FINAL DECISION DOCUMENTATION and DECISION RATIONALE

Clear Dodger Timber Sale

Environmental Assessment Number OR080-2003-03

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

Sections 13, 23, 24 & 25, Township 4 South, Range 4 East Willamette Meridian

Clackamas County, Oregon

I. Introduction

The Bureau of Land Management (BLM) has conducted an environmental analysis (Environmental Assessment Number OR080-03-03) for a proposal to partial cut harvest approximately 161 acres of 60 to 85 year old mixed conifer (predominately even-aged Douglas-fir with western hemlock, and western red cedar) stands within the GFMA (Matrix) Land Use Allocation (LUA). These stands are located within the Upper Clear Creek and Lower Clackamas River Watershed. The proposed action also includes girdling trees to create snag habitat in the Riparian Reserve. Temporary road construction, road renovation, and road decommissioning or blocking are part of the proposal. A Finding of No Significant Impact (FONSI) was signed on March 31, 2003 and the EA and FONSI were made available for public review on April 2, 2003.

This decision authorizes the implementation of only those activities directly related to and included within the timber sale. A separate decision will be issued concerning the Riparian Management proposal and road management issues not related to the timber sale.

II. Decision

I have decided to implement the density management action described in Alternative A (EA pp. 5-13) with modifications described below, hereafter referred to as the "selected alternative". The selected alternative is shown on the maps at the end of this Decision Rationale. This decision is based on site-specific analysis in the Environmental Assessment (EA # OR080-2003-03), the supporting project record, management recommendations contained in the Upper Clear Creek and Lower Clackamas River Watershed Analysis; as well as the management direction contained in the *Salem District Resource Management Plan (RMP)* dated May 1995.

A. Modifications

1. *Acres* – Acres have been finalized based on unit traverse and sale layout. The contract has 16 fewer harvest acres than the EA (see Table 1). In addition, during the final field work phase, it was determined that no more than two acres would be cleared for new road rights-of-way.

Table 1: Acres Change from the EA to the Contract

Table 1a: Changes in Unit Numbers and Acres					
Unit Numbers		**Harvest Method**	**Acres**		
Contract	**EA**		**Contract**	**EA**	**Change**
1	B-4	Partial Cut - Commercial Thinning	7	8	-1
2	B-3	Partial Cut - Commercial Thinning	6	10	-4
3	B-2	Partial Cut - Commercial Thinning	37	40	-3
4	B-1	Partial Cut - Commercial Thinning	20	18	2
5	A-1	Partial Cut - Commercial Thinning	10	20	-10
6	C-1	Partial Cut - Commercial Thinning	35	38	-3
7	D-1	Partial Cut - Commercial Thinning	19	22	-3
8	B-5	Partial Cut - Commercial Thinning	5	5	0
9	A-1	Partial Cut - Commercial Thinning	4	*	4
R/W		Clearing for road rights-of-way	2	0	2
Partial Cut (PC) Commercial Thinning			143	161	-18
Clearing for road rights- of -way			2	0	2
Total			145	161	16

* Contract units 5 and 9 were both originally part of unit A-1.

2. *Timber volume* - Final timber volume estimates for the sale have been determined through a field timber cruise. From Matrix lands the cruised volume is 1688 Thousand Board Feet (MBF), an increase of 88 MBF over estimates made for the EA.

3. *Logging Systems* - Ground based logging increased from 128 acres estimated in the EA to 134 acres in the contract. Cable yarding decreased from 33 acres estimated in the EA to 9 acres in the contract.

4. *Road Construction* – The amount of new road construction decreased from 2000 feet estimated in the EA to 213 feet in the contract.

5. *Fuels Treatment* – The original EA called for removal of all fuels created by the purchaser's operations from within 25 feet of the Hillockburn Road. The timber sale contract will require the purchaser to remove all fuels created by their operations from within 40 feet of the Hillockburn Road.

B. Changes to the Environmental Consequences

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.

Cable Yarding: Reducing the number of cable yarded acres from 33 in the EA to 9 in the timber sale contract would reduce non-mitigated compaction and loss of site productivity on the proposed sale area proportionally.

Ground Based Yarding: The timber sale contract increases the number of ground based yarded acres from 128 in the EA to 134 in the timber sale contract. The increase is due to more of the area being less than 35% slope than originally estimated in the EA. The Best Management Practices identified in the EA would be implemented in the timber sale contract. The result would limit compaction and loss of productivity to less than ten percent of the area. This is within parameters analyzed in the RMP.

Clearing for Road Rights-Of-Way: The effects to this clearing are described in effects associated with road construction (EA pp. 19, 20, 29, 28, 42, 43, 46, 47).

The above modifications do not change the scope of the project analyzed in EA number OR-080-03-03, nor do these modifications affect the adequacy of the analysis contained in the EA.

C. Summary of the Decision

1. Harvest approximately 143 acres from the GFMA Land Use Allocation for an expected yield of 2,987 hundred cubic feet (CCF) (1,688 MBF). The following is a description of harvest acres and timber volumes by harvest method.
   - *Commercial thinning* (Partial Cut) of approximately 143 acres of Matrix lands from 9 units. It is expected that this will yield approximately 1,682 thousand board feet (MBF).
   - *Road Rights-of-way:* Clear up to 2 acres for road rights-of-way in units 5 and 6.

2. Tree Topping: Approximately 290 trees would be topped within the project area for snag creation.

3. Road Construction, Decommissioning and Blocking: Approximately 213 feet of road would be constructed to facilitate logging operations and would be decommissioned and blocked after completion of logging operations.

4. Road Maintenance and Renovation: Road maintenance and Renovation (brushing, blading, resurfacing, spot rocking, culvert installation, replacement and repair) would occur on approximately 4.7 miles of existing road. These activities would take place within the current road prism. Roads that are currently blocked and will be opened and renovated for this sale will be blocked again after operations have been completed.

5. Design Features and Mitigation Measures: All design features and mitigation measures described in the EA (pp. 8 - 12) are incorporated into the timber sale contract with the changes described in section II. A-5 of this Decision Rationale.

6. Compliance with Direction: The selected action is consistent with applicable land use plans, policies, and programs. Programmatic documents covering this proposal are the *Record of Decision for Amendments to the Survey and Manage, Protection Buffer, and Other Mitigation Measures Standards and Guidelines (ROD, January, 2001); Salem District Resource Management Plan (May 1995); Record of Decision (ROD) for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl (April 1994); and the Western Oregon Program-Management of Competing Vegetation Record of Decision (August 1992).* All of these documents may be reviewed at the Cascades Resource Area office.

