Cold Elk
Forest Management Project
Environmental Assessment

Reader's Guide

July 2016

BLM

Medford District - Grants Pass Field Office

NATIONAL SYSTEM OF PUBLIC LANDS
U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Dear Reader,

Thank you for your interest in public lands and welcome to the Cold Elk Forest Management Project. This Readers Guide is meant to help you understand the project and describes your opportunities to participate in the planning process. This guide describes the what, where and why of the work we are proposing to do.

This Readers Guide has been made available to supplement the Cold Elk Forest Management Project Environmental Assessment (EA). This guide is a synopsis to the information contained in the EA. The purpose of an EA is to disclose the direct, indirect, and cumulative impacts that may result from the action alternatives. We are now in the EA comment period, part of which includes public involvement. During this process the BLM solicits your feedback on the proposed project.

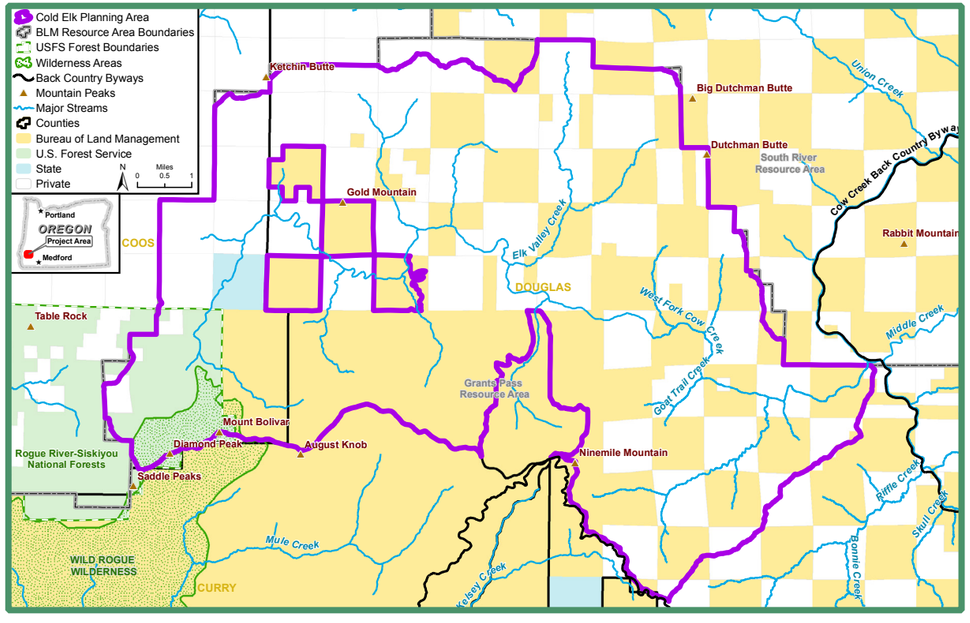
Inside this Readers Guide you will find a Planning Area description, a discussion of the Purpose and Need for the project, a description of the action alternative, a descriptoin of the proposed forest management treatments, a map of the Planning Area with potential treatment units, public involvement information, and a Forest Management Tour.

We hope this guide helps you understand the EA and the action alternative. Please contact our office if you have questions. Your input is an important part of the management of your public lands. Thank you.

Allen Bollschweiler, Grants Pass Field Manager

Planning Area Description

The Planning Area falls within the West Fork Cow Creek watershed. The watershed is part of the Umpqua River drainage in the Klamath Mountains province in southwest Oregon. This area is approximately 20 miles northwest of the town of Glendale. The southwestern portion of the Planning Area is mostly a solid block of BLM-managed lands within the BLM Medford District. The northern and eastern portions of the Planning Area have BLM lands intermingled with private lands, characteristic of Oregon and California (O&C) railroad lands of western Oregon.



Landscape Description

Historical Conditions

The West Fork Cow Creek watershed developed as both mixed conifer and Douglas-fir communities. Exceptions include the Bear Creek drainage and serpentine soil areas in Wilson Creek, which both had relatively sparse tree cover. A small but distinct white oak savanna woodlands populated small valleys and rocky flat areas. A long history of fire activity maintained open conditions and limited understory regeneration. Fire suppression beginning in the early twentieth century has shifted the type and growth rate of vegetation on the landscape. Overall, fire suppression, recent catastrophic large fires, timber harvest from the 1960s to the 1990s, and reforestation practices have decreased the acreage of mature and late seral forests.

