversion of grasslands to cropland and development.

NELO can do its part in insuring the protection of natural forests and vital bird habitat by decreasing the unsustainable harvest quota on places like South Bench State Section.

NELO

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DNRRC are the initials for Department of Natural Resources and Conservation. It's not conservation when an alarmingly high harvest quota like 300,000 board feet of Ponderosa pine is proposed for 150 acres. That would nearly denude the landscape of forest.

By scaling back excessive non-sustainable timber harvests, NELO could live up to the "Conservation" part of DNRRC, NELO could show they care about songbird and upland ground bird habitat, NELO could begin to change its image from brutal slash-and-burn destroyers of invaluable forest to real conservationists who truly care about the vital role our forests serve in today's changing world of global climate alteration, toxic air quality in our cities and around coal generating power plants.

Since 1997, NELO foresters have engaged in outright lies to the public regarding timber sales proposals, implementation and development of timber sales on: Beaver Bell Creek State Section, North Park State Section, Middle Bench State Section, Sure Enough State Section and others.

Over time, I have compiled an extensive list of NELO's deceitful statements and practices regarding the above mentioned State Sections.

I expect NELO to be entirely truthful and straight forward to any members of the public during every phase of the South Bench State Section timber sale proposal.

Some quotes from NELO's forester recently:

"Trees are something to care for, not to just plant and walk away."

"Trees are an investment in the future, like stocks and bonds, but the return is eco-benefits."

"He (his grandpa) tailored his forest for growth . . . by keeping the forest dense with trees allowing minimal light to enter the forest floor."

"I want people to pay attention to trees that are around them. Trees are something to care for in order for them to display the benefits of carbon sequestration, absorbing particulate matter from the atmosphere, raising property value by softening the landscapes and making the property more appealing to people through nature."

Mr. Stoychoff, I am paying attention to the trees around me in the Little Snowies, and I care deeply about them.

Question: Mr. Stoychoff, have you collected enough information on old growth and advanced second growth Ponderosa pine in the 150 acres of the South Bench State Section by measuring each tree diameter at breast height, taken note of the condition of each tree, entered the information into an on-line calculator to compute the numerical benefits, such as how much carbon is reduced from the atmosphere?

Question: Mr. Stoychoff, have you assessed how many hundred pounds of carbon would go into the atmosphere when the huge so-called "slash piles" (largely comprised of freshly killed post & pole trees and resource replacement trees) created from the excessive logging on the South Bench State Section are burned?

NELO

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CONCLUSION: This is a badly flawed timber sale proposal and should not be implemented as it is now.

Thank you for this opportunity to offer comments on the South Bench State Section timber sale proposal.

Sincerely,



David J. Munnion

50 COPIES OF THIS LETTER WILL BE IN CIRCULATION WITHIN TWO WEEKS.

To: Joshua Stoychoff  
MT DNRC / NELO  
NE LO Forester / POB 1021  
LEWISTOWN, MT 59457

April 17, 2018  
From: Jacqueline  
S. Mercenier  
1333 Ancient Trail  
FOREST GROVE, MT  
59441

Joshua,

Thank you for your "Initial Proposal on South Bench Timber sale of March 28, 2018", sent to us 6 days later, on April 3, 2018, for our comments.

The state statute 77-5-222 voted in 1994, wasn't based on healthy science for the Montana forests; especially not if we remember that East of the Rockies, Montana gets but 1/3 of the annual rainfall of the western part of the state.

In the last 20 years, from where we live in the heart of the Little Snowies, we have watched the deplorable effect of DNRC/NELO's "timber sales". The plan for this "proposed harvest activities [that] would begin in the Summer of 2018... and [take] 300,000 - three hundred thousand board feet of Ponderosa Pine from [about] 150 acres", does not bode good.

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from the start. Here is why:

- The plan is to log in the SUMMER??

In the height of birds nesting and raising their young? When the trees are green, full of sap, at the height of their photosynthesis-making season, "working" on producing seeds & cones? When all young & succulent plants are available on the ground for birds & wildlife? All of these facts, especially this coming Summer, after this late coming Spring? We haven't even seen Spring here yet. Even if the "timber harvest" would happen in "overstocked stands", and there wouldn't be "300,000 board feet in: just overstocked stands! -

this doesn't make sense. The noise of the machinery, the activity, the soil destruction, would wreak havoc in the South Bench School Section, and neighboring forests.

