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

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

Billy Tower Thin
OR090-DNA-07-06

A. Description of the Proposed Action

The proposed action is to implement the Billy Tower Thin by commercially thinning approximately 315 acres within the North Lake Creek planning area. The proposed action, including silvicultural prescriptions, logging systems, Riparian Reserve treatments, road decommissioning prescriptions, and wildlife and botany mitigation measures is described in the attached "Project Implementation Prescription."

Location: T15S, R7W, Sections 13, 14, & 15

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.

List by name and date all applicable NEPA documents that cover the proposed action.

- EA OR090-04-07, North Lake Creek Thinning Project; June, 2005.

List by name and date other documentation relevant to the proposed action (e.g., source drinking water assessments, biological assessment, biological opinion, watershed assessment, allotment evaluation, rangeland health standard's assessment and determinations, and monitoring the report).

- Biological Assessment of the North Lake Creek Thinning Project, January 25, 2005, Eugene District, Siuslaw Resource Area.
- Biological Opinion – US Fish and Wildlife Service, March 17, 2005.

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. Billy Tower Thin includes moderate thinning on 165 acres of Matrix and 143 acres of Riparian Reserve, as described in Alternative E. In addition, there would be approximately 7 acres of heavy thinning in Riparian Reserve, as described in Alternative D, adjacent to Stream No. 1. 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 effects analysis regarding road-related sediment was extensive and appropriate for the type of landscape comprising the Billy Tower Thin timber sale, in that the type and amount of road construction and renovation needed to implement the Billy Tower Thin 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. The Billy Tower Thin project is within the Upper Lake Creek and Upper Congdon Creek northern spotted owl home ranges; the EA specified that thinning dispersal habitat would degrade but not remove dispersal habitat (pp. 31-32). This conclusion is consistent with the findings of the Biological Opinion of 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 Billy Tower Thin would result in a relative density of 34, within the range anticipated in the EA.

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

Yes. (1) There are no new standards or goals for managing resources. No new recovery plans for listed species have been developed. The Billy Tower Thin project is consistent with the US Fish and Wildlife Service's biological opinion for the North Lake Creek EA. (2) There are no changes in resource conditions from when the EA was published in 2004. (3) There are no changes in resource-related plans, policies or programs of other government agencies, Indian tribes. (4) There are no new designations in the North Lake Creek planning area or the Billy Tower Thin project area. (5) There are no changes in statute, case law, or regulation that would affect the implementation of the Billy Tower Thin 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 Billy Tower Thin 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 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. No special status botanical species were located in the harvest area during surveys. There are no known wildlife special status species in the project area. There is no indication that implementing the Billy Tower Thin 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 Billy Tower Thin project.

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

Yes. The Billy Tower Thin 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.

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

Name	Title
Jeff Apel	Engineer
Karin Baitis	Soils Scientist
Rick Colvin	Landscape Planner
Dan Crannell	Wildlife Biologist
Doug Goldenberg	Botanist
Peter O'Toole	Planning Forester
Leo Poole	Fisheries Biologist
Dave Reed	Fuels Specialist
Steve Steiner	Hydrologist
Janet Zentner	Logging Systems Forester

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. Document that these applicable mitigation measures must be incorporated and implemented.

(see attached implementation prescription)

REVIEWED BY

/s/ Rick Colvin	5/30/07
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/ William E. Hatton	6/13/07
Siuslaw Resource Area Field Manager	Date

June 21, 2007

North Lake Creek
Project Implementation Prescription
Billy Tower Timber Sale- Tract # xx - xxx
T.15 S. R.7 W. Secs. 13, 14 & 15

Silviculture

- Thin approx. 165 acres in the Matrix.
- Select conifer leave trees to reserve 130 ft² basal area/acre.
- Retention of target basal area will average 90 trees/acre, RD = 33
- 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.
- Hardwoods, yew trees and snags shall be reserved.
- Trees with MAMU nesting structure, marked with yellow paint, are reserved.

Riparian Treatment

- Thin approx 150 acres in Riparian Reserves using the same prescription as adjacent Matrix, except in heavy thin area.
- Heavy thin approx 7 of the 150 acres adjacent to stream 1 upstream from the quarry as shown on the project area map.
  - Select conifer leave trees to reserve 100 ft² basal area/acre
  - Retention of target basal area will average 40 conifer trees/acre, RD =22
- 50 foot stream protection buffers as shown on hydro map for streams 1, 9, 10, 13, 16, 17, and 28
- 75 foot stream protection buffers, all other streams, except as flagged on the ground at the head of stream 11.

Logging Systems

Cable Yarding Design Features – approx 220 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 of logs is required when yarding over streams. Anticipate need to yard logs over stream 1 on map. Corridor trees cut from reserve area will be left on site.
- Cable yarding corridors would be made erosion resistant if needed where severe gouging has occurred.
- No corridors through south side of slide reserve area (stream 11).