III. Alternatives Considered

Alternatives Dropped From Detailed Analysis: Two action alternatives were evaluated and later dropped from detailed analysis:

- No New Road Construction: An alternative with no new road construction was considered and dropped because the potential effects of implementing the timber management action alternative without new road construction are within the scope of the alternatives analyzed.
  The Cascades Field Manager could essentially implement a no new road construction alternative by simply choosing to exclude those acres of thinning which would be logged from landings accessed by new roads. The Field Manager did use his prerogative and elected to eliminate ninety percent of the proposed road construction, reducing construction from 2,000 feet to 213 feet.
- Regeneration Harvest in Unit B-2: This alternative was dropped after review of the stand exam data revealed that the stand has not yet reached culmination of mean annual increment and that thinning the stand now would result in maximizing total yield over the life of the stand.

Alternatives Considered in Detail: The EA analyzed the effects of the proposed action and the no action alternatives. Complete descriptions of the "action" and "no action" alternatives are contained in the EA, on pages 5-13.

IV. Reasons for the Decision

Considering public comment, the content of the EA and supporting project record, the management recommendations contained in the Upper Clear Creek and Lower Clackamas River Watershed Analysis, and the management direction contained in the RMP and Survey and Manage ROD, I have decided to implement the selected action as described above. My rationale for this decision follows:

1. The selected action addresses the identified purpose and need for action in that it would:
   - Contribute to meeting the need for a sustainable supply of timber by immediately making 1,688 MBF of Matrix timber available and managing these forest stands to provide a long term sustainable supply of timber.

- Contribute to meeting the need for a healthy forest ecosystem by speeding the development of desirable ecosystem components that are currently lacking due to past management practices (e.g. snag creation).
- Adequately protect the watershed while meeting other objectives.
- The selected alternative is consistent with applicable land use plans, policies, and programs (EA, pp. iv).

2. The "no action" alternative was not selected because it does not meet the purpose and need, nor does it fulfill any of the projects objectives. Implementing the "no action" alternative will not contribute economic benefits to local communities, nor will it help accelerate the development of some desirable ecosystem components.

V. Public Involvement/ Consultation/Coordination

Scoping: A description of the proposal was included in the Salem Bureau of Land Management *Project Update* which is mailed to more than 1070 individuals and organizations. A letter asking for scoping input on the proposal was mailed on September 4, 2002 to adjacent landowners and individuals who have expressed an interest in management activities in the resource area as a whole or in this area. Letters were also sent to the Confederated Tribes of Grande Ronde; Confederated Tribes of the Warm Springs Reservation of Oregon; Federal, State, County and local government organizations; Clackamas River Water Providers and Special Interest groups.

Comment Period and Comments: The EA was made available on the Internet and notices mailed to approximately thirty-six agencies, individuals and organizations on March 28, 2003. A legal notice was placed in local newspapers soliciting public input on the action from April 2 to May 2, 2003. Thirty-five comment cards and letters were received. Responses to these comments can be found in Appendix A of this Decision Rationale.

Consultation/Coordination: The Clear Dodger timber sale was submitted for Formal Consultation with U.S. Fish and Wildlife Service (USFWS) as provided in Section 7 of the Endangered Species Act of 1973 (16U.S.C. 1536 (a)(2) and (a)(4) as amended). Consultation was completed on February 27, 2003 (Biological Opinion (BO) Reference number 1-7-03-F-0008). As a result of consultation, the USFWS found that the sale would not likely jeopardize the continued existence of the spotted owl (BO p. 45-46), and anticipates incidental take (BO p. 46-47).

The Clear dodger project was determined to have no effect to listed fish, therefore, consultation with U.S. Department of Commerce, National Marine Fisheries Service (NOAA Fish) is not required.

Extensive coordination and cooperation was done with the Clackamas River Water Providers. Water Department employees were included in Interdisciplinary Team meetings and discussions.

VI. Conclusion

I have determined that change to the Finding of No Significant Impact (FONSI - August 2002) for the Clear Dodger Timber Sale is not necessary for these reasons: The existing EA for the Clear Dodger Timber Sale, along with additional information contained in this document, fully covers the project. There are no significant new circumstances or facts relevant to environmental concerns and bearing on the modification to the proposed 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.

