

Butte Creek Timber Sale

Environmental Assessment (EA) Number OR080-04-09

USDI - Bureau of Land Management
Oregon State Office, Salem District, Cascades Resource Area

Township 6 South, Range 2 East, Sections 19, 25, 27, 29 and 35 and
Township 7 South, Range 2 East, Section 1 and 25; Willamette Meridian
Clackamas County, Oregon

Introduction

The Bureau of Land Management (BLM) has conducted an environmental analysis for the Butte Creek thinning project, which is documented in the Butte Creek Thinning environmental assessment (Butte Creek EA, # OR080-04-09) and the associated project file. The Proposed Action of the Butte Creek EA is to thin 40-85 year old mixed conifer stands on 680 acres within the Matrix Land Use Allocation (LUA) and 20 acres within the adjacent Riparian Reserve LUA. A Finding of No Significant Impact (FONSI) was signed on November 29, 2004 and the EA and FONSI were then made available for public review.

Decision

My decision is based on site-specific analysis in the Butte Creek EA, the supporting project record, management recommendations contained in the *Molalla River Watershed Assessment*, as well as the management direction contained in the *Salem District Resource Management Plan* (RMP) dated May 1995. I have decided to implement the Proposed Action of the Butte Creek Thinning EA with modifications described below, hereafter referred to as the "selected action". The selected action is shown on the maps attached to this Decision Rationale. The following is a summary of this decision.

1. *Harvest:*

- Commercially Thin 519 acres
 - 506 acres within the General Forest Management Area (GFMA) portion of the Matrix LUA.
 - 13 acres within the Riparian Reserve LUA.
- Clear 3 acres for road rights-of-way within the GFMA LUA
- Clear 1 acre for expansion of a rock pit (quarry). See # 4.

Total harvest area acres were reduced from the projected area stated in the EA due to natural topography features, areas of fragile or unstable soils, botanical sites, and wet areas that were identified during field work; areas where further examination indicated that it would be better to wait a decade or more to implement thinning prescriptions.

Thinning acres in the Riparian Reserve (RR) LUA were reduced because additional surveys found that species diversity and spatial distributions in the stands met diversity objectives without intervention, and because some RR thinning units were associated with GFMA units dropped from the proposal (See Table 1).

2. *Logging*

- Yarding:
 - 501 acres of ground-based yarding.
 - 22 acres of skyline yarding.
- Falling:
 - Mechanized falling/processing would be allowed on any area 40 percent slope or less. This would be done using a tracked harvester that would fall and process trees and position them for skidding and yarding.

3. *Road Work:*

- Road Access:
 - 0.5 mile of new road would be constructed to access units 3, 9, 10 & 13. These roads would be left in place, barricaded and seeded after use.
 - An additional 0.5 mile of temporary new road construction could be built by the purchaser if necessary to facilitate ground-based yarding in units 2 and 14. The road spurs would not be located near large trees. If these roads are not built, then skid roads would take their places. After logging, these roads or skid trails would be blocked and seeded.
Change: The EA analyzed approximately 1.6 miles of new road construction. This is now changed to 0.5 miles of road to be constructed and 0.5 miles of road that may be constructed, an overall a decrease of 0.6 miles of new road.
- Road Renovation:
 - 12 miles of roadside brushing, blading, minor repairs, culvert replacement, spot rocking as needed, and ditch and culvert cleaning.
- Road Reconstruction/Improvement:
 - 1.0 mile of ripping, removing large rocks, blading, brushing, ditch and culvert cleaning, 6" lift of rock, compact subgrade and surface,.
 - 1.0 mile of opening previously decommissioned roads to use for this project and decommission and block again after use.

4. *Rock Pit:*

- The existing rock pit in T. 7 S., R. 2 E., section 27 would be used for pit run rock needed for the project. The quarry is part of the active transportation network in the Resource Area, addressed in the Transportation Plan for the Cascades Resource Area.
- The rock pit would be enlarged by approximately one acre by removing vegetation and overburden.

Table 1: Overview of Management Actions

| Item | | Analyzed in the EA | In the Selected Action | Comments |
|--|----------------------|--------------------|------------------------|---|
| Timber Harvest - Acres | | | | |
| Total Acres of Harvest | | 700 | 523 | |
| Thinning | GFMA LUA | 674 | 506 | |
| | Riparian Reserve LUA | 20 | 13 | |
| Clearing vegetation for road rights-of-way | | 5 | 3 | |
| Clearing vegetation for rock pit expansion | | 1 | 1 | |
| Logging Systems - Acres | | | | |
| Yarding | Ground Based | 618 | 501 | Includes acres for road rights-of-way and the rock pit (quarry) expansion. |
| | Skyline | 82 | 22 | |
| Falling | Mechanized | 618 | 500 | May take place within areas less than 40 % slope. |
| Roads - Miles | | | | |
| New Construction | | 1.6 | 1.0 | “May” construct 0.5 mile of temporary road to facilitate yarding in portions of units 2 and 14. |
| Reconstruction/Improvement | | 2.2 | 2.17 | |
| Renovation * | | 14 | 12 | |

* Includes 8 miles of renovation along haul routes crossing non-federal land.

5. Fuels Treatments:

- Slash remaining on landings after blocking and covering yarding roads and skid trails would be piled and burned.
- Activity created fuels adjacent to some property lines would piled and burned.

6. Snag/CWD Habitat:

- Any snags or CWD larger than 20 inches diameter that are encountered during operations would be protected from damage or disturbance by logging operations under standard contractual logging procedures, BMP, and OSHA requirements. If any such snag needs to be cut or is accidentally knocked down, it would remain on site.

7. Project Design Features:

- In addition to the above, a summary of the design features, incorporated into the timber sale contract, are described in the Butte Creek EA (EA pp. 8-11).

Compliance with Direction

The analysis in this Butte Creek EA is site-specific and supplements analyses found in the *Salem District Proposed Resource Management Plan/Final Environmental Impact Statement*, September 1994 (RMP/FEIS). This project has been designed to conform to the *Salem District Record of Decision and Resource Management Plan*, May 1995 (RMP) and related documents which direct and provide the legal framework for management of BLM lands within the Salem District (EA section 1.2). All of these documents may be reviewed at the Cascades Resource Area office.

Survey and Manage Species and Special Status Species: With regard to Special Status and “Survey and Manage” species, the proposed project follows the survey requirements for mollusks from the *Record of Decision for Amendments to the Survey and Manage, Protection Buffer, and Other Mitigation Measures Standards and Guidelines*, January, 2001 (SM/ROD) and *Implementation of 2003 Survey and Manage Annual Species Review*, December 2003. The proposed project was screened for and was found to comply with the *Record of Decision to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines in Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl*, March 2004 (SSSP).

