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APPEAL TO THE REGIONAL FORESTER
(503) 283-6343OF THE UNITED STATES FOREST SERVICE
REGION 6

BARK,	)
ONRC	) 36 CFR § 215 Appeal
	) In Re: Appeal of the Decision
APPELLANTS	) Notice, for the **Juncrock**
vs.	**) Environmental Impact Statement**
	)
LINDA GOODMAN, REGIONAL FORESTER,	)
DECIDING OFFICER.	)
	)

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

Dated this 26th day of May, 2004

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 Becky Nelson

Dear Ms. Goodman,

In accordance with 36 CFR 215, Bark and ONRC hereby appeal the decision to implement Alternative III of the Juncrock Environmental Impact Statement ("Juncrock EIS"), signed by the Mt. Hood National Forest ("MHNF") Forest Supervisor, Gary L. Larsen on April 12, 2004.

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

Decision Date: April 12, 2004.

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

Appeal Period End Date: May 27, 2004 (see official Notice of Decision).

Description of the Project: 550 acres, including 305 acres of shelterwood logging, 90 acres of "Individual Tree Selection" with regenerated openings ranging from 10 to 75% of the treated area, and 155 acres of thinning, of which 14 acres will occur in riparian areas. The project will also include 2.8 miles of road construction. Approximately, 10.2 miles of road will be closed for an unknown period of time after the treatment. Recreational Trail #487 will be relocated during harvest operations.

Location: Within White River Watershed, east of Mt. Hood and south of White River, within the Barlow Ranger District.

Appellant's Interests:
Bark and ONRC have 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. ONRC has worked to protect the Mt. Hood National Forest for over two decades. Members and staff of Bark and ONRC 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 and ONRC have used the Juncrock Project area. The value of the activities engaged in by Bark and ONRC 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 CFR 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 intend to pursue our 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

2. Prepare a Decision Notice implementing **Alternative I** of the Juncrock Environmental Impact Statement.

3. 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

4. Defer the Juncrock project until monitoring of Management Indicator Species (MIS) populations has been conducted on the entire Mt. Hood National Forest. A full description of where key habitat exists in each district for each MIS in the MHLRMP should be developed for the Mt. Hood National Forest.

INTRODUCTION:

The Juncrock project planning area is approximately 550 acres and is located in the White River and Beaver Creek 5th Field watersheds. The Environmental Impact Statement ("EIS") for the Junrock project analyzed four alternatives: Alternative I (no action), Alternative II (Uneven Aged Management Approach), Alternative II (Even Aged Management Approach, the Proposed Action, subject to this appeal), Alternative IV (identical to Alternative II except that it places a diameter limit of 21 inches DBH).

The Appellants believe Forest Supervisor Gary Larsen's EIS and DN 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:

#1 The FEIS Has An Insufficient Analysis Of The Relation Between Disease And Ecosystem Health

The FEIS's analysis of disease is faulty, and Alternative III will compromise the health of the Juncrock ecosystem. The Purpose and Need of the Juncrock sale is to "[i]mprove timber stand conditions by…reducing the number of trees damaged by insects and disease," and to "[p]romote Douglas-fir, ponderosa pine, and western larch trees species that are shade intolerant, fire tolerant, and more resistant to insect and disease." FEIS, 6. Disease control is faulty premise for action for two reasons. First, it fails to consider the positive effects of disease on ecosystem health. Second, it fails to recognize the futility of harvesting as a disease control method. The problems with the purpose and need repeat themselves throughout the document. Proceeding with the proposed alternative under the FEIS's analysis will violate management laws and regulation on Mt. Hood National Forest, and must be reconsidered.

The Forest Service's recent decision to apply even-aged management through Alternative III raises its required analysis well beyond what the EIS provides. NFMA has specific requirements for even aged management, found at NFMA § (g)(3)(F). Even-aged management can only be used where it is determined to be the "optimum" or at least "appropriate." The analysis of the no-action alternative makes it clear that natural disease cycles are beginning to achieve the very process of thinning proposed by Alternative III. FEIS, 7. Even-aged management cannot therefore be described as either "optimum" or "appropriate," but rather is being chosen for dollar return or timber output, in violation of NFMA § 6(g)(3)(E)(iv). The Forest Service's last-minute change to the selected Alternative was done without the required corresponding increase in FEIS analysis for even-aged management.