Historically, stands showed great variety of density and fire was a frequent occurance in the Planning Area

Existing Conditions

Much of the Planning Area is designated a North General Forest Management Area (O&C Matrix) and is within the Klamath West Unit of Critical Habitat for the northern spotted owl. Current conditions exhibit high tree densities leading to reduced tree vigor. This increases the risk of habitat loss from trees dying as a result of fire, insects, and drought. Consecutive drought years have recently predisposed trees to these mortality agents.

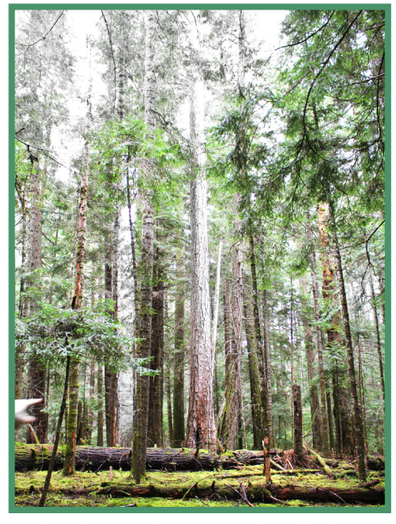
Overstocked forest stand with dead and dying trees.

The Planning Area also provides habitat for coho and chinook salmon, and cutthroat and steelhead trout. The Umpqua River basin cutthroat trout has been listed as an endangered species. Northern spotted owls also inhabit parts of the Planning Area, as do red tree voles and marbled murrelets.

Desired Conditions

The desired condition within the Cold Elk Planning Area is a mixture of multi-aged forests. This desired condition is reflective of the Matrix Land Use Allocation characteristic of the Planning Area, coupled with the need to manage for vigorous growing conditions by reducing stand densities and creating variable structure for northern spotted owls.

A desired condition for Critical Habitat Units in the Planning Area includes a forest ecosystem that is sustainable and resilient under current and future climate conditions. Long term recovery of the northern spotted owl can best be achieved by protecting, enhancing, and developing habitat.



High value northern spotted owl habitat such as this pictured above can be developed through active management actions.

Purpose and Need for the Project

The purpose of this project is to manage forests in the Matrix Land Use Allocation (LUA) and Riparian Reserves (RR) for timber production as outlined in the 1995 Medford District Resource Management Plan / Record of Decision using silvicultural practices, and/or commercial and non-commercial treatments.

The majority of O&C Lands fall within the Matrix Land Use Allocation.

There is a need for this project to produce wood volume, increase conifer growth rates for future wood volume productoin, and maintain/improve vigor of retained conifers and other vegetation while maintaining northenr spotted owl habitat.

Land Use Allocations

Riparian Reserves would be treated in a manner that protects their important values.

The Cold Elk Forest Management Project is located in the West Fork Cow Creek watershed, in Douglas County, with a small portion in Coos County, Oregon. For a map of the Planning Area see the center pages of this Scoping Guide.

Treatment is desired within Matrix Land Use Allocations in order to improve forest vigor and health, provide a sustainable supply of timber and other forest products to provide jobs and contribute to community stability, and to maintain connectivity between late-successional reserves.

There is a recognized desire for treatment within Riparian Reserve Land Use Allocations. Treatment within Riparian Reserves would help promote Aquatic Conservation Strategy objectives by providing ecosystem diversity, and develop structural and spatial stand diversity.

Project Alternatives

On the next few pages is a simple description of the No Action Alternative and Action Alternative. For a more in-depth discussion of the alternatives, see the Cold Elk Forest Management Project EA (pp. XX-XX).

The No Action Alternative 1

The No Action Alternative provides a baseline for comparison of the Action Alternative and describes the existing condition and the continuing trends within the Planning Area. Selection of the No Action Alternative would not meet the purpose and need of the project.

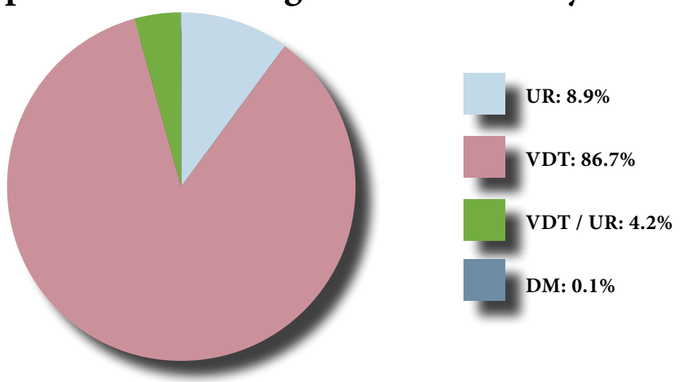
Action Alternative 2

The BLM is proposing a variety of treatments within the Cold Elk Project Planning Area. The treatments are described on pages 6 through 7of this Readers Guide. The proposed treatments in Alternative 2 meet the Purpose and Need of the project. Below is a summary of the treatments proposed under Alternative 2.