Northern Spotted Owl (NSO) Status Review:

The following information was considered in the analysis of Clear Dodger Projects 1 and 2: a/ *Scientific Evaluation of the Status of the Northern Spotted Owl* (Sustainable Ecosystems Institute, Courtney *et al.* 2004); b/ *Status and Trends in Demography of Northern Spotted Owls, 1985-2003* (Anthony *et al.* 2004); c/ *Northern Spotted Owl Five Year Review: Summary and Evaluation* (USFWS, November 2004); and *Northwest Forest Plan – The First Ten Years (1994-2003)*: d/ *Status and trend of northern spotted owl populations and habitat, PNW Station Edit Draft* (Lint, Technical Coordinator, 2005). To summarize these reports, although the agencies anticipated a decline of NSO populations under land and resource management plans during the past decade, the reports identified greater than expected NSO population declines in Washington and northern portions of Oregon, and more stationary populations in southern Oregon and northern California.

The reports did not find a direct correlation between habitat conditions and changes in NSO populations, and they were inconclusive as to the cause of the declines. Lag effects from prior harvest of suitable habitat, competition with Barred Owls, and habitat loss due to wildfire were identified as current threats; West Nile Virus and Sudden Oak Death were identified as potential new threats. Complex interactions are likely among the various factors. This information has not been found to be in conflict with the NWFP or the RMP (*Evaluation of the Salem District Resource Management Plan Relative to Four Northern Spotted Owl Reports, September 6, 2005*).

Alternatives Considered

The EA analyzed the effects of the “proposed action” and the “no action alternative.” No unresolved conflicts concerning alternative uses of available resources (section 102(2) (E) of NEPA) were identified. No action alternatives were identified that would meet the purpose and need of the project and have meaningful differences in environmental effects from the proposed action (EA Section 2.1).

Reasons for the Decision

Considering the content of the EA and supporting project record, the management direction contained in the RMP and public comment, I have decided to implement the selected action as described above. My rationale for this decision follows:

1. The selected action meets the purpose and need of the project (EA section 1.3), as shown in Table 2.

Table 2: Effect of the Selected Action and No Action Alternative on the Purpose and Need (P&N)

| Purpose and Need (EA section 1.3) | Selected Action | No Action Alternative |
|---|---|---|
| Offer a marketable timber sale | Fulfills. Appraisal indicates that this should be a successful timber sale. | Does not fulfill. Does not result in a timber sale. |
| Balance wood volume production, quality of wood, and timber value at harvest. | Maintains volume production over the course of the rotation, lengthens the rotation some, logs at end of rotation would be larger diameter, which generally increases quantity, quality and value in white wood species compared to unthinned stands. | Does not provide for intermediate harvest at this time (delays achievement of this part of P&N), but meets wood volume production over course of rotation. Logs at the end of the normal timber harvest rotation would be smaller diameter, which generally reduces quantity, quality and value compared to thinned stands. |
| Maintain a healthy forest ecosystem with habitat to support plant and animal populations and protect riparian areas and water resources | Retains the element described under “no action” on untreated areas of the stands in the project area and encourages development of larger diameter trees and more open stand conditions in treated areas. This adds an element of diversity over the landscape not provided on BLM lands under the “no action” alternative. | Retains the element of a dense stand with high density, smaller tree diameters and increasing levels of small size CWD for the next decade or more in all stands in the project area. |
| Increase diameter growth rate in Riparian Reserves. | Fulfills by concentrating stand growth on fewer stems. | Does not fulfill. Diameter growth would continue current trajectory. |
| Restore habitat for riparian-dependent species. | Fulfills by accelerating changes in some parts of some stands to develop more elements of diversity faster. Will allow understory to develop by opening up the canopy. | Fulfills, but not as rapidly as the selected action. Maintains current trends that develop diversity slowly in these uniform, managed stands with a single canopy and very limited understory. |
| Provide for structural and spatial stand diversity on a landscape level in the long term. | | |
| Provide access for timber harvest and silvicultural practices. | Fulfills. Implements maintenance on feeder roads, allowing continued access for management activities. Improves access for management and fire protection in Section 19. | Partially fulfills. Would delay maintenance on feeder roads, making access for silvicultural practices more difficult. Main routes would be maintained under both alternatives. Would not preclude future maintenance for management activities. |

2. The selected action was adjusted in response to public comments (e.g. changes in proposed road construction).
3. The selected action complies with RMP management direction (Decision Record p. 3, EA section 1.2)
4. The selected action would not have significant impacts on the affected elements of the environment (EA FONSI pp. 1-3).

The No Action alternative was not selected because it does not meet the Purpose and Need directly, or delays the achievement of the Purpose and Need (EA sections 1.3, 3.2.9), as shown in Table 2.

Public Involvement/ Consultation/Coordination

Scoping: In compliance with National Environmental Policy Act (NEPA), the project appeared in each Salem District Project Update, beginning with October 2003, which is mailed to over 1,070 addresses. A scoping letter dated July 13, 2004 was sent to 50 potentially affected and/or interested individuals, groups, and agencies. Five letters were received during the scoping period. A summary of the responses received was included in EA Appendix 4 – Response to Scoping Letter Comments.

Comment Period and Comments: The EA was made available on the Internet and notices were mailed on December 1, 2004 to approximately 66 agencies, individuals and organizations. A legal notice was placed in The Molalla Pioneer newspaper soliciting public input on the action on December 1, 2004. One letter was received from two organizations and two letters were received from individuals during the EA comment period. An additional 638 pre-printed postcards were received from individuals after the comment period closed. The BLM response to substantive comments can be found in Appendix 1 of this Decision Rationale.

Consultation/Coordination: Wildlife: The Butte Creek proposal was submitted for Formal Consultation with U.S. Fish and Wildlife Service (USFWS) in August 2004. Consultation with the USFWS resulted in a “May Affect, Not Likely to Adversely Affect” Determination for northern spotted owl. The selected action would follow all applicable terms and conditions from the Biological Opinion issued in March 2005 [FWS reference: BO# # 1-7-05-F-0228].

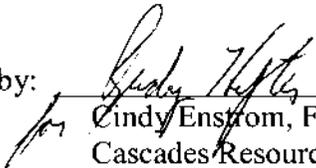
Fish: A determination has been made that this project would have “no effect” on ESA listed fish. See EA section 3.2.7.1 and EA Appendix 2: ESA Determination of Effect to Upper Willamette River steelhead trout and Upper Willamette River Chinook salmon (EA, p. A-3).

Conclusion

I have determined it is not necessary to change the Finding of No Significant Impact (FONSI - May 2004) for the Butte Creek selected action. The Butte Creek EA, along with additional information contained in this document, fully covers the project. There are no significant new circumstances or facts relevant to environmental concerns about the selected action or its impacts, which were not addressed in the EA. The action is within the scope of the alternatives identified in the original EA, and the environmental impacts are within those described in the original EA and are less than or the same as those anticipated for the proposed action in that assessment. There are no site specific impacts that would require supplemental/additional information to the analysis done in the RMP/FEIS.

