

Documentation of Land Use Plan Conformance and NEPA Adequacy (DNA)

U.S. Department of the Interior
Bureau of Land Management (BLM)
Eugene District, Oregon

Leibo Canyon Thinning DOI-BLM-OR-E050-2010-0004-DNA

A. Description of the Proposed Action

The proposed action is to implement the Leibo Canyon Thinning by commercially thinning approximately 75 acres within the North Lake Creek planning area, 41 acres in matrix and 34 acres in riparian reserves. The proposed action, including silvicultural prescriptions, logging systems, Riparian Reserve treatments, road decommissioning prescriptions, and wildlife mitigation measures is described in the attached "Project Implementation Prescription."

Location: T.15 S. R.6 W. Sec.19 Will. Mer.

B. Conformance with the Land Use Plan (LUP) and Consistency with Related Subordinate Implementation Plans

LUP Name: Eugene District Record of Decision and Resource Management Plan (RMP), as amended

Date Approved: June 1995

The proposed action is in conformance with the applicable LUPs because it is specifically provided for in the following LUP decisions:

The Eugene District Record of Decision and Resource Management Plan calls for providing a sustainable supply of timber from the Matrix Land Use Allocation (LUA) (p. 84). The Proposed Action is within the Matrix LUA. The RMP also calls for applying silvicultural practices in Riparian Reserves to control stocking, reestablish and manage stands, and acquire desired vegetation characteristics needed to attain Aquatic Conservation Strategy objectives (p. 24).

C. Identify the applicable NEPA document(s) and other related documents that cover the Proposed Action.

1. EA OR090-04-07, North Lake Creek Thinning Project; June, 2005.
2. Biological Assessment of the North Lake Creek Thinning Project, January 25, 2005, Eugene District, Siuslaw Resource Area.
3. Biological Opinion – US Fish and Wildlife Service, March 17, 2005 (*amended September 2008*).
4. Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage Protection Buffer, and other Mitigation Measures Standards and Guidelines. January 2001.

D. NEPA Adequacy Criteria

1. Is the current proposed action substantially the same action (or is a part of that action) as previously analyzed?

Yes. The North Lake Creek EA considered commercial thinning on 5,500 acres of Matrix and Riparian Reserve LUAs. The Proposed Action is included in that analysis area (see Map 5 in the EA).

2. Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the current proposed action, given current environmental concerns, interests, resource values, and circumstances?

Yes. The EA analyzed an appropriate range of alternatives given the purpose and need for the project. Five alternatives were analyzed: (1) Alternative A, No Action; (2) Alternative B, designed to contribute to the Eugene District's Allowable Sale Quantity (ASQ) as well as provide for forest health and productivity; (3) Alternative C, designed to contribute to ASQ, but included additional objectives to protect and enhance northern spotted owl habitat and mushroom productivity; (4) Alternative D, designed to contribute to ASQ, but included objectives to emphasize stand structure development in a portion of the Riparian Reserves and minimize short-term impacts to aquatic habitat; and (5) Alternative E, which would contribute to ASQ, but also enhance aquatic habitat complexity. See EA, pp. 5-11. The selected alternative is Alternative E as described in the North Lake Creek Thinning Project EA, modified to include the heavy thinning in 20% of the Riparian Reserves as described under Alternative D. Leibo

Canyon thinning includes 75 acres of moderate thinning as described in Alternative E. No new environmental concerns, interests, resource values, or circumstances have been revealed since the EA was published in 2004 that would indicate a need for additional alternatives.

