Bark
PO Box 212065
Portland, OR 97212
503-331-0374
www.bark-out.org
Alex P. Brown
alex@bark-out.org

APPEAL TO THE REGIONAL FORESTER
OF THE UNITED STATES FOREST SERVICE
REGION 6

BARK,	)	
	)	36 CFR § 215 Appeal
	)	In Re: Appeal of the Decision
APPELLANT	)	Notice #1, for the **Collawash**
	)	**Thinning Environmental**
	)	**Assessment**
vs	)	
LINDA GOODMAN, REGIONAL FORESTER,	)	
DECIDING OFFICER.	)	
	)	

APPELLANT'S: NOTICE OF APPEAL, REQUEST FOR STAY, REQUESTED RELIEF, AND STATEMENT OF REASONS

Dated this 20th day of October, 2005

NOTICE OF APPEAL

To: Appeal Deciding Officer
Ms. Linda Goodman, Regional Forester
Region 6, U.S. Forest Service
ATTN: 1570 APPEALS
P.O. Box 3623
Portland, Oregon 97208-3623
Emailed to: appeals-pacificnorthwest-regional-office@fs.fed.us, cc: to Andrei Rykoff, Alex P. Brown on October 20, 2005.

Dear Ms. Goodman,

In accordance with 36 C.F.R. § 215, Bark hereby appeals the Decision Notice #1 and Finding of No Significant Impact to implement Alternative B of the Environmental Assessment ("Collawash Thinning EA"), signed by the Mt. Hood National Forest ("MHNF") Forest Supervisor, Gary L. Larsen on September 5, 2005.

Decision Document: Collawash Thinning Environmental Assessment, Decision Notice, and Finding of No Significant Impact.

Decision Date: September 5, 2005.

Responsible Official: Gary L. Larsen, Forest Supervisor, MHNF.

Appeal Period End Date: October 20, 2005.

Description of the Project: The Proposed Action proposes to log 237 acres of forest, 88 acres of which is designated as Riparian Reserves, the remainder is designated as Matrix. The entire project falls within areas designated as B-8 Earthflow areas and/or B-2 Scenic Viewsheds. The project would open approximately .7 miles of currently overgrown and reforested road and construct .25 miles of new road.

Location: Within the Collawash watershed, in the Clackamas River Ranger District. The project area is located in T.6 S., R.6 E.; T.7 S., R.6 E.; T.7 S., R.5 E.; Willamette Meridian.

Appellant's Interests:
Bark has a specific interest in this sale, and that interest will be adversely affected by this timber sale. We have previously expressed our interest in this specific sale, and have standing to appeal this decision according to 36 CFR § 215.11(a)(2). Bark is a non-profit organization based in Portland, Oregon and has worked to protect the Mt. Hood National Forest since 1999. Members and staff of Bark live in the communities surrounding the Mt. Hood National Forest and use the Forest extensively for recreation, viewing wildlife and wildflowers, municipal water, hunting, fishing, overall aesthetic enjoyment, and other purposes. Specifically, members and/or staff of Bark have used the Collawash Project area for recreation, non-timber forest products (in this case mushroom collecting), and for drinking water. The value of the activities engaged in by Bark members and staff will be irreparably damaged by this project. We have a long-standing interest in the sound management of this area, and the right to request agency compliance with applicable environmental laws.

REQUEST FOR STAY

Although an automatic stay is in effect for this sale as per 36 C.F.R. § 215.10(b), we formally request a stay of **all** action on this project, including sale preparation, layout, road planning, any advertising, offering for bids, auctioning, logging, road construction, or other site preparation by a purchaser pending the final decision on this appeal.

A full stay is essential to prevent unnecessary expenditure of taxpayers' money, an irretrievable commitment of agency resources, and irreversible environmental damage. Without a stay, the federal government may waste taxpayer money preparing a sale that may later be cancelled.

Because we might pursue a legal challenge to this sale with or without this stay, offering this timber sale may unnecessarily expose the government to liability and the purchaser to financial losses.

REQUESTED RELIEF

1. Withdraw the Decision Notice and/or prepare an Environmental Assessment that meets the requirements of the National Environmental Policy Act or

2. Modify the sale to meet the objections presented in Appellants' Statement of Reasons and consistent with the National Environmental Policy Act, National Forest Management Act, these statutes' implementing regulations, and the Mt. Hood National Forest Land and Resource Management Plan (MHLRMP) as amended by the Northwest Forest Plan

INTRODUCTION:

The Environmental Assessment (EA) for the Collawash Thinning project analyzed four alternatives: Alternative A (no action), Alternative B (thin 204 acres of matrix land and 88 acres of riparian reserve, the Proposed Action, subject to this appeal), Alternative C (thins 204 acres of matrix land, reopens but does not build roads), and Alternative D (thins 149 acres of matrix land, reopens roads, eliminates thinning of natural second-growth stands).

The EA has been divided into two different Decision Notices (DNs) and Findings of No Significant Impact (FONSIs). The Appellant has submitted a separate Notice of Appeal for the "Decision Notice #2 and FONSI." When the Appellant refers to the "Proposed Action" in this document, we are referring to the Decision as outlined in the "Decision Notice #1 and FONSI." The alternatives analyzed in the EA, therefore, include the following as it pertains to the Decision Notice #1 and FONSI: Alternative A (no action), Alternative B (thin 149 acres of matrix land and 88 acres of riparian reserve, the Proposed Action, subject to this appeal), Alternative C (thins 149 acres of matrix land, reopens but does not build roads), and Alternative D (thins 149 acres of matrix land, reopens but does not build roads).

The Appellant believes Forest Supervisor Gary Larsen's DN and FONSI are in error and not in accordance with the legal requirements of the National Environmental Policy Act (NEPA), 42 U.S.C.4321 *et seq*. and its implementing regulations; The National Forest Management Act (NFMA) 16 U.S.C. 1600 *et seq*. and its implementing regulations; the Administrative Procedures Act, 5 U.S.C. § 706; the Mt. Hood Forest Plan (MHLRMP); and the Forest Service Manual.

REASONS:

<u>Purpose & Need Is Not Justified</u>

The Decision Notice states the purpose of logging is to:

1) Increase health and vigor and enhance growth that results in larger wind firm trees;
2) Enhance and/or restore biological diversity by variable density thinning;
3) Provide forest products consistent with the Northwest Forest Plan goal of maintaining the stability of local and regional economies now and in the future;
4) Enhance riparian reserves by accelerating the development of mature and late-

successional stand conditions. (EA sec. 2.2).

The very premise of logging is that the forests targeted are in fact unhealthy. The EA supports this with one sentence in section 4.2.1, which describes the existing condition, "Currently the stands identified for thinning are overcrowded, causing reduced growth and the potential for increased mortality." While the Forest Service experts' opinions are entitled to deference, the agency may only rely on expert opinion where the agency discloses the underlying data that serves as the basis for that opinion. Idaho Sporting Congress v. Thomas, 137 F.3d at 1150; 40 C.F.R. § 1502.24 (the agency "shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions" in the EA). In addition to not disclosing the underlying data that supports this assertion, in section 4.3.1 the EA clearly contradicts this assertion, "Failure to space trees early in their life can have consequences lasting the life of the timber stand. Most of the Collawash plantations were precommercially thinned at approximately 15 to 20 years of age and are now between 45 and 50 years of age. In most units, another *thinning would be desirable in 15 to 30 years* [emphasis added]; it would be sooner in stands that had closer spacing in the first thinning and later in stands thinned to a wider spacing." The EA does not go on to explain why these units must be thinned now, as opposed to waiting 15 to 30 years.