- Soil destruction happened in each DNRC/NELO "timber harvest" we have watched in the last 20 years. The feller-buncher is driven in such a way that it destroys the thin, fragile top-soil layer that in many areas of the Little Sierras rests on a rock shelf. Once that top-soil layer is destroyed, it doesn't come back, at

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least not within 20 years! - which means no plants, thus no food, for all the birds & wildlife that depend on it.

Old growth and advanced 2nd growth parts of the forests were destroyed in the last 20 years logging under DNRC/NELO

Old growth forests provide a genetic pool in their seeds of strong genes from trees that have resisted all kinds of biological attacks during their long life. These old growth stands provide habitat for Owls, and particularly for SENSITIVE Owl species (the Flammulated; the Northern Saw-whet), as well

<sup>as</sup> cavity nesting & habitat for many different birds, including many Song birds. They are habitat for Wild Turkeys in winter, when the lesser amount of snow under their stands of trees allow the Turkeys to find & peck for seeds. These Old growth and advanced 2nd growth forests are THERMO COVER for White-tailed Deer and upland ground birds (Grouse). Last, but not least, old growth forests are FIRE-RESISTANT! A very important factor in our drought (last year) years...

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The Old growth & advanced 2nd growth forests were not mentioned in the other DNRC/NELO plans either; nevertheless they were MOSTLY cut down, and haven't shown much "recuperation" yet, within the last 20 years.

- In addition to the destruction of old growth and advanced 2nd growth trees, trees MARKED for retention to reseed the forest, were HARVESTED anyways in the past DNRC/NELO loggings; making it even more difficult for the forest to re-grow naturally.

- On top of all this, HUGE brush-piles, containing perfectly marketable trees (logic?) were left to lay, an "invitation" to Beetle kill - which in turn invade

eventually neighboring healthy forests, and what is left of the School Sections forests, as you know.

- In a HEALTHY forest, there is no need for "weed spraying"; the problem of "weeds" is brought about by logging machinery and logging trucks. THESE need to be power washed before they even drive into the forest; but this is not often practiced. Weed spraying" is responsible

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for our loss of insects and SPECIFICALLY POLLINATING BEES - yes, there are wild bees colonies in intact forests - And a loss of insects means a loss of BIRDS; "weed spraying" is also polluting the air all beings breathe: birds, animals, humans; and it unfortunately kills the good plants (food resources) as well as "weeds".

When brush-piles are burned, 2 years after a DNRC logging, the fires scorch trees within at least 200 or so yards.

This weakens the trees, which then attract the Beetles that have already moved in neighboring trees - they have had 2 years as described on page-4.

Many parts of School sections forest logged under DNRC/NELO in the last 20 years in the Little Snowies STILL look the aftermath of war zones...

For what? To give "money to the Montana Schools Fund?" The GROSS income of ALL Montana State Lands timber sales, is less than  $\frac{1}{2}$  of 1% of the total budget of the School Trust Fund.

... If expenses were accounted for, the State would realize it is LOSING

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money. So, the State is losing money, and our forests on School Sections are being destroyed.

Moreover, in the Little Snowies, there has been and is a CUMULATIVE EFFECT to the DNRC/NELO logging, with the additional logging of about 500 acres of BLM land, and abusive logging or cutting on private land such as the N bar Ranch, the Curlew Ranch and the White Pine Ranch.

For all those reasons, I am opposed to the ill-conceived South Bench Timber sale, as it is presently proposed.

I would like to see DNRC/NELO grow into a role of School Section Stewardship that studies & protects the Sections' ecological systems & enhances them; so we can see a balance in the life of forests, bird life, wildlife, bee life and decent human activities. Maybe then, School Sections forests could become an ecological model for other forests.