3. Is the existing analysis adequate and are the conclusions adequate in light of any new information or circumstances.

Yes. No new information or circumstances have arisen since the EA was published in 2004 that could affect the adequacy of the analysis. The North Lake Creek area has been designated as Critical Habitat for the Northern Spotted Owl in the 2008 recovery plan. The USFWS issued an amendment to the 2005 Biological Opinion taking this change into consideration. The effects analysis for the proposed action in the EA was adequate under the critical habitat designations. The effects analysis regarding road-related sediment was extensive and appropriate for the type of landscape comprising the Leibo Canyon thinning timber sale, in that the type and amount of road construction and renovation needed to implement the Leibo Canyon thinning project is consistent with what was anticipated in the EA (pp. 5, 8, 9-11). Effects analysis in the EA regarding dispersal habitat for spotted owls and mushroom production remains adequate. Portions of the Leibo Canyon thinning project overlap with the home range of one owl pair. Almost all of unit 1 consisting of 38 acres of thinning overlaps the Alsea owl home range, this site has been occupied by spotted owls for a number of years. The Alsea owls nested and produced fledglings in 2008, they did not nest in 2009, the site will continue to be monitored to ascertain nesting and suitable mitigations will be applied to prevent disturbance during the critical breeding period. The EA specified that thinning dispersal habitat would degrade but not remove dispersal habitat (pp. 31-32), the current proposed action will maintain 40% canopy closure after treatment. The effects determination due to light to moderate thinning and road renovation associated with this action is likely to adversely affect the Alsea spotted owl pair because the thinning includes foraging habitat within their home range. This conclusion is consistent with the findings of the original Biological Opinion and amendment from the USFWS. Analysis of mushroom productivity assumed that productivity would be reduced on a nearly 1:1 ratio between the number of trees removed and loss of mushrooms, when averaged over a large area and multiple years (EA, p. 34). The EA estimated that productivity would be reduced overall to 38% within thinned areas (EA, p.36) for the Proposed Action under a moderate thinning regime (EA, p. 8) with a relative density in the mid-30's. The silvicultural prescription for Leibo Canyon thinning would result in a relative density of approximately 33 which is within the range anticipated in the EA.

The effects of thinning on climate change have come into question recently. The appropriate scale at which carbon estimates should occur are at the Resource Management Plan or larger. Since the USLP EA and the LSR 267 EIS tiered to the 1995 RMP, the analysis has been completed in the EIS that accompanied the 1995 RMP. The 1995 RMP did consider increases in carbon dioxide release from forest management activities. The two forest management activities that were considered as having a measureable impact (based on research available at that time) included large scale clear cutting of old growth (age class 200+) and prescribed burning after harvest of those acres. The total increase in atmospheric carbon would not exceed 0.01 percent due to those actions under the 1995 Proposed Resource Management Plan (pages 4-9; 4-10 1995 FEIS). All other forest management actions were considered to have much less of an impact and therefore were not considered. In comparison, Leibo Canyon is a thinning project and does not include clear cut harvest of old growth and associated prescribed burning. The proposed action includes piling of slash within 25 feet of roads. Slash from these piles would be used to scatter over decommissioned roads, and the remaining material would be covered and burned to increase safety in the event of wildfire occurrences. The carbon released from these slash piles is not expected to have measurable impacts to increases in carbon dioxide in the atmosphere due to the small quantity and short duration of burning that is to occur. The conclusions in the 1995 RMP/EIS analysis of carbon release support the thinning as described in this proposed action would have a negligible effect on the global carbon pool. New information or circumstances about carbon release with regards to the proposed action is considered to be insignificant.

4. Do the methodology and analytical approach used in the existing NEPA document(s) continue to be appropriate for the current proposed action?

Yes. A new recovery plan for the northern spotted owl was released in August of 2008, resulting in portions of the North Lake Creek area being designated as critical habitat. The Leibo Canyon thinning timber sale is located within the newly designated critical habitat. Formal consultation was reinitiated for

the North Lake Creek EA resulting in an amendment to the original Biological Opinion. The Leibo Canyon thinning project is consistent with the US Fish and Wildlife Service's biological opinion and its amendment for the North Lake Creek EA. There are no changes in resource conditions from when the EA was published in 2004. There are no changes in resource-related plans, policies or programs of other government agencies, Indian tribes. There are no changes in statute, case law, or regulation that would affect the implementation of the Leibo Canyon thinning project.

5. Are the direct and indirect impacts of the current proposed action substantially unchanged from those identified in the existing NEPA document(s)? Does the existing NEPA document sufficiently analyze site-specific impacts related to the current proposed action?

Yes. The EA describes impacts to the aquatic ecosystem, northern spotted owl foraging habitat and dispersal habitat, mushroom productivity, noxious weeds, and implementation costs. Impacts from implementing the Leibo Canyon thinning timber sale would fall within those analyzed in the EA, and were anticipated in the EA. The models used in the EA to predict road-related sediment remain current and appropriate at the landscape scale. The analysis of effects to northern spotted owls is consistent with that contained in the original and amended Biological Opinion from the US Fish and Wildlife Service. No new research has come to light regarding effects of commercial thinning on mushroom productivity. The EA analysis included typical effects that would be expected at the site-specific level, and identified BMPs that would be implemented as needed depending on site-specific conditions. There are no known wildlife special status species in the project area. No special status botanical species were found during surveys. There is no indication that implementing the Leibo Canyon thinning would result in different environmental effects than those anticipated in the EA.