The Pacific Northwest Science Update "Restoring Complexity: 2nd Growth Forests & Habitat Diversity" states that "crowded trees are tall but skinny; little vegetation grows on the forest floor" (4). Most of the Collawash units we explored had a rich diversity of life on the forest floor as well as other characteristics of a mature forest including course woody debris, snag development, and a mid-level canopy. There was much Oregon grape, vine maple, and rhodendrum. In many units this forest does not fit into the description of an impaired plantation stand that might benefit from human intervention. The EA maintains that, "Currently the stands identified for thinning are overcrowded, causing reduced growth and the potential for increased mortality" (EA sec 4.2.1). This affirmation is in opposition to our observations, the Collawash Hot Springs Watershed Analysis (CHSWA), and subsequent sections of the EA. The CHSWA's executive summary insists that the

PHOTO 1: Unit 3, displaying undergrowth (vine maple, fir seedlings) associated with mid-seral development.

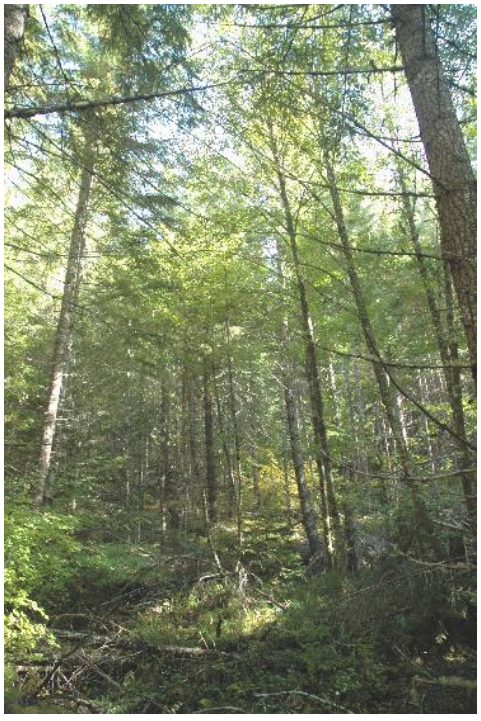

PHOTO 2: Canopy opening in Unit 3 associated with mid-seral development.

Forest Service should "focus restoration silvicultural projects in Riparian Reserve *early* seral stages" (CHSWA, 1-4). Forests at mid seral stages are not fit for thinning for two reasons. First, they do not respond as positively to thinning as early seral forests because "as stands mature they reach an age at which thinning may not result in the same growth response that would be expected in younger stands" (EA, p. 39). Second, their ability to function as dispersal corridors for late seral species is highly ambiguous (CHSWA, 3-31). If mid seral stands can fulfill functions similar to late seral stands, thinning would generate much more ecological trauma than enhancement. The plantations designated for this project are mid seral stands and have already reaped the benefits from thinning at an early age. See Photos 1, 2. Thinning projects in these stands should be immediately aborted and instead directed toward early seral growth.

It is clear from the EA that the ultimate goal of this is to speed up tree growth for future harvest, regardless of forest health. The entirity of section 4.4.1, which "describes the likely future scenario for thinning" (EA, 33), is devoted to highlighting the steady amplification of thinning projects in the Clackamas River Ranger District since the 1970's, and projects a more than doubling of current thinning acreage in the near future. It states that thinning at multiple stages throughout a forest's life, especially during the most economically beneficial and ecologically detrimental period of maturity, is standard. One must assume that future harvest for economic benefit will occur. As stated, the position and geology of these units make them extraordinarily inappropriate for commercial harvest, both now and in the future. This intent is not compatible with the goals of a Tier I Watershed, where protection of water quality for the sake of anadromous fish is the overriding objective. In fact, as subsequently discussed, the health of anadromous fish species is not even a secondary goal. According to the EA (sec 4.2.7), the effects determination for threatened anadromous fish species is "May Affect, Not Likely to Adversely Affect." Instead of enrichment, a possible degradation of fish habitat will occur as a result of this project. This is unacceptable in a Tier 1 Watershed.

Soil, Roads, Hydrology

Earthflow

The Collawash Watershed is the most unstable watershed in Mount Hood National Forest and is a designated Tier 1 Key Watershed, meaning it is important habitat for a wide variety of imperiled anadromous fish. Further, the sites selected for commercial thinning under this project are the most unstable within the watershed. The Collawash Watershed, especially the specifically selected area, is inappropriate for the Proposed Alternative.

The DN approves exceptions to conditions of soil productivity, earth flow and roads that do not meet Mt. Hood National Forest (MHNF) Management Plan Standards (DN/FONSI #1, 5). These exceptions are only acceptable for the waiver of "Should" standards and guidelines, and are not applicable to "Shall" standards and guidelines (MHNF LRMP, 4-45). However, it is unclear whether the earthflow stability exception pertains to a "Should" or "Shall" guideline. According to MHNF LRMP Standards and Guidelines, "soil and water improvement activities *shall* be encouraged and *shall* be designed so that earthflow movements will not be reactivated" (B8-038,039). Yet the exception made in the DN refers to a different guideline that states, "The combined cumulated detrimental impacts, occurring from both the past and planned activities, or detrimental soil compaction, puddling, displacement, erosion or severely burned soil *should* not exceed 8 percent of the activity area" (MHNF LRMP B8-040). The DN does not address Guidelines B8-038 or -039. However, it is clear that because "all six of the units on earthflow

are currently above 8% detrimental soil condition and they will remain above 8% after project implementation," the project *does not* "encourage soil and water improvement activities" (MHNF LRMP B8-038) and *may not* be designed so that earthflow movements will not be reactivated or accelerated (MHNF LRMP B8-039). Because exceptions are not acceptable for these "shall" conditions, the project does not comply with MHNF LRMP for B8 Earthflow areas.

In addition, these exceptions are justified primarily because the pre-project conditions do not meet the standards and there will be no improvement in the post-project conditions. These are clearly inappropriate grounds for justification. The peril of a situation does not justify future abuse. These below-standard areas are in fact the most important to monitor and must be the least affected by project activities.

The Forest Service is acting arbitrarily in their decision and providing false justifications for unsound conclusions. One major inconsistency is clear in the second DN for the natural second growth forests. In order to reduce constructed and re-opened road mileage, the Forest Service decided to utilize helicopter logging methods. But the new roads, because of their specifically selected location, were predicted to have negligible impact on the watershed. The DN explains that "while these roads would have been located on gentle terrain and would not have crossed any streams or unstable areas, I have decided not to build these roads at this time…" (DN#2, p. 1). Why has the Forest Service chosen to reduce project revenue, and in doing so increase continued deficits, by employing a more costly logging method if the same outcome is to be expected from the cheaper technique? Further confusion arises from a comparison to the first DN (for plantations), which has not declared any change in logging methods. The plantation sites are just as, if not more, unstable than the natural second growth sites and will therefore experience the same, if not worse, adverse impacts from additional road building. The Forest Service decisions are arbitrary and ill-justified and must be modified in order to appropriately underline all the impacts that may result from the project, and indicate how these impacts are directing the decisions made. Hypothesized impacts and resulting decisions should be in accordance with the CHSWA.