Protests: In accordance with Forest Management Regulations at 43 CFR 5003.2, the decision for this timber sale will not become effective or be open to formal protest until the Notice of Sale is published "in a newspaper of general circulation in the area where the lands affected by the decision are located". Protests of this sale must be filed within 15 days of the first publication of the notice. For this project, the Notice of Sale will be published in The Molalla Pioneer on or around November 2, 2005. The planned sale date is November 30, 2005.

Contact Person: For additional information, contact Randy Herrin (503) 315-5924 or Rudy Hefter (503) 315-5931, Cascades Resource Area, Salem BLM, 1717 Fabry Road SE, Salem, Oregon 97306.

Approved by:  _____
Cindy Enstrom, Field Manager
Cascades Resource Area

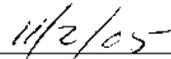
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Date

Exhibit A: page 1

September 7, 2005
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UNITED STATES DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Salem District - Oregon

EXHIBIT A

Butte Creek Thinning
Tract No. 05-502
Sheet 1 of 8

TIMBER SALE CONTRACT MAP - CONTRACT NO. OR-080-TS-20005-502

T. 6 S., R. 2 E., Sections 19, 25, 27, 29, 35, W. M.
T. 7 S., R. 2 E., Sections 1, 25, 27, W. M., Clackamas County

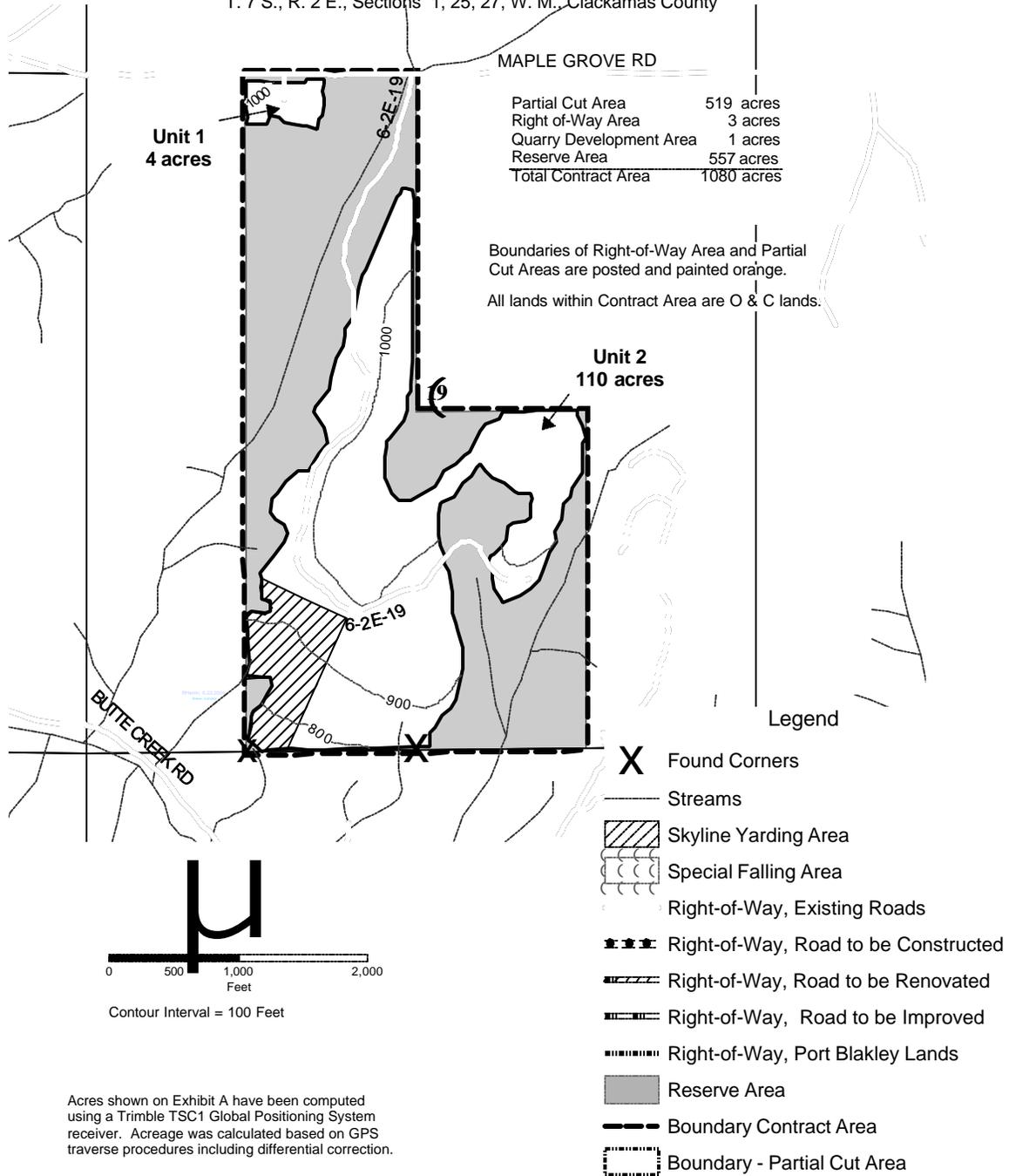


Exhibit A: page 2

September 7, 2005
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Sheet 2 of 8