Summary of Proposed Action Alternatives Activities

Alternative 2 Proposed Activities		Matrix LUA	Riparian Reserve LUA	Combined
Harvest Summary	Understory Reduction (UR)	214 acres	117 acres	331 acres
	Variable Density Thinning (VDT)	1,810 acres	1,400 acres	3210 acres
	VDT/UR	91 acres	66 acres	157 acres
	Disease Management (DM)	1 acre	3 acres	4 acres
	Total Harvest Acres	**2,116**	**1,586**	**3,702 acres**
Operations Summary	Ground Based	655 acres	649 acres	1,304 acres
	Cable/Skyline	1,099 acres	731 acres	1,830 acres
	Helicopter	149 acres	88 acres	237 acres
	Total Operation Acres	**1,903**	**1,486**	**3,389 acre**
Temporary Route Construction Summary	Temporary Route Construction	**5.19 miles**	**0.45 miles**	**5.64 miles**
	Temporary Route Reconstruction	**1.63 miles**	**0.29 miles**	**1.92 miles**
	Total Mileage	**6.82 miles**	**0.74 miles**	**7.56 miles**

Proposed Forest Management Activities by Percentages



Treatments Being Considered

Variable Density Thinning

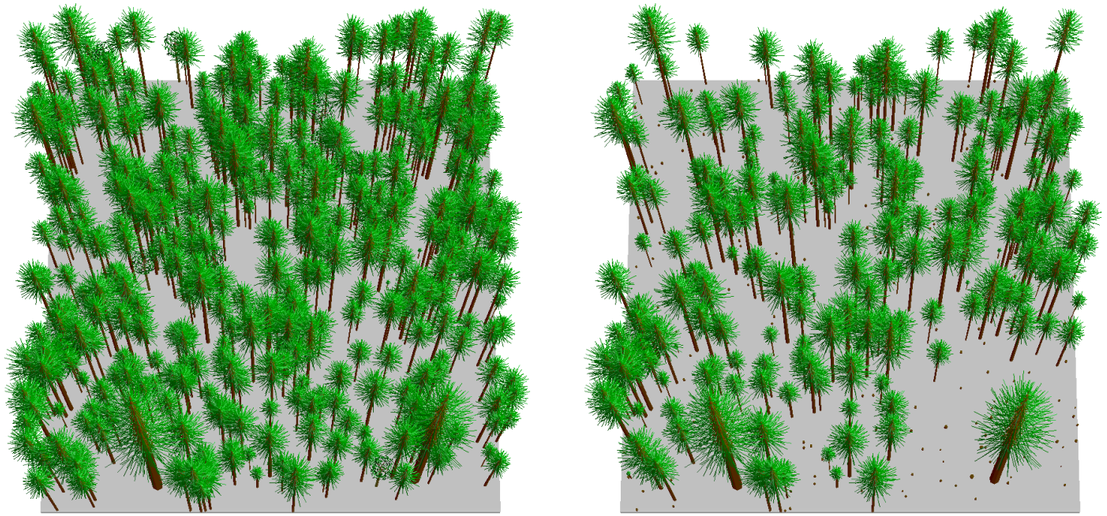
Variable density thinning treatments are applied to create complex forest structure. This type of thinning may include treatments that create space (gaps) around large legacy trees of less prominent species such as pine, oak and cedar. It may also maintain denser areas that may remain untreated, known as "skips." Variable density thinning objectives include:

- Removing excess trees that create "ladder fuels," which improves a forest stand's ability to withstand wildfire.
- Increasing amount of spotted owl habitat over the long term.
- Favoring the retention of more fire tolerant and drought tolerant trees.

