

Bark

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March 9, 2006

Cindy Enstrom Bureau of Land Management Salem District Office 1717 Fabry Road S.E Salem, OR 97306

E-mailed to Cindy Enstrom at <u>cindy_enstrom@blm.gov</u> Mailed via USPS certified mail.

RE: Protest of Final Decision Documentation and Decision Rationale for the Clear Dodger Timber Sale Reissue, February 22, 2006.

Dear Cindy,

Pursuant to 43 CFR 5003, please consider the following protest of the Final Decision Documentation and Decision Rationale for the Clear Dodger Timber Sale Reissue that you signed on February 21, 2006.

Decision Title: Final Decision and Decision Rationale for Clear Dodger Project 1.

Project Description: The project will log 143 acres of mid- and late-seral forests and build, or re-build, approximately 5 miles of road.

Project Location: T4S, R4E Sections 12, 23, 24, and 25 Willamette Meridian,

Clackamas County, Oregon.

Date of Decision: February 22, 2006

Name of Deciding Officer: Cindy Enstrom, Field Manager, Cascades Resource Area, Salem BLM.

Introduction:

Bark's mission is to bring about a transformation of Mt. Hood National Forest (and surrounding BLM forests) into a place where natural processes prevail, where wildlife thrives and where local communities have a social, cultural, and economic investment in its restoration and preservation. Bark believes that the Clear Dodger Timber Sale will

harm critical terrestrial and aquatic resources. In particular, Bark objects to the harvest and roadbuilding activities proposed for Units 3, 4, 5, 6, 7, and 9. These units provide critical late Successional forest habitat in an otherwise fragmented forest landscape.

Statement of Reasons

Reasonable range of alternatives

Under NEPA all *agencies* of the Federal Government shall provide a detailed statement of alternatives to the proposed action, and the environmental impacts of both the proposed action and the alternatives. 42 USC § 4332, 40 C.F.R § 1508.9. An agency must look at and discuss every reasonable alternative within the range dictated by the nature and scope of the proposed action. Northwest Environmental Defense Center v. BPA, 117 F.3d 1520, 1539 (9th Cir. 1997). The Clear Dodger Reissue fails to give an adequate discussion or analysis of alternatives to the proposed action. In response to these concerns raised in Bark's November 15, 2005, comments, the BLM responds, "Bark did not, however, offer any suggested alternatives that meet the purpose and need of the project." (Reissue EA, p 14) The intent of NEPA is clearly for the acting *agency* to address a range of alternatives, not the general public. The scope of alternatives are only adequate if the alternatives presented permit decision-maker a reasoned choice. By not providing any concrete alternatives to the proposed project, or any discussion of the environmental impacts of an alternative, this EA does not meet the requirements of NEPA.

The Clear Dodger Timber Sale does not meet stated Purpose and Need

The Reissue EA meets the needs of one objective of the Matrix Land Use Allocation (LUA) while jeopardizing others. Clear Dodger will successfully offer timber products to the market place yet as outlined throughout this Protest, the logging of mid- and late-seral forests clearly does not meet the goal of, "Retain elements that provide ecosystem diversity..." (Reissue EA p 13, citing RMP pp 1, 20)

Similarly, the Reissue EA meets the needs of one objective of the Roads, "Provide appropriate access for timber harvest, silvicultural practices, and fire protection vehicles..." (Reissue EA p 13), but in doing so jeopardizes the attainment of other goals. As demonstrated in the Road section of this Protest, the stated purpose and needs to reduce potential human sources of forest fire, garbage dumping, unauthorized OHV use, and reduce overall environmental effects associated with roads is simply not met.

In this case, the BLM has failed to demonstrate that the Clear Dodger project will retain ecosystem diversity through the harvest of mid- and late-seral forests nor reduce negative ecosystem impacts from roads. Approving a project that does not meet the purpose and need of that project is arbitrary and capricious. 5 U.S.C. § 706(2)(A).

Reissue EA Does Not Adequately Address Cumulative Effects

In response to Bark's concerns regarding the cumulative impact of the Clear Dodger project, the BLM states, "Every element of the environment was evaluated for the potential for cumulative effects." (Reissue EA p 14) The BLM goes on to cite Tables 7, 8, and 9 in the Reissue EA (pp 25-27) as the record of their evaluation.

The Ninth Circuit in *Klamath-Siskiyou Wildlands Ctr. v. BLM* observed that a table purporting to examine the cumulative effects of timber harvest was inadequate because "the problem with the entire table is that it does not provide any objective quantification of the impacts" of the past logging. *Klamath-Siskiyou Wildlands Ctr. v. BLM*, 387 F.3d 989, 994 (9th Cir. 2004) (KS Wild). The court in *KS Wild* went on to state that regarding future projects, "a calculation of the total number of acres to be harvested in the watershed is a necessary component of a cumulative effects analysis, but it is not a sufficient description of the actual environmental effects that can be expected from logging those acres." *Id.* at 995.

The analysis presented in the Clear Dodger Reissue EA does not even go so far as to calculate the acres harvested in the watershed. Furthermore, it is unclear whether any actual cumulative effects analysis took place other than the use of the WAR analysis. In response to Bark's concerns regarding multiple, and recent (harvest within last 5 years, or scheduled within next 5 years), timber sales in the watershed, the BLM responds, "Bark asks about the Guard, Unguard, Clear, and South Fork thinning sales (Forest Service) and BLM's Artful Dodger timber sale. With the exception of one unit in the Guard timber sale, the Guard, UnGuard, Clear and South Fork sales are thinning projects." It appears that the BLM believes these projects to be ecologically neutral, or at least not worthy of analysis, because they are 'thinning' projects. Bark has documented significant concerns regarding wildlife habitat, snags, course woody debris, and other legacy features threatened by the projects outlined above.

In addition to not analyzing the impacts from relevant past and present actions, Table 9 in the Reissue EA (p 28) asserts that project 1 will have a beneficial effect on snag habitat. However, this assertion is unsupported by the facts or the EA analysis. NEPA requires the BLM to conduct a cumulative impacts analysis, and the Clear Dodger Reissue EA simply does not meet this mandate. 40 C.F.R. § 1508.7.