This has not been the case thus far. The EA does not follow the CHSWA'a management prescriptions which severely caution against any additional road building and other disruptive logging activities **(**CHSWA, 2-21, 1-7, 3-15, 1-6, 2-14**)**. The DN fails to acknowledge or account for the discrepancy between the EA's positive assessment of post-thinning conditions and the CHSWA's contrary admonition of general and location-specific logging activities. The following sections are meant to highlight these discrepancies and give a more accurate understanding of adverse conditions that may materialize after the project.

Steep Slopes & High Risk of Landslides

The EA fails to disclose and analyze the impacts of the Proposed Alternative in relation to soil disturbance. According to the Background Sediment Regime Map of the CHSWA (2-16), units 1-4 of the project are in or adjacent to areas of the Collawash Riverbank categorized as "Ancient landslide (active and dormant), Streambanks, Unstable Drainageways, Rapid Stream Downcutting, Debris Slides and Flows in Major Drainageways, Soil Creep, Slope Undercutting." On the map, the thickness of the line indicating this condition denotes its relative sediment production rate. This area of the Collawash Riverbank occupied by units 1-4 consists of one of the thickest lines on the map. Consequently, units 1-4 produce among the highest rates of sediment in the entire Collawash / Hot Springs Watershed area, already one of the most unstable watersheds of the National Forest. Also, there are active landslides near units 9A, 9B, and 10

that, according to the EA, are associated with previous logging activity. If these sites are harvested, there is a high probability for increased landslides in the future. Any sediment produced as a result of timber harvesting flows directly into the Collawash River from perennial and intermittent streams. Dutch Creek, for example, which is at the base of the units 9 and 10 drains directly into the Collawash River. Additionally, most of the units fall under an "Ancient Landslide (Dormant)" categorization in the Landform Type Map (CHSWA, 2-20), which has a medium to high relative hazard rating. The relative hazard rating is based on (1) susceptibility of landform type to mass-wasting events and (2) likelihood of sediment from that event reaching a defined channel. This indicates that not only is the sediment production rate abnormally high in the units, but also, there is a high probability that nearby streams will be impacted by this sediment production. The information provided in the CHSWA, therefore, directly contradicts the EA's speculation that threatened fish species and overall water quality will not be adversely influenced by the project.

The Flows Map (CHSWA, 3-41) indicates that units 1-4 are in a "Mass Wasting / Sediment Area" flowing directly into the Collawash River, while units 9 and 10 occupy the same type of area, instead flowing into Dutch Creek, which then flows into the Collawash River. While mass wasting and sediment production is a problem under normal conditions, the CHSWA admits to the escalation of this hazard as a result of forest management activities such as Alternative B. "Management activities on these landforms [those with an inherent risk of mass wasting, including the majority of Collawash thinning units]," the CHSWA states, "increase the relative hazard for inducing landslides and mass wasting occurrence" (CHSWA, 2-21). The CHSWA further recommends that roads built on unstable topography be removed in order to "maintain or restore natural flows" (CHSWA, 1-7). Yet this project proposes to reopen 0.7 miles and construct 0.8 miles of roads. What will be done to prevent landslides as a consequence of this project, more specifically in relation to the proposed road building?

Steep Units of Concern:
Unit 3 (423) Wasting apparent down slope of proposed road re-opening.
Unit 5 (420)
Unit 6
Unit 7 (487) Sign of landslide along northern border

Unit 9B (428) B East side is very steep.
Unit 10 (429)

To justify logging on highly erosive and unstable terrain, the EA claims to follow Best Management Practices (BMPs). However, the soil types of the logging area preclude the project's ability to follow certain BMPs. One such BMP incorporates the stipulation that "[t]he re-opening of roads is encouraged over the construction of new roads if they are located in areas that would prevent sediment delivery to streams" (EA, p. 17). The re-opening

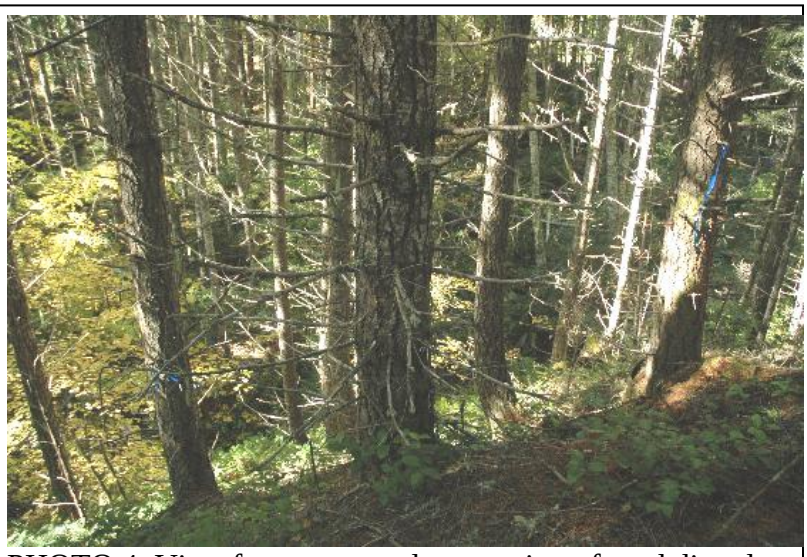

PHOTO 4: View from proposed re-opening of road directly down slope to creek, approximately 40 feet below. Note steepness of slope.

of .7 miles of road in Unit 3 clearly violates this BMP as the proposed roadbed is parallel to a stream channel and has a steep slope on the downhill side of the road that terminates directly into the stream channel. From our observations the soil is extremely unstable, sloughs freely under the weight of footsteps, and is totally inappropriate for road-building. See Photos 3, 4.

PHOTO 3: Soils on slope below proposed re-opening of road in Unit 3 eroded from footsteps.

The soils of the proposed units in the Decision are the most sensitive in the entire watershed area. All of the units' soils falls under one of the following two categories: 'Moderate Deep' to 'Deep' soil, categorized as "very erosive soil types…are usually unstable, associated with large ancients landslides both dormant and active;" or 'Stream Adjacent Soils,' categorized as "very erosive, unstable, lack topsoil and organic horizons…they are always associated with perennial streams and major drainage ways, they are constantly subject to erosional forces despite heavy to modest forest cover" (CHSWA, 2-12). Limiting road construction to relatively stable areas within the project units does not fulfill BMPs because it completely ignores the fact that the majority of units are wholly located in extremely sensitive soil areas that are also highly unstable. Absolute, not relative, soil stability is the issue. Unit placement *did not* avoid sensitive soil types as advised by BMPs, and because of this, selective road placement prevents sediment delivery only relative to other highly unstable areas. Is this acceptable in a special emphasis watershed? The EA claims: "Adverse impacts eliminated or substantially reduced by use of BMPs" (EA, p. 20). However, as indicated through this example, BMPs are only partially followed, and therefore the adverse impacts *are not* avoided and the EA does *not* address all of the significant impacts. Because the EA fails to properly implement effective BMPs, it does not comply with requirements set in the Mt. Hood LRMP that "compliance with state requirements *shall* be met through planning, application, and monitoring of Best Management Practices" (MHNF LRMP Four-53, italics added).