Example of Variable Density Treatment

Before Treatment

After Treatment



Above: *The stand at left is experiencing competition for resources (such as light, nutrients, water, space). If no thinning were to occur, these stands would remain in stand exclusion (loss of a developed understory and midstory, spindly trees exhibiting growth suppression and susceptible to disease, mortality, and windthrow). Applying variable density thinning to the stand, at left, opens up the canopy, lets in available sunlight, and decreases competition for resources that lead to mortality.*

Understory Reduction

Understory reduction is a treatment designed to reduce fuel loading and ladder fuels, potentially decreasing the risk of wildfire. This treatment would enhance tree growth and vigor and may increase fire resiliency.

Understory reduction includes the partial or complete removal of one or more understory canopy layers for the purpose of maintaining desired stand components and/or reducing the risk of stand replaement fire (RMP, p. 186).

Forest Stand in need of Understory Reduction Treatment.

Disease Management

A laminated root rot infection center is currently reducing site productivity and potential to develop future spotted owl habitat. The primary hosts most severely affected include Douglas-fir and white fir. Because this disease is long-lived and continues infecting susceptible species, this treatment would remove Douglas-fir and white fir, followed by a subsequent planting of conifer species resistant to infection damage.

Road number 31-8-31.0 is adjacent to this four acre infection center. Roadside safety remains at risk where this disease is found as trees readily fail with no supporting root structure. If left untreated, the anticipated natural regeneration of Douglas-fir would continue to occupy the growing space, thereby perpetuating infection on productive forestland and compromising road safety.

Inside of a Douglas-fir suffering from laminated root rot. One of the symptoms include the white fuzzy material in the picture above, also known as setal hyphae, which occurs between sheets of decomposing wood.

Cold Elk EA
Action Alternative
07/1/2016

R10W R09W R08W

T31S T32S

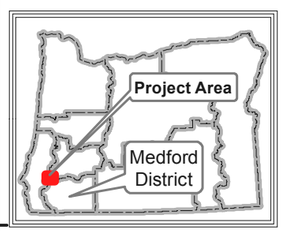
4745500 4738000

427500 435000 442500 450000

8 9

- Planning Area
- Resource Area Boundary
- Bureau of Land Management
- Helicopter Landings
- Understory Reduction
- Variable Density Thin
- Variable Density Thin/ Understory Reduction
- Lam Root Rot
- Cable Yarding
- Ground Based Yarding
- Helicopter Yarding
- Temporary Construction
- Temporary Reconstruction
- Roadside Management Units
- Paved Road
- Rocked Road
- Natural Surface Road
- Not Known

0 1 2
Miles



Operations Needed to Accomplish Goals

Yarding methods may vary depending on a number of factors, including environmental concerns, available roads, ease of access, and cost. Below are the three types of yarding operations being considered in the Cold Elk Project.

Cable Yarding

Cable yarding is the process of removing logs from a harvest unit to a landing by use of wire cables, a carriage, a tower, and a yarder.

- The carriage is the device from which logs are suspended and which rides back and forth between the yarder and tower, also called the "skyline carriage."
- The tower is the anchor point placed on the far end of the yarding corridor, from which the carriage moves back and forth.
- On Medford District BLM lands, at least one end of the log must be suspended during yarding. This helps limit impacts to soils and other plants.

A cable yarding operation.

Ground-Based Harvesting/Yarding

Ground based harvesting is the cutting of trees in the harvest unit using a mechanized saw. Ground based yarding is the removal of logs from a harvest unit using wire cables and a tractor or dozer-like machine.

- On Medford District BLM lands, the tractor must be equipped with an integral arch so that one end of the log is suspended above the ground while being pulled to a landing. This protects soils and the remaining trees within the unit.

A ground-based harvesting operation.

Helicopter Yarding

Helicopter yarding is the removal of logs from a harvest unit using wire cables and a helicopter to fully suspend the logs from the ground and transport them to a landing.

- Usually conducted when access to a unit is limited by one of a number of factors, including terrain difficulty, lack of available roads, and habitat concerns.
- This is often the most expensive and hazardous yarding method available.

A helicopter yarding operation.

Proposed Road Work

Access to treatment units depend on the quality of available roads. The Cold Elk Forest Management Project Environmental Assessment will analyze roads within the project area and may propose a variety of actions, including: road maintenance, temporary route construction, and temporary route reconstruction. When forest management activities generate revenue, road maintenance activities occur on a regular basis and are associated with project activities. Such maintenance activities may improve the function of forest roads and decrease sedimentation from forest roads.

Temporary Route Construction*

- These routes are created in areas where no previous routes exist. They allow operators temporary access to harvest units.