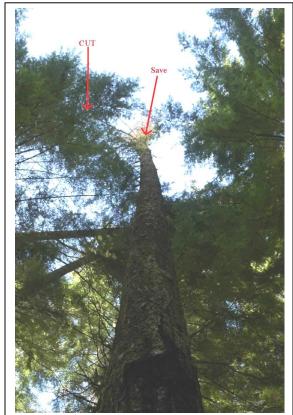
NEPA requires the cumulative impacts analysis to include reasonably foreseeable future actions. 40 C.F.R. § 1508.7 As identified by the Interior Board of Land Appeals, Case IBLA 2004-15, referring to Clear Dodger Silvicultural Prescriptions at 7, "The prescriptions propose more regeneration harvest and commercial thinning when the trees are 100 years old, or in approximately 20 years." (p 2) Given this knowledge of what is intended in the foreseeable future, it seems that the agency would be compelled to include such actions in a cumulative impacts analysis. After all, it seems any efforts to add diversity to stands is irrelevant with the knowledge that they are slated for future regeneration harvest.

Snag Requirements Not Being Met

Bark hereby incorporates by reference the comments and Protest submitted by Oregon Natural Resources Council (ONRC) March 7, 2006. ONRC's Protest clearly demonstrates on pages 2-4, the need to incorporate new science regarding the retention of snags.

Regardless of the adoption of new information regarding the need for higher levels of snag retention, the BLM has failed to demonstrate that it will comply with current requirements for snag retention of 40 percent of cavity nesting bird potential at the harvest-unit level found in the RMP (pp 25, 46) and Northwest Forest Plan (NFP) (C-42).

In providing the baseline information needed to assess the preferred action's impact on snags, the BLM asserts, "No snags are present within units B1 (Unit 4), B4 (Unit 8), and B5 (Unit 1)." (p 46) Bark visited all three of these units on March 6 and did not find snags in Units 1 and 8, but found many in Unit 4. As demonstrated in the photographs below, not only are snags present in Unit 4, but some appear to be in Decay Class 1 (hard), and have the potential to meet Coarse Woody Debris (CWD) requirements (NFP C-40, RMP p 25) when they fall to the forest floor.



Top of snag #1 in Unit 4, Decay Class 1. Note adjacent live tree marked to cut.

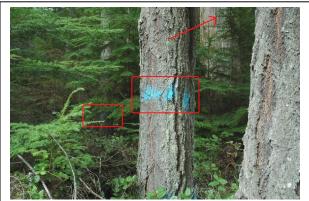


Base of snag #1 in Unit 4, Decay Class 1. Note adjacent live tree marked to cut.

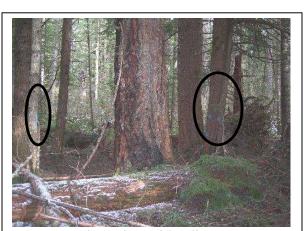
The Reissue EA specifically suggests that "Design features would protect most, if not all, of existing large snags (at least 20" DBH)." (p 49) The above snag is over 20" DBH, but could be considered a potential hazard because of the marked trees contact with it. The BLM should have recognized the existence of this snag and analyzed the impacts of harvesting in the Reissue EA. Furthermore, because this was one of only 8 snags in Unit 4 identified by Bark on our March 6 field trip, the retention of all of these snags is required to meet the minimum requirements for retaining snags. (NFP C-40, RMP p 25)

The Reissue EA fails to disclose how many snags per acre must be retained to support 40% potential population levels on area no larger than 40 acres. A thorough analysis would disclose which species of cavity excavators may occupy the area, how many snags of which species – which size – and which decay class are needed per acre (for each species, because these requirements are non-overlapping) to meet the 40% potential population requirement.

Bark expects that this analysis be completed in an Environmental Impact Statement (EIS) or that Units 1, 3, 4, 5, 6, 7, and 9 be removed from the project area due to the occurrence of snags in these units.



Large snag #2, Unit 4, in background. Foreground is adjacent tree marked to harvest.



Large snag in Unit 3 with adjacent trees marked to cut (cut markings circled).



Top of snag #2, Unit 4, in background.

Late Successional Forest Requirements will Not be Met

There is very little older, Late Successional forest left in the Lower Clackamas (15%) and Middle Clackamas fifth field watersheds (32%) (Reissue EA, p 30). According to the Reissue EA, 120 acres of Late Successional forest is planned for harvest. (Table 10, p 29)

Using this table, the total acreage to be harvested in the Lower Clackamas fifth field watershed is 83 acres from Units 4, 5, 6, 7, and 9.

Assuming that the logging of 83 acres in Late Successional forest would degrade its late-successional qualities, the BLM is not meeting requirements to "Retain late-successional forest patches in landscape areas where little late-successional forest persists. This management action/direction will be applied in fifth field watersheds (20 to 200 square miles) in which federal forest lands are currently comprised of 15 percent of less late-successional forest." (RMP p 25) The BLM contends, "Stands that have been identified as late-successional stands in Table 10 would remain Late Successional stands after thinning because the age class of these stands would not change as a result of the proposed thinning." (Reissue EA, p 30) This assessment ignores accepted definitions of late-successional and old-growth forests, which incorporate structural characteristics such as snags and CWD¹

Clear Dodger clearly doesn't conform to snag requirements as outlined in the previous section, and therefore Bark believes that Late Successional habitat will be lost due to the proposed action. If the BLM chooses to assert that Late Successional forest will be retained it should accurately present evidence to defend that assertion.

Furthermore, there is no discussion in the Reissue EA of where the 15% figure came from, and whether or not it includes activities that have occurred since the Lower Clackamas Watershed Analysis was written in 1996. The citation provided by the BLM regarding the 15% figure on page 30 of the Reissue EA is of the RMP, pages 21 and 22. Upon review, the RMP contains no discussion of current levels of Late Successional habitat in the project area's affected fifth field watersheds.

Significant New Information Regarding Blowdown

Bark's November 15 comments on the Reissue EA addresses concerns over the potential increase in blowdown, or windthrow, that may occur due to the proposed action. The BLM did not address this concern in the Reissue EA nor in the Decision Rationale, despite repeating Bark's concern regarding this issue. (Decision Rationale #6, p 20) Due to significant new information that Blowdown is a serious concern and the risk of Blowdown will be increased due to the proposed action, Bark requests the BLM prepare supplemental NEPA to analyze these impacts.

NEPA requires an agency to prepare a supplemental NEPA document if there "are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9(c)(1)(ii). When new information is discovered, "the agency must consider it, evaluate it and make a reasoned determination whether it is of such significance as to require implementation of formal NEPA filing procedures." Warm Springs Dam Task Force v. Gribble, 621 F.2d 1017, 1024 (9th Cir. 1980).

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¹ Old-growth Definition Task Group. 1986. Interim definitions for old-growth Douglas-fir and mixed-conifer forests in the Pacific Northwest and California. USDA Forest Service, Pacific Northwest Research Station, Res. Note PNW-447. 7 p.