Because of the highly unstable nature of the proposed units, clearly and consistently indicated by the CHSWA, the project's initial objective to "manage for conditions contributing to watersheds ability to produce long term high quality water" will not be met (USFS thinning letter – May 6, 2002). Subsequent documents modified the objective to "enhance riparian reserves by accelerating the development of mature and late-successional stand conditions" (EA DN#l and #2, p. 1). This objective will also not be met under the project's current outline. Increased sediment delivery to streams will worsen water quality, and therefore worsen riparian reserve conditions, irregardless of the alleged forest stand condition improvements.

Roads

The Collawash River is especially prone to sediment production and delivery due to its "flashy" nature; this characteristic is a direct result of the dense road network in the Collawash watershed,

and further road building will only exacerbate the problem. As indicated by the Mean Monthly Flow Chart (CHSWA, 3-12), the Collawash River is much flashier than the Upper Clackamas River and Fish Creek, which are highly comparable in other regards. The Mean Daily Stream Discharge Chart (CHSWA, 3-13) indicates a significantly higher winter discharge for Collawash River than for the Clackamas River. Because of this increased winter discharge, summer flow is kept at a minimum. This is critical to "sustaining habitat for riparian flora and fauna, maintaining cover, forage and travel corridors for other terrestrial wildlife, and providing water for human uses…affecting not only the amount of water available for these beneficial uses, but also the quality of water" (CHSWA, 3-15). Collawash's tendency for flash flooding, elevated sediment production, and summer low flows are a direct result of the already extensive road system veining the watershed. The CHSWA claims, "Currently, there is a greater amount of sediment production and delivery sites than what existed under the reference sediment regime. Many upland forested sites that were not sediment sources in the past are now sites of chronic production; most can be directly attributed to roads" (CHSWA, p. 3-8). The Collawash watershed is a particularly poor area for road construction, especially considering it has the highest road density of the entire National Forest (CHSWA, 3-14).

The Collawash watershed hosts 3.5 miles of roads per square mile; the Fan Creek subwatershed hosts an astounding 6.2 miles of roads per square mile. The impact of the existing roads should be the primary objective addressed in any project proposed in the watershed. Considering that there are 6.2 miles of roads per square mile within the Fan Creek subwatershed alone, there should be no additional roads in the Fan Creek subwatershed – temporary or otherwise. Evidence shows that there is no such thing as a "temporary" road in terms of hydrological impacts and that the proposed "temporary" road building and re-opening cited in the EA are explicitly expected to be used again in the future. In section 4.3.1 the EA expresses the expectation to use these roads again in the future, "In most units, another thinning would be desirable in 15 to 30 years; it would be sooner in stands that had closer spacing in the first thinning and later in stands thinned to a wider spacing."

The Fan Creek subwatershed is not the only watershed/subwatershed that would be affected by these sales that currently contain excessive roading. To paraphrase the Northwest Forest Plan, if funds do not exist to decommission roads in key watersheds, no new roads may be built. Alternative B builds 0.25 miles of new road and recommissions 0.7 miles of old road, while decommissioning none. It is clear from this and other projects that decommissioned roads always have the opportunity of being reopened, reversing the already extensive revegetation process. Even if not officially reopened, their closure is often ineffective in prohibiting use. Motor and nonmotor vehicles are often able to pass the ill-constructed barriers to usage. When the EA assures roads will be "closed," does this mean barrier construction in the typical (often non-functional) sense? The EA does not disclose how these roads will be "closed."

PHOTO 5: Culvert being bypassed on 6322-170.

Not only does the watershed have an unusually high road density, but the road placement is less than ideal. Throughout the watershed, eighty-five miles of road exist within riparian reserves. There are 665 stream crossings, and thirty-two miles of road exist on very unstable slopes and landforms (CHSWA, 3-8). In just the proposed units, two roads (4620, 6322) are labeled "Roadways on unstable or very unstable landforms, high failure potential" according to the CHSWA. In addition, portions of 6322 are labeled as "High sediment production sites, existing source" (CHSWA 3-9). See PHOTO 5. Building new roads in this area will contribute to mass wasting and sediment production, causing severe damage to riparian reserves. The CHSWA strongly advises against additional road construction, recommending instead, to "reduce the road contribution to flashy streamflows" and "defer activities which may delay hydrologic recovery in certain high risk subwatersheds" (CHSWA, 1-6). While the EA maintains that new road construction will have a negligible effect on riparian areas, the CHSWA states the opposite, "Existing management related sediment production and delivery in the watershed comes primarily from the road system; some sites are chronic producers. Pathways for sediment transport and delivery have been expanded by road related drainage" (CHSWA, 1-6). The CHSWA continues, "[this causes] potential loss of aquatic habitat, with effects manifested downstream of this watershed" (CHSWA, 1-6). The CHSWA's objective to "reduce human causes of erosion/sedimentation, related to timber harvest and roads" cannot be met with the addition of skid trails, roads and bare soil inevitable from Alternative B of the Collawash Thinning project (CHSWA, 1-6). Even if decommissioned at the project's end, the added roads will continue to contribute negatively to riparian areas and will likely be reconstructed for future thinning projects prior to their rehabilitation, which will take decades**.** Roads are not easily obliterated due to soil compaction, and invasive species often seed first. Not only will riparian areas and the threatened fish species inhabiting them suffer from sediment deposition and low summer flow, but the reopening and building of roads will further contribute to the fragmentation of habitat, negatively impacting all varieties of wildlife.

The PA states that stream sedimentation will not occur: "The chance that measurable amounts of fine sediment would enter any stream as a direct result of logging activity is negligible. This is because the proposed roads are located on stable landforms, do not cross streams and would be decommissioned" (EA, p. 23). Yet there already exist roads on unstable landforms. Two roads in the unit (4620, 6322) are labeled "Roadways on unstable or very unstable landforms, high failure potential" according to the CHSWA. In addition, portions of 6322 are labeled as "High sediment production sites, existing source" (CHSWA, 3-9). In fact, the road system 4620 is highly unstable. On the same south-facing slope as new units are proposed for 10 and 9B west, there is a very large wash out in an old plantation (west of intersection bet 4620 and 6322). We feel it is irresponsible to propose logging on this same unstable terrain. 6322-170 has been washed out in one spot and at its intersection with Fan Creek the culvert has blown-out. The "road" is not a functioning road. Fixing this road will be a significant expense hardly worth the cost of extracting trees, and the road will very likely just wash out again. And at what environmental cost? Additionally, during a previous visit in April of 2002, Road 6321 was cracked and beginning to come apart soon before unit 424. Old roads entering unit 4 crumbled shortly after leaving that road into landslides. Although the 6321 appears to be repaired, the area clearly has a high potential for landslides. The failure to accurately disclose and analyze the impacts of road reconstruction and use violates NEPA.

Not only are roads historically unlikely to be built on landforms with sufficient stability (because even the relatively stable land in this highly unstable area is unfit for road-building), but the EA

makes it impossible to know whether any roads will be built or re-opened will cross streams. In the instance of the .7 miles of road to be "re-opened" in Unit 3 we followed the old road for significantly longer than .7 miles and it clearly crossed a stream. At this stream it appeared that there were blue unit boundary markers creating a buffer on either side, but there were no markers indicating the termination of the road. If we couldn't tell where the new road was to end, how are we to know if it will cross the stream? Also numerous seeps, intermittent streams and perennial streams have not been marked on the map. Road 4620-330 has three streams crossing it, one perennial and two intermittent. Thus how can we be assured that the proposed roads will not cross any streams? How can we further be promised that road decommissioning will mitigate sedimentation when road decommissioning will occur only if there exist "earthflows or … detrimental forest conditions [that] exceed Forest Plan standards" (EA, p. 17). In sum, the affirmation that logging activities will not contribute to stream sedimentation is supported only by three partially erroneous or highly uncertain assumptions: proposed roads (1) are located on stable landforms, (2) do not cross streams and (3) would be decommissioned.