Temporary Route Reconstruction*

- These routes already exist on the landscape.
- Reconstruction restores an existing road to its engineered condition.

Temporary Route Renovation

- Restores an existing unmaintained route to its original or modified design standard.

Road Maintenance

- Maintenance on existing roads would help maintain their original design standard.
- Maintenance reduces sedimentation from road runoff.

**Temporary routes are usually decomissioned after use.*

Typical BLM road.

Decommissioned road after more than 15 years.

Road Maintenance.

Recently decommissioned road.

Resources that Influenced the Project Design

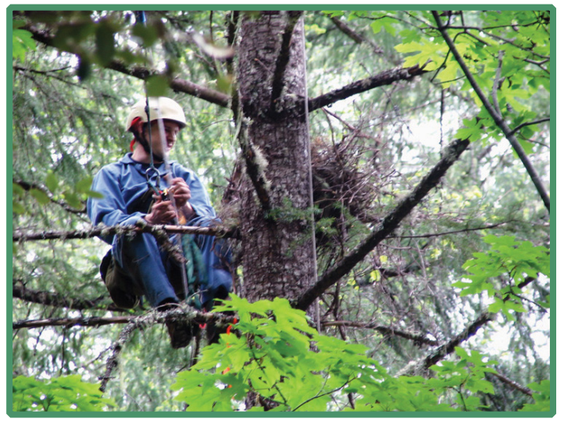
The Interdisciplinary team (IDT) of resource specialists that developed the project received comments from the public; local, federal and state agencies; federally recognized tribes; and other organizations that were interested in the project.

The IDT considered in detail the following issues and incorporated them into the design of the action alternative, Project Design Features (EA Chapter 2.3), and analysis of the environmental effects found in Chapter 3 of the EA.

Wildlife (EA Chapter 3.3)

Wildlife biologists considered the effects of proposed project activities on the northern spotted owl, their habitat, and their prey species, as well as effects to red tree voles, fishers, marbled murrelet, and other species of concern.

Northern Spotted Owl



Red Tree Vole (RTV) surveyor, verifying nest occupancy.

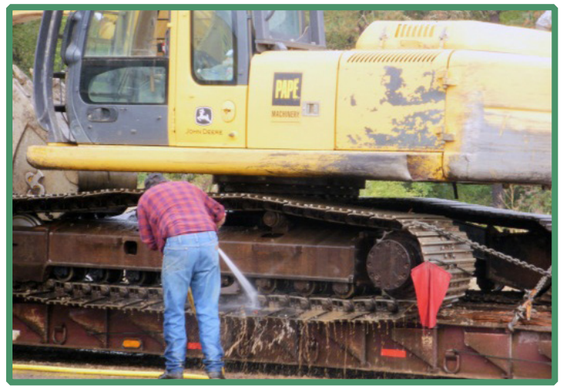
Soils (EA Chapters 3.4 and 3.5)

Effects to soil and site recovery and nutrient cycling were analyzed by resource specialist who have incorporated measures to reduce potential impacts to soils.

Invasive Species/Noxious Weeds (EA Chapter 3.10)

BLM botanists evaluated proposed project activities for the potential spread of invasive/noxious weeds. Measures have been incorporated into the project design to reduce the likelihood of spreading non-native plant species.

BLM Soil Scientist assessing soil compaction.



Contract Administrator verifying equipment is washed to prevent noxious weed spread prior to entry on public land.

Hydrology / Aquatics (EA Chapter 3.6 and 3.7)

A project goal is to protect water quality and quantity, fish, and aquatic habitat. Resource specialists have analyzed project effects on the physical integrity of the aquatic system, as well as sediment and instream flow. Measures have been incorporated into the project design to protect sensitive species such as Coho Salmon.

BLM employee surveying a stream.

Effects to fish, such as Coho Salmon will be analyzed as part of the Cold Elk Project.

Fuels / Fire (EA Chapter 3.2)

The proposed Variable Density Thinning and Understory Reduction treatments are intended to create fire resilient stands by reducing surface fuels, ladder fuels, and crown density. Thinning followed by treatment of surface fuels and activity fuels can reduce potential fire danger and increase resiliency to natural fire. Thinning can, to a degree, restore fire resiliency.

Stand Condition (EA Chapter 1.3 and 1.4)

Resource specialists assessed and evaluated site conditions to determine need and extent of forest management treatments.

Silviculturist verifying stand age.

Thinning may allow for both natural and prescribed fire to burn with low intensity.