6. Can you conclude without additional analysis or information that the cumulative impacts that would result from implementation of the current proposed action are substantially unchanged from those analyzed in the existing NEPA document(s)?

Yes. Cumulative effects considered in the EA included those from past and future timber sales on public and private land, recreation management activities through implementation of the Upper Lake Creek Recreation Area Management Plan (RAMP), and road paving (EA, p. 19). No unanticipated actions or events have occurred in the North Lake Creek planning area that would have additional cumulative effects with the Leibo Canyon thinning project.

7. Are the public involvement and interagency review associated with existing NEPA document(s) adequate for the current proposed action?

Yes. The Leibo Canyon thinning project area is within the North Lake Creek planning area, which went through extensive public scoping prior to development of the EA. In August, 2003, a scoping letter was mailed to over 300 groups, businesses, local government agencies, and individuals, announcing that BLM was seeking help identifying issues and concerns regarding timber harvest in the North Lake Creek area. An open house was held at the Triangle Grange on September 4, 2003, and BLM staff was available during the Blachly Fair, September 7-8, 2003. In May, 2004, the North Lake Creek EA was released for a 30-day public review and was sent to 12 groups or businesses, 9 state or local government agencies, and 15 individuals. In addition, a notice announcing the availability of the EA was sent to approximately 90 individuals who had received commercial mushroom harvesting permits for this area since October 2003.

Formal consultation as required by Section 7 of the Endangered Species Act was initiated with the US Fish and Wildlife Service (FWS). The FWS issued its biological opinion on March 17, 2005. After a new spotted owl recovery plan was released by the USFWS in August of 2008 formal consultation was reinitiated with the services and an amendment to the original Biological Opinion was issued on September 15, 2008. Because the current proposed action would have no effect on coho salmon and its designated critical habitat, as well as no adverse effect on Essential Fish Habitat, consultation with NOAA Fisheries is not required.

E. Interdisciplinary Analysis: Identify those team members conducting or participating in the preparation of this worksheet.

<u>Name</u>	<u>Title</u>
Jeff Apel	Engineer
Karin Baitis	Soils Scientist
Sharmila Premdas	Landscape Planner/NEPA
John Moore	Wildlife Biologist
Dan Crannell	Wildlife Biologist
Janet Zentner	Logging Systems Forester
Luis Palacios	Logging Systems
Doug Goldenberg	Botanist
Peter O'Toole	Planning Forester/Team Lead
Clint Foster	Silviculture
Leo Poole	Fisheries Biologist
Dave Reed	Fuels Specialist
Steve Steiner	Hydrologist

F. Mitigation Measures: List any applicable mitigation measures that were identified, analyzed, and approved in relevant LUPs and existing NEPA document(s). List the specific mitigation measures or identify an attachment that includes those specific mitigation measures (see attached implementation prescription).

REVIEWED BY

/s/ Sharmila Premdas _____ 2/23/2010 _____
 NEPA Coordinator Date

CONCLUSION

Based on the review documented above, I conclude that this proposal conforms to the applicable land use plan and that the existing NEPA documentation fully covers the proposed action and constitutes BLM's compliance with the requirements of NEPA.

/s/ Charles Fairchild _____ 2/23/2010 _____
 Field Manager (Acting) Date
 Siuslaw Resource Area

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
EUGENE DISTRICT OFFICE

DECISION RECORD
Documentation of NEPA Adequacy
Leibo Canyon Thinning Project
DOI-BLM-OR-E050-2010-0004-DNA

Decision:

It is my decision to implement the Leibo Canyon Thinning Project as described in the Documentation of NEPA Adequacy **DOI-BLM-OR-E050-2010-0004-DNA** and in the attached implementation prescription.

The proposed action has been reviewed by Resource Area Staff and appropriate project Design Features as specified in the North Lake Creek EA which analyzed these actions will be incorporated into the proposal. Based on the Documentation of NEPA Adequacy, I have determined that the proposed action involves no significant impact to the human environment and no further analysis is required.