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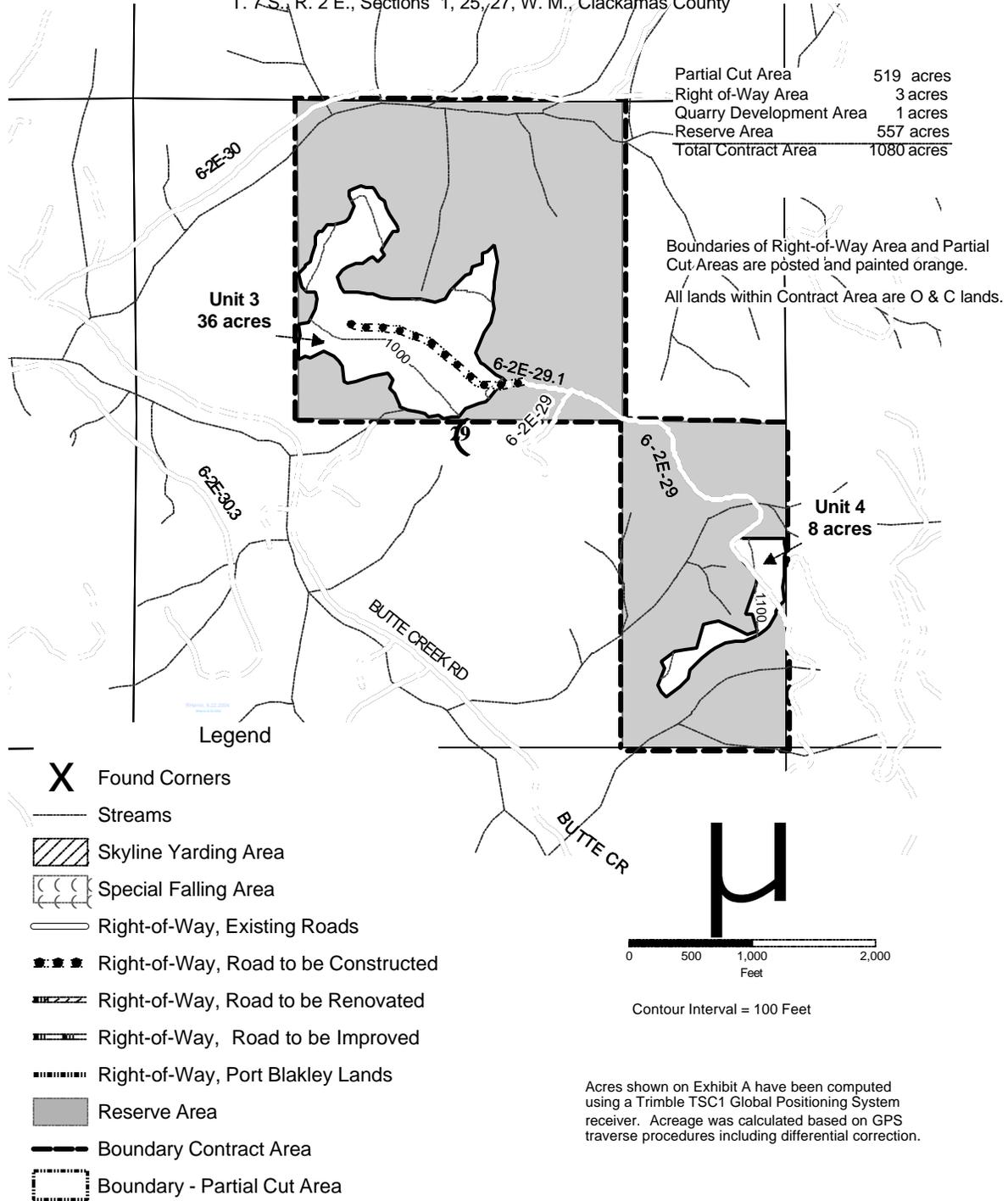


Exhibit A: page 3

September 7, 2005
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Sheet 3 of 8

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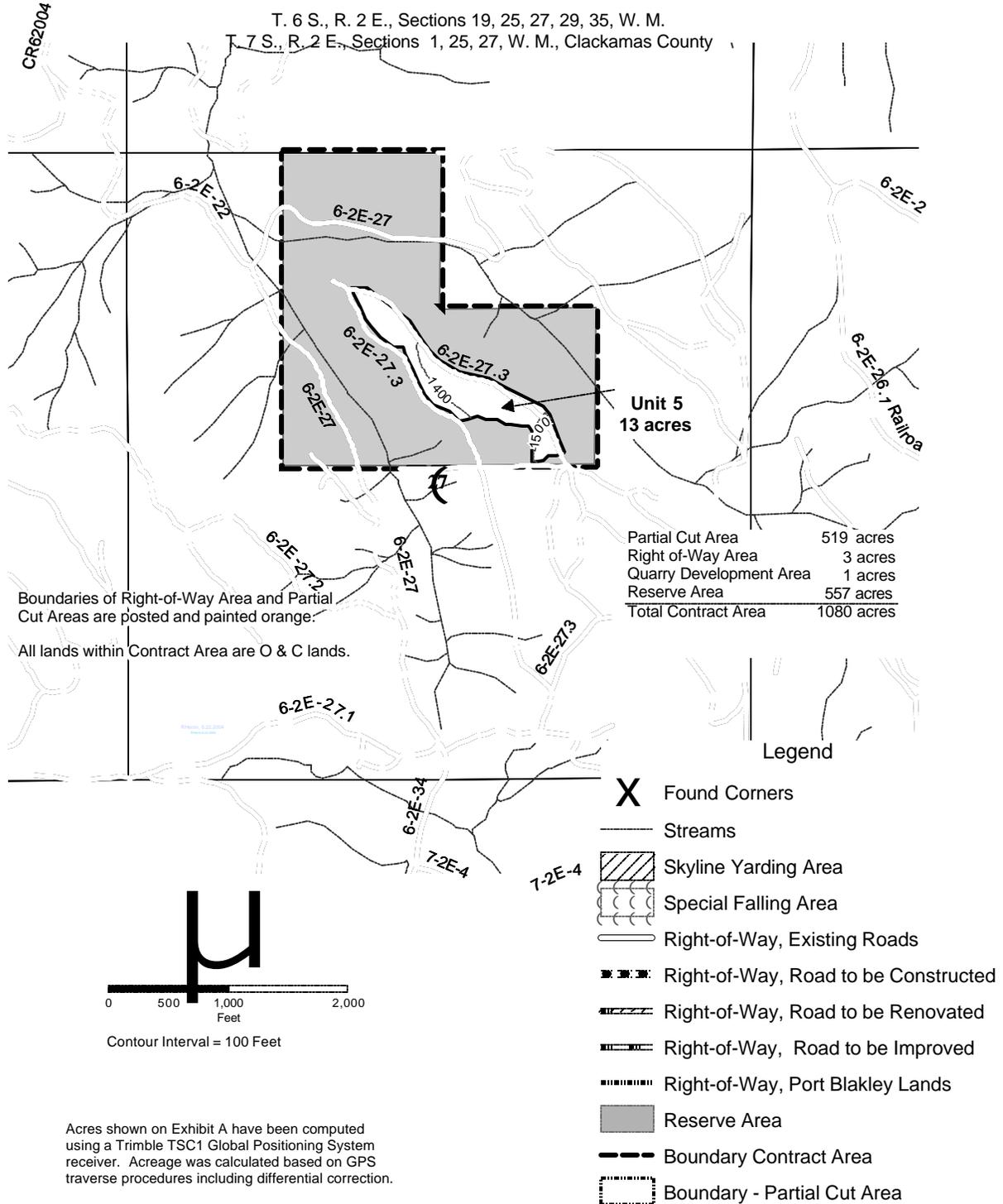


Exhibit A: page 4

September 7, 2005
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Salem District - Oregon

EXHIBIT A

Butte Creek Thinning
Tract No. 05-502
Sheet 4 of 8

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T. 6 S., R. 2 E., Sections 19, 25, 27, 29, 35, W. M.
T. 7 S., R. 2 E., Sections 1, 25, 27, W. M., Clackamas County

| | |
|----------------------------|-------------------|
| Partial Cut Area | 519 acres |
| Right-of-Way Area | 3 acres |
| Quarry Development Area | 1 acres |
| Reserve Area | 557 acres |
| Total Contract Area | 1080 acres |

Unit 6
66 acres

boundaries of Right-of-way Area and Partial Cut Areas are posted and painted orange.