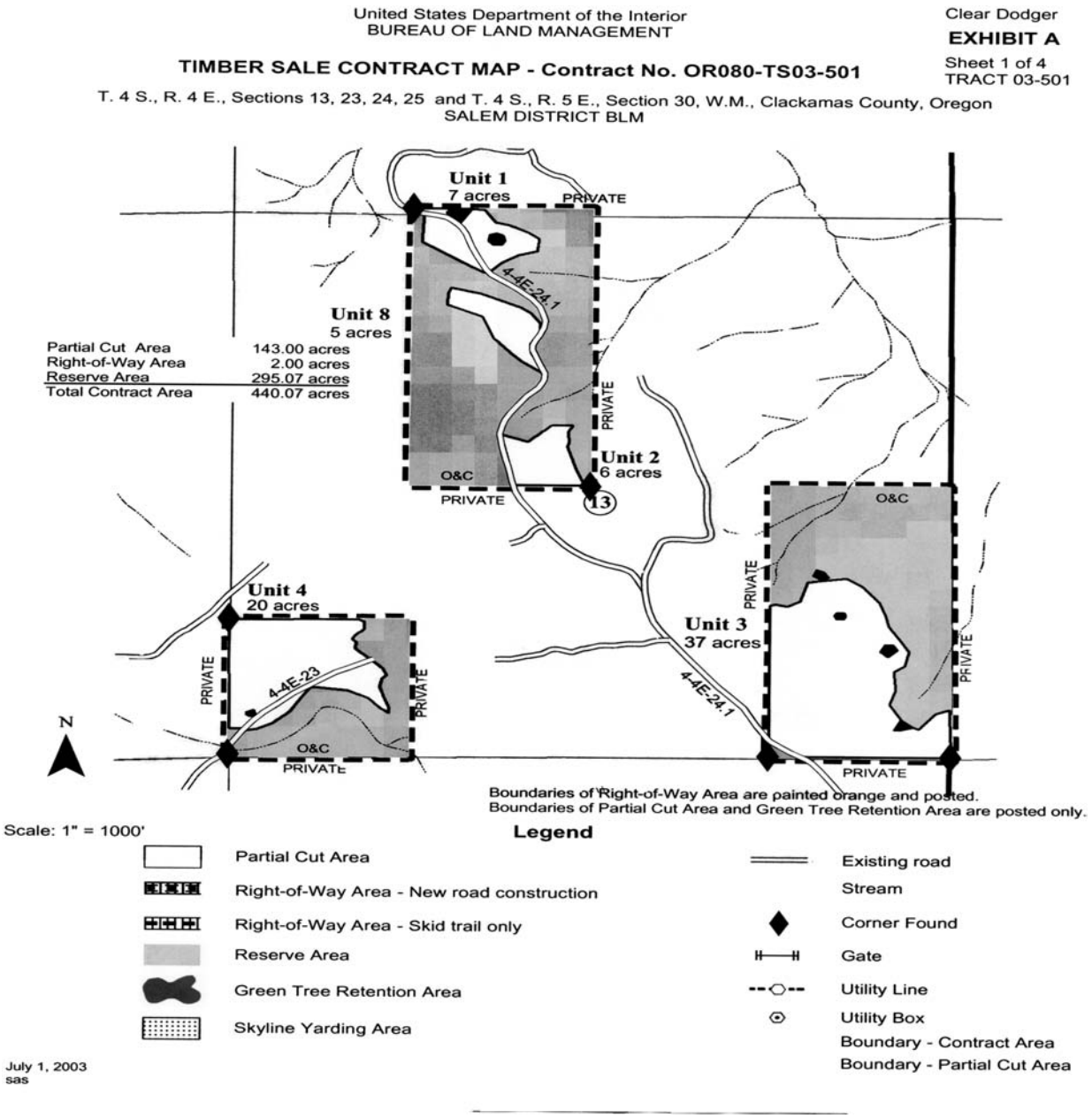
Protests: In accordance with Forest Management Regulations at 43 CFR 5003.2, the decision for this timber sale will not become effective or be open to formal protest until the Notice of Sale is published "in a newspaper of general circulation in the area where the lands affected by the decision are located". 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 *Sandy Post* on or around July 30, 2003. The planned sale date is August 27, 2003.

Contact Person: For additional information concerning this decision or the BLM protest process, contact Randy Herrin (503) 315-5924, Carolyn Sands (503) 315-5973 or Bob Hershey (503) 315-5931, Cascades Resource Area, Salem BLM, 1717 Fabry SE, Salem, Oregon 97306.

Approved by: Belle Smith for
William B. Keller
Cascades Resource Area Field Manager

July 29, 2003
Date

Project Maps



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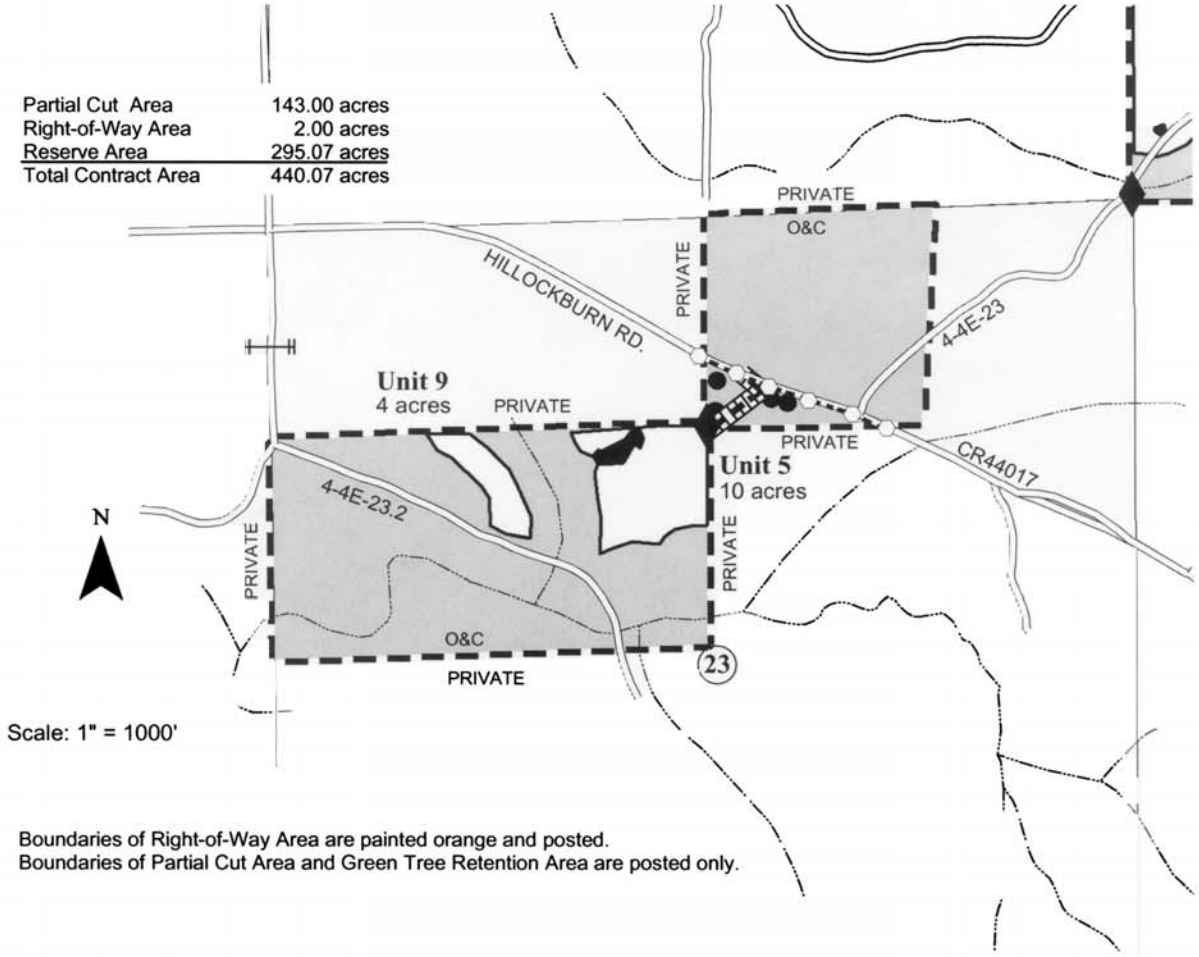
BUREAU OF LAND MANAGEMENT

Clear Dodger
EXHIBIT A
Sheet 2 of 4
TRACT 03-501

TIMBER SALE CONTRACT MAP - Contract No. OR080-TS03-501

T. 4 S., R. 4 E., Sections 13, 23, 24, 25 and T. 4 S., R. 5 E., Section 30, W.M., Clackamas County, Oregon
SALEM DISTRICT BLM

Partial Cut Area	143.00 acres
Right-of-Way Area	2.00 acres
Reserve Area	295.07 acres
Total Contract Area	440.07 acres



Scale: 1" = 1000'

Boundaries of Right-of-Way Area are painted orange and posted.
Boundaries of Partial Cut Area and Green Tree Retention Area are posted only.