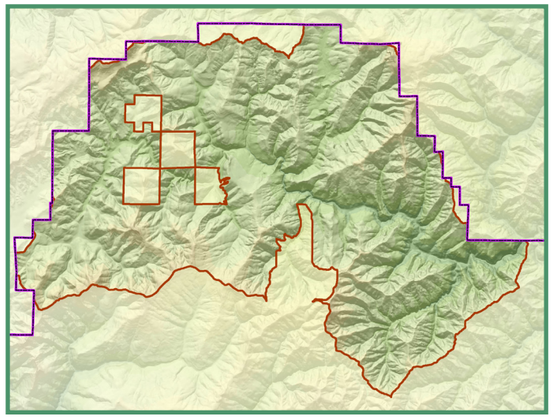
Archeological Resources (EA Chapter 3.8)

Surveys in the Planning Area were carried out according to BLM Archeological standards to determine potential impacts to cultural resources. Measures are incorporated to protect cultural and paleontological resources if discovered during project design and implementation.

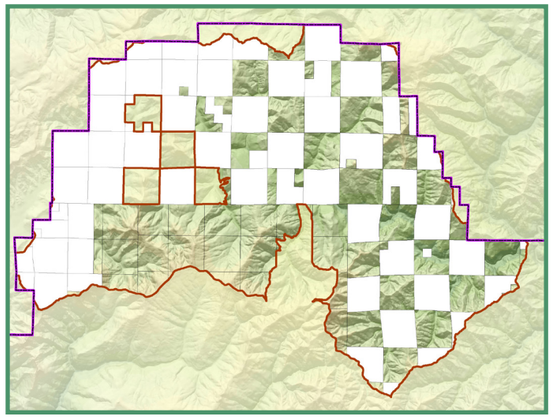
Flint found and protected at a BLM archaeology site.

Cold Elk Project Unit Selection Process

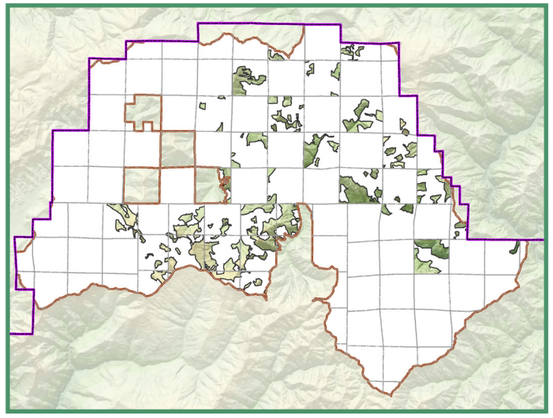
An interdisciplinary team (IDT) of resource specialists is brought together during the planning stages of a project. There are many steps that the IDT must go through before the final proposed treatment units are selected. Below is a brief description of the unit screening and selection process.



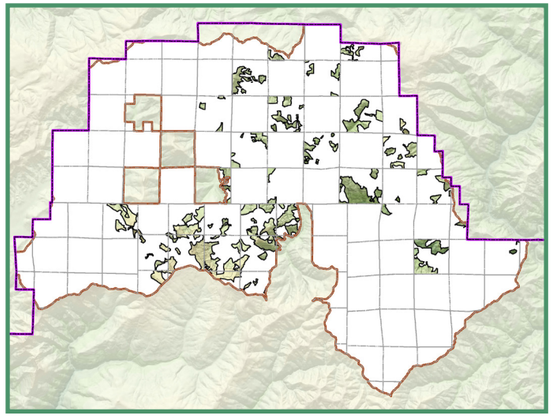
Step 1 - Delineate Project Area



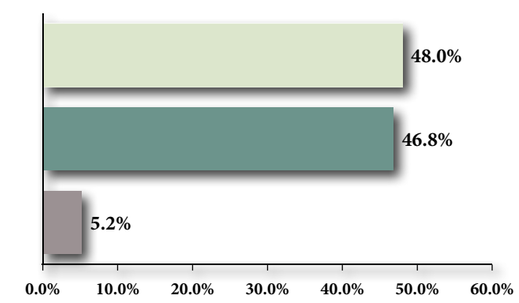
Step 2 - Identify BLM-Managed lands



Step 3 - Screening Process: Remove or mitigate sensitive areas, Northern Spotted Owl nest patches, sensitive soils, flora and fauna protection areas from the project