All lands within Contract Area are O & C lands.

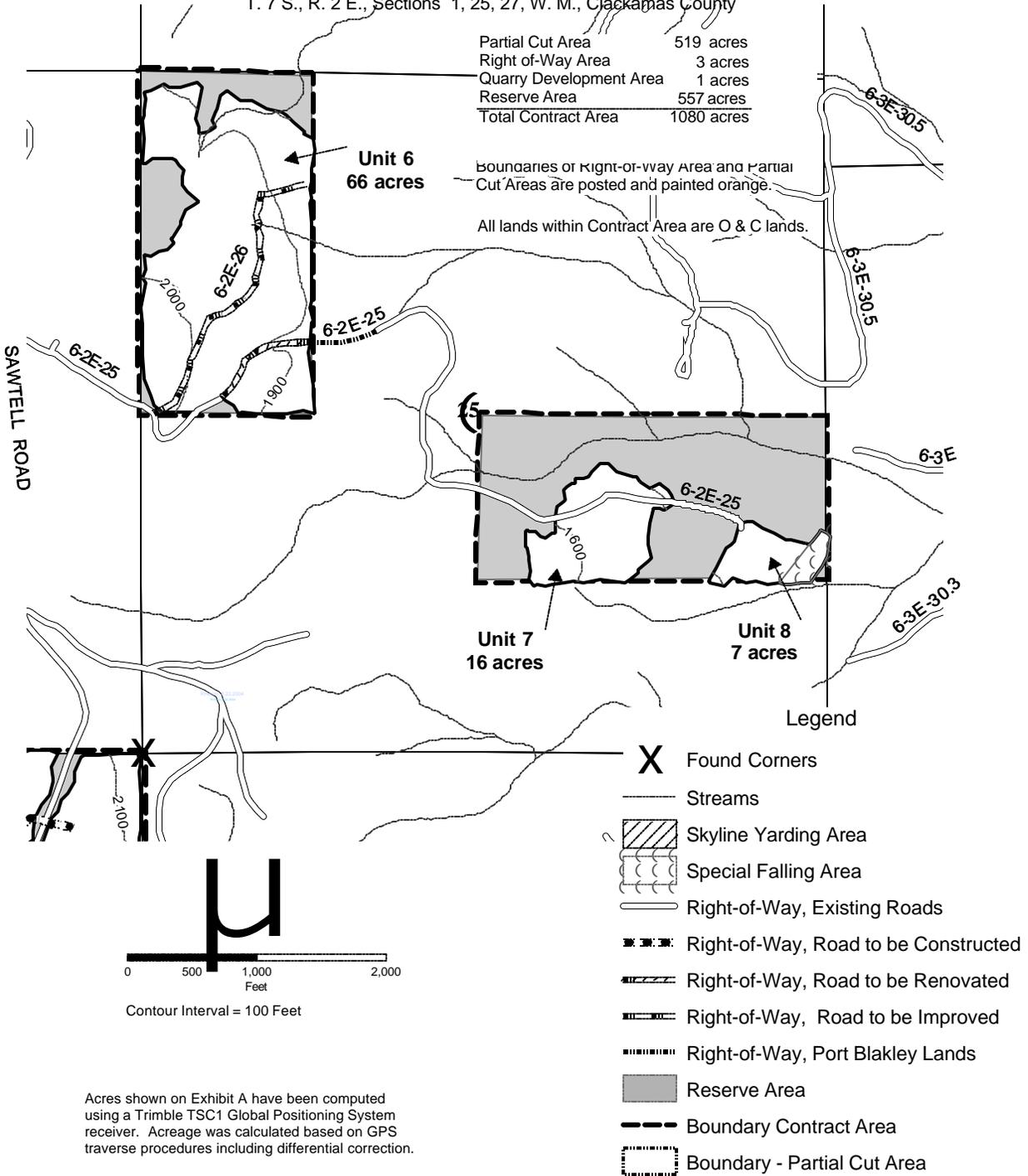


Exhibit A: page 5

September 7, 2005
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Bureau of Land Management
Salem District - Oregon

EXHIBIT A

Butte Creek Thinning
Tract No. 05-502
Sheet 5 of 8

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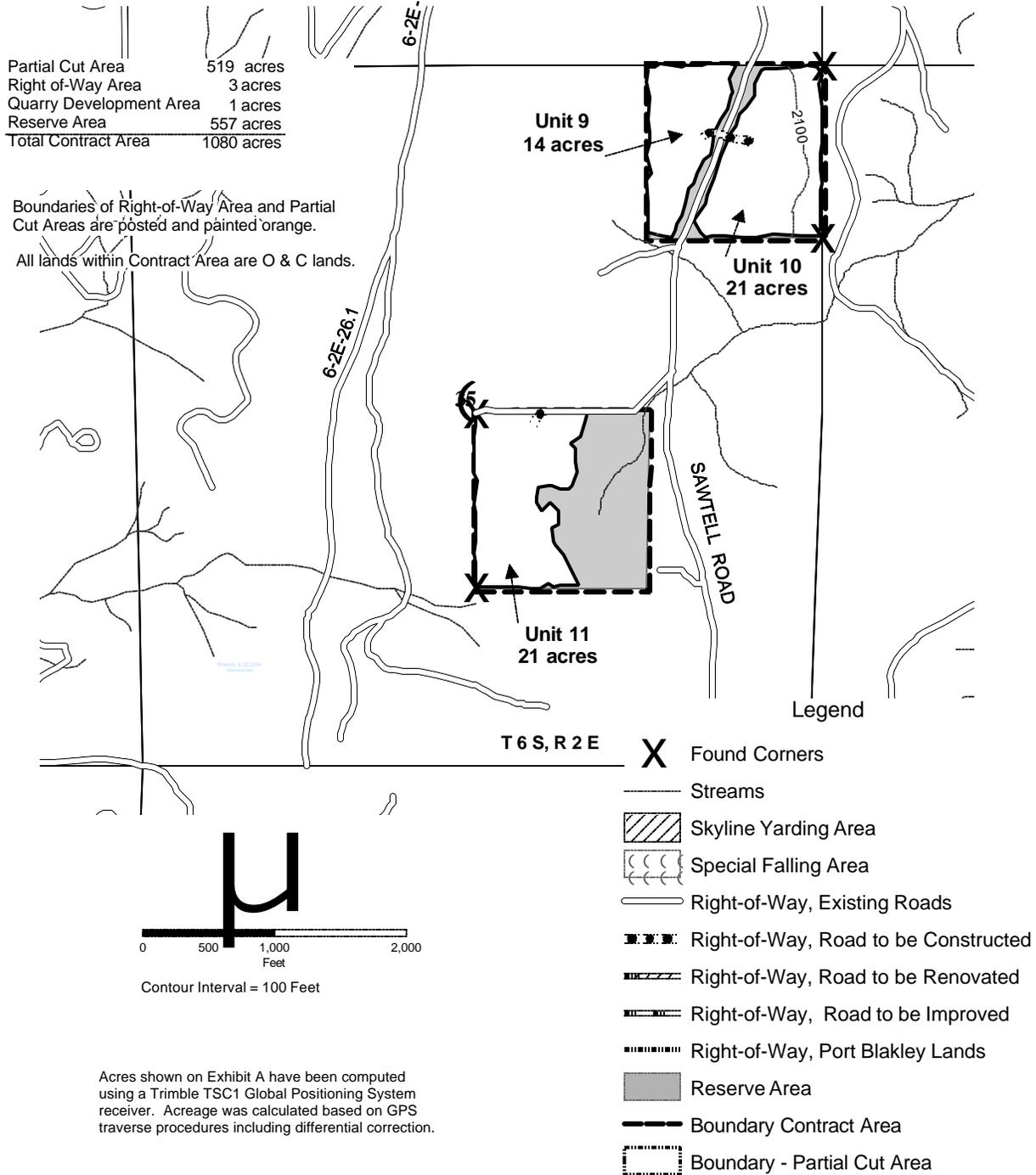