The FEIS does not analyze the needs of wildlife for diseased trees as habitat. The FEIS recognizes this need, and says, "[t]ree diseases such as Indian Paint Fungus may be beneficial to cavity nesting species." FEIS, 68. The NFWP requires the Forest Service to consider microclimates of habitat structures, and to analyze and promote this microclimate health through a variety of means, particularly the clustering of habitat trees into patches 2.5 acres or larger. NFWP S&G, p. C-40 to C-46 (1994). The FEIS states that 4 disease trees per acre would be left. FEIS, 22. It does not state how these 4 trees will be grouped. The MHLRMP has several requirements regarding diseased trees as habitat, especially in regard to the size and height of the trees, and the species biological potential that must be retained through wildlife tree retention proscriptions. There is no discussion of how trees will be selected to meet these criteria. Finally, the Forest Service's own research shows concerns over the cycles of rot, regeneration, and disease that provide for continuous supplies of habitat. *Trees and Logs Important to Wildlife in the Interior Columbia River Basin*, Forest Service General Technical Report PNW-GTR-391. The 4 dying trees will provide viable habitat for only a few years. Even after regenerated areas are old enough to be susceptible to disease, it takes twenty years for Indian paint fungus, for example, to create a suitable habitat structure, to a total of 150-200 years to create proper habitat. *Id*. There is no account of what measures will be taken in the interim to ensure a continuous supply of habitat for snag-dependent species. These oversights in the analysis must be addressed in a new EIS.

Disease also plays a critical role in the natural ecosystem cycle. Trees die from competition and create openings in the canopy when they fall over and these openings change the dynamic of the micro-eco-system. The NWFP recognizes this, and while it even recommends management for some events, it explicitly does not include disease: "[s]maller scale disturbances, such as those caused by insects, diseases, and wind, create small gaps in the overstory that characterize the transition and shifting-gap stages of old-growth forest development." NWFP S&G, p. B-8 (1994). This process of natural thinning is acknowledged in the FEIS, where it states "The mortality from existing diseases and insects continues to create gaps in the existing overstory," FEIS, 42, "The Douglas fir is beginning to self thin" FEIS, 7 and

"Existing overstory canopy cover is less than 50% and may drop to 20% or less within 10-20 years" FEIS, 11. These statements show that disease is a necessary part of natural ecosystem function. The proposed action in Alternative III will sacrifice a natural cycle in favor of an unnatural one.

Another ecosystem process affected by disease is nitrogen-fixation. The process of decay created by the steady input of dead wood is known to be a critical piece of nitrogen-fixing. Many of the Oregon forests are nitrogen-poor, and rely upon the known nitrogen-fixing processes of Indian paint fungus and other fungi. These processes are critical to the preservation of proper soil fertility and general forest ecology. The FEIS needs to consider the effects of removing infested trees on nitrogen counts and other inputs/outputs of the eco-system of the planning area.

Timber harvest has the potential to increase the overall level of disease in the Juncrock planning area. In the Mill Creek Planning Area to the north of the Juncrock sale, previous logging was specifically conducted to remove mistletoe, and these areas show a significantly higher presence of mistletoe than the unlogged portions of the planning area. Likewise, in the Juncrock planning area, the previously logged areas show a higher amount of mistletoe than the areas that haven't been logged previously. Logging causes more wounds and branch stubs, FEIS, 44 ("falling, skidding, machine piling and burning of piles in the partial cuts could cause some wounding to leave trees"), which is not addressed as a concern, even though wounds open the trees to higher incidence of heart-rot fungi like the Indian paint fungus. FEIS, 15 ("Logging can contribute to the spread of…Indian paint fungus"). Recent logging operations on the Hipo timber sale to the west of Juncrock illustrate how damaging logging can be to remnant trees. The Hilynx EA expressed concern about scarring increasing disease levels, and yet even under what timber sale planner Becky Nelson described as very controlled and careful logging, there are dozens of trees that have been scarred and wounded from the logging operations. Planning regulations require the preservation of a native ecosystem, NWFP S&G, p. A-1, C-19 & C-37 (1994), 36 CFR 219.15, 36 CFR 219.27(b). Clear-cutting naturally-occurring diseased trees in favor of more resistant trees does not advance these goals. Rather, the proposed action will increase the incidence of disease.