On a February 12, 2006, field trip to Clear Dodger, Bark members counted eight trees marked for harvest blown down in Unit 7. On a March 6, 2006, field trip to Clear Dodger, Bark staff noted a stand of trees in Unit 4 in which 5 non-harvest trees had recently blown down. The trees were of varying DBH from 6" to 18." As seen in the picture below, the prescription for this stand within Unit 4 appears to be very aggressive.



Bark staff in Unit 4 of Clear Dodger. The two root wads uprooted are western hemlocks, between 14"-18" DBH that have recently blown down. The stand in the picture will be aggressively thinned (11 trees in the photo are marked to cut), significantly increasing future risk of similar blowdown.



Bark member in Unit 7 of Clear Dodger. Blowdown of eight trees marked to cut was observed, including Douglas fir in picture.

Clear Dodger Does Not Comply with Aquatic Conservation Strategy

Many of the ACS effects determinations in the EA are based on speculative and anticipated actions, or unsubstantiated speculations that underestimate the potential seriousness of the impacts of these actions. Results produced from analysis employing these assumptions may be inaccurate or misleading. Employing this analysis for effects determinations raises significant problems for meeting NEPA requirements for "best available science" and other statutory requirements. The EA fails to disclose how the increased peak flows produced by Clear Dodger timber sale will maintain and restore the instream flow regime within these degraded basins as required by the Aquatic Conservation Strategy. The EA also fails to acknowledge the wide array of scientific information that details impacts of logging on stream systems, including the relationship between increased flows, unstable channels, and increased sedimentation. Sediment impacts associated with increased peak flows are not disclosed.

One of the objectives of the Aquatic Conservation Strategy Objectives is to "Maintain and restore the distribution, diversity, and complexity of watershed and landscape-scale features." (EA Table 20) Logging projects leave forest stands hotter, drier, more susceptible to fire, blow down, drought, disease, and invasive species. The roads associated with logging projects are responsible for innumerable problems with sediment,

compaction, fragmentation, wildlife destruction and disruption, erosion, and human abuse issues such as dumping, illegal OHV use, and fire. The healthy diversity and complexity that these stands already contain will be destroyed if this project goes forward. Especially units A1 and D1, which are particularly wet, contain many large snags (which are not properly buffered in this project), much large downed woody debris, a lush and thriving forest floor, lots of natural clearings, habitat for sensitive species, and an amazing array of biodiversity. In units C1, A1, and D1, there were several particularly wet areas with water-loving grasses, dense fern and fungi growth, and striking botanical diversity, none of which were buffered at all, and would be destroyed by logging the surrounding trees and by the logging equipment itself. In D1, one of these areas was at a small dip in the surrounding landscape, directly adjacent to a steep slope, not only suggesting water movement, at least through the soil if not through an intermittent stream, but also potential problems with water movement interruption and erosion. Also in D1, almost the entirety of the forest floor was either covered in native plants and mosses, or rotting logs, (some of which were very large). A few areas at the top of these gentle peaks did not have much visible plant life on the forest floor, even with adequate sunlight and clearings and rich soil with rotting woody debris, leaving one to believe that these areas were the ones most affected by harsh weather and water drainage. If these trees are logged, as many are marked for, these areas will have difficulty recovering and will also be especially susceptible to drought, windthrow, erosion, and fire. Many of the stands to be logged sit on top of steep slopes, some above fish bearing streams. While the EA dismisses many of these concerns, the reasoning is unsubstantiated and unproven. We do not believe that this project will maintain or restore the distribution, diversity, and complexity of the watershed. Please provide current, best available and peer reviewed science that explains how you reached this conclusion based on good scientific methodologies.

Another objective of the Aquatic Conservation Strategy is to "maintain and restore spatial and temporal connectivity within and between watersheds." (EA Table 20) While these areas do have "discontinuous ownership patterns", it makes little sense to further jeopardize an already fragmented area, especially since many of these areas have so much soil moisture, and, in some stands, lots of large woody debris, stream crossings, project areas adjacent to and above streams, some of them fish bearing. Many of the mitigation measures are inadequate to counter the extreme disturbances roads create, even with measures such as sloping roads, limiting certain actions to dry weather, or replacing culverts, roads have been shown to have severe negative impacts for many years even after they are decommissioned. Assumptions made based on unsubstantiated reasoning and dubious methods of analysis are, at the very least, highly controversial in the face of past experience, common sense, and a vast array of scientific information about how roads have all manner of detrimental effects on the environment, and concerning the ASCO, how they have detrimental effects to water movement through streams and soil. This does little to maintain and restore spatial and temporal connectivity within and between watersheds. Also, taking away 50% of the trees in the area and destroying native ground vegetation will not help in moisture retention, or help in water movement within and between watersheds. Building roads and logging in these areas, risking erosion, sediment into streams, interruption of proper water movement, and soil compaction, will indeed compromise this objective.

The 3rd ACS objective is to "maintain and restore the physical integrity of the aquatic system, including shorelines, banks, and bottom configurations". The EA states that there will be 4 stream crossings, and that the "physical integrity of channels at existing stream crossings would be altered for one to several years following repair/maintenance." (EA 37) It seems a better way to maintain the physical integrity of the aquatic system, and these particular streams, would be to decommission these roads and try to restore as much of their natural drainage pattern as possible. This project does not meet this ACS objective, either.

In fact, this project does not comply with a number of the ACS objectives, as it is not substantiated that it will maintain or restore natural sediment regimes, in-stream flows, species and plant composition, structural diversity of plant composition, or habitat to support well distributed populations of native plant, invertebrate and vertebrate ripariandependent communities. In fact, it puts at risk streams, fish species, soil composition, plant, animal, fungi, and sensitive species.

The Clear Dodger project area is located at elevations between 1,300 and 2,000 ft., with approximately one-half of the project area subject to rain on snow events, which have the potential to increase peak flows during winter or spring storm. Portions of Clear Creek and the Clackamas River are both identified as having moderate water quality problems, which may be affecting general water quality, fisheries and for the Clackamas, aquatic habitat. One of the stated probable causes is erosion. The Clear Dodger EA by ignoring the consequences from peak flow erosion, and relying on untested mitigation assumptions, fails to demonstrate that the objectives of the Aquatic Conservation Strategy will be attained. Many statements in the EA regarding the attainment of Aquatic Conservation Strategy objectives are not scientifically substantiated.

The Clear Dodger timber sale proposes vigorous commercial thinning in basins that are currently at-risk or not properly functioning because of intensive clearcut logging or other deforestation and road construction (particularly on unstable and potentially unstable slopes and within the "rain-on-snow" zone), high road density, and elevated sedimentation and peak flows. The EA's assumption that there will be a small increase in summer water yield which correlates to the removal of the confer over-story that is unlikely to directly alter base flow or peak flow events in a measurable manner is unsubstantiated with the given analysis.

