

Chapter 1 Purpose and Need for Action

The Montana Department of Natural Resources and Conservation (DNRC) Trust Land Management Division (TLMD), Southern Land Office is proposing the Palisades Timber Sale Project (proposed action). The proposed action is located in Carbon County, approximately 7 miles west of Red Lodge, Montana on state trust lands in the Luther area (*see Figure 1-1*).

Harvest activities would take place on approximately 789 acres within Sections 3, 5, 6, 7, 8, 9, 10 and 11, Township 7 South (T7S), Range 19 East (R19E). These sections, totaling approximately 4,755⁺ acres, along with existing and proposed roads needed to access and support proposed activities on these sections, will herein be referred to as the project area (*see Figure 1-2*).

Purpose

Project Objectives were formed based on the DNRC Policies and Rules. These include the trust mandate as well as the management philosophy developed through the State Forest Land Management Plan (SFLMP: DNRC 1996) and Administrative Rules for Forest Management (Forest Management Rules: ARM 36.11401 through 471). The purpose of the project is to:

- Manage the forest to improve health, productivity and biodiversity.
- Generate revenue for trust beneficiaries; this includes capturing the value of live as well as dead and dying lodgepole pine before the resource is no longer merchantable for lumber.
- Develop a transportation system that will satisfy long-term management needs, address fish passage concerns and improve water quality through BMP compliance.

The lands involved in the proposed action are held by the State of Montana for the support of the Morrill Trust, and Pine Hill School (*Enabling Act of February 22, 1889*). The Board of Land Commissioners (Land Board) and the DNRC are required by law to administer these state trust lands to produce the largest measure of reasonable and legitimate return over the long run for these beneficiary institutions [*1972 Montana Constitution, Article X, Section 11; Montana Code Annotated (MCA) 77-1-202*].

DNRC strives to balance its fiduciary responsibilities with its stewardship responsibilities that are intended to promote biodiversity and subsequently protect the future income-generating capacity of the forest. All forested lands involved in the proposed action would thus be managed in accordance with the DNRC's SFLMP and Forest Management Rules [*Administrative Rules of Montana (ARM) 36.11.401 through 456*].

Need

Conifer forest stands in the Palisades project area are heavily dominated by lodgepole pine and have little age class diversity. Many stands in the project area are overstocked, with trees showing signs of low vigor including poor annual leader and diameter growth. The lack of species and age class diversity combined with low growth and vigor predisposes stands to insect infestations and disease outbreaks. Mountain pine beetle is active in the Palisades project area, with mortality of lodgepole pine trees averaging 13 percent.

Active forest management would:

- improve species and age class diversity,
- increase stand growth and vigor,
- provide a measure of decreased risk against potential losses from damaging agents such as insects, diseases, and fire.

In addition, active forest management would produce revenue for the trust beneficiaries and move stands towards a sustainable stand composition, which is consistent with DNRC programmatic goals of managing for a healthy and biologically diverse forest.

The current transportation system in the project area does not meet Best Management Practice (BMP) standards for forestry and are currently affecting both water quality and fisheries habitat. Project activities associated with the timber sale would facilitate road improvements which would include adequate road surface drainage, sustainable road grades and locations and properly designed road stream crossings sites to accommodate both hydrologic and aquatic needs.

Relevant Agreements, Laws, Plans, Permits, Licenses and Other Authorizations

Management activities on lands within the proposed project area must comply with certain agreements, laws, plans, permits, licenses, and other authorizations. Following are some of DNRC's core guiding regulations for forest management on state trust land. In addition to these program-wide policies, each of the following resource sections (vegetation, transportation, etc) will also describe those agreements, laws, plans, permits, licenses that are specific to that resource. These descriptions can be found in Chapter 3 Affected Environment and Environmental Consequences.

State Forest Land Management Plan

DNRC developed the SFLMP to "provide field personnel with consistent policy, direction, and guidance for the management of state forested lands" (DNRC 1996: Executive Summary). The SFLMP provides the philosophical basis, technical rationale, and direction for DNRC's forest management program. The SFLMP is premised on the philosophy that the best way to produce long-term income for the trust beneficiaries is to manage intensively for healthy and biologically

diverse forests. In the foreseeable future, timber management will continue to be the primary source of revenue and primary tool for achieving biodiversity objectives on DNRC forested state trust lands.

DNRC Forest Management Rules

DNRC Forest Management Rules (*ARM 36.11.401 through 456*) are the specific legal resource management standards and measures under which DNRC implements the SFLMP and subsequently its forest management program. The Forest Management Rules were adopted in March 2003 and provide the legal framework for DNRC project-level decisions and provide field personnel with consistent policy and direction for managing forested state trust lands. Project design considerations and mitigations developed for this project must comply with applicable Forest Management Rules.

Montana Best Management Practices (BMPs) for Forestry

Montana BMPs consist of forest stewardship practices that reduce forest management impacts to water quality and forest soils. The implementation of BMPs by DNRC is required under *ARM 36.11.422*. Key forestry BMP elements include: streamside management; road design and planning; timber harvesting and site preparation; stream crossing design and installation; winter logging; and hazardous substances storage, handling, and application.