On July 16, 2009 the U.S. Department of the Interior, withdrew the Records of Decision (2008 ROD) for the Western Oregon Plan Revision and directed the BLM to implement actions in conformance with the resource management plans for western Oregon that were in place prior to December 30, 2008.

Since project planning and preparation of National Environmental Policy Act documentation for this project began prior to the effective date of the 2008 ROD, this project had been designed to comply with the land use allocations, management direction, and objectives of the 1995 resource management plan (1995 RMP).

The Proposed Action is in conformance with the standards and guidelines of the 1995 Eugene District Record of Decision and Resource Management Plan (as amended).

The Leibo Canyon Thinning Project is consistent with court orders relating to the Survey and Manage mitigation measure of the Northwest Forest Plan, as incorporated into the Eugene District Resource Management Plan. On December 17, 2009, the U.S. District Court for the Western District of Washington issued an order in *Conservation Northwest, et al. v. Rey, et al.*, No. 08-1067 (W.D. Wash.) (Coughenour, J.), granting Plaintiffs' motion for partial summary judgment and finding a variety of NEPA violations in the BLM and USFS 2007 Record of Decision eliminating the Survey and Manage mitigation measure. Previously, in 2006, the District Court (Judge Pechman) had invalidated the agencies' 2004 RODs eliminating Survey and Manage due to NEPA violations. Following the District Court's 2006 ruling, parties to the litigation had entered into a stipulation exempting certain categories of activities from the Survey and Manage standard (hereinafter "Pechman exemptions").

Judge Pechman's Order from October 11, 2006 directs: "Defendants shall not authorize, allow, or permit to continue any logging or other ground-disturbing activities on projects to which the 2004 ROD applied unless such activities are in compliance with the 2001 ROD (as the 2001 ROD was amended or modified as of March 21, 2004), except that this order will not apply to:

- A. Thinning projects in stands younger than 80 years old (emphasis added):
- B. Replacing culverts on roads that are in use and part of the road system, and removing culverts if the road is temporary or to be decommissioned;
- C. Riparian and stream improvement projects where the riparian work is riparian planting, obtaining material for placing in-stream, and road or trail decommissioning; and where the stream improvement work is the placement large wood, channel and floodplain reconstruction, or removal of channel diversions; and
- D. The portions of project involving hazardous fuel treatments where prescribed fire is applied. Any portion of a hazardous fuel treatment project involving commercial logging will remain subject to the survey and management requirements except for thinning of stands younger than 80 years old under subparagraph a. of this paragraph."

Following the Court's December 17, 2009 ruling, the Pechman exemptions are still in place. Judge Coughenour deferred issuing a remedy in his December 17, 2009 order until further proceedings, and did not enjoin the BLM

from proceeding with projects. Nevertheless, I have reviewed the Leibo Canyon Thinning Project in consideration of both the December 17, 2009 and October 11, 2006 order. Because the Leibo Canyon Thinning Project entails no regeneration harvest and entails thinning only in stands less than 80 years old, I have made the determination that this project meets Exemption A of the Pechman Exemptions (October 11, 2006 Order), and therefore may still proceed to be offered for sale even if the District Court sets aside or otherwise enjoins use of the 2007 Survey and Manage Record of Decision since the Pechman exemptions would remain valid in such case. The first notice for sale will appear in the newspaper on February 24, 2010.

Administrative Remedies:

The forest management decision to be made on the action described in the Documentation of NEPA Adequacy is subject to protest under 43 CFR subpart 5003. Under 43 CFR 5003.2 subsection (b), the decision will be published in local newspaper(s) and this notice shall constitute the decision document. Under 43 CFR 5003.3 subsection (a), protests may be filed with the authorized officer within 15 days of the publication date of this decision. Under 43 CFR 5003.3 (b), protest(s) filed with the authorized officer shall contain a written statement of reasons for protesting the decision. A decision on this protest would be subject to appeal to the Interior Board of Land Appeals, although, under 43 CFR 5003.1 subsection (a), filing a notice of appeal under 43 CFR part 4 does not automatically suspend the effect of a decision governing or relating to forest management under 43 CFR 5003.2 or 5003.3.