Legend

- Partial Cut Area
- Right-of-Way Area - New road construction
- Right-of-Way Area - Skid trail only
- Reserve Area
- Green Tree Retention Area
- Skyline Yarding Area
- Existing road
- Stream
- Corner found
- Gate
- Utility Line
- Utility Box
- Boundary - Contract Area
- Boundary - Partial Cut Area

July 1, 2003
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Clear Dodger
EXHIBIT A
Sheet 3 of 4
TRACT 03-501

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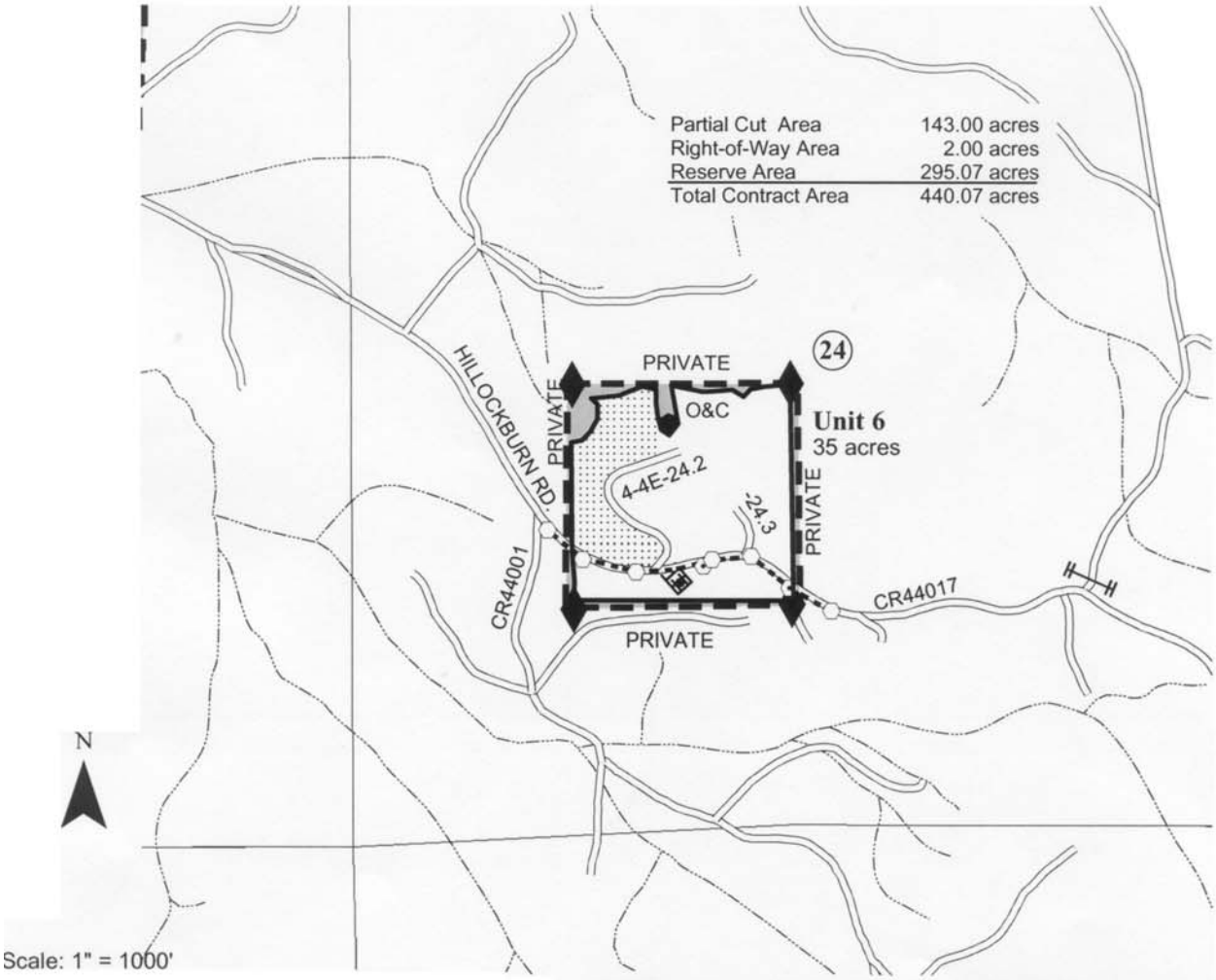

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July 1, 2003
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Clear Dodger
EXHIBIT A
Sheet 4 of 4
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TIMBER SALE CONTRACT MAP - Contract No. OR080-TS03-501