Ground Based Yarding Design Features – approx 95 acres

- Operations would occur when soil moisture content provides the most resistance to compaction, as approved by the Authorized Officer.
- Skid trails would be limited to slopes less than 35%, as indicated on project area map, with approval from the Authorized Officer.
- All skid trails would be predesignated and approved by an Authorized Officer.
- Use existing skid trails wherever possible.
- Preplan (map) and designate (flag) skid trails to occupy less than 10% of the unit. This can be accomplished by a minimum 150 foot spacing between skid trails, and limiting width of skid trails to 12 feet.
- Use of low ground pressure (<6 psi) ground-based yarding equipment would be limited to a single pass 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.
- Logs would be skidded to designated or approved landings.
- Till 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. Tilling would immediately follow logging operations and take place prior to the onset of the fall rainy season. If tillage cannot be accomplished the same operating season, all trails would be left in an erosion resistant condition and blocked.
- Avoid using ground-based yarding equipment within 200 feet of streams, except in special yarding areas as shown on the project area map. Skid trails in the special yarding areas shall be at least 75 feet from the harvest unit boundary and shall avoid dry draws.

Road Construction and Renovation

Construct Spurs as follows:
Spur A (6.1 sta) Spur B (6 sta) Spur C (4.6 sta)
New construction, subgrade to a 14' width, outsloped where possible, and natural surfaced. Purchaser option to rock spurs A & B.

Renovate BLM roads as follows:
*15-7-14.2A(0.33 mi) *15-7-14.7(0.35 mi) *15-7-14.14(0.11mi)
15-7-14.10(0.18 mi) 15-7-14.11(0.77 mi) 15-7-14.12 (0.64 mi)
15-7-14.13(0.21 mi) 15-7-14.73(0.03 mi) 15-7-12C(0.37 mi)
15-7-15.75(0.15 mi) 15-7-15.76(0.04 mi)
Renovation will consist of brushing, scarifying or grading and/or widening the existing subgrade to a 14' width. Purchaser option to rock except three roads marked with an *, which are tributary to rd -14.2 beyond the jct with rd -14.11.

Recondition BLM roads as follows:
15-7-14.2A(0.81 mi)
Reconditioning will consist of replacing old culverts and installing new culverts.

The use of Road No. 15-7-14.2 beyond the jct with -14.11 will be restricted to dry season use for timber haul. No use of Rd 15-7-14.2 beyond the jct. with -14.7.

If the Purchaser exercises the option to rock rd # 15-7-14.11, hayling will be allowed during periods of wet weather, so long as the road surface is maintained to prevent sediment delivery to Stream # 4 on map. If sediment delivery to stream #4 occurs, wet weather hauling shall not be allowed until road maintenance has remwdied the condition.

Logger's choice landings/spurs to be constructed as needed, subject to approval by the Authorized Officer, purchaser option to rock.

Road Decommissioning

Road #	**Decom Measures**
15-7-12, -14.14, -14.7, -14.73	3, 4
Spurs A, B, & C; Loggers choice spurs; Landings; -15.75, -15.76	1, 2, 3, 4, 5, 6

Road Decommissioning Measures:

1. Till the road prism and landing if not rocked.

2. Where available, scatter slash/brush/trees along the road prism surface.

3. At road entrance, block road with earthen barriers (berms) and trenches. Place logs, root wads, slash/brush/trees and/or boulders as feasible on the barrier.

4. Use drain dips, lead-off ditches, water bars or other measures to prevent accumulation of surface run-off on the road prism using adequate spacing based on road gradient. On rd. no. 15-7-14.7, remove steam crossing culverts and back slope the stream banks.

5. Purchaser option rock roads shall require final blading of rock prior to blocking.

6. Road decommissioning will take place when soil moisture conditions are optimal, generally between July 1 and October 15, prior to fall rains.

Wildlife

Threatened and Endangered Species

- Seasonal restrictions for northern spotted owls as follows: None needed.
- Seasonal restrictions for marbled murrelets as follows: No seasonal restriction needed. Two trees providing nesting structure for MAMU and fourteen adjacent trees are marked with yellow paint and shall be reserved from harvest or damage from falling/yarding activity.
- Seasonal restrictions for bald eagles as follows: None needed.

Special Status Species
No Special Status Species or unique habitats were encountered during field reviews of the proposed unit.

Survey and Manage Species
There are no vertebrate or invertebrate species in the project area for which S&M species surveys are required.