Thank you for your consideration,  
Sincerely, Jacqueline S. Mercenier

1. Forest growth and productivity was not considered adequately in the DNRC's SYC from 1994.

**DNRC Response:** We are unaware of any sound basis for this claim regarding the flawed sustainable yield target and none was provided in the comments received. Three additional sustainable yield calculations have been published since the one referenced in the comment from 1996. The current harvest level as of the 2015 calculation is 56.9 MMBF from 570,510 managed acres statewide. [http://dnrc.mt.gov/divisions/trust/forest-management/sustainable-yield-calculation/announcements-and-stay-informed/FinalSYC\\_2015\\_FinalReport\\_20150910.pdf](http://dnrc.mt.gov/divisions/trust/forest-management/sustainable-yield-calculation/announcements-and-stay-informed/FinalSYC_2015_FinalReport_20150910.pdf)

2. The 300 MBF proposed for removal from 150 acres is excessive.

**DNRC Response:** Following additional field review and analysis the project was expanded to include the removal of approximately 400 MBF from 200 acres. A letter noting this change was sent to individuals who commented on the project March 15, 2019. We believe that this level of harvest is moderate in intensity and many larger reserve trees would be retained following harvest should the action alternative be selected. We acknowledge and respect that individuals can have differing perspectives and opinions regarding how intensive any given timber harvest may appear. Anticipated effects of the proposed action will be analyzed and fully disclosed in the Environmental Assessment.

3. Logging in the spring and summer would adversely affect nesting birds.

**DNRC Response:** Most forest-nesting song birds in Montana nest from April to July and require approximately 1 month to incubate and fledge young. Thus, most song birds are likely to have reared at least one brood prior to typical DNRC start-up dates that begin in late spring. Forest birds could be displaced from the project area by motorized activities during the early to mid-portion of the nesting season during the operating season that activities would need to occur to accomplish the project. Should any active or inactive raptor nests be identified, they would be protected, and activity restrictions would be put in place. This issue will be addressed further in the EA.

4. Logging in the spring and summer would adversely affect the vegetation and species that depend on it, as it is the growing season.

**DNRC Response:** A number of plants and trees would be affected on the project area and they would generally be substantially harmed or killed by mechanized activities and logging equipment. Should activities occur during winter, less ground vegetation damage and less soil disturbance would occur. Otherwise, impacts associated with conducting logging activities during the growing season would not be expected to be appreciably different than those expected during the winter period. Disturbance and mortality of ground vegetation would be short-term and would likely take 2 to 5 years to recover. Additional analysis of effects on vegetation and wildlife will be provided in the EA.

5. 300 MBF of timber volume does not exist in "just" overstocked stands, thus less dense stands would be logged excessively.

**DNRC Response:** Stands would be logged in the manner necessary to accomplish silvicultural, ecological, and volume objectives. More trees would be removed from some portions of the project area than others, and some sites would be sparsely forested following proposed treatments. Some adverse impacts to vegetation, habitat and wildlife would be expected, which will be discussed and disclosed in the EA for the project.

6. The motorized human activity and associated disturbance and soil destruction will cause harmful adverse effects within the state section and on neighboring forests.

**DNRC Response:** Noise and activity-related disturbance would be expected on the project area for the duration of the project (i.e., one operating season). Such disturbance could displace or alter behavior of wildlife species using the

project area and neighboring lands. These effects will be discussed further in the EA. We are unaware of any likely soil-related effects (with the possible exception of noxious weed establishment) that would have an effect on neighboring forests.

7. On DNRC timber sale projects they have observed during the last 20 years, soils have been destroyed and not recovered causing adverse impacts to plant and animal communities.

**DNRC Response:** DNRC has been conducting quantitative soil monitoring studies on timber harvest projects since 1988 that cover a wide range of soil and equipment types, climates, geologies, and silvicultural prescriptions throughout the State. The equipment used to harvest timber and the slopes that the equipment operates on typically are the best indicators for potential soil impacts with increased levels of impacts as slopes increase with traditional ground-based equipment. Impacts measured and considered include displacement, compaction, erosion, and total detrimental disturbance. DNRC has found that average total detrimental disturbance on similar projects averages approximately 13% of the ground area. Primary skid trail areas and other areas of severe soil impacts may remain for 10 - 30 years. Exposing mineral soil as a part of logging activities, however, can also dramatically improve conifer seedling success for forest regeneration. DNRC implements a number of mitigation measures on each project to minimize adverse impacts to soils. Such mitigations would also be implemented as a part of this project. Further analysis and disclosure of potential soil impacts will be presented in the EA for the project.