Step 4 - Fine Scale Screening Process: Remove Northern Spotted Owl habitat areas (Recovery Action 32 patches), Northern Spotted Owl site prioritization (Recovery Action 10*), red tree vole protection buffers, environmental protection zones (EPZ), and areas that were uneconomical or inaccessible.*



Non-BLM land within the Planning Area: 48.0%

BLM Managed lands screened out: 46.8%

BLM Managed lands under consideration for treatment within the Planning Area: 5.2%

Public Involvement

To the right is a diagram which briefly explains the National Environmental Policy Act (NEPA) and the Environmental Assessment process. The brown boxes show the steps in the EA process where the BLM solicits public participation. The Cold Elk Project is currently in the stage described in the final brown box, the "EA Public Comment Period and Field Trip."

Scoping Comments and Public Meeting

Public participation for the Cold Elk Project EA will continue on July 5, 2016, when the BLM publishes a legal notice in the *Grants Pass Daily Courier* and the *Roseburg News Review*. The EA will be made available on that day for a 30-day public comment period, ending on August 4, 2016.

Comments may be submitted by visting the project website at http://tinyurl.com/BLMePlanning-ColdElk, and clicking the "Comment Periods" tab on the left side of the webpage. Comments may also be submitted in hardcopy or electronically to the address listed below:

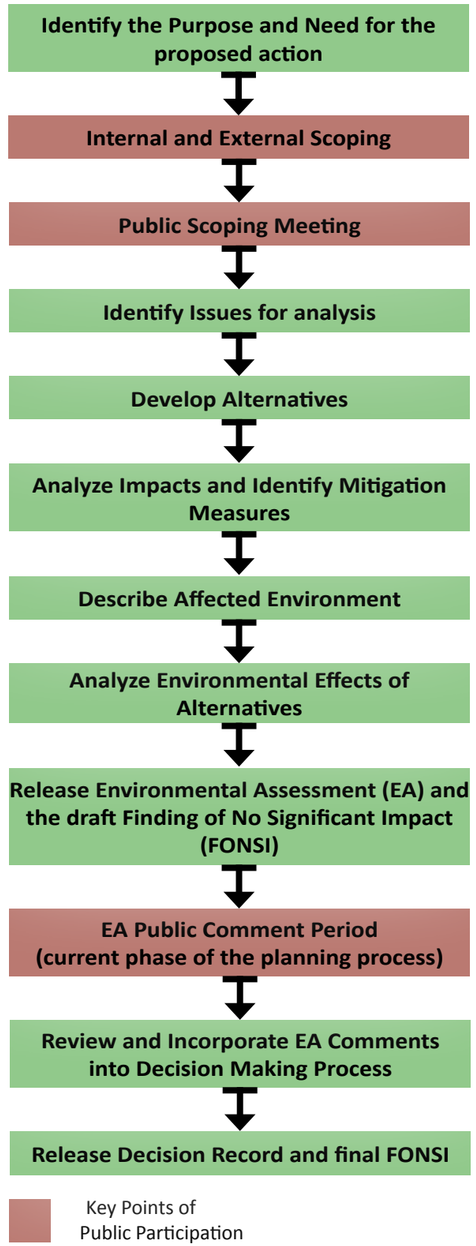
Grants Pass Interagency Office
ATTN: Cold Elk Public Comment
2164 NE Spalding Ave
Grants Pass, OR 97526

A public meeting will be held on July 11, 2016 at the Grants Pass Interagency Office (address above) from 3:00 PM to 5:00 PM. The meeting will provide interested members of the public an opportunity to ask questions and learn more about the project. For more information about the meeting, and about the project please visit the BLM's planning website at http://tinyurl.com/BLMePlanning-ColdElk, or call us at the number below.

Primary Contact
Leah Schofield • Planning and Environmental Coordinator
(541) 471-6504 • lschofie@blm.gov