Riparian Logging

We are concerned about the large amount of Riparian Reserve logging included in this project under Alternative B. Not only is the Collawash watershed very susceptible to landslides, but the Riparian Reserves in these units are recovering quite well. All the streams we have seen were covered in healthy riparian plant species (hardwoods, devil's club, skunk cabbage, etc.) and most units had a vibrant understory including western red cedar, a riparian-dependent tree species. The Collawash units appear to be a perfect example of an area that is capable of recovering on its own. This observation is supported by the CHSWA, which affirms that "along many of these affected streams [those affected by past management], deciduous vegetation has reestablished and now provides sufficient shading" (CHSWA, 3-20). The proposed logging will have a detrimental impact on the riparian areas. One obvious example is unit 6, which straddles Fan Creek. The steepness of the Western edge of the thin, the steepness of several areas directly bordering the creek makes it particularly sensitive to riparian degradation and to sedimentation.

The small seeps, streams, and intermittent streams that are apparently too small or numerous to mark on the maps provided in the EA should be marked for clarity, and to ensure that riparian zones serving critical wildlife needs are not inappropriately logged and are afforded adequate protection. There are some areas that even if not logged would be impacted by the edge effect of nearby logging. Unit 8, for instance, had two creeks running through it (NE corner of Unit) that were significant enough to have culverts built for them on road 6320, but these are not marked on the map. The east side of unit 1 is also wet with cedars present and does not require "enhancing." Unit 5 is in or adjacent to "Shrub Wetland" and "Moist or Wet Meadow," as seen in the Wet Areas Map of CHSWA (3-29). This is not acknowledged in the EA. What measures are being taken to protect this area from possible adverse effects?

The Decision claims that 88 acres of riparian reserves will be enhanced under Alternative B and that no acreage will be enhanced under the other alternatives. It is unacceptable to make this statement without any acknowledgement of the vast amount of controversy over this issue. While canopy coverage *may* thicken over the long run as a result of management activities, sediment production and instability in an already hazardous area highly likely to increase and this should be acknowledged in the EA's discussion of effects.

Soil

Soil is not a renewable resource. All road building and logging, especially adjacent to riparian areas increases erosion. Sedimentation of streams is a concern for all watersheds but of particular concern within a Tier 1 Watershed. Soil compaction caused by road building (in this case there is no difference between temporary and open roads since the soil compaction is the same) and soil compaction due to heavy machinery such as tractors significantly reduce an area's growth and re-growth (See Barstool EA). We are particularly concerned about the impacts to soil in the Collawash sale. The EA fails to disclose and analyze the impacts of this timber sale on sensitive and unstable soils.

The project area contains two types of soils that are labeled as sensitive. The first is "Moderately Deep to Deep Soils," which is defined as "Very erosive soil types…are usually unstable, associated with large ancient landslides both dormant and active (earthflows)." The second is "Stream Adjacent Soils," which are "often very erosive, unstable...they are constantly subject to erosional forces" (CHSWA, 2-13). What measures will be taken to prevent soil erosion, landslides, and sedimentation given the sensitive nature of the soils in the project area?

According to the EA's soil analysis (p. 57), in all but one of the units, detrimental soil conditions will worsen after the implementation of Alternative B. This is unacceptable for soil that is already highly erosive and unstable (see Steep Slopes and High Risk of Landslide section). The CHSWA indicates that two thirds of the watershed's soil is sensitive and "particularly susceptible to detrimental impacts from management activities" (CHSWA, 2-14). The placement of project units for Collawash thinning was ill-conceived and should be reevaluated in light of the CHSWA recommendation for the termination of management activities on highly sensitive soils.

Blowdown

What is the scientific basis for the blowdown concern outlined in the Decision? The DN identitifies one of the project's purposes is to "enhance growth resulting in larger wind firm trees" (DN, p. 1). What kind of science do you have that shows that thinning will reduce wind-damage? The impacts to the Eagle Creek Timber Sales that were logged illustrated the link between logging and blow-down of adjacent trees, and we've seen inumerable instances of thinning projects affecting the blow-down potential of valuable habitat adjacent to the units. If trees blowdown due to short-term increased wind-damage susceptibility, they will be unable to garner the assumed long-term benefits. Moreover, natural blow down taking place is already creating variable density with natural openings that allow more light to reach some trees. See picture PHOTO 6.

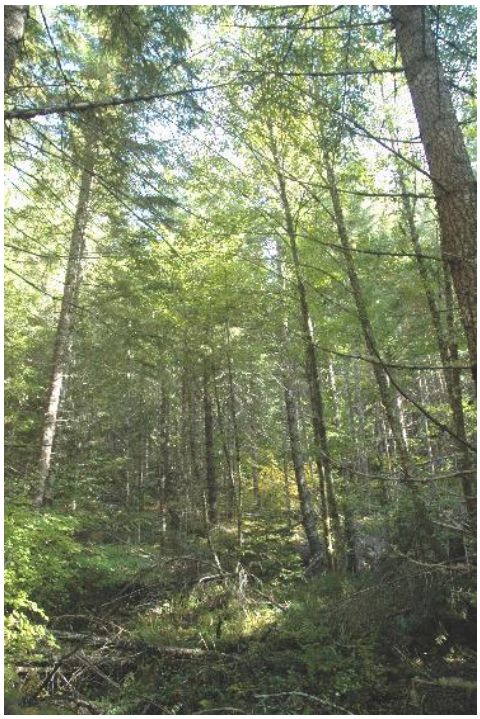

PHOTO 6: Canopy opening in Unit 3 associated with mid-seral development.

The EA states that as a result of precommercial thinning the plantations proposed for thinning in the project "have strong stems and root systems at this time" (EA, p. 37) and the CHSWA confirms that windthrow is not a problem in the area (CHSWA, p. 2-10). It is not acceptable to manage for blowdown resistance in already substantially resistant stands at the expense of water quality, snag and down log density and Northern spotted owl and other threatened or sensitive wildlife habitat. On top of all this, how can we be assured that the smallest trees will be removed and the larger wind firm trees will be left?

Invasive Weeds

In a recent letter received by the Appellant, Gary Larsen states, "Invasive plants are compromising our ability to manage the National Forests for a healthy native ecosystem." (Update letter received September 14, 2005) This problem cannot be underestimated and is an increasing problem throughout the previously the heavily-roaded Clackamas River Ranger District. Of particular concern are the large concentrations of Scot's Broom (*Cytisus scoparius*) found on many of the existing logging roads. A casual examination of the area around the Collawash thinning units provides ample examples of this increasing problem (Scot's broom and exotic blackberry were present on road 6321); fields of Scot's Broom result from their seeds having been transported deep within the subwatershed on logging trucks.

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** (3-18, emphasis added).