Sustainable Yield Calculation

In addition to the SFLMP and Forest Management Rules, DNRC is required to re-calculate the annual sustainable yield for forested trust lands at least every 10 years (*MCA 77-5-221 through 223*). DNRC defines the annual sustainable yield calculation (SYC) as:

“...the quantity of timber that can be harvested from forested State lands each year in accordance with all applicable state and federal laws, including but not limited to the laws pertaining to wildlife, recreation and maintenance of watersheds and in compliance with water quality standards that protect fisheries and aquatic life and that are adopted under the provisions of Title 75, Chapter 5, taking into account the ability of State forests to generate replacement tree growth (MCA 77-5-221).”

The SYC determines the amount of timber that can be harvested annually on a sustainable basis from state trust lands, given all applicable laws and environmental commitments described in the SFLMP and Forest Management Rules. Important ecological commitments related to biodiversity, forest health, threatened and endangered species, riparian buffers, old growth, and desired species mix and cover types were incorporated into the SYC. After incorporating these commitments into the model, the statewide annual sustainable yield was determined to be 57.6 MMBF of timber.

Figure 1-1. Palisades Timber Sale Vicinity Map.

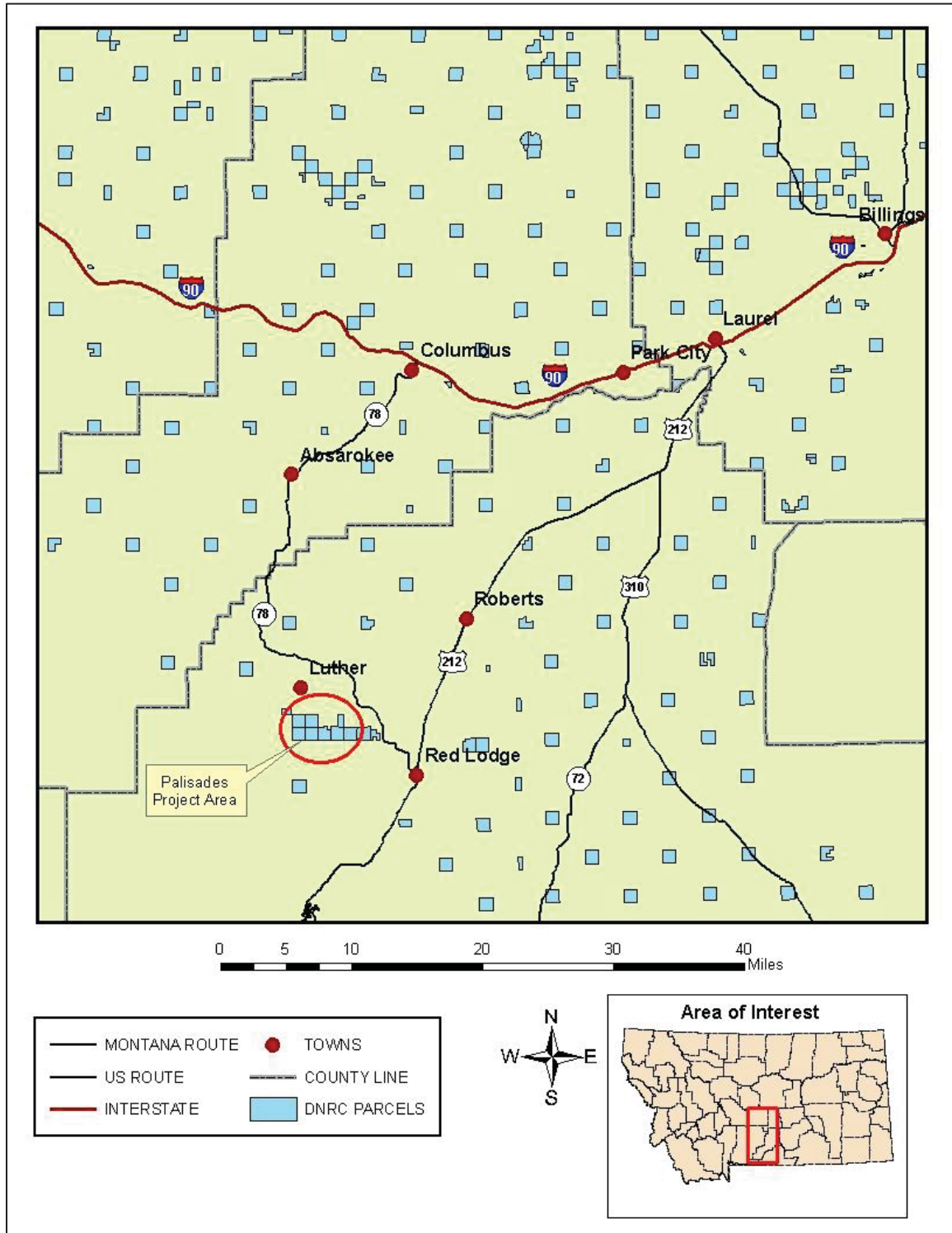


Figure 1-2. Palisades Timber Sale Project Area.