Authorizing Official:

/s/ Charles Fairchild
William E. Hatton
Field Manager
Siuslaw Resource Area

2/23/2010
Date

**North Lake Creek
Project Implementation Prescription
Leibo Canyon Timber Sale - Tract # 10-565
T. 15 S., R. 6 W., Section 19**

SILVICULTURE

- Thin approximately 41 acres in the Matrix.
- Vary the leave tree spacing as needed to generally reserve the larger diameter, more vigorous trees.
- Selected leave trees shall be of good form and relatively free of defect.
- Show preference to select red cedar trees for retention.
- Hardwoods, yew trees and snags shall be reserved.
- Approximately 13 trees supporting potential MAMU nesting structure, marked with yellow paint, are reserved within the harvest area. Additional trees supporting potential MAMU nesting structure, marked with yellow paint, are located outside the harvest area.

Unit 1

- Select conifer leave trees to reserve 110 ft² basal area/acre.
- Retention of target basal area will average 50 conifer trees/acre.
- Post thin stand RD = 34

Unit 2

- Select conifer leave trees to reserve 100 ft² basal area/acre.
- Retention of target basal area will average 77 conifer trees/acre.
- Post thin stand RD = 33

Unit 3

- Select conifer leave trees to reserve 140 ft² basal area/acre.
- Retention of target basal area will average 78 conifer trees/acre.
- Upper diameter limit of 26 inches dbh
- Post thin stand RD = 33

Riparian Treatment

- Thin approximately 34 acres in Riparian Reserves using the same prescription as adjacent Matrix.
- 100 foot stream buffer on the South Fork Alsea River.
- 75 foot stream protection buffers on all other streams.

LOGGING SYSTEMS

Cable Yarding Design Features – approximately 60 acres

- All cable yarding would be to designated or approved landings.
- To minimize impacts, spacing of cable corridors should be kept to 150 feet apart at one end and limited to 12 feet in width (a cable system capable of 75 foot lateral yarding would be used).
- Minimum one-end suspension is required. Intermediate supports may be necessary to achieve the required suspension.
- Full suspension is required when yarding over streams. Corridor trees cut in reserve area will be left on site.
- Cable yarding corridors would be made erosion resistant if needed where severe gouging has occurred.

Ground Based Yarding Design Features – approximately 15 acres

- Operations would occur when soil moisture content provides the most resistance to compaction, as approved by the Authorized Officer.
- Limit skid trails to slopes less than 35%.
- Pre-designate skid trails.
- Use existing skid trails wherever possible.
- Limit skid trails to <10% of the harvest area by requiring a minimum 150 foot spacing between skid trails at one end, and limit the width of skid trails to 12 feet.
- Limit low ground pressure (<6 psi) ground-based yarding equipment to one round trip when operating outside designated primary skid trails, utilizing downed slash to minimize soil disturbance.
- Require felling of trees to lead to the skid trails and maximize winching distances.

- Skid logs to designated or approved landings.
- Decompact skid trails and landings and place slash and brush on trails. Care should be taken to shatter but not mix or displace the soil profile. Decompaction would immediately follow logging operations and take place prior to the onset of the fall rainy season. If decompaction cannot be accomplished the same operating season, leave trails in an erosion resistant condition and block.
- Locate skid trails at least 75 feet from the harvest unit boundary. Skid trails shall avoid dry draws.

ROAD CONSTRUCTION AND RENOVATION

1. New Construction:

- Spur A = 1083 feet
- Spur B = 290 feet
- Spur C = 310 feet
- 15-6-19.5 Junction = 100 feet

Spurs A & B are to remain natural surface. The subgrade on Spur C will be surfaced with 8" of crushed rock. Road 15-6-19.5 Junction will be purchaser option to rock.

2. Renovation:

- 15-6-19.75 = 0.08 miles

Renovation work will consist of brushing, scarifying or grading and/or widening the existing sub grade to a 14' width.

- 3. Road Nos. 15-6-19.5 and 15-6-19.75 may be rocked at purchaser's expense to allow wet weather haul.
- 4. Logger's choice landings/spurs to be constructed should generally less than one hundred feet and subject to approval by the Authorized Officer.