8. DNRC has removed old growth from state trust lands during the last 20 years, which can have adverse effects on forest genetics and long-term health.

**DNRC Response:** Forested stands in this project will be evaluated as a part of the project analysis and will be considered during development and implementation of harvest prescriptions, should the action alternative be selected. Should any old growth stands be harvested, DNRC would attempt, as determined by silvicultural objectives and as stand conditions allow, to maintain at least the minimum number of large live trees and basal area required by DNRC's old growth definition (ARM 36.11.403), which would ensure that ample genetic variability and long-term forest health would be maintained.

9. The proposed project would remove old growth forest, which could adversely affect flammulated owls, saw whet owls, song birds and wild turkeys.

**DNRC Response:** Old growth and select associated species will be addressed further in the EA for the project. Saw whet owls are a common, native, non-sensitive species commonly found in Montana and habitat needs for this species would be amply addressed through DNRC's coarse filter management. They will not be analyzed further in the EA. Wild turkeys are not native to Montana; however, they are a valued game species managed by Montana Fish, Wildlife and Parks. Wild turkeys use a very wide range of habitat conditions, utilizing both open and dense forest conditions. Proposed harvest treatments on approximately 200 acres in the project area would retain ample roost trees and would have negligible adverse effects to wild turkeys. This species will not be evaluated further in the EA.

10. The proposed project would remove old growth forest, which could adversely affect thermal cover for white-tailed deer and upland game birds (e.g. grouse).

**DNRC Response:** Old growth and select associated species will be addressed further in the EA for the project. Forest dwelling grouse species in Montana are common, native, non-sensitive species and habitat needs for these species would be amply addressed through DNRC's coarse filter management approach. They will not be analyzed further in the EA. Effects related to cover reduction for big game species such as white-tailed deer will be discussed further in the EA.

11. The proposed project would remove old growth forest, which could reduce fire resistance of the stands and make them more susceptible to wildfire and mortality.

**DNRC Response:** Should old growth stands be identified in the project area and logged, we would not anticipate reduced resistance of the stands to fire or make them more susceptible to fire-caused mortality. Other relevant issues related to old growth will be addressed in the EA.

12. Old growth and second growth stands logged on DNRC lands during the last 20 years have shown little recuperation.

**DNRC Response:** Comment acknowledged. Depending on the site(s) in question and the type of recuperation being discussed, stands can take several decades to a century or more to "recuperate", regenerate, and/or develop. Additionally, following timber harvesting activity where regenerating a new stand or age class within a stand is an objective, DNRC is required to conduct regeneration surveys to ensure that treatment objectives were met (ARM 36.11.420).

13. In past DNRC projects leave trees were harvested, which adversely effects a stand's ability to naturally regenerate.

**DNRC Response:** In some situations, leave trees may be removed due to operational considerations, or to remove remaining volume and provide a free-to-grow environment after a stand has regenerated, or to capture value of trees blown down by high wind events etc. By contract, operators can be fined for removing trees marked for retention. To maintain large snags over time at least one large, live tree per acre must be retained, which helps further ensure that stands will continue to be able to regenerate. Significant numbers of leave trees and unharvested stands currently remain on past project areas such as North Fork Flatwillow and the Middle Bench Timber Sale parcel.

14. Huge slash piles were created as a result of past projects that contained merchantable material.

**DNRC Response:** All DNRC timber sale contracts contain log and utilization specifications that must be met by contractors. Occasionally logs or pieces of logs that may be merchantable or may appear merchantable may end up in slash piles. DNRC foresters that administer the sales do periodic inspections and frequently communicate with operators to minimize this occurrence.

15. Large slash piles created as a result of past projects that contained decaying slash invited beetle infestations in remaining stands and neighboring forests, which killed more trees.