The costs associated with the treatment of invasive plants ranges from $40-$340 and annually costs 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). These impacts are very real, and are the direct result of an increase in invasive plants in the National Forest due to activities such as those proposed in the Collawash Decision. The EA clearly states that the actions outlined in the decision would increase the risk of invasive plants establishing, "The action alternatives would have a risk ranking of high but the design criteria (#7 and 11) would be followed to reduce the chances of these weeds spreading to new areas" (4.9). "Reducing the chances…" does not reduce the risk. The impacts of increased invasive plants in the Collawash watershed are significant and directly linked to the road-building and harvest activities proposed in the Decision. The road-building and road re-opening proposed in the Decision must not take place without a full analysis of the impacts of these activities.

Non-Timber Forest Products

The EA and DN maintain that the Collawash thinning project will meet the objective to "Provide forest products consistent with the Northwest Forest Plan goal of maintaining the stability of local and regional economies" (DN#1 and #2, p. 1). However, this objective is only considered in terms of the commercial value of timber, excluding all other harvestable forest products. The EA fails to disclose the full range of adverse economic impacts associated with commercial thinning. For example, forest mushroom harvest is a burgeoning market, offering substantial financial gains to local economies. The Collawash area is home to large amounts of chanterelle mushrooms that will suffer undisclosed impacts from logging activities. See PHOTO 7. Our time at the Collawash sites yielded a five-pound harvest, which easily could have approached fifty. The effect of thinning on local mushroom supply is not addressed or even acknowledged in the EA. In terms of harvestable mushrooms, will the project meet its objective to provide forest products for the sustenance of local and regional economies?

PHOTO 7: A perfect specimen of a white chanterelle found in Unit 3.

Impacts to additional non-timber forest products have not been considered. Commercial and recreational fishing of fish species endemic to the Collawash River contributes substantially to local, regional and national economies. Even short term degradation of water quality can drastically affect spawning and development success of commercial fishing species. While the Collawash thinning project may not directly alter river conditions, its effects combined with the effects of other present and future surrounding management activities may degrade fish supply for commercial and recreational harvest.

The "forest products" that the EA refers to must incorporate non-timber products with economic standing. Mushrooms and anadromous fish are two highly valuable forest products that the EA fails to even acknowledge as such, let alone analyze impacts of thinning on local populations. Failure to disclose the project's full range of economic impacts on the area is clearly a violation of NEPA.

Hardwoods

There are hardwoods present in some of the units that would be threatened by the proposed logging. Any and all hardwood trees need to be protected because hardwoods (particularly, alders because they are nitrogen fixers) play a vital role in forest ecosystem health and diversity. USGS Biological Science Report USGS\BRD\BSR, "Managing for Biodiversity in Young Douglas-Fir Forests of Western Oregon" (MB 2002). Members of Bark recently visited the Collawash Thinning area and noticed that Units 3 and 6 have mature alders lining the streambed. Some of these alders had orange paint markings and some did not. Will the Forest Service protect the health and ecosystem diversity by leaving hardwood trees in the Collawash area? This is not disclosed in the EA.

Prescription Markings are Unclear

In the Decision Notice, the Forest Service indicates that "thinning will leave approximately 80 to 140 variably spaced trees per acre" in the plantation portion of the project (DN #1, p. 1). However, during a recent visit to the area, Bark members noticed that very few trees were marked. What process will the Forest Service use to determine which trees will not be thinned? How will the Forest Service ensure that the remaining trees are variably spaced if trees are not marked? Currently it is impossible to determine this through analysis of the EA or by looking at the proposed units.

Also, the Forest Service has not addressed whether the transect line across one of the streams is for a skyline logging corridor. This type of logging would not have a restorative effect in this area because the northwestern part of the unit was very wet and soggy and the soil throughout was loose, wet, and sliding.

Fish and Wildlife

On our multiple field visits, Bark members have seen many signs of wildlife. Not only were the stands were full of birds, tracks in the snow revealed the presence of snowshoe hare, deer, elk, weasel, rodents, and bobcat. Deer scat and coyote scat were also prevalent throughout the area. We also sited pacific salamander, pacific tree frogs, garter snakes, and rough-skinned newts. This is clearly an area that is serving as habitat for a range of species.

Riparian Reserves

Many wildlife species within the watershed depend directly on Riparian Reserve health for their continued viability. Logging within Riparian Reserves will disrupt wildlife populations and possibly alter forest conditions to the detriment of the population. Bat populations within the Collawash watershed depend heavily on riparian areas for their future success. According to the CHSWA, "Most bats also rely heavily on lakes, ponds, wetlands and meadows…Several of the bat species that are predicted to have a low probability of achieving a well distributed viable population are highly associated with wetlands and riparian areas for foraging" (CHSWA, 3-30). The CHSWA further states that "experts consulted for the FSEIS felt that the lack of buffer protection provided to small wetlands under the interim riparian reserve boundaries could compromise viability for several bat species" (CHSWA, 3-22). The EA analyzes management effects on only one bat species, claiming for that species, "no impact" (EA, p. 44). What developments have occurred since the CHSWA was written that enable logging in Riparian Reserves without impacting dependent bat species? How will other bat species be affected by management activities?

Amphibians are also largely dependant on the condition of Riparian Reserves. The CHSWA states that "amphibian occurrence is expected in most of these habitats" and that "dispersal between suitable habitats is likely the most significant issue facing amphibian populations" (CHSWA, 3-30). How will logging in Riparian Reserves affect amphibian dispersal habitat? According to the CHSWA, "Few surveys have been conducted and there is little local knowledge of the distribution of aquatic amphibians relative to stream gradient, temperature, shade and sediment" (CHSWA, 3-22). What studies have been completed since the Watershed Analysis's publication that have led the Forest Service to assure "no impact" on many amphibian species?

Evidence of beaver in the form of downed trees and several nesting sites was detected adjacent to unit 1. The CHSWA claims that despite the ability of the watershed to support a relatively high density of beaver, few to no beaver are now occupying these sites. How will logging activities affect beaver habitat that is only meters away? In addition to providing beaver with prime habitat, the pond adjacent to unit 1 may support waterfowl, wading bird, and bat populations. How will logging activities in such close proximity to this crucial riparian habitat affect its inhabitants?

Critical Habitat for Northern Spotted Owl

The Collawash thinning project, as proposed, will degrade Northern spotted owl critical habitat, contributing to the regression, not recovery, of the threatened Northern spotted owl. Unit 10 and a portion of Units 9A and 9 B, totaling 55 acres, are in land federally designated as Critical Habitat for the Northern spotted owl (Critical Habitat Unit OR-12). One of the FWS' consultation duties is to ensure that other federal agency actions do not result in the destruction or adverse modification of designated critical habitat. 16 U.S.C. § 1536(a)(2). In addition, Forest Service regulations require measures for preventing the destruction or adverse modification of critical habitat. 36 C.F.R. § 219.27 (a)(8). "Critical habitat" is defined in the ESA as "[t]he specific area within the geographic area occupied by a species . . . on which are found those physical and biological features (I) essential to the conservation of the species, and (II) that may require special management considerations or protections." *Id.* § 1532(5)(A)(i). "Destruction or adverse modification" of critical habitat is defined as "direct or indirect alteration that appreciably diminishes the value of critical habitat[,] . . . includ[ing], but . . . not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical." 50 C.F.R. § 402.02. "Conservation" is further defined as "to use and the use of all methods and procedures necessary to bring an

endangered species to the point at which measures provided pursuant to this Act are no longer necessary." 16 U.S.C. § 1533(3).