Total new construction = 0.36 miles; Total renovation = 0.08 miles

ROAD DECOMMISSIONING

- (aa) Purchaser shall decompact skid trails and natural surface roads with decompaction equipment, such as a track mounted excavator, during the dry season.
- (bb) Purchaser shall construct drainage dips, waterbars and/or lead-off ditches, as directed by the Authorized Officer.
- (cc) Purchaser shall place logging slash, where available, on the entire road prism of tilled natural-surfaced roads.
- (dd) (X) Purchaser shall block skid trails with root wads, logs and slash as directed by the Authorized Officer.
(EB) Purchaser shall block roads with earthen barricades.

Road	Road Rocking	If not rocked				If rocked		
		(aa)	(bb)	(cc)	(dd)	(bb)	(cc)	(dd)
		Decompact	Drainage	Logging Slash	Blocking	Drainage	Logging Slash	Blocking
Skid Trails	Not allowed	X	X	X	X			
Spur A	Not allowed	X	X	X				
Spur B	Not allowed	X	X	X				
Spur C	Required*	X	X	X		X		
15-6-19.75	Optional	X	X	X		X		
15-6-19.1	Optional		X		EB	X		EB
15-6-19.5	Optional		X		EB^	X		EB^
15-6-19.5 Junction	Optional	X	X	X	X	X	X	
15-6-19.6	Optional		X			X		

*Purchaser may buy out of road surfacing

^Block Road No. 15-6-19.5 at the end of Road No. 15-6-19.5 Junction

WILDLIFE

Threatened and Endangered Species

Spotted Owls:

- Operations shall be restricted seasonally in Unit 1 as follows:
 - Prohibit harvest activities, except timber haul, from March 1 thru July 7, unless protocol surveys indicate no occupancy by the Alsea River NSO. Maintain 40% canopy closure within this home range.

Marbled Murrelets:

- Do not harvest or damage trees with potential murrelet nesting structure. Trees with potential nesting structure within the harvest area have been marked with yellow paint and are shown as Special Habitat Trees on the map. Additional trees are marked in the Reserve Area outside the harvest area boundary.

Special Status Species

No Special Status Species or unique habitats were encountered during field reviews of the project area.

Fish

Threatened and Endangered Species

Oregon coast coho salmon are located adjacent to the project area. The required stream protection buffers noted in Riparian Treatments are adequate to prevent adverse impacts. No adverse impacts are predicted from timber haul.

Botany

Threatened and Endangered Species

No federally listed Threatened or Endangered plant species were located during surveys.

Special Status Species

No Special Status Plants were located during surveys and no mitigations are needed.