**DNRC Response:** Incidence of forest insects will be addressed further in the EA for the project. Logging slash can both contain and attract certain species of bark beetles. In situations where mountain pine beetle (*Dendroctonus ponderosae*) is active in a stand, slash from harvested trees that have been infested by beetles can contain beetles that overwinter in slash and emerge the following year to attack remaining trees within the stand or migrate to adjacent stands with suitable host trees. Additionally, slash piles can attract pine engraver beetles (*Ips* spp.) that infest and overwinter in the slash and emerge the following year to re-infest undisposed slash or standing trees. Prompt disposal of slash is necessary to mitigate potential impacts from bark beetles as well as fire hazard, and DNRC strives to accomplish this in accordance with applicable laws, regulations, and operating guidelines.

16. Logging equipment should be power washed before it goes on the site to minimize potential for weed invasion.

**DNRC Response:** Power washing of all heavy equipment is required on all DNRC projects before it is allowed to operate onsite.

17. Spraying weeds kills unintended targets such as native plants, insects, bees, and indirectly, birds due to loss of insect food.

**DNRC Response:** DNRC makes efforts to select weed spray chemicals that specifically target some weeds with lesser effect on non-target native plants. Any weed spraying conducted with this project would be done in accordance with manufacturer label specifications and would occur only on localized areas in order to minimize direct or indirect effects to non-target species, including insects or birds.

18. Weed spraying pollutes the air.

**DNRC Response:** Any weed spraying conducted in association with this project would be done in accordance with manufacturer label specifications and would be done on calm days to minimize drift from targeted areas. Spraying would occur in localized, targeted areas, particularly roadways and landings that may require spot spraying. As a result, any adverse effects to air quality such as drift or odors from herbicide application would be confined to targeted areas and short term in duration.

19. Trees within 200 yards of burned slash pile are scorched and subsequently weakened from slash pile burning, which attracts beetles that kill additional trees.

**DNRC Response:** It is possible for trees to be scorched or damaged by heat generated from burning slash piles; however, the potential impact on an individual tree is dependent on the size of the slash pile and the distance from the tree to the slash pile. Damage to standing trees from slash pile burning only occurs on trees immediately adjacent (within approximately 75 feet) to the slash pile that are close enough to either be contacted directly by flames or scorched by intense radiant heat. Damage from slash pile burning to trees farther than 75 feet from the pile is highly unlikely.

20. Revenues from the DNRC forest management program do not exceed costs and it is losing money.

**DNRC Response:** We refer the commenter's to the Trust Land Management Divisions most recent Annual Report for Fiscal Year 2018 which provides detailed accounting of the Forest Management program:

<http://dnrc.mt.gov/divisions/trust/docs/annual-report/FY2018TrustLandsAnnualReport.pdf>

21. The gross income of all Montana state lands timber sales is less than 0.5% of the total budget of the state school trust fund.

**DNRC Response:** We refer the commenter's to the Trust Land Management Divisions most recent Annual Report for Fiscal Year 2018 which provides detailed accounting of the Forest Management program:

<http://dnrc.mt.gov/divisions/trust/docs/annual-report/FY2018TrustLandsAnnualReport.pdf>

22. The DNRC proposed project will contribute to cumulative effects in addition to those created by similar projects on BLM land and private land.

**DNRC Response:** Comment noted. Cumulative effects relevant to this project will be addressed in the EA.

23. Opposed to the project as currently proposed.

**DNRC Response:** Comment noted.

24. Would like to see state trust sections managed as preserves for scientific study and education.

**DNRC Response:** A programmatic change to alter the direction of managing state forests in the manner proposed is beyond the scope of this project. Such a dramatic change would require a possible Forest Plan revision, forest management ARM revisions, and possibly amendment to the Constitution of the State of Montana.

25. Proposed logging would cause irreparable soil structure damage and erosion. There is irreparable soil structure damage on every state section in the Little Snowies that has been logged since 1997. Operations should be conducted in winter when the ground is frozen or when 8-10 inches of snow is present to prevent soil structure damage.