These statutes and regulations provide strict requirements for habitat protection that will be violated under the proposed action. According to the initial Biological Opinion of the FWS: "The Biological Opinion anticipated that 68 acres of dispersal habitat would be removed by heavy thinning and 62 acres of Nesting/Roosting/Foraging (NRF) habitat would be downgraded (USDA 2005, p. 121). After refinement of the proposed action and field verification, the current assessment of impact is zero acres of dispersal removed and 55 acres of NRF downgraded" (EA, p. 42). The EA does not explain what caused this change in acreage.

The EA admits that "[i]n the short term, thinning in plantations would degrade dispersal habitat" (EA, p. 41). Habitat degradation of this type is causing the Northern spotted owl to become increasingly threatened. As recognized by the spotted owl status review, all existing suitable habitat could be critical to the survival of the spotted owl. Will there still be a local spotted owl population to repopulate the area in the future? Degrading NRF habitat from suitable to unsuitable habitat today will only exacerbate the trend in reduction of NRF habitat quality and suitable NRF quantity. Currently, only 49% of the Collawash watershed is suitable NRF habitat, compared to the historic level of 75 % of the watershed. The EA claims "there would be no discernable cumulative effect" on spotted owls because although the quality of critical spotted owl habitat will be diminished, no overall change in habitat quantity would occur (EA, p. 43). This is untrue: a quantity of 35 acres of suitable NRF habitat, which is also defined as Critical Habitat, will be made unsuitable (EA, p. 42).

The CHSWA acknowledges the likely decline of spotted owl populations, targeting timber harvest such as the proposed action as one of the main contributors to spotted owl regression. The Analysis insists that spotted owl population declines are directly dependent on location of harvest units and that "a slow decline would pose less risk to the population and would be best achieved by concentrating harvest outside known owl activity centers" (CHSWA, 3-36). Because the timber harvest units proposed in Alternative B encompass spotted owl Critical Habitat, NRF habitat and dispersal habitat, the recommended alternative may accelerate spotted owl decline. No thinning project claiming to use ecological restoration as a motivation can jeopardize local populations of a threatened species. The Proposed Action fails to adhere to conservation stipulations enacted for the protection of the northern spotted owl and therefore should be withdrawn.

Barred owl territorial expansion as a result of harvesting may further displace spotted owl populations. Reduction in habitat quality post-harvesting could cause an increase in both inter- and intra-species competition. In the case of the threatened Northern spotted owl and its common competitor, the barred owl, this competitive escalation could very easily result in spotted owl displacement and loss of habitat. Spotted owl critical habitat will, with certainty, experience an even greater reduction in quality as a result of the project, and possibly experience reduction in quantity.

Furthermore, this project very poorly adheres to BMPs concerning spotted owl protection. During the critical nesting period for spotted owls, noise generating activities are allegedly prohibited. However, road use by inescapably loud trucks, log hauling and hazard tree removal are condoned. (EA, p. 14). These activities not only sufficiently pollute the area through their noise production, but also disturb nesting, roosting and foraging activities in other ways. On top of this, the already minimal noise restriction may be waived if no nesting activity is detected.

How can we be assured that the survey protocol employed to determine nesting activity will be thorough, especially given the decreasing levels of staffing in the district? Even minor negligence can result in an inaccurate determination, which may prove critical to the species.

If "in the context of the local and watershed scale, the project would adversely affect the spotted owl and its habitat" (EA, p. 42), how does the project contribute to spotted owl recovery? As required by law, the FWS must physically protect and restore designated critical habitat to achieve "recovery" not just maintain the species in bare survival mode. This is the legal mandate of the ESA as reflected in three circuit court opinions Gifford Pinchot Task Force v. FWS (9th Circ August 6, 2004), Sierra Club v. U.S. Fish and Wildlife Service, No. 00-30117 (5th Cir. Mar. 15, 2001), N.M. Cattle Growers Ass'n v. United States Fish and Wildlife Serv., 248 F.3d 1277, 1283 & n.2 (10th Cir. 2001). In order to ensure that any action taken will lead to the recovery of the Northern spotted owl, we request a thorough research and report addressing the Northern spotted owl habitat in the Environmental Impact Statement.

Snags and Down Logs

According to the CHSWA, "Many species in the Pacific Northwest evolved to use the large snags and logs that were historically abundant in the landscape. As referred to earlier, twenty-seven neotropical migratory bird species occurring within the watershed have significantly declined over the last two decades, based on Breeding Bird Survey data (Sharp, 1992). Of these 27 species, half are snag dependent and insectivorous or birds of prey feeding on forest birds." (CHSWA, 3-3) When Bark members visited the Collawash area on October 14, 2005, the snags and the trees surrounding snags (in both the plantations and the natural second growth stands) were not marked in any way to indicate they would be saved from logging. Logging activities in the proposed unit will necessarily decrease snag and down log densities. Employing BMPs, the Environmental Assessment aims at the retention of snags "where safety permits" (EA, pp.14-15), but, for most logging activity, safety does not permit the retention of snags, unless the snags are buffered through intentional marking of save trees surrounding them. Whether this method of snag creation actually works is still under scrutiny, yet it is unclear that the Forest Service will even provide this amount of protection for snags, which many species rely on for habitat.

Logging activities will also disrupt the vital decomposition processes occurring in down logs. The EA's plan to approve skid trail and skyline locations in areas that would avoid disturbing key concentrations of down logs is commendable, but how realistic? Further, the creation of new wood debris cannot replace large decaying downed logs because the wood debris generated will not have the volume or decomposition process to support the wildlife that depends upon large decaying down wood.

The Forest Service relied on the use of the DecAID planning tool as a guide to managing and conserving snags for biodiversity (EA, p. 46). However, the Forest Service must address the dynamics of snag retention over time by ensuring that recommended snag levels are maintained over time despite high rates of snag fall. DecAID is not a time-dynamic simulator and does not account for potential temporal changes in vegetation and other environmental conditions. Marcot, B. G., K. Mellen, J. L. Ohmann, K. L. Waddell, E. A. Willhite, B. B. Hostetler, S. A. Livingston, C. Ogden, and T. Dreisbach. In prep. "DecAID -- work in progress on a decayed wood advisor for Washington and Oregon forests." Research Note PNW-RN-XXX. USDA Forest Service, Pacific Northwest Region, Portland OR. (http://www.fs.fed.us/wildecology/decaid/decaid_background/decaid_whatis.htm). Also, DecAID tolerance levels need careful explanation. These tolerance levels are very difficult to put in terms that are understandable by the general public, but if the Forest Service is going to use

this tool they must make it understandable. The NEPA analysis should provide cumulative species curves for each habitat type and each forest structural stage and should explain the studies and publications that support the data points on the curves. What kind of habitat were the studies located in? What was the management history of the site? Was the study investigating nesting/denning, roosting, and foraging too?

Threatened Anadromous Fish

Many threatened anadromous species depend on the quality of this watershed for survival. Increases in sediment production over recent years have likely already lowered fish productivity, and contributed to the decline of fish species at risk (CHSWA, 3-27). "The watershed is designated Tier I, Key Watershed under the Northwest Forest Plan because it contains crucial refugia for at-risk fish species" (EA, p. 25), including Lower Columbia River steelhead, Upper Willamette River chinook salmon and Lower Columbia River coho salmon. Evidence of these fish is recorded as few as 0.14 miles downstream from the project. Increase in sediment production over recent years has likely already lowered fish productivity, according to the CHSWA (CHSWA, 3-27).