Instream and peak flows in a sub-basin are affected by a number of environmental variables including vegetation condition, rainfall, temperature, antecedent snow accumulation, elevation, soil compaction, acres of non-forested area, road interception of subsurface flow, and increased drainage density caused by roads. Changes to natural or background instream flows are caused by removal of forest vegetation, and the construction and re-construction of roads. Vegetation removal influences the storage and transport of water by changing evapotranpiration rates, deep sub-surface moisture content, and snow accumulation and melting rates (Jones and Grant 1996). Roads intercept subsurface flows (Wemple and others 1996, Megahan and others 1992) and create impermeable surfaces that cause surface run-off that bypasses slower subsurface flow routes (Harr and others 1975, Harr and others 1979, Ziemer 1981). The changes to hydrologic processes resulting from forest roads are as permanent as the roads. Until the

roads are removed and natural drainage patterns restored, roads will continue to affect the routing of water through watersheds (Jones and Grant 1996).

Road density and drainage network increase caused by roads also affect peak flows. According to the NMFS-Matrix, road densities between 2 and 3 miles of road per square mile of area indicate a sub-basin is "at risk" of increased peak flows. Sub-basins with more than 3 miles of road per square mile of area are "not properly functioning." For the Upper Clear Creek Watershed, open road densities are apparently less than 3.5 miles per section, but how much less is not revealed. No information is provided on the Clackamas River Watershed. It very possible that based on the NMFS model that both the Upper Clear Creek and Lower Clackamas watersheds are at risk or not properly functioning. The NMFS-Matrix also evaluates the extension of the drainage network caused by roads. An extension of 5% to roughly 20% indicates that a sub-basin is "at risk" and an extension over 20% indicates that a sub-basin is "not properly functioning." What is the extension of the drainage network caused by roads in the Clear Dodger planning area? This would be useful information to have before determining to expand the road network, thereby degrading the area further.

Statements regarding ACS objectives for sediment are also unsubstantiated and inconflict with available scientific information. The EA anticipates increased sedimentation in the proposed action, but also states that mitigation will off-set any degradation, claiming that potential impacts resulting from tree harvest and road construction would be mitigated and, with the implementation of BMP, are unlikely to contribute to measurable amounts of sediment to streams. In addition to violating the Northwest Forest Plan (see e.g. WR-3 in ROD, p. C-37), such claims are unsubstantiated and dubious. The effects analysis, which is also based on assumptions about the function of the Riparian Reserves as buffers and the impacts of the Restoration Project yet to be completed, is erroneous and improper. Effects analysis based on speculative activities are inadequate for full disclosure requirements.

For example, Broderson (1973) studied three watersheds in western Washington and found that, in most situations, 200-foot buffers, or about one site-potential tree height, are effective at removing sediment generated through vegetation removal. He noted that buffers are less effective for sediment removal if sediment-laden waterflows cross the buffers as channelized flow, and that ground-based harvest systems are most likely to produce channelized flows. Wong and McCuen (1982) analyzed the ability of vegetated buffers to trap sediment and found that the relationship between buffer widths and percent sediment removal was non-linear. For example, removal of 90% of sediment on a 2% slope required a 100-foot buffer whereas removal of 95% of sediment required a 200-foot buffer. Available scientific information suggests that buffer widths of 200 feet – possibly much larger – are necessary for trapping sufficient sediment to "maintain and restore" the sediment regime in the Clear Dodger planning area. Currently, only unit B-3 has buffer widths of 200 feet.

The Clear Dodger timber sale EA does not demonstrate that the objectives of the Aquatic Conservation Strategy will be achieved, and therefore is not in compliance with the Northwest Forest Plan. We request the sale be modified to protect aquatic resources. Supplemental environmental analysis or a thorough EIS is needed to clearly demonstrate

that Aquatic Conservation Strategy objectives will be achieved and to address significant inconsistencies between methodologies and analytic techniques employed in the EA and information available in the published literature. We request an analysis be conducted by employing scientifically credible analytical techniques and that impacts of the sale be fully disclosed. Based on the information provided, we believe that logging and road building activities will impede attainment of ACS objectives in the Clear Dodger planning area.

Lastly, the Clackamas River Corridor portion of the lower Clackamas River Tributary 6th field watershed has been designated as a Key Watershed. (RMP 6). It goes on to say, "areas under consideration for this project are not within or tributary to the Clackamas River." (EA 9). Yet the units B3, B4, and B5 are all adjacent to tributaries that feed directly into the Clackamas. Please explain this.

Fisheries

The EA states that the three units located in the Middle Clackamas River watershed, B-2, B-3, and B-4 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 which are located on top of a ridge just above Riparian Reserves. Runoff from these units will flow directly to the North Fork Reservoir, which is already a water quality impaired area with struggling populations of Lower Columbia River steelhead trout, Lower Columbia River Chinook salmon and Upper Willamette River Chinook salmon. Additionally, two of the proposed thinning units are adjacent to fish-bearing streams (the N. Fork of Clear Creek flows adjacent to units A-1 in Section 23 and D-1 in Section 25). North Fork Clear Creek, supports a population of resident cutthroat trout and most likely also sculpins (EA, 20), and is also water quality impaired ("the macroinvertibrate community is moderately depressed in comparison to reference conditions" (EA, 24)). The probable culprits to the water problems in both Clear Creek and the Clackamas River are erosion and animal waste disposal (EA, 24). Given the stated water quality problems in the area, the BLM should be leaning on the cautionary side of engaging in activities that have been scientifically proven to improve fish habitat, not logging activities that have demonstrated to harm it. The EA also suggests that the proposed road construction would have "no impacts on fish or aquatic habitat" (EA, 34), but no substantial scientific evidence is provided to support that statement. Therefore, Bark asks that Units B-2, B-3, B-4, A-1 and D-1 be dropped from consideration.

Riparian Restoration Project

This project proposes to create up to 8 snags per acre in green conifer trees greater than 20 inches in diameter, some scattered, some clumped as miniature clearcuts. Bark supports effective restoration efforts that will improve habitat conditions across the landscape, but has questions about the science used to determine that the riparian areas need improving. The EA even cites aerial photographs that indicated that shading is "near to full potential along all tributaries on public lands in the project area", and that the Clear and Foster Creek Watershed Assessment indicated that "current shade levels on forested lands in the watershed are adequate for protection of stream temperature" (EA, 36). First-hand visits to the area, likewise, left me with the impression that the riparian areas do not need more openings. How much of the riparian areas that you propose to treat are in an open condition? As you must know, the higher the percentage, the worse

off the area is: the percentage of opening is directly proportional to stream temperature, sedimentation, fisheries condition, etc. I would like to suggest that the Riparian areas would benefit greater from these resources being used to decommission roads in the vicinity. That would certainly have a much greater benefit to the riparian area, particularly given that there are fish bearing streams adjacent and to the south edge of unit D-1 and A-1 that will experience adverse environmental impact from road building. One of the justifications for the Riparian Restoration project is to increase the amount of snags and downed wood; however the EA states that the No Action Alternative would result in "more snags and down wood." (EA, 28). Why not simply go with the no action alternative?