**DNRC Response:** DNRC has been conducting quantitative soil monitoring studies on timber harvest projects since 1988 that cover a wide range of soil and equipment types, climates, geologies, and silvicultural prescriptions throughout the State. The equipment used to harvest timber and the slopes that the equipment operates on typically are the best indicators for potential soil impacts with increased levels of impacts as slopes increase with traditional ground-based equipment. Impacts measured and considered include displacement, compaction, erosion, and total detrimental disturbance. DNRC has found that average total detrimental disturbance on similar projects averages approximately 13% of the ground area. Primary skid trail areas and other areas of severe soil impacts may remain for 10 - 30 years. Exposing mineral soil as a part of logging activities, however, can also dramatically improve conifer seedling success for forest regeneration. Winter logging can reduce soil disturbance and damage to existing vegetation, however, it comes at the cost of impeding the establishment of new seedlings. DNRC implements a number of mitigation measures on each project to minimize adverse impacts to soils. Such mitigations would also be implemented as a part of this project. Further analysis and disclosure of potential soil impacts will be presented in the EA for the project.

26. Proposed logging would cause ground disturbance that would allow for weed invasions requiring application of deadly herbicides for their control.

**DNRC Response:** Comment noted. This issue will be addressed in the EA.

27. Author has witnessed mortality of numerous species of wildlife and insects associated with herbicide applications by other area residents. Alternatives to toxic chemicals should be used.

**DNRC Response:** DNRC makes efforts to select weed spray chemicals that specifically target some weeds with lesser effect on non-target native plants. Any weed spraying conducted with this project would be done in accordance with manufacturer label specifications and would occur only on localized areas in order to minimize direct or indirect effects to non-target species, including insects or birds. DNRC incorporates the use of bio-controls for weeds on sites where they are likely to have a high probability of success in controlling target weed species.

28. The project area provides habitat for saw-whet owls, flammulated owls, and goshawks.

**DNRC Response:** Saw whet owls are a common, native, non-sensitive species commonly found in Montana and habitat needs for this species would be amply addressed through DNRC's coarse filter management. They will not be analyzed further in the EA. Northern goshawks are likely to occur in the local area, and nest site protections would be put in place in the event that a nesting pair is located. Their habitat needs are also primarily addressed through DNRC's coarse filter management approach. No observation records occur for flammulated owls in the Big or Little Snowy Mountain ranges, thus they are not likely to be present. Should flammulated owls be present in the project area, proposed treatments would improve habitat conditions for flammulated owls by opening up the tree canopy and by retaining large trees and snags. Proposed treatments would also create more sustainable habitat conditions for the owls over the next two decades. Flammulated owls will not be analyzed further in the EA.

29. Native American cultural sites and artifacts may be present on the proposed project area. An archeological assessment should be completed prior to timber sale activities.

**DNRC Response:** Comment noted. An archeologist will review this project prior to timber sale activities, should the action alternative be selected.

30. The archeological assessment must include negative effects associated with road building, road maintenance, clearcuts, slash treatment, landing zones and other heavy equipment operations.

**DNRC Response:** Comment noted. An archeologist will review this project and the activities most likely to adversely affect cultural sites, should they be present, prior to timber sale activities.

31. The project area provides habitat for black-backed woodpeckers.

**DNRC Response:** No Montana Natural Heritage Program records exist for black-backed woodpeckers in the Big or Little Snowy Mountain Ranges. Black-backs prefer dense stands of recently fire-killed trees, which do not occur to any appreciable degree in the cumulative effects analysis area or project area. Should sizable stand-replacing wildfires occur in the landscape where the project area occurs, it is possible that black-backs could show up as they are highly nomadic. Given these considerations and the life history requirements of the species, it is unlikely that any individuals of this species would be measurably affected by the proposed activities. Thus, this species will not be addressed further in the EA.

32. Heavy equipment operations conducted in association with logging kill thousands of tree seedlings and saplings, which is unacceptable.

**DNRC Response:** Under the action alternative, conifer regeneration would be managed based on the silvicultural objectives of each stand on the project area. Where good quality regeneration is present of the tree species desired, it would be protected. In some stands, regeneration is sparse and/or suppressed and comprised of Douglas-fir under ponderosa pine overstories. In such situations, Douglas-fir typically is not the species we want to perpetuate. In some stands, surface soil scarification may be applied to help improve establishment of natural regeneration. In thinning portions of some mature stands, promoting conifer regeneration at this time may not be the desired objective. Maintaining forested acres or previously forested acres as forest is an important management objective for DNRC's Forest Management Program.