Noxious Weeds and Invasive Non-native species

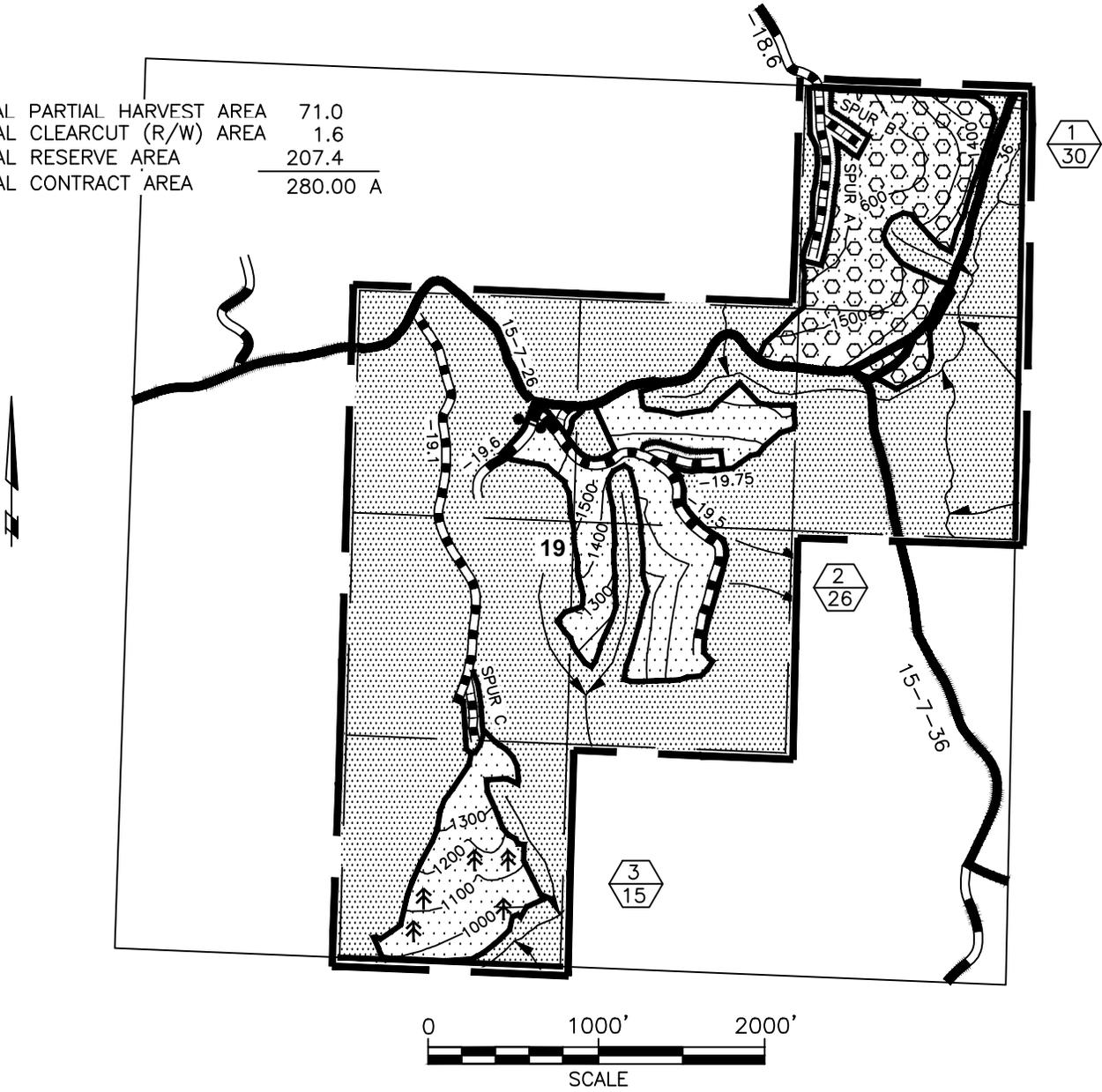
- All yarding and road construction equipment would be cleaned prior to arrival on BLM-managed lands to lessen the spread of noxious weed seed.
- Decommissioned roads would be seeded with native grasses if seed is available.
- Post and sign roadside test plots on Road No. 15-6-19.1 to prevent vehicle disturbance to spotted knapweed control test plots.

Fuels

- Scatter roadside and landing piles across skid trails, Spurs A and B, Spur C if not rocked, and Road No. 15-6-19.75 after harvest. Scatter slash in a manner that does not create a deep (>1ft), continuous fuel bed.
- Cover and burn any piles not scattered across closed roads. Up to 20% of piles along decommissioned roads may be left unburned.
- Pile, cover, and burn (approx 90% of piles) logging debris less than 9" diameter within 25 feet of Road Nos. 15-7-26, and 15-7-36.
- Burn piles in the late fall when favorable smoke dispersion conditions are common.

DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT
 PROJECT PLANNING MAP
 LEIBO CANYON TIMBER SALE
 T. 15 S., R. 6 W., SEC. 19, WILL. MER., EUGENE DISTRICT

TOTAL PARTIAL HARVEST AREA	71.0
TOTAL CLEARCUT (R/W) AREA	1.6
TOTAL RESERVE AREA	207.4
TOTAL CONTRACT AREA	280.00 A



LEGEND

- | | | | |
|---|---|--|---|
|  | PARTIAL HARVEST AREA |  | BOUNDARY - CONTRACT AREA |
|  | RESERVE AREA |  | BOUNDARY - CUTTING AREA
(BLAZED, PAINTED & POSTED) |
|  | CLEARCUT (R/W) AREA |  | PAVED ROAD |
|  | SPECIAL OPERATING AREA |  | ROCK SURFACED ROAD |
|  | APPROXIMATE LOCATION OF
SPECIAL HABITAT TREES
5 GROUPS (13 Trees) |  | ROAD TO BE CONSTRUCTED |
| | |  | ROAD TO BE RENOVATED |
| | |  | GATE |
| | |  | STREAM |
| | |  | UNIT NUMBER
ACRES |