Wildlife & Botany

The EA fails to adequately analyze the impact of this sale on wildlife and to adequately present management plans for designated Federally listed, Survey and Manage, and Bureau Sensitive species.

Northern Spotted Owl

The proposed action occurs within known spotted owl habitat and may adversely affect the spotted owl. However, the EA provides no plan for mitigation of owl habitat, only that seasonal restrictions would minimize the risk of disturbance if nesting spotted owls are found within the disturbance range. However even these seasonal restrictions could be waived early if ongoing surveys indicate no presence of spotted owls within the disturbance range of the harvests. What are the protocols for these surveys? How often will they be taking place? The EA also does not comply with the management requirement to retain 100 acres of the best northern spotted owl habitat as close as possible to a nest site or owl activity center for all known spotted owl activity centers (RMP, 22.) The failure to maintain adequate spotted owl habitat also violates the NWFP. Furthermore, the EA does not discuss whether incidental takes will occur and if there was a Biological Evaluation prepared which would authorize such takes.

The EA states that "habitat conditions are expected to improve as thinned stands mature." (EA 3). Yet the expected time for this habitat improvement is over twenty years from now. We find it hard to sacrifice such valuable habitat as one of the conclusions reached by Scientific Evaluation of the Northern Spotted Owl is that due to an increasingly uncertain fate, threats comparable to those faced at the original time of listing, and clear risks of extinction (particularly in the northern part of the range), protection of all existing suitable owl habitat may prove important to the persistence of the owl.

Yet this proposal will downgrade 120 acres of suitable habitat into dispersal habitat. According to the Scientific Evaluation of the Northern Spotted Owl "logging in owl habitat remains a major threat to owl survival, particularly ongoing logging on state and private lands, and salvage logging on federal lands." (5-19).

The agency must comply with the ESA by formally reinitiating consultation with the FWS on the effects of this project on spotted owl recovery (and within the context of all the new information). Gifford Pinchot Task Force v. FWS (9th Circ August 6, 2004). In the absence of a recovery plan, the agency must retain all options for species recovery and avoid taking actions that will limit options for recovery. It is very controversial

whether or not the actions intended to be implemented in the revised Clear Dodger proposal will promote or hinder recovery of the NSO and it's habitat.

The agency must comply with the ESA by formally reinitiating consultation with the FWS on the effects of this project on spotted owl recovery (and within the context of all the new information). Gifford Pinchot Task Force v. FWS (9th Circ August 6, 2004). In the absence of a recovery plan, the agency must retain all options for species recovery and avoid taking actions that will limit options for recovery. It is very controversial whether or not the actions intended to be implemented in the revised Eight Mile Meadow proposal will promote or hinder recovery of the NSO and it's critical habitat.

New information on the Threatened northern spotted owl indicates that there are significant new uncertainties for the owl that have not been fully considered at the regional or local scale. As recognized by the spotted owl status review, all existing suitable habitat could be critical to the survival of the spotted owl. New concerns include but are not limited to the following:

- a. competition and displacement from the barred owl that is dramatically increasing in numbers within the range of the spotted owl;
- b. the effects of West Nile Virus that is fatal to the owl;
- c. the potential loss of habitat from Sudden Oak Death syndrome;
- d. greater than expected loss of habitat to wildfire;
- e. the potential effect of climate change on regional vegetation patterns;

and

f. misapplication of the Healthy Forest Initiative.

We are also curious how the USFW came up with "may affect, likely to adversely effect" yet the BLM has interpreted this to mean that they should go ahead and proceed with the project. It is quite telling when the EA analyzes the effects of the No-Action Alternative to the spotted owl. It states that, "[s]uitable habitat would continue to be suitable habitat until thinning or regeneration is implemented at some other time." (EA 55). In otherwords, by your own admission, if you log this area you will take habitat away from a threatened species. Not only is this morally apprehensible, but it is illegal.

Bureau Sensitive Species

The EA also states that the planning area is habitat (highly likely) for the Oregon slender salamander, yet it does not state whether any surveys were performed in preparation for this project. The Oregon slender salamander is considered as a Bureau Sensitive Species. According to the Salem BLM Resource Management Plan for all Special Status species the BLM should "[c]onduct field surveys according to protocols and other established procedures." (RMP 29). As it is not a very mobile organism and the surrounding lands offer little potential for habitat these surveys are especially pertinent.

The RMP also states that surveys should "identify impacts of proposed actions to bureau sensitive species and clearly describe impacts in environmental analyses." (RMP 29). All the EA provides in regards to the salamander is that since the operation will create more downed logs. It neglects the important fact of moisture to the survival of amphibians and

the fact that thinning these units will bring increased sunlight and wind into these areas that has a drying effect on downed wood. Not to mention that CWD left from logging is generally smaller diameter wood that is less effective for salamander habitat, which required downed logs 16 inches in diameter and a decay class greater than 3.

EA goes so far as to state that the "Oregon Slender Salamander is not a very mobile species, with very limited ability to move between discontinuous habitat patches. Therefore, the scale for assessing cumulative effects to this species is the project area and land in all ownership immediately adjacent to project area units." (EA 54) Supposedly these Salamanders will find shade in the 50% newly reduced canopy cover. Also, the EA fails to disclose the status of the Oregon Slender Salamander, or anything else, plant, animal, or condition, in the immediately adjacent areas. It also ignores the fact that if a S&M species is being irresponsibly managed in many areas of the forest, then there will indeed be a cumulative impact to that species and to the ecosystem, as the numbers of that and other species decline, especially if they are not particularly mobile.

We are also curious why the clouded salamander, and the red-legged frog, along with numerous species of bats, all of which are classified as sensitive species and depend on coarse woody debris, snags, and a damp forest floor for their habitat are no longer taken into consideration with the new EA. The impacts of the proposed action on these sensitive species are never identified or analyzed in the EA, as is required by the Resource Management Plan. (RMP, 29)

Neither is the impact from climate change on these sensitive species considered, with its anticipated drying affects on the habitat. A nearly 50% reduction in canopy cover is not going to provide much shade, and scorched ground will not provide the moist habitat necessary for the survival of the amphibians. For many species, benefits will be greatest if trees are retained in patches rather than singly, and even very small patches do not provide suitable microclimates, as required by the NWFP. (ROD, C-41.) Bureau sensitive species and their habitats should be managed so as to recover the species, not further degrade their habitat. (RMP, 28.) Further analysis of the effects of this sale on the population of amphibians, bats, and other old-growth dependent species such as pileated woodpeckers, northern goshawk, bald eagles, pine martens and red tree voles is necessary. In addition, more feasible mitigation measures, with concrete analysis of their success, should be considered for the short-term viability of the species.