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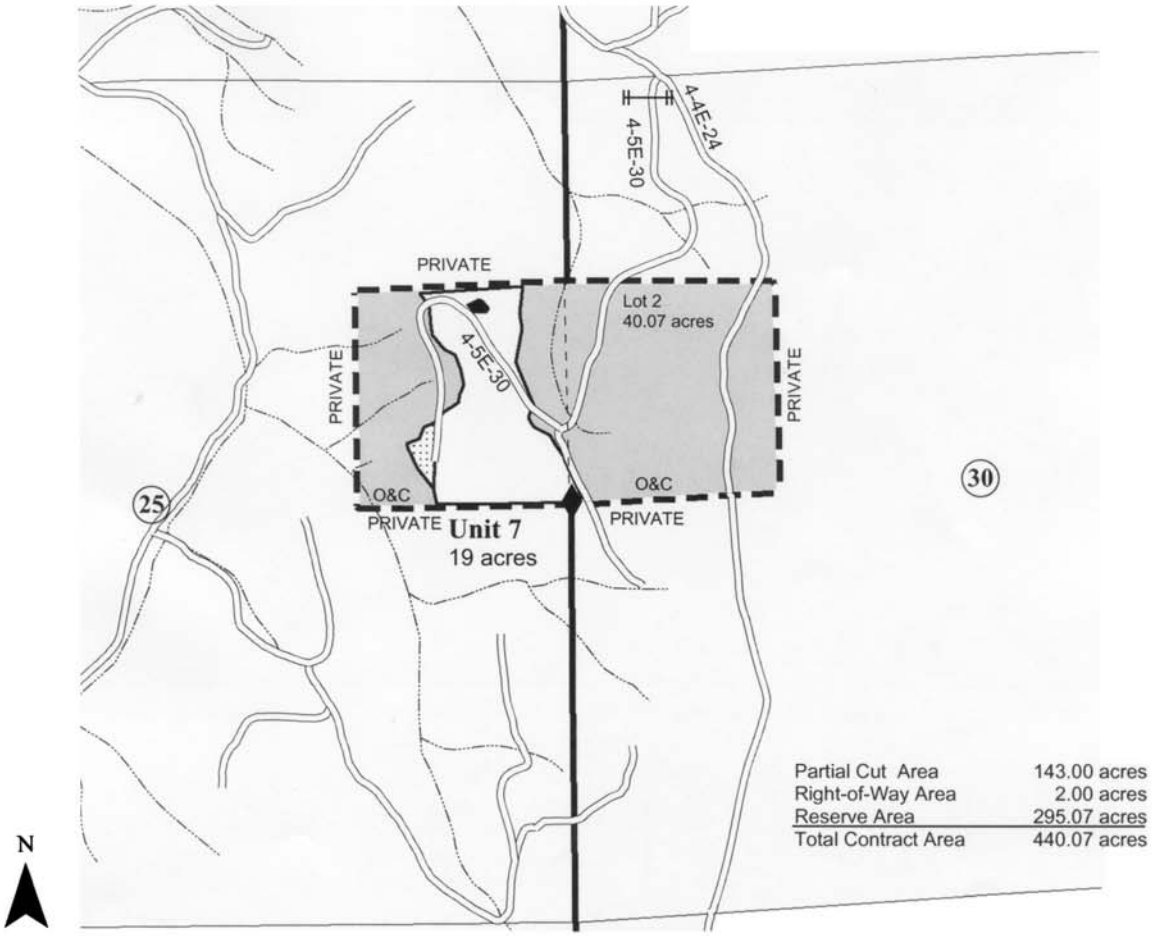

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July 1, 2003
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Appendix A: Response to Public Comments Received on the Clear Dodger Environmental Assessment (EA#OR080-03-03)

In following are comments that the BLM received from the public after public review of the Environmental Analysis (EA). The comments, (in **bold** type), may have been paraphrased for clarity or conciseness or to combine similar thoughts from multiple writers, but the complete text of the comment was available to the Interdisciplinary Team (IDT) making the response. The full text of the comment letters is available in the Clear Dodger EA file. The IDT response is in *italics*.

1. **The removal or even just the cutting of the trees will create lots of erosion, which will rush down into at least one of the tributaries of Clear Creek**.
   No cutting or removal of trees is planned within the Riparian Reserves. The full width of the Riparian Reserves will act as a filter to prevent increased sediment input to the tributaries of Clear Creek.

2. **Cutting the trees around a creek will result in increased water temperatures**.
   No cutting of trees is planned around any creeks. Girdling of trees within the Riparian Reserves will result in those trees slowly dying and becoming standing snags. Girdling would be spaced out over both area and time so that significant changes in the amounts of shade on creeks would not occur.

3. **Unit D-1 is too wet and steep for road construction/reconstruction/logging**.
   All areas identified as wet areas have been removed from the sale and buffered. The no road construction alternative has been selected for unit D-1. No steep slopes were identified within the portions of unit D-1 selected to be thinned.

4. **The existing roads are dumps for unscrupulous local people; new roads will increase the problem**.
   New road construction has been reduced from 2000 feet to 213 feet, all of which will be decommissioned and blocked from public access. The BLM has entered into agreements with the Clackamas County to increase law enforcement and cleanup of illegal dumping on public lands.

5. **There are many large areas of late-successional forest, although not old growth, it is still some of the oldest forest in the area**.
   The proposed action is a thinning, not a regeneration harvest. The overall characteristics of the stands successional classification will remain the same as it currently is.

6. **Road construction will cause disruption to the hydrological systems**.
   New road construction has been reduced from 2000 feet to 213 feet, all of which will be decommissioned. Roads to be constructed are on relatively low slopes and disruption to hydrological systems will be minimal.

7. **Road construction will create a fire hazard**.
   The 213 feet of new road that will be blocked and decommissioned will not appreciably alter the fire hazard conditions from the current levels.

8. **Heavy machines and heavy removal of trees will destroy the soil balance**.
   Ground based harvesting of trees is planned and managed to impact less than ten percent of the area. This is consistent with disturbance levels described in the RMP. "Heavy removal of trees" is not a part of this proposed thinning.

9. **This proposal has no valid or real benefit except for your own profit**.
   The BLM will not realize any profit or financial return from this action. All monetary payments are returned to the United States Treasury for disbursement by Congress. The value and benefits of this project are described in the Purpose and Need on pages 1 and 2 of the EA.

10. **The EA states that the road density of 3.5 miles per section is "at or just below the threshold for wildlife". What does this mean? And does the total road density in this project area or the watershed exceed this? What are the requirements regarding road density in the RMP and does this plan conform to them**?
    The road density in the affected watersheds is not expected to change appreciably due to this project. There will be a minor amount of road construction (213 feet). Some roads that are now closed will be reopened; however, all of the reopened roads will be closed. The new construction will be blocked and closed, and roads currently gated will be closed. The Salem District RMP does not have a requirement or target road density level.

11. **Why can the 600-foot section of road in unit B-1 simply be decommissioned since roads are currently not allowed in Riparian Reserves**?
    Roads are in fact allowed within Riparian Reserves. Even construction of new roads is allowed, once Watershed Analysis has been completed (NFP C-32). The 600 foot section of road referenced above will not be decommissioned because it will be needed for future access and management of BLM lands. To decommission this section of road would ultimately require construction of new roads to access the lands that this road currently serves.

12. **The proposal allows for construction of 2,000 feet of new road construction to access 16 acres of land, yet the new road will be expensive, increase road densities, and cause additional distress to wildlife & fish populations. I would like to see the no new road alternative selected**.
    New road construction has been reduced from 2000 feet to 213 feet, all of which will be decommissioned upon completion of the project.