33. Too many usable trees have been wasted in large slash piles on DNRC projects conducted during the last 20 years.

**DNRC Response:** All DNRC timber sale contracts contain log and utilization specifications that must be met by contractors. Occasionally logs or pieces of logs that may be merchantable or may appear merchantable may end up in slash piles. DNRC foresters that administer the sales do periodic inspections and frequently communicate with operators to minimize this occurrence.

34. Large green slash piles created by logging operations attract pine beetles and provide material for breeding sites. Such sites increase the spread of beetles into healthy forests causing high tree mortality. Thus, large slash piles are not acceptable.

**DNRC Response:** Incidence of forest insects will be addressed further in the EA for the project. Logging slash can both contain and attract certain species of bark beetles. In situations where mountain pine beetle (*Dendroctonus ponderosae*) is active in a stand, slash from harvested trees that have been infested by beetles can contain beetles that

overwinter in slash and emerge the following year to attack remaining trees within the stand or migrate to adjacent stands with suitable host trees. Additionally, slash piles can attract pine engraver beetles (*Ips* spp.) that infest and overwinter in the slash and emerge the following year to re-infest undisposed slash or standing trees. Prompt disposal of slash is necessary to mitigate potential impacts from bark beetles as well as fire hazard, and DNRC strives to accomplish this in accordance with applicable laws, regulations, and operating guidelines.

35. Over 150 species of birds occur in and around the project area; thus, a thorough wildlife assessment must be completed.

**DNRC Response:** Comment noted.

36. Every DNRC timber sale loses money and DNRC does not account for expenses incurred during the planning and implementing phases of a timber sale. This must be done for the proposed project.

**DNRC Response:** We refer the commenter's to the Trust Land Management Divisions most recent Annual Report for Fiscal Year 2018 which provides detailed accounting of the Forest Management program:

<http://dnrc.mt.gov/divisions/trust/docs/annual-report/FY2018TrustLandsAnnualReport.pdf>

37. Income from all DNRC timber sales in any given year produces less than one half of one percent of the annual income to the school trust fund. This is unacceptable business practice.

**DNRC Response:** We refer the commenter's to the Trust Land Management Divisions most recent Annual Report for Fiscal Year 2018 which provides detailed accounting of the Forest Management program:

<http://dnrc.mt.gov/divisions/trust/docs/annual-report/FY2018TrustLandsAnnualReport.pdf>

38. Bald and golden eagles have been observed in the project area.

**DNRC Response:** Comment noted.

40. Old growth trees and advanced second-growth trees provide vital winter habitat and thermal protection for white-tailed deer, mule deer, wild turkeys, blue grouse, ruffed grouse, white-breasted nuthatches, and mountain chickadees. Logging would result in deterioration of important winter habitat for these species.

**DNRC Response:** Old growth and select associated species will be addressed further in the EA for the project. Forest dwelling grouse species in Montana, as well as white-breasted nuthatches and mountain chickadees are common, native, non-sensitive species and habitat needs for these species would be amply addressed through DNRC's coarse filter management approach. They will not be analyzed further in the EA. Wild turkeys are not native to Montana; however, they are a valued game species managed by Montana Fish, Wildlife and Parks. Wild turkeys use a very wide range of habitat conditions, utilizing both open and dense forest conditions. Proposed harvest treatments on approximately 200 acres in the project area would retain ample roost trees and would have negligible adverse effects to wild turkeys in the local area. This species will not be evaluated further in the EA. Effects related to cover reduction for big game species such as white-tailed deer and mule deer will be discussed further in the EA.