Eighteen known sites of Megomphix hemphilli, a Survey and Manage species, were detected according to the previous EA, 17 of which were (are) in the vicinity of the units. The EA now simply states that all mollusk surveys were performed and offers nothing in regards to the surveys finding. This project will decrease crown cover from residual trees and course woody debris (CWD) that would provide shade and microclimates that would assist mollusk species not detected to persist, however, again, the impacts on the species from microclimate drying and the reduction of CWD is not analyzed.

Another Special Status Species cited is Cetrelia cetrarioide. The EA notes that one species was found and is no longer within the boundaries. We are curious if any additional surveys were performed to see if the lichen is present in any other units?

Survey and Manage Species

On Monday, November 14th Bark conducted surveys in unit B2 and found a Ramaria araiospora just north, northwest of the southeast corner of the unit. There was a flag in the area that read GPS PT R040 120B. We flagged from this point with white flags heading north to the Ramaria. On the Map it appears there is one in the area but our sighting did not seem to match the placement on the map. Further, there was a tree just a few feet away that was adorned with a blue stripe and blue dot. We would appreciate if this could be investigated and we would be glad to assist in any way.

The EA states that "no adverse effects to identified Survey and Manage species is anticipated due to the protection buffers." The chart below specifies that a 50 feet protection buffers has been placed around this site. (EA 31). So either, this is a newfound species that needs to be investigated or these buffers have not been created as the EA suggests. The EA does not state when the surveys were performed, or how many of these surveys were conducted. The Salem BLM has failed to adequately survey for sensitive and listed species and therefore lacks the necessary information to support the proposed action for the Clear Dodger Timber Sale.

We do not believe that the BLM has to survey for every species that may be present in a project area in order to propose a project. However, before making a final decision, surveys for sensitive, listed, proposed for listing/rare, and special status species that have been reported or are likely to utilize the project area should be conducted if reliable population estimates are not available. See generally, Office of the Inspector GENERAL, FOREST SERVICE TIMBER SALE ENVIRONMENTAL ANALYSIS REQUIREMENTS (1999) 20. The agency is at minimum needs to comply with the 2001 Survey and Manage Record of Decision, which is the law. Such monitoring is required under NFMA, and NEPA requires the agency to use only high quality science and to obtain data when it is missing yet necessary to make an informed decision. 36 C.F.R. § 219.27(a)(6); 40 C.F.R. §§ 1503.24 (scientific accuracy), 1502.22 (incomplete or unavailable information). Has the agency completed surveys in accordance with the 2001 Record of Decision? The failure to complete such monitoring means that the data is not collected, and the approximate population levels or trends of species on the Forest are unknown. Without such data, the MNF lacks the informed ability to issue a Decision Memo, in violation of NEPA. 40 C.F.R. § 1500.1; Sierra Club v. Martin, 168 F.3d 1 (11th Cir. 1999). The USFS has to demonstrate that there is no effect to the NSO, or any of the other extraordinary circumstances that are present in the planning area.

Other Species

The EA does not discuss the occurrence of cavity nesting birds in the units and what, if any, mitigation measures would be implemented to protect their habitat. The Salem District RMP mandates that enough snags be retained per harvest unit to support cavity nesting birds at a 40% of potential population (RMP, 25). To establish what 40% of potential population may be, and whether or not the number of leave snags per acre would be sufficient to support this 40%, more information about the composition and amount of cavity nesters in the units is necessary. NEPA requires that a high level of science be used in environmental analysis, to provide the public with information on the

sale. 40 C.F.R. § 1502.24. Finally, the impacts of the loss of 143 acres of good thermal cover for wildlife, specifically deer and elk, are not discussed in the EA. The lack of thorough analysis about the composition of existing populations, impact of the proposed project to these populations and the lack of mitigation measures indicate that further analysis must be prepared in order to adequately address these issues.

Roads

The EA calls for building .05 mile of new road and re-opening 4.7 miles of currently closed road. The EA also includes decommissioning .05 mile of road and blocking or gating 2 miles of existing road. We strongly support the decommissioning of the roads, and commend efforts to decrease the overall road density in the watershed. However, the net result of the above scenario is that new road feet will be built with an immediate and lasting adverse environmental impact, while the benefits of the road decommissioning will not be seen for decades. Bark raised this issue in November 15, 2005 comments on the Reissue EA but the Decision Rationale did not address concerns raised.

Meanwhile, road that was currently in the process of re-vegetating will be re-opened with renewed adverse impacts. Some of this recovering road is in the stage of "advanced recovery where understory vegetation is similar to adjacent areas and trees are growing in the compacted area." One such road is 4-4E-23 heading into Unit B1. Despite the fact that this is supposedly an open road, the fact is that it is no longer any where near being useable. Just 20 feet from the road is a 6 feet deep ditch that is quite effective at keeping even ATVs from using the area. The rest of the way there is salal, sword ferns, alder, and even 6 feet tall hemlock growing in the middle of the roadway. There were points on the hike into the unit that we were wondering if we were still on the road. Then just before entering unit B1 we noticed that the road crosses a stream. The fact that this recovering unused road will be reopened will negatively impact the area, and the true road densities of the area. As it would require extensive new road work in an area with already excessively high road mileage, please remove this unit from the proposal.

Likewise, the benefits of blocking or gating the 2 miles of roads won't be felt for decades to come, if ever, as the chance of reopening the road as seen with this sale is real. There is also a high incidence of ATV use in the area and these gates are easily bypassed. There is also no indication about the permanence of the closed roads, thus the proposed road scenario suggests a net loss to the ecosystem.

There are still some questions left unanswered about both the decommissioning of roads and the building of the temporary roads. The EA does not set out a time frame for blocking existing road. The road blocking: is it after the temporary roads are built? If so, the impact of a temporary increase in road density to the watershed is not assessed.