Winter Steelhead represent "the strongest stock of wild anadromous fish in the watershed" (CHSWA, 3-24). Surveys show that 50% of the run present in the subbasin above Two Rivers used the Collawash watershed as a spawning area. This species is considered a "stock at risk" and any alteration of their habitat (which reaches as close as 0.14 mile downstream of unit tributaries) will greatly impact the viability of the species (CHSWA, 3-24). Late Run Coho, also a "stock at risk," are found in the watershed. In fact, this population is "probably the last wild population of coho found in the entire Columbia River Basin. Late Run Coho is on the Region 6 Sensitive Species List and "one of the three classes of this stock is very weak and has a high potential for extinction" (CHSWA, 3-24). The effects determination for this species and the other above listed threatened species are "May Affect, Not Likely to Aversely Affect." The EA admits that "thinning within riparian reserves is a ground disturbing activity that has the potential to cause a temporary reduction in water quality by allowing sediment to enter the stream channel from surface erosion or run off" (EA, pp. 26-27). This information combined with the fact that turbidity levels in Collawash are higher and persist longer than those of surrounding streams complicates the effects determination. If management activities "may affect" threatened fish populations, what will be the possible effects? Are there no possible adverse effects to anadromous fish populations, as the effect determination leads us to believe, or could there be negative effects as the CHSWA suggests?

During the process of logging, before revegetation, what preventative measures will be taken to ensure that sediment does not infiltrate the streams? Also, will the use of grass seed (and mulch in steeper areas) be sufficient to prevent erosion and subsequent stream sedimentation? At what density will the native plants be placed in order to prevent erosion/sedimentation?

Deer and Elk Winter Range

Disturbing deer and elk during winter months when food supplies and nutrient reserves are low may have critical results. Human and mechanical encounters elevate stress levels causing increased metabolic rates and lessen the already limited foraging areas. The Forest Service plans to deal with this by prohibiting harvest operations from December 1 – March 31 (EA, p. 14). However, this prohibition is waived when snow accumulation is less than 12 inches or if elk are determined not to be present in the area. There are a number of problems with this conditional protection of deer and elk during critical winter months. First, weather conditions on Mt. Hood are such in this era of global climate change that there is great variation of snow levels. Snow

will accumulate only to suddenly melt during a warm spell, which will then be followed by severe winter conditions lasting well into spring. Warm interludes during long winter months allow for a brief period of lipid buildup necessary for deer and elk survival. Under the proposed waiver, a restriction would be raised during a warm spell, allowing for the harassment of deer and elk in the vicinity and the lipid depletion that results. Fat reserves that should receive a boost during that time, will instead suffer the opposite, decreasing deer and elk viability during long winters. Second, the waiver falsely assumes that disturbance will only occur if snow levels are high. If the snow melts, the animals present will still likely use the area, and not go to another area. Lipid depletion will result both when snowfall is over and under the decided 12". This waiver is clearly designed to favor logging at the expense of deer and elk. The Forest Service seems to be selectively advocating the protection of deer and elk only when such protection strategies do not conflict with timber harvest opportunities.

Survey and Manage Standards and Guidelines

According to the Forest Service, the Collawash Project is consistent with the 2001 FSEIS to Amend the Survey and Manage Mitigation Measure Standard and Guidelines as well as the 2004 FSEIS to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines (DN # 1, p. 5). However, the EA provides no information about what the Forest Service did to meet these requirements. Lack of information limits the public's ability to participate. The National Environmental Policy Act (NEPA) regulations tell agencies that "public scrutiny [is] essential." 40 C.F.R. § 1500.1(b). Accordingly, agencies are charged to "encourage and facilitate public involvement in decisions," *id*. § 1500.2(d), so that "environmental information is available to public officials and citizens before decisions are made." *Id*. § 1500.1(b). A blanket statement that "no species were found to require the management of known sites" fails to provide sufficient information for the public.

In an effort to determine if surveys were done, Bark members walked all of the units of the project. No survey markings were found except what seemed to be a circle of flags in Unit 7. Was a Survey and Manage species found here? What management protocols have been followed? The lack of disclosure in the EA and lack of markings in the Units begs these questions.

<u>Forest Health Alternative & Restoration Opportunities</u>

Many of the forests we visited were on their way toward healing themselves from past management activities. Many have very diverse, healthy understory. Many were not overly dense. Unit 8 had areas where trees were ten feet apart. Blow down is also happening naturally in many units. (See unit 1 (421), which is enabling them to thin themselves. Unit 5 (420) has places where spacing is 15 feet between trees.

We would like you to reevaluate your plan for the Collawash sale and create instead a restoration alternative. This could involve some thinning of any unnaturally dense stands, leaving the trunks for down woody debris, and chipping the limbs for soil fertilization. In a native forest, when a tree falls to the ground it acts as a physical barrier to the movement of soil down a slope. Over a short period of time the collected soil on the uphill side of a fallen tree sports a variety of young developing plants that further capture soil being transported down a hill. Some of the steeper units could benefit from thinning with trees left in place on the ground to act to mitigate the soil losses and provide thermal cover.

There are also many nearby areas that could benefit from pre-commercial thinning, for example, the area north of 9B West/10 and the area east of 9B. The part of Unit 2 (422) on the west side of the road is very young (15-30 yr old) Douglas-fir and Western hemlock with lots of rhododendrons, and is somewhat impenetrable. This area in particular, given the age class of the stand and the fact that it is so steep, is more suited for pre-commercial thinning than a commercial thin.

Road obliteration is desperately needed and would also be part of this alternative, as would invasive plant removal. Such a project could truly address the forest health issues, without the damage caused by an intensive commercial harvest operation. It could also serve to provide a sustainable source of employment for timber workers.

The EA immediately rejects a thinning without logging alternative on the sole ground that it does not comply with the NWFP goal of maintaining the stability of local and regional economies now and in the future. First of all, when has not adhering to only one goal of the NWFP stopped the Forest Service from conducting a project? For example, the proposed Alternative B of this project will not meet the desired future condition of "well distributed" snags and down logs or hydrologically and physically balanced earthflows, but is still advocated by the Forest Service. And second, please explain how a non-commercial thinning projects that create jobs and the maintenance of truly healthy forests that provide an array of recreational opportunities do not contribute to stable economies now and in the future?

Conclusion

Thank you for the opportunity to comment on this project. As stated above, we are concerned about the native stands, steep and unstable slopes, high road density, spotted owl populations and neighboring threatened fish species at risk as a result of this sale. We are highly suspicious of the serious discrepancy between the EA's conclusions and those of the CHSWA, and would like to see scientific support of the impact determinations reported in the Decision. We are concerned that this project as outlined will cause more damage than good in the sensitive Collawash watershed and we are not convinced that commercial logging is the best way to address the problems that exist in this planning area. For this reason, we ask that an adequate EA be drafted, and that issues raised in this letter be specifically addressed. We would like the opportunity to work with you to turn this project into a truly restoration based proposal and are interested in working together with you to find resources to make this kind of project possible.

Sincerely,

Alex P. Brown
Executive Director, Bark