41. Intact forest, such as that found in the project area may provide important elk calving habitat.

**DNRC Response:** Elk seek out secluded areas to have their young that are safe from disturbance and predators in May and June. In northwest Montana, elk have been documented moving to other nearby secure sites within two days of having calves. Immediately following the birth of calves, individual cows may remain isolated near their selected, secure

locations for several days before returning to mingle with other elk. While specific areas may have importance for calf recruitment, it can be difficult to identify precise sites that individual cow may select year after year. Elk are capable of locating new preferred sites for calving areas and given the small scale of the proposed action alternative and abundant dense cover patches present on neighboring BLM and USFS lands, any expected displacement of calving elk or reduction of usable calving sites would be expected to have negligible effect on local elk herds. This issue will not be addressed further in the EA.

42. DNRC needs to consider cumulative effects of logging on all other ownerships that has gone on in the area during the past 20 years.

**DNRC Response:** Cumulative effects associated with logging and other potential causes of relevant environmental effects will be considered and disclosed in the EA.

43. 300 MBF of timber volume removed from 150 acres is excessive and would ruin the forest for decades. This level of harvest would nearly denude the landscape of forest.

**DNRC Response:** We believe that this level of harvest is moderate in intensity and many larger reserve trees would be retained following harvest should the action alternative be selected. We acknowledge and respect that individuals can have differing perspectives and opinions regarding how intensive any given timber harvest may appear. Anticipated effects of the proposed action will be analyzed and fully disclosed in the Environmental Assessment. Note that the harvest acreage increased slightly to 200 acres and 400 MBF following further review by DNRC and a notice to that effect was sent to David Murnion and Jacqueline Mercenier on 3/15/2019.

44. Since 1985 there has been a 40% decrease in bird populations in the United States due to application of chemical herbicides, pesticides, deforestation, wetland destruction, cultivation of native grasslands, and human development.

**DNRC Response:** Comment noted. This issue and these topics are outside of the scope of the proposed action. Effects of weed control actions and influences of logging as they would relate to the project area and cumulative effects analysis area(s) will be considered in the EA. Other topics listed at the scale they are presented in the comment will not be addressed further in the analysis.

45. Since 1997 DNRC NELO foresters have lied to the public about implementation and development of timber sales on sections including Beaver Ball Creek, North Fork, Middle Bench, and Sure Enough.

**DNRC Response:** DNRC makes every effort to be factual and transparent in all aspects of project development, implementation and monitoring. We also recognize that sometimes disagreements can occur. Specific concerns should be provided to local managers at the time of occurrence so that they may be rectified.

46. List of four statements provided in quotes from a NELO forester considered by the commenter to be deceitful.

**DNRC Response:** Comment noted. Context of the quotes provided is unclear. The quotes provided by the commenter do not appear to convey deceit.

47. What stand data has been collected for old growth and non-old growth stands? Has DNRC calculated numerical benefits such as how much carbon is reduced from the atmosphere by these trees?

**DNRC Response:** DNRC completed a timber cruise for this timber permit as well as old-growth verification. The calculation of carbon sequestration for the 200 acres proposed for treatment is outside the scope of this analysis.

**48.** How much carbon will go into the atmosphere as a result of slash piles that would be burned as a part of the South Bench Timber Sale?

**DNRC Response:** The amount of carbon emissions from slash burning is dependent on the amount of material burned. In general, slash burning emits 225 lbs. of carbon monoxide per ton of material burned. The EPA states that “Most of the fuel carbon in wood is converted to CO<sub>2</sub> during the combustion process, but because of inefficient combustion, low combustion temperatures, and large amounts of excess air, a much higher ratio of carbon monoxide to CO<sub>2</sub> is produced than for combustion of wood in airtight wood stoves or wood-fired boilers. This formation of carbon monoxide coupled with incomplete combustion acts to slightly reduce CO<sub>2</sub> emissions compared to other types of wood combustion.<sup>14-19</sup> CO<sub>2</sub> emitted from this source may not increase total atmospheric CO<sub>2</sub>, however, because emissions may be offset by the uptake of CO<sub>2</sub> by regrowing biomass.” As a requirement of DNRC's major open burning permit issued by the Montana Department of Environmental Quality, DNRC submits a list of annual acres and tons of material burned, and the DEQ determines and reports the emissions of particulate matter, volatile organic compounds, and nitrous oxides that are emitted into the atmosphere.

**49.** The timber sale as currently proposed is flawed and should not be implemented.

**DNRC Comment:** Comment noted.