The trees marked do not match the Forest Service's description of diseases trees. Appellants have evaluated every unit in the Juncrock sale, and many units have trees marked that show no signs of insect or disease infestation. Like many forest pathogens, Indian paint fungus destroys the heartwood of live conifers. The fungus is found on true firs, especially grand fir and hemlock, but rarely attacks Douglas fir and spruce. A number of old (estimated by Appellants to be approximately 350 years) Douglas-firs within Unit 8 of the Juncrock sale, are marked to cut, even though they cannot contract Indian paint fungus. Other examples are evident throughout the planning area, although at this point, all of the marking is not completed. Statements are also made that are scientifically unsubstantiated. For example, the statement that "Stem disease and mistletoe are at epidemic levels," FEIS, 11, is unproven. The statement that "the majority of western hemlock and grand fir trees in the treatment units are infected with this disease" is also unproven FEIS, 36, and not substantiated by what Appellants have seen on the ground. In the response to comments about the effects of stand replacement, the agency says, "[w]e are not attempting to eliminate forest pathogens, but to bring them into a more balanced range of natural conditions." FEIS, 114-115. However, there is no documentation of what the range of natural conditions is. There is also no evidence that western hemlock and grand fir found in the Juncrock planning area are outside their normal range, or have increased rates of pathogenic diseases, or that replacing them with Douglas-fir and ponderosa pine would bring the area closer historic conditions.

The above violations show that the FEIS's purpose and need of disease control is faulty, and that the management decisions based on it are in violation of regulations and laws. The action in Alternative III is "designed to regenerate an even-aged stand of timber." The proposed action does not sufficiently consider the effects of the proposed analysis on diseased tree dependent species. It also does not sufficiently

consider the role that disease plays in a healthy ecosystem. It fails to recognize the effects that timber harvest, and even-aged harvest in particular, have on creating disease. An Alternative that highlights and promotes the complex and important relationship between disease and forest health is needed. As it is, the FEIS is inadequate to support the proposed action, as it does not in any way show even-aged harvest to be optimum, or even appropriate.

#2 Adverse Effect on the Northern Spotted Owl

We strongly urge the USFS to reconsider implementing the Juncrock timber sale because of its adverse effects on the northern spotted owl. The proposed alternative will jeopardize spotted owl populations and their habitat. The EIS that justifies the proposed alternative fails to address the destruction of corridors, the effects of interspecies competition, and the potential impact of pending litigation. The result of these oversights is a proposed alternative that fails to comply with the mandates of the ESA, NFMA, NEPA, the APA, the MHLRMP, and the NWFP. The proposed action must be altered by changing harvest prescriptions and dropping all units that will degrade owl habitat.

Effect of the proposed action on connectivity corridors

The owl connectivity corridor will not be maintained, but further degraded. The greatest need for the planning area is to maintain old growth habitat, as outlined on the Desired Future Conditions chart FEIS, 37, which states a goal to increase the presence of Cathedral, Open Intolerant and Late Seral Multistory Stands. Yet, it is very unclear how the proposed action will increase these stands. The FEIS claims that Cathedral stands will only be decreased by 1% in the proposed action alternative, but how this will happen is not explained or verified, given that old growth will be logged and the canopy opened up. The same is true for the Open Intolerant Multistory stand, which will supposedly stay the same. Late Seral Multistory stands will also supposedly stay the same. This also seems unlikely given the logging planned for the area.