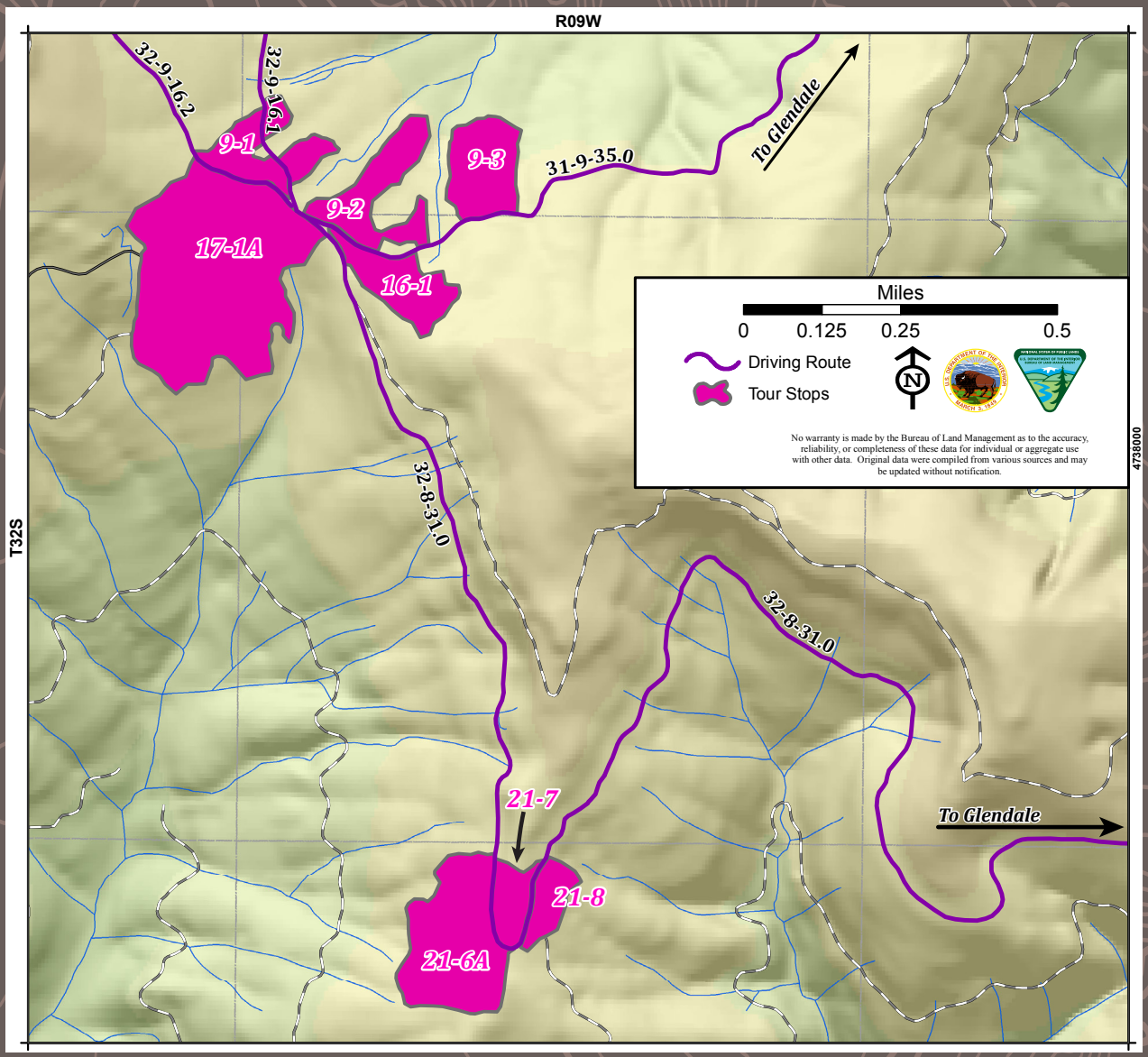
Understanding the National Environmental Policy Act (NEPA)

The Environmental Assessment Process



Forest Management Tour in the Cold Elk Area

The Grants Pass Field Office invites you to personally view previous BLM forest management treatments, similar to the types of treatments proposed in this project. These units were part of the Anatouvik Thin treatment of 2010 and 2011. These sites may not be accessable in the winter. If you choose to make this trip, please plan accordingly: Check the weather forecast, bring appropriate clothing and equipment, and tell someone where you are going. This tour may take approximately 5 hours. An additional forest management tour that shows treatments closer to Grants Pass may be found on this project's online planning page at http://tinyurl.com/BLMePlanning-ColdElk.



9-1, 9-2: 2010 Commercial Thin, tractor yarding, 40% canopy target

9-3: 2010 Commercial Thin, cable yarding, 40% canopy target

16-1: 2011 Commercial Thin, cable yarding, 40% canopy target

17-1A: 2011 Commercial Thin, tractor yarding, 40% canopy target

21-6A: 2010 Commercial Thin, cable yarding, 40% canopy target

21-7, 21-8: 2010 Commercial Thin, tractor yarding, 40% canopy target

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