The EA did not analyze the effects of the current road density or the cumulative effect of this road on the surrounding area. The EA Lower Clackamas River Watershed Analysis (LCWA) does not disclose road densities. On page 2-27 of the LCWA, the following information is provided on road densities:

Currently the Lower Clackamas River watershed road density is at 3.1 miles per square miles, which is <u>0.6 miles per square miles over forest plan objectives</u>. Furthermore, the Lower Clackamas River subwatersheds are also on average 3.1 miles per square miles. The Buttes, the Divide and Admin subwatersheds are not within deer and elk inventoried severe and normal winter range therefore forest plan standards for road densities are projected at 2.5 miles per square mile by year 2000. The Corridor subwatersheds are primarily within inventoried normal and severe winter range. Currently the Corridor road density is at 3.0 miles per square miles. <u>Yet the 3.0 miles per square miles is 1.0 per square miles above the projected forest goal of 2.0 miles per square miles</u> by the year 2000.

Based on the logos on the cover of the watershed analysis, the document seems to be prepared on behalf of the BLM and the US Forest Service, thus covering both land designations. So do the above road density recommendations not apply to BLM land? Does BLM have different road density goals for deer and elk range? If so, then what are they? If not, then it appears that the road densities in the Lower Clackamas River watershed already exceeds recommended levels. The EA does not indicate what subbasin of the Lower Clackamas Watershed the Clear Dodger planning area is in. Is it the Watershed, Corridor, Divide, Admin, or Buttes? These are the sections described in the LCWA. The EA also does not offer specific road density information for the actual Clear Dodger planning area. This is obviously necessary in order to assess accurate cumulative impacts to the area, and in order to determine whether it will result in irreparable degradation. The EA states that the for the Upper Clear Creek watershed, open road densities are less than 3.5 miles per section, which is just below the threshold for wildlife. How far below? Using the above standards, anywhere above 2 miles per square miles is above the goal that was projected for Mt. Hood National Forest by the year 2000. Again, does this goal pertain to BLM lands?

It is also critical, in determining road densities, that figures include roads that are actually being used by motorized vehicles. Bark recently released a report on the state of roads in the Clackamas River Ranger District of Mt. Hood. It found that 25% of the roads that were supposed to be closed were not. Moreover, the effectiveness and source of funding of the road closing and decommissioning was not addressed in the EA. The Clear Dodger area is heavily used by motorized recreationists and subject to abuse by ORVs. Bark's study found that gates are often removed and thus ineffective. The EA did not describe a roads monitoring plan for the roads that will be blocked or gated. To truly take the road out of the roads system, the road should be decommissioned through effective berms, and ripping and replanting of the road surface. Only repairing the gate on road 4-5E-30.00 will probably not be sufficient to stop abuse. Both the BLM and the Forest Service continue to build new roads, even though funding is not available to maintain or adequately close roads. With what funding do you plan to decommission, monitor, and restore this road?

Even temporary roads have cumulative impacts, as they impact the area as they are being built and they impact the area even after they are decommissioned. The impacts of roads include increased sediment input, fragmentation of habitat, stream crossings, introduction of exotics, increased peak flow, extension of drainage density, increased interaction

between humans and wildlife, and soil productivity loss, to name a few examples. Decommissioning roads cannot offset the soil disturbance from the new temporary roads and the logging operation, even if the BLM is completely successful in re-vegetating the area in the future.

The EA acknowledges that garbage dumping is also a severe problem along Hillockburn Road and many of the forest roads leading from Hillockburn road; however, the environmental impact of this garbage, including toxic chemicals flowing into nearby streams is not assessed in the EA. I understand that new collaboration is now happening between the BLM and the counties to get control of the dumping problem. This is great news! It would be helpful, however, to know how much funding will be allocated to this and for what duration? Given the phenomenon of existing dumping grounds at the end of many roads in the Clear Dodger planning area, it appears that resources are still needed to clean up and monitor the existing roads. Currently, gates don't seem to be working, as I noticed that dumping was taking place in front of gates as well as behind them. Until adequate funds are available and proven effective to get complete control over the current dumping situation, it seems unwise to create conditions for increased abuse.

The EA states that a no new road construction alternative is within the scope of the alternatives analyzed, and I encourage you to pursue it; however it would have been helpful to have such an option offered as a formal alternative for complete analysis, including beneficial impacts. In summary, given the consequences of increasing the road density and given that only 16 acres of forest would be accessed with the new road, is does not seem like a sound investment of agency resources let alone a wise ecological decision, to include new road building in the final proposal.

I encourage you to consult the following resources in making your determination to build new feet of road.

- 1. Robert Coats, et al., Assessing Cumulative Effects of silvicultural Activities, (1979) (significant increases in peak flow post-harvest)
- 2. Robert Harr, et al., *Changes in Storm Hydrographs after Road Building and Clear-Cutting in the Oregon Coast Range*, 11 Water Resour. Res. 436-44 (1975) (same; timber harvest leads to soil compactions and increased floods)
- 3. ROBERT HARR, ET AL., PACIFIC NORTHWEST RESEARCH STATION, U.S. DEP'T OF AGRICULTURE, CHANGES IN STREAM-FLOW FOLLOWING TIMBER HARVEST IN SOUTHWESTERN OREGON, PNW-249 (1979)
- 4. ROBERT HARR, ET AL., PACIFIC NORTHWEST RESEARCH STATION, U.S. DEP'T OF AGRICULTURE, EFFECTS OF TIMBER HARVEST ON RAIN-ON-SNOW RUNOFF IN THE TRANSIENT SNOW ZONE OF THE WASHINGTON CASCADES, PNW 88-593 (1989)
- 5. J. Jones & G. Grant, Peak Flow Responses to Clear-Cutting and Roads in Small and Large Basins, Western Cascades, Oregon, 32 Water Resour. Res. 959-74 (1996)
- 6. K. Lyons & L. Beschta, Land Use, Floods, and Channel Changes: Upper Middle Fork Willamette River, Oregon (1936-1980), 19 Water Resour. Res. 463-71 (1983)
- 7. M. Reid & T. Dunne, *Sediment Production from Forest Road Surfaces*, 20 Water Resour. Res. 1753-61 (1984)

Steep Slopes & Soils

EA said in response to comments that "it is not part of the proposed action to harvest timber" on steep slopes (EA, 4). Then the EA goes on to say that "some areas within the proposed action are steeper than would be allowable for ground based operations and thus will have to be skyline yarded. The EA states that Units C-1 and D-1 require yarding because slopes are greater than 35% (EA, 5). These units together constitute 60 acres, or 37% of the sale acreage (EA, 6). That's a large percentage of the sale to be logged on steep slopes, especially given that assurances are made in the EA that logging on steep slopes would not happen at all. Cable yarding with one-log suspension, which is the EA's stated mitigation remedy for steep slope logging, is by no means free of adverse effects, and these effects are not addressed in the EA. This type of logging often creates deep ruts, contributing to soil disturbance, erosion and an increase in sedimentation and compaction. Despite the fact that existing yarding corridors will be used as much as possible, a number of them will be new. And all main skid trails will be left intact for use for later harvest projects (EA, 30), thus continuing to create sedimentation and contribute to malfunctioning hydrology.