13. **The description of the proposed action is confusing. In some places the EA describes the action as commercial thinning and in other places it mentions partial cutting**.
    The proposed action for all units can be described as commercial thinning. Thinning is considered to be a form of partial cutting and the two terms were used interchangeably.

14. **Where was take authorized for the northern spotted owl**?
    Take for the northern spotted owl was issued by the U. S. Fish and Wildlife Service in their February 27, 2003 Biologic Opinion (Service Log 1-7-03-F-0008) (EA p. vi.).

15. **The low projected canopy cover after treatment calls into question the size of trees to be left, are they really going to be the dominant and co-dominant trees**?

The following table summaries data from the silvicultural prescription marking guidelines. As evidenced by the changes in average diameter, it is the smaller trees that will be removed.

Silvicultural Prescription Summary

Unit	Trees per Acre		Basal Area per Acre		Average Diameter		Acres
	Before	After	Before	After	Before	After	
A1	217	87	297	195	15.8	20.3	4
A1	261	116	213	144	12.2	15.2	10
B1	158	109	216	167	15.8	16.8	20
B2	236	112	320	221	15.8	19.8	37
B3	263	129	200	140	11.8	14.2	6
B4	391	137	260	144	11.0	14.0	7
B5	391	137	260	144	11.0	14.0	5
C1	162	97	281	223	17.8	21.2	35
D1	154	101	220	178	16.2	18.2	19
Weighted Average	211	108	264	192	15.5	18.4	

16. **Reserved trees in Riparian Reserves should not be used for attaching cables to facilitate skyline yarding**.

    Attaching cables to standing trees does not always result in the death of the tree. In cases where trees used as cable anchors are completely girdled by the cables, they will be counted towards the eight trees per acre girdled under the Riparian Treatment project.

17. **Dropping units C1, D1 and B2 would reduce the effects of this project on the spotted owl and would help maintain ecological diversity and some of the older stands in the lower Clackamas watershed**.

    This sale is consistent with the Biological Opinion issued by the Fish and Wildlife Service. This proposed action is designed to maximize species diversity. Minor species and hardwoods are selected for retention over Douglas fir, trees with defects are retained, snags are retained where possible or created after operations. These steps help to develop the characteristics of an older forest.

18. **The WAR cumulative impacts analysis does not adequately assess the cumulative impacts. Cumulative impact analysis fails to consider logging on private lands and recent sales on Forest Service and BLM lands**.

    Assumptions utilized for the WAR were discussed in the Cumulative Effects Analysis of Peak Flow Events for the Clear Dodger Proposal (a supplemental EA report prepared by the Cascades Area Hydrologist). Artful Dodger, a previous BLM action in this watershed, was incorporated into the analysis under current condition. There are no other BLM actions likely to occur in this watershed during the next decade. U.S.F.S. was contacted and all completed and proposed forest treatments, in this watershed, were incorporated into the analysis. On non-public lands, it was assumed that all mature stands would be harvested: a "worst-case scenario" that likely overestimates what will actually occur.

19. **Riparian Reserve Treatments: Some girdling may be appropriate to give these stands a pulse of snags and coarse woody debris, although other restoration or mitigation projects elsewhere should have higher priority. I suggest that you not fall or girdle more than three trees in clumps, but spread the treatments out. If any tree is used in riparian reserves for yarding *[tail holds]*, it should be counted as a treated tree in the riparian reserve**.

    Riparian Reserve treatments are not a part of this decision. Comments regarding these treatments will be reconsidered when a separate decision is prepared for that action. If Riparian Reserve trees are used as cable anchors the numbers and condition of those trees will be considered when deciding on and implementing the Riparian Reserve Treatment portion of this project.

20. **There was not enough analysis of the potential effects of logging on steep slopes. The EA does not adequately discuss the effects on the soils by logging on steep slopes**.

    As stated on page 4 of the EA, it is not part of the proposal to harvest timber on steep slopes. Steepness is relative to the conditions or uses proposed for specific sites. For tractor yarding, 35% is considered the upper end of operability on BLM lands. For forest management operations, 80% is considered the upper end of operability (RMP, Appendix C-13). The vast majority of the slopes within Clear Dodger are less than 35%. The steepest slopes, where timber would be harvested, are approximately 50% for short distances.

21. **Thinning actions increase ground cover, which will cause an increased height and temperature to any fire. This has the potential to turn ground fires into canopy fires. Removal of canopy and fire resistant mature trees will contribute to higher risk of fire**.

    Thinning will remove the ladder fuels that enable fires to move from the ground into the canopies, remove tons of available fuel in the form of standing trees, break up the continuity of the remaining fuels, both on the ground and in the canopies. Any increase in ground cover plants would not be expected to be so volatile as to produce flame lengths reaching and sustaining fire in the canopy. Where the Hillockburn Road passes through sale units, fuels created by the project will be removed for a width of forty feet from the edge of the road to provide a fire barrier. All other roads used in the sale will be blocked after use to reduce the amount of garbage dumping, shooting and introduction of fire. The goal of this project is not to remove mature trees, rather it is to remove the suppressed and intermediate trees, allowing the larger trees to continue growing and developing the large size and thick bark that help them withstand the effects of fire. Breaking the continuity of fuels in the crowns will help limit the potential of spread of a crown fire should that occur.

22. **The EA prepared for the Clear Dodger sale fails to give an adequate discussion or analysis of alternatives to the proposed action**.

    Some writers expressed the opinion that the range of alternatives presented in the EA is insufficient to provide the decision maker with a reasoned choice. None of these writers, however, offered any suggested alternatives that meet the purpose and need of the project. Alternatives were considered that included regeneration harvest, but the IDT concluded it was not an appropriate action at this time. An alternative was considered that would have prescribed no new road construction, but the IDT felt that the decision not to construct new roads was within the purview of the decision maker (a fact verified by the decision to eliminate 90% of the road construction considered). Likewise, the decision maker could have opted to thin fewer acres, or to remove fewer trees.

The only action alternative that was not analyzed, and would have met the purpose and need of the project, would have been to harvest more trees or more acres than described in the EA.