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

Special Status Species
Vascular Plants
Poa laxiflora, Bureau Tracking
Lichens and Bryophytes
Buxbaumia aphylla, Bureau Tracking, *Chaenotheca furfuracea*, Bureau Tracking
Usnea longissima, Bureau Tracking

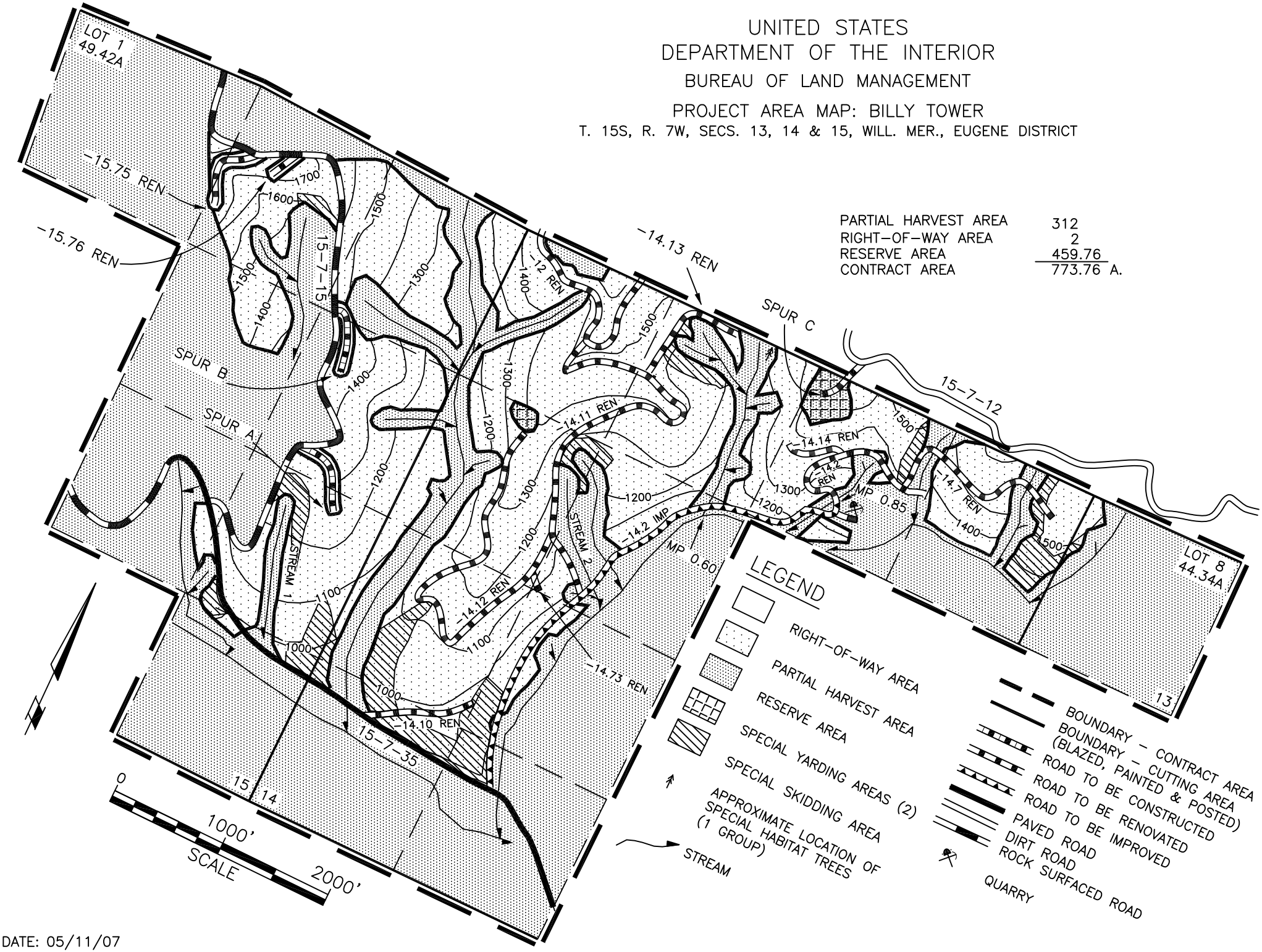
No mitigation measures are planned for Bureau Tracking species.

Survey and Manage Species
Surveys for vascular and non-vascular species comply with the 2001 S&M ROD. No known Category B, D, or E species were located in the project area. *Usnea longissima*, Category F, was found but management of known sites for Category F species is not required.

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.

Fuels
- Scatter roadside and landing piles across roads to be closed after harvest. Scatter slash in a manner that does not create a deep continuous fuel bed.
- Any piles not scattered across closed roads will be covered and burned
- Burn piles in the late fall when favorable smoke dispersion conditions are common.
- Machine pile, cover, and burn logging debris less than 6”diameter within 25 feet of roads 15-7-15, and 15-7-14.2. Restrict excavator to gravel road surface. Hand pile, cover, and burn logging debris less than 6”diameter within 25 feet of road15-7-35. No piles will be created and burned within the 50 and 75 foot no treatment buffers on the 15-7-35 or -14.2 roads.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
PROJECT AREA MAP: BILLY TOWER
T. 15S, R. 7W, SECS. 13, 14 & 15, WILL. MER., EUGENE DISTRICT



PARTIAL HARVEST AREA	312
RIGHT-OF-WAY AREA	2
RESERVE AREA	459.76
CONTRACT AREA	773.76 A.

DATE: 05/11/07