Exhibit A: page 6

September 7, 2005
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Bureau of Land Management
Salem District - Oregon

EXHIBIT A

Butte Creek Thinning
Tract No. 05-502
Sheet 6 of 8

TIMBER SALE CONTRACT MAP - CONTRACT NO. OR-080-TS-20005-502

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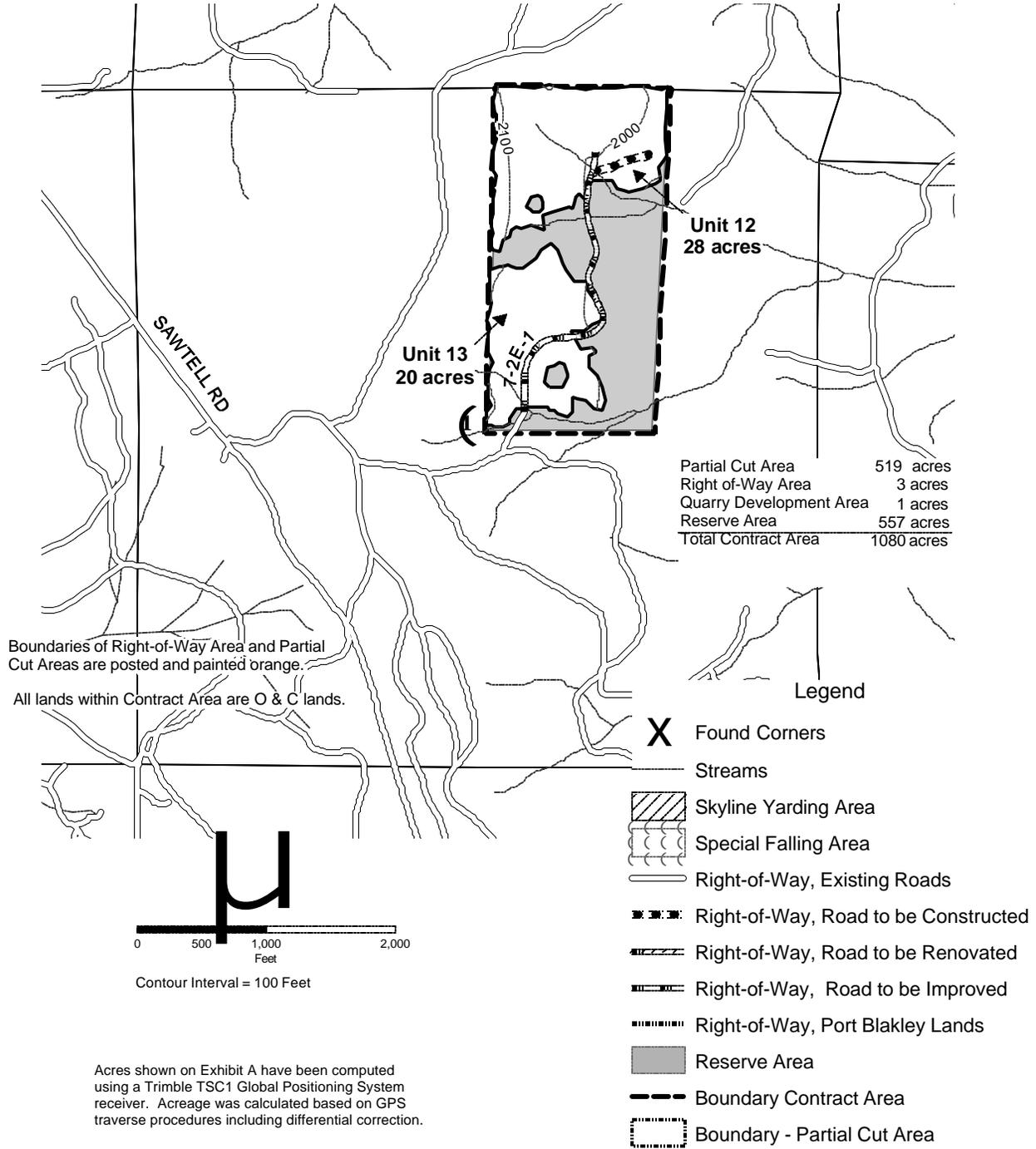


Exhibit A: page 7

September 7, 2005
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Bureau of Land Management
Salem District - Oregon

EXHIBIT A

Butte Creek Thinning
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Sheet 7 of 8