The EA fails to adequately address affects to soils from the project. The EA notes that there is a concern for soil instability, erosion, runoff and compaction when soil is wet (EA, 15-16), but fails to discuss what the compaction potential is for each unit, and fails to analyze the compaction due to the building of temporary roads and landings. The EA states that 10% compaction will not be exceeded in the project area under the proposed alternative, however no information about the percentage of the area is currently in a compacted state. Is it already at its 10% threshold given all the existing yarding corridors and roads? In addition, the EA states that the soil is unstable in unit C-1, but does not set out any solid mitigation measures to preclude further damage to the soil from harvesting activities. What evidence is there that the mitigation measures proposed will actually minimize compaction? While logging on wet soils is certain to result in compaction, so is logging on dry soils. Please share information about the effects of compaction on dry soils as well as wet, along with scientific analysis of the impact of your proposed mitigation methods. The terrain just east of Units B-2, B-3, and B-4 are described as having high rates of sediment transport during episodic events (EA, 22), and the given units will surely drain onto these slopes, however, no assessment of impact was provided, simply stating that erodability is low because the slope of the actual unit is less than 20% (EA, 29).

The EA also does not adequately assess the impacts of broadcast burning on soil stability and erosion. The failure of the EA to adequately analyze the effect on soil due to harvest and burning activities, and to present any proven mitigation measures for soil compaction and nitrogen loss, requires that a supplemental environmental EA is needed prior to this project moving forward.

In addition to impacting soils, and aquatic systems, the logging on steep slopes with have other residual effects, including the destruction of reserve green trees outside of the unit boundaries used for attaching cables (EA p 9). This is an unnecessary consequence of logging in an area that should not be logged in the first place due to its steepness. Will any of these trees be old growth? The EA states that old growth trees and many of the largest second growth would be reserved from harvest in all units and not be felled unless

essential to provide for human safety (EA, 11). Does this apply to trees used as part of yarding operations? All trees used for attaching cables, whether inside or outside of the unit should be counted as wildlife trees, as the mortality rates for these trees will likely be high. If the Riparian project is pursued, any trees destroyed as a consequence should count toward the 8 snags per acre desired for the Riparian Project.

Competition from brush species is also a said to be a major concern for unit D-1; however effective mitigation is not addressed in the EA. In fact the proposed action clearly states that "the wider spacing of residual trees would result in increased growth of understory trees and shrubs, which would provide a richer more diverse habitat for wildlife" (EA, 28). Where is the evidence that this will indeed become a richer habitat given the stated concern about competition from brush species? In the LCWA, noxious weeds are listed as a major problem, stating that "The introduction of nonnative plant species, especially noxious weeds, is a potential threat to native biological diversity. Noxious weed invasions can reduce biodiversity through the displacement of plant species necessary for wildlife habitat and can also adversely effect reforestation, visual quality, and recreational activities." A variety of noxious weeds are found throughout the watershed in areas associated with roads, timber harvest activities and recreational use. Nonnative seed can be carried to areas of ground disturbance through vehicle use, logging equipment, and contaminated erosion control and forage seed mixes, as well as by wind and biological vectors." (LCWA, 2-10). The EA states that logging equipment will be washed, but just a few seeds can cause an invasion. What studies have shown that this alone can guarantee that the area won't be subject to an increase in the spread of noxious weeds?

Impacts of Noxious Weeds Not Adequately Addressed

The BLM admits that roading and yarding "may lead to an increase in the invasive/non-native plant populations in project area... All known invasive/non-native species from the project area are priority III noxious weeds and are well established and widespread throughout the Cascade Resource Area... Eradication of Priority III noxious weed species is not practical using any proposed treatment methods due to their widespread infestations... Adverse effects from invasive/non-native are not anticipated" (EA pg. 28). Essentially, the BLM admits that this project will likely facilitate the spread of invasive weeds, but says that all is well because they are everywhere already and cannot be controlled.

In a recent letter received by Bark, Gary Larsen, Supervisor, Mt. Hood National Forest, states, "Invasive plants are compromising our ability to manage the National Forests for a healthy native ecosystem." (Update letter received September 14, 2005)

According to the USDA's Pacific Northwest Region Invasive Plant Program Final Environmental Impact Statement (Invasive EIS),

Roads and roadside habitats are particularly susceptible to plant invasions for a number of reasons. Roads eliminate some of the physical and environmental barriers that prevent plan invasions by increasing light availability and opportunities for dispersal. Micro-environmental changes along roads can provide opportunities for invasion because many invasive plants are favored by open, disturbed habitats. Disturbance closely associated with roads and the establishment and spread of invasive plants are vehicular traffic and maintenance activities, road, grading, roadside mowing, and keeping roads free of fallen or overhanging vegetation. These activities can increase invasive plant introductions because open spaces with higher light availability, invasive plants can follow roads by natural dispersal mechanisms or be transported along them by animals or humans. For this reason, roads are primary vectors for the spread of invasive species (pp 3-18, emphasis added).

The costs associated with the treatment of invasive plants ranges from \$40-\$340 and annually costs USDA Forest Service Region 6 \$4.8 million (Invasive EIS, 4-94). Furthermore, the treatment of invasive plants requires measures that themselves have significant impacts on the human and natural environment. The Proposed Action referred to in the Update Letter from Gary Larsen includes the treatment of 13,000 acres in the Mt. Hood National Forest, all but 125 of which will be done with the use of herbicides. "The proposed use of herbicides could result in cumulative doses of herbicides to workers, the general public, non-target plant species, and/or wildlife" (Invasive EIS, 4-2).

The Reissue EA states, "Adverse effects from invasive/non-native are not anticipated. Existing populations of noxious weed species that are widespread and well-distributed could increase in vigor in the short term, as more sunlight reaches the forest floor after treatment. As the canopy closes over the next 20 years, it is anticipated that they would be shaded-out and be reduced again to low-vigor populations." (p. 31). Given that Clear Dodger includes approximately 5 miles of road construction and/or reconstruction, there is a very high likelihood of spreading noxious weeds. This directly conflicts with the objectives in the Salem District Record of Decision and Resource Management Plan, "Avoid introducing or spreading noxious weed infestations in any areas." (p 64)

Conclusion

In conclusion, Bark requests the BLM to either prepare an Environmental Impact Statement to address our concerns or remove Units 3, 4, 5, 6, 7, and 9 from the current proposed action. Either one of these remedies will also address the significant new information regarding blowdown presented on pages 6-8. Thank you for your consideration.

Sincerely,

alex

Alex P. Brown Executive Director Bark