23. **Blowdown is likely given that blocks B3, B4, B5 and D1 are on top of a ridge**.
Some amount of blowdown is possible, even likely, after thinning is complete; large amounts of blowdown are not expected. Thinning, especially from below, does not open the stand up enough for the wind to topple large numbers of trees. Blowdown is more common where individual trees are left exposed to the wind, where large openings are created in the forest stand or where either of the foregoing occurs on a prominent exposed ridge. The units mentioned by the writer are not on high exposed ridges. The B3-5 units are on a moderately sloped bench that sits above the Clackamas River and unit D1 drapes across a small ridge that sits well below a higher ridge to the east. Any blowdown is expected to produce large woody debris within the desired ranges.

24. **The EA fails to adequately analyze the impacts on wildlife and to adequately present management plans for Survey and Manage species**.
Surveys were completed to protocol for all Survey and Manage species and management plans and are consistent with established recommended treatments.

25. **The project area is habitat for several sensitive species that rely on coarse woody debris, snags and a damp forest floor. The prescribed broadcast burn (EA, 17) will have a negative impact on the survival of any amphibians and there is a strong probability that some of the leave trees will be damaged or killed by excessive heat**.
There is no broadcast burn planned for this project. The only planned burning is the landing piles, which would be covered and burned after the fall rains start. Impacts to sensitive species are adequately described in the EA on page 31.

26. **What studies have shown that washing logging equipment alone can guarantee that the area won't be subject to an increase in the spread of noxious weeds? What about the cleaning of logging trucks as well**?
Nothing can guarantee that noxious weeds won't spread, even under the no action alternative. The mitigation measure of washing equipment is intended to limit as much as possible the introduction of new sources of infestation.
Ground disturbing activities will be monitored for several years to identify and eradicate new populations before they get established. Logging trucks are not planned to be washed because they are confined to roads that are already exposed to introduction from many sources outside of our control.

27. **The EA states that the three units located in the Middle Clackamas River Watershed, B2, B3, and B4 are too small and steep to support fish populations (EA, 20), however the EA fails to disclose the effects of sedimentation runoff from these units**.
The reference is not to Units B2, 3, & 4 as being small and steep, it is the streams in the vicinity of these units that are to small and steep to support fish (EA p. 20). The units are on relatively flat ground and buffer the streams with a full Riparian Reserve buffer. Given the low gradient of the units, the fact that this is a thinning, not a regeneration cut and the full buffers, no increased sediment is expected to reach these streams that do not even support fish populations.

28. **Is the funding reliable for the projects that are not associated with the timber sale, i.e. Riparian Reserve treatment and roadwork**?

These projects would be funded through the "Jobs-In-The-Woods" program. Funding for this program has been relatively stable over the past five years.

29. **On page 17 there is the TPCC table. What is this, where did it come from and what does it reference**?

*TPCC is an acronym for the **Timber Production Capability Classification** system, which is designed to identify sites capable of sustaining timber management without degradation of their productive capacity. Factors such as soil depth, available moisture, slope, drainage, and stability are evaluated to determine the degree of timber management activity on a particular site, to identify special practices or limitations to prevent site degradation, and to identify sites too fragile to tolerate timber management without long-term loss of productivity. Legislative requirements and BLM policy specify that timber harvest will be planned and carried out only on lands which can be managed without environmental degradation of the site (RMP p. C-11).*

30. **It is absurd to assert that critical owl habitat will be preserved while at the same time spotted owl take has been authorized. (EA, vii #9**).

The "Critical Habitat" referred to here is a specific area designated by the Fish & Wildlife Service in the recovery plan for the spotted owl. There is no Critical Habitat involved in this project.

31. **You should mitigate the expected impact of ground based logging equipment**.

Typically, mitigation measures for impacts from tractor logging consist of ripping and blocking skid trails. In a thinning, ripping the skid trails can damage the root systems of the remaining trees. Also, the same skid trails likely would be needed on future entries or at the time of final harvest. Consequently, ripping of skid trails is deferred until after final harvest. Since there will be no skid trails accessing the Hillockburn Road, and all roads tributary to Hillockburn, used in the project, will be blocked or gated, all skid roads will be effectively blocked.

32. **The EA admits that there will be a negative impact on existing snags and CWD, yet the purpose and need list creating snags and CWD**.

The Purpose and Need actually says to "...provide elements of complex stand structure such as snags and down logs." Although it is recognized that there will be a negative impact on these structural elements, it is not expected that the proposed action will extirpate them from the stands. The existing snags and CWD are mostly soft, highly decadent and in the latter stages of decay. By creating new snags and CWD now, there will be a continued supply of these elements.

33. **What types of fertilizer will the BLM and the Forest Service use and the concentration of Nitrogen and Phosphorus**?

The BLM has no plans to fertilize the sale area after harvest. If fertilization is contemplated in the future, it will be the subject of NEPA analysis at that time.

34. **Though matrix lands are allocated to produce the majority of timber under the Northwest Forest Plan, there is no mandate to cut Matrix lands**.