TIMBER SALE CONTRACT MAP - CONTRACT NO. OR-080-TS-20005-502

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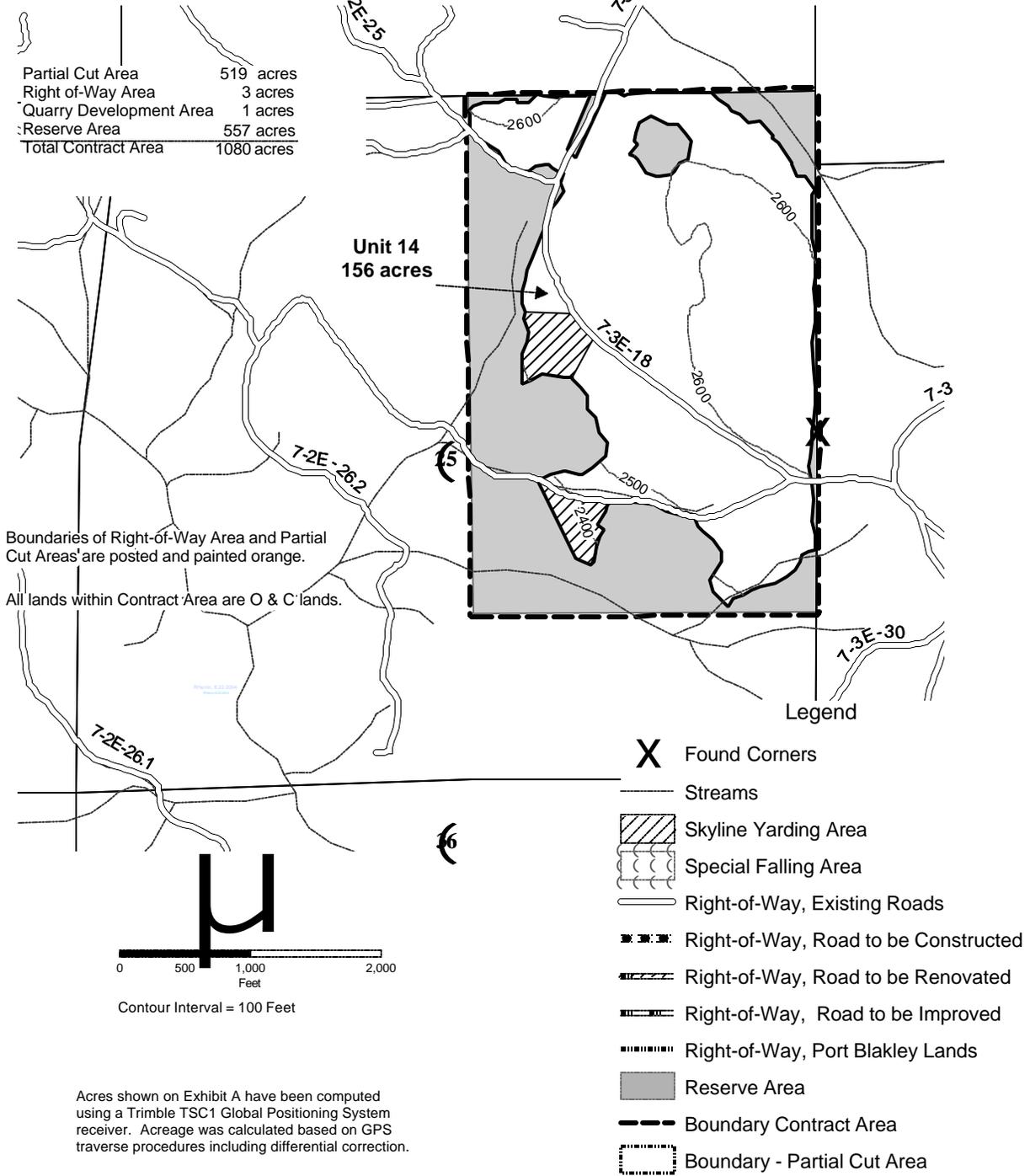


Exhibit A: page 8

September 7, 2005
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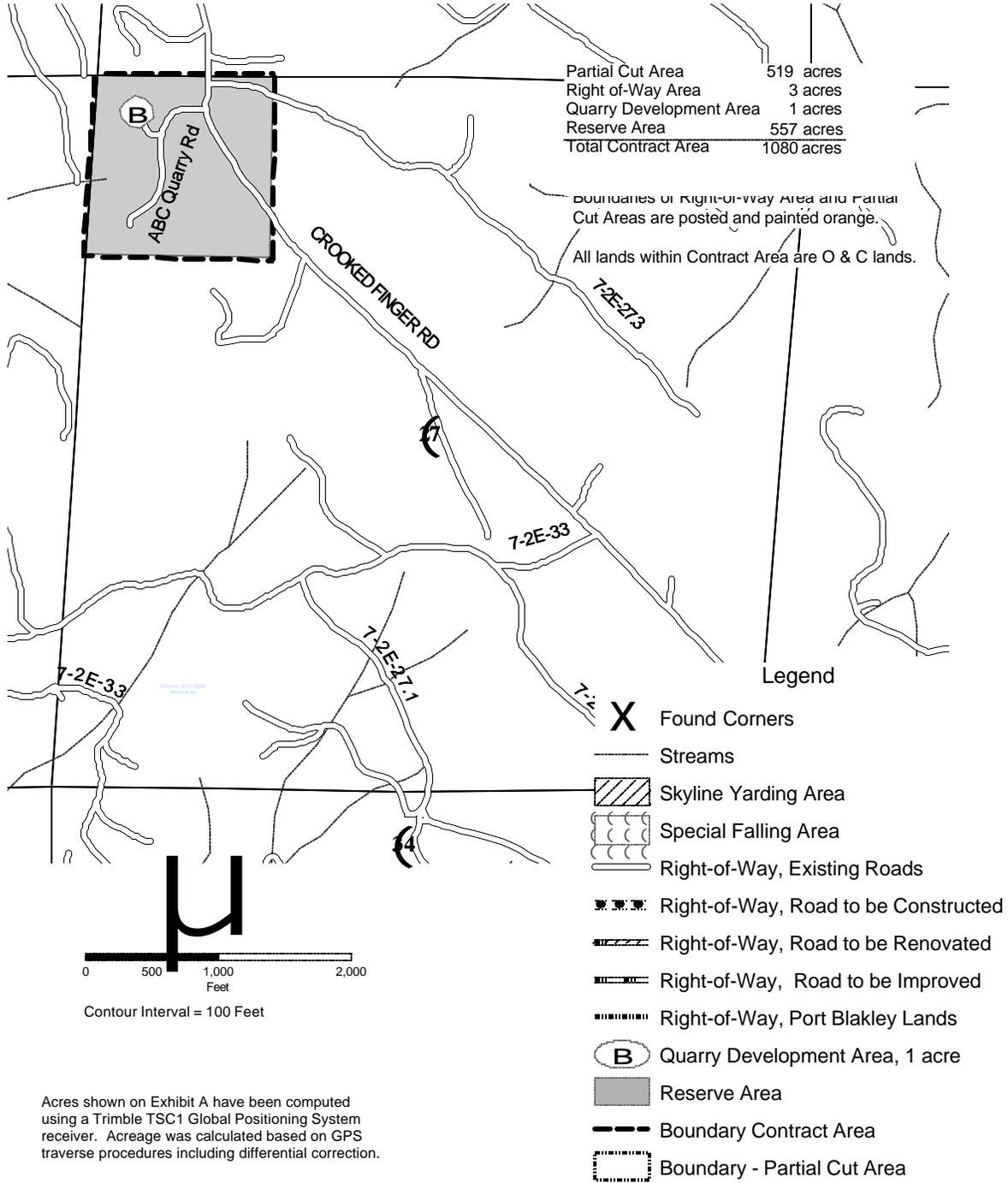
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EXHIBIT A

Butte Creek Thinning
Tract No. 05-502
Sheet 8 of 8

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Appendix 1: Response to Comments Received During the EA Public Review

The Butte Creek Thinning Environmental Assessment was made available for public review on December 1, 2004. Public Comments were solicited and the comment period closed on December 31, 2004. Comments were received as follows:

- 1 letter from 2 organizations
- 2 letters from individuals
- 678 pre-printed post cards

The major concerns raised in the comments have been consolidated and summarized.

Comments and Responses:

1. Respondents state that "... all of the largest and best trees that are older than the dominant trees that came in after logging or fires should be retained and protected from cribbing and other damage associated with falling and yarding."

Reply to #1: The project is designed to leave the largest and best trees. The EA states at Section 2.2.2 paragraph 1 that "stands would be thinned from below to remove suppressed, intermediate and some co-dominant trees..." It is BLM's intention and desire to retain the trees which the respondents describe, but we cannot categorically state that all such trees would be left. Where it becomes necessary for large trees to be felled, for safety or operational concerns, those trees would be left on site as coarse woody debris. To provide additional protection, BLM has decided to drop 0.3 miles of road in unit 2 that may have impacted large remnant trees.

2. Respondents state that it is important to save all snags and that BLM's proposal is insufficient to do this.

Reply to #2: As with the larger trees described above, it is BLM's desire and intention to leave all snags in place. Where snags must be felled for safety or operational concerns, the felled snags will be retained for CWD. Skid roads, landings and roads will be designed to minimize their impacts to snags. BLM is not without experience in maintaining snags through thinning operations. The photos below show snags that were present throughout the logging of another BLM sale and remained intact.



3. Concern was voiced over the 1.2 miles of permanent new roads being constructed, mostly in units B & C. Unit B was a particular concern because the proposed new road was located quite close to several larger trees and snags.

Reply to #3: After additional field review, much of the required rocky road construction was eliminated from units B (Unit 2) & C (Unit 3). Cable yarding was eliminated from unit C and the road construction necessary to access those areas was eliminated. In Unit B, the proposed road location was abandoned due to the anticipated impacts to large trees and snags.

4. There is nothing addressing the impacts on springs, well or groundwater in general. Any logging operation is going to affect ground water and in turn the local domestic water sources.

Reply to #4: Long-term, measurable effects to watershed hydrology, channel morphology, and water quality as a result of the proposed action are unlikely (EA p. 20). Measurable direct, indirect and cumulative effects to stream flow, channel function, and water quality as a result of the action alternative are of low probability (Hydrology Report p. 12-28). This includes springs, ground water and local domestic water sources. The EA is a summary of the analysis documented in the Hydrology Report, which goes into more detail regarding the effects of the project on stream channels, wetlands, and ponds (Hydrology Report pp. 7, 15-16) and ground water (Hydrology Report pp. 27-28).

5. Runoff and flooding of the flatlands where homes have been placed will have to be dealt with by residents. How is this addressed in your report? Page 17 says no increase of risk, but this isn't correct.

Reply to #5: Runoff is addressed in the EA, although it is couched in terms of streamflow (EA page 20, Hydrology Report pp. 12-15, 18). Flooding would be addressed as the result of extreme increases in streamflow (i.e. peak flows), which is not anticipated as a result of the proposal (EA pp. 20, A-4, A-5, Hydrology Report pp. 13-15). Commenter presents no evidence to demonstrate that this project will result in runoff and flooding in the flatlands.

6. Are any chemicals to be applied anywhere and at any time? Not addressed in your report. How will they affect water quality or domestic – municipal supplies?

Reply to #6: The proposed action does not include chemical treatments. Therefore, there are no effects to water quality, domestic or otherwise as a result of chemical applications.

7. There are many private landowners (p. 23) but the impact on their properties and life quality isn't discussed.

Reply to #7: Scoping letters were sent to several local private land owners. The quality of life for private landowners was not raised as an issue during scoping. Page 23 is a portion of the description of wildlife habitat. Private lands are discussed in the context of their relationship of wildlife habitat.

8. On pg. 7 roadways are going to be reconstructed & surfaced with rock. This doesn't make sense if logging is during dry weather. Blocking of resurfaced roads doesn't keep out ATV's and other trespassers who degrade the quality of life for those who live there. On p.21 roads are already compacted. Why do they need rock?

Reply to #8: The purpose of rock roads was to reduce sedimentation and runoff thereby reducing impacts. The amount of new rock road has been reduced by 0.6 mile. It is true that blocking roads doesn't guarantee that some ATV users and others won't violate blockades. BLM experience is that over time, blockades are an effective way to accomplish road stabilization and revegetation.

9. On p. 8 slash is to be burned. On p. 21 slash will remain on site.

Reply to #9: Page 8 is part of the description of the proposed action and does include a description of slash piling and burning on a portion of the project area (landings and road corridors). Page 21 is part of the description of the environmental effects to the soils. The sentence on page 21 that states that slash would remain on site is accurate for the majority of the project area. The soils report continues on page 22 where the effects from pile burning are discussed for those acres where burning is expected to occur.

10. Discussions of wildlife habitat are incomplete. Have local residents been contacted?

Reply to #10: Scoping letters were sent to 20 local residents and their comments were requested. Replies were received from three residents, none of whom provided additional information concerning local wildlife habitat.

11. The discussion of stream sedimentation is unrealistic. Even the slightest logging operation in the past has increased the water quality and sedimentation rate greatly. Just because Butte Creek watershed has good water quality doesn't mean some degradation is permissible.

Reply to #11: These statements are general in nature without any substantiation or further explanation. The discussion of sedimentation in the EA is a summary of a greater discussion contained in the hydrology report (as noted in the EA on page 20). The EA and the Hydrology report acknowledge that increases in stream sediment may occur as a result of this project, such increases are not expected to be large enough to be measured or of a long term duration (EA p 20, Hydrology Report pp 16 - 24).

12. The report is riddled with "unlikely" conclusions. There are eight "unlikely" on p. 20 alone, pointing to the lack of concrete data supporting the variety of conclusions: no impact on plants, wildlife, water quality, hydrology, and local life quality, etc.

Reply to # 12: The earth sciences are not exact sciences and do not always have exact predictable results. Therefore, the authors of the EA, and those of the supporting reports, are unable to make concrete statements regarding subjects in which the science is incomplete or where the variables are so numerous that concrete conclusions are unsupported. Where models and the known science tend to support conclusions based upon hypothesis or extrapolation, the anticipated results are expressed in qualified terms such as likely or probable, or in the reverse, unlikely or improbable. The BLM uses the best science that is available and draws conclusions that are supported to the degree in which the outcome is certain.

Appendix 2: Crossover between EA and Contract Unit Numbers

Table 3: Crossover between EA and Contract Unit Numbers

| “Contract” Unit # (Unit(s) on the Exhibit A Map) | EA Unit # |
|---|------------------|
| 1 | A |
| 2 | B |
| 3 | C |
| 4 | F |
| 5 | G |
| 6 | H |
| 7 | I |
| 8 | J |
| 9 | K |
| 10 | K |
| 11 | L |
| 12 | M |
| 13 | M |
| 14 | O |