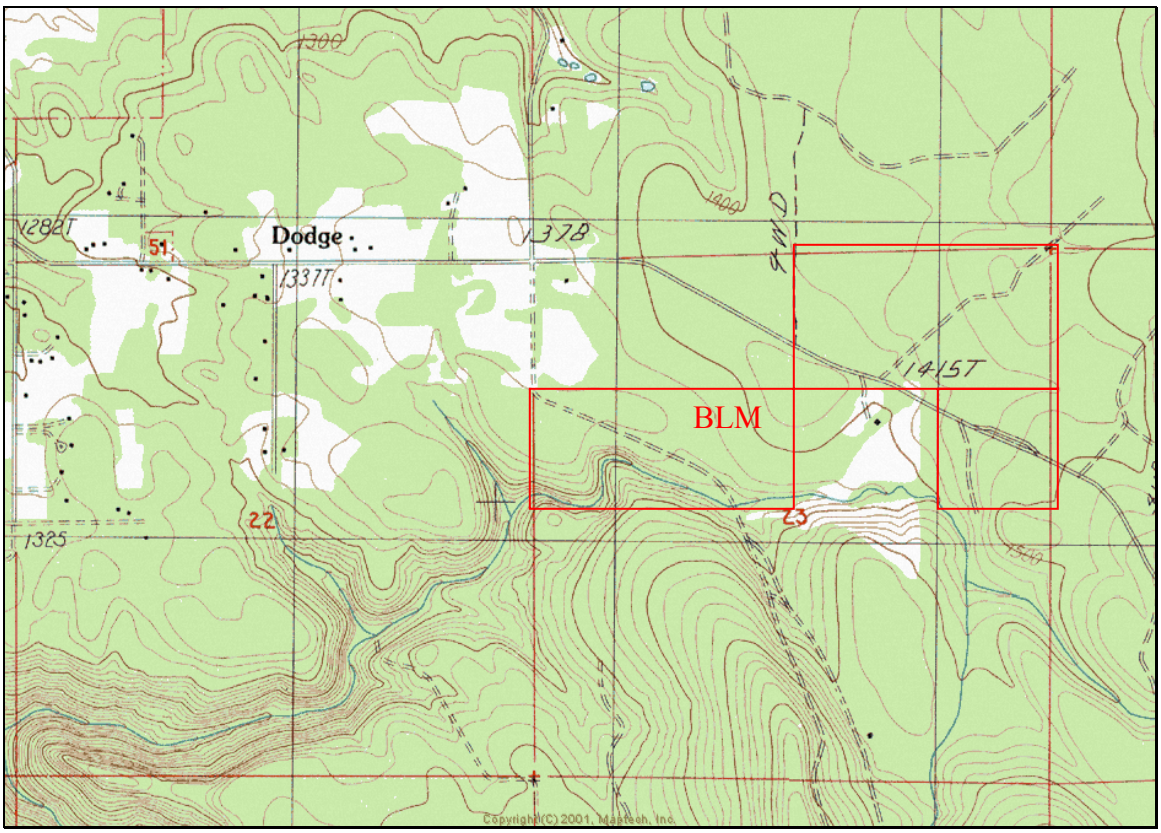
The Record of Decision for the Northwest Forest Plan says that "Although certain thinning and salvage activities would be allowed in the reserves, programmed timber harvest would only occur in the 22% of the land designated as matrix or adaptive management areas, ..." (NFP, ROD, Pg 3). The ROD goes on to describe the Matrix Land Use Allocation as "...the area in which most timber harvest and other silvicultural activities will be conducted. However the matrix does contain non-forested areas as well as forested areas that may be technically unsuited for timber production." (NFP, ROD, pg 7) In the Record of Decision for the Salem District Resource Management Plan, State Director Elaine Zielinski says "I approve the Salem District Resource Management Plan as recommended and hereby declare that, effective October 1, 1994, the annual productive capacity (allowable harvest level) of the Columbia, Alsea-Rickreall, Clackamas-Molalla and Santiam River master units is 5.72 million cubic feet." Clearly the State Director and the Secretaries of Interior and Agriculture are mandating that timber be cut as a part of the NFP and that it is to be cut in the Matrix.

35. **The peak flow effect of past and currently proposed timber harvest is inconsistent with ACS objectives #1 (maintain watershed features to ensure protection of aquatic systems to which species are uniquely adapted), #3 (maintain the integrity of bottom configurations), #5 (maintain character of sediment input, storage, and transport), #6 (retain patterns of sediment routing), #7 (maintain timing and duration of flood plain inundation and water table elevation), #8 (appropriate rates of bank erosion), and #9 (maintain habitat to support well-distributed native species)**.

As discussed in the Cumulative Effects Analysis of Peak Flow Events for the Clear Dodger Proposal (a supplemental EA report prepared by the Cascades Area Hydrologist), potentially significant augmentations of peak flows were only predicted for "unusual" storm events. In addition, WAR values will likely be increased by private actions in the watershed irrespective of BLM actions. BLM actions alone, particularly since the proposed action will retain close to 50% of the forest cover, is unlikely to augment peak flows in a measurable manner. Finally, the significance of the estimated changes must be related to the likelihood of delivering adverse impacts to public resources. Channels viewed on public lands in the watershed are in functional condition and the estimated increase in peak flows that would result from the proposed action is highly unlikely to result in any adverse impact to public resources.

36. **While I understand where the "Clear" part of the sale name comes from, I can only imagine that the "Dodger" part insinuates an understanding on the part of someone within the Forest Service that their actions in and designs on the forests are mischievous at best**.

The Forest Service has had no involvement in this project. If you understand that the "Clear" part of the sale name comes from Clear Creek, you are quite right. As for the origins of the "Dodger" part of the name, it honors the history of this area and the early community of "Dodge" which is approximately a mile from the project area and clearly displayed on USGS maps of the area (see map inset below).



37. **The WAR cumulative impacts analysis does not adequately assess the cumulative impacts**.

The WAR assessment considers the potential cumulative effect (CE) of the proposed action on augmentation of peak flows and was not intended to address multiple resources or multiple effects at multiple scales.

As discussed in the EA, the proposed action is unlikely to result in any measurable effect to stream channels, water quality or watershed hydrology. If the action is unlikely to result in any direct effect, such as an increase in stream temperature along channels which are treated or an alteration in the physical habitat or the sediment regime, etc., it cannot contribute "cumulatively" to the degradation of these parameters in the watershed. NEPA requires that CE be considered when they are of a substantive nature: hypothetical effects do not meet these criteria.

CE resulting from the augmentation of peak flows was considered because there is adequate scientific evidence to support the hypothesis that there is a potential for such effects, particularly in forested watersheds in the Cascades subject to rain on snow events. Utilizing the WAR model, the EA disclosed that the potential for augmentation of peak flows was "indeterminant": potentially, peak flows have been augmented in this watershed as a result of forest harvest. Under these circumstances, the next logical step is to investigate conditions in stream channels to see if they exhibit indications of scour or instability which could result from being exposed to flows they are not able to accommodate.

As stated in the EA, all channels on BLM in the project area were assessed in the field and all were considered to be functioning normally. In other words, there was no field evidence to support the hypothesis that peak flows were having a detrimental effect on stream channels or public resources in the watershed.

The WAR analysis indicates that it is possible that augmentation of peak flows, in combination with other impacts to stream channels such as wood removal, is having, or has had, a detrimental effect on stream channels lower in the watershed or on private lands. However, the BLM has no legal basis nor congressional mandate to investigate such possibilities.

The IDTeam did not make a recommendation to drop the proposed action due to the risk for augmentation of peak flows because there was no field evidence that they have actually occurred and, assuming they have occurred, there is limited potential for the BLM to effectively mitigate beyond what it is already doing: retaining substantial forest cover in the areas that are thinned. It should be added that there is no evidence that the IDT could find to support the hypothesis that thinned stands contribute to augmentation of peak flows under rain on snow conditions.