In 1996 an analysis was completed that showed the percentage of late successional stands in the White River 5th Field and Beaver Creek 6th Field Watershed to be 66%. This percentage was increased using information provided by the Mt. Hood NF GIS layers, which elevated that percentage to 68%. This is based on the premise that only clearcuts count toward a decrease in vegetative cover, and that "partial cutting late successional stands change the structure type, but maintains their late successional classification." FEIS, 49. This means that an area could have a 50% canopy removal, but because it was a partial cut and not a clearcut, it would not lead to a change in the late successional classification. This is a totally unreasonable method for determining whether a stand is late successional or not. The late successional classification is based in large part on it's appropriateness as habitat for late successional species. Clearly a 50% canopy removal would diminish it's suitability as habitat for most late successional species. "Since 1996, two of the plots became older then [sic] 80 years," FEIS, 49, and therefore were added to the percentage of late successional forest in the watersheds. However, logging projects have also taken place since 1996, which have changed late successional habitat. The late successional percentages need to be fully reevaluated before this project proceeds.

The spotted owl is increasingly threatened due to habitat destruction of the type proposed in the Juncrock Timber Sale. The FEIS downplays the reality of this by relying on a false assumption in the White River Watershed Analysis (WRWA) which states that "This NRF habitat can be maintained in at least marginal condition through selective thinning, while conditions improve at the more moist elevations where NRF habitat would naturally occur" FEIS, 3, *citing*, WRWA, page IV-43. Conditions are not improving at more moist elevations. They are degrading. Therefore adaptive management requires protection of all available habitat in order to maintain even marginal conditions for the owl.

Although the Record of Decision claims that Alternative III was selected because it "maintains an owl connectivity corridor" ROD, 4, the FEIS Biological Evaluation states that "The dispersal corridor designated by the White River LSR Assessment along Frog Creek and Clear Creek to allow connectivity north and south across the Mt. Hood National Forest would not be totally breached but would be substantially reduced in effectiveness" Appendix C, 4. Given the ongoing downturn in spotted owl population, even marginal habitat is not an acceptable level to aim for. Improving habitat is the appropriate response, and this project is further degrading habitat.

Lack of current spotted owl population surveys precludes implementation of the Juncrock Timber Sale.

To avoid taking or otherwise jeopardizing listed species and/or the destruction or adverse modification of critical habitat, the ESA creates a process whereby all federal action agencies must consult with the FWS before the agency engages in actions that may affect critical habitat or a threatened or endangered species that may be present in the project area. 16 U.S.C. §§ 1536(a)(2). The USFS must prepare a biological assessment that describes the anticipated impacts to the target species because of the project. *Id.* § 1536(c)(1). FWS then must issue a biological opinion that "shall . . . [e]nsure that any action authorized, funded, or carried out by such agency. . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical] habitat...." *Id.* §§ 1536(a); (b).

As part of a biological opinion, the FWS must quantify the extent of the incidental take and the effect that the proposed action will have on a listed species' critical habitat. 16 U.S.C. § 1536(b)(4)(A)(i); (B)(i). To this end, the FWS must consider the impacts to the listed species from the proposed action in conjunction with past and present actions: the "effects of the action." 50 C.F.R. §§ 402.14(g)(2) – (4); 402.02. In nearly all cases of consultation on the Mt. Hood National Forest, FWS has adopted the USFS's biological assessment as FWS's determination of effect on the listed species.

The Forest Service must include an "environmental baseline" in its analysis. The "environmental baseline" gives the condition of the species and its habitat prior to the proposed action, and "includes all past and present impacts of all Federal, State, or private actions and other human activities in the action area; the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation; and the impact of State or private actions which are contemporaneous with the consultation in progress." 50 C.F.R. § 402.02. Without an adequate environmental baseline, FWS has no way of evaluating the present status of a listed species, and thus cannot rationally decide whether additional impacts on the species may not jeopardize its continued existence.

The failure to make a population-based analysis, combined with the failure to complete current spotted owl surveys, creates a significant level of uncertainty regarding the level of impact that this project will have on owls in the White River Watershed and nearby lands. Indeed, the Biological Evaluation suggests that smaller home ranges may be in use and/or that owls might be using fragmented habitat out of lack of better available habitat. This is an important factor in terms of the owl's survival: either there are more owls doing "better," or the species is doing "worse" because individuals are confined to poor quality habitat. Without population surveys, it is impossible to make a reasoned determination as to the impacts on the species from the proposed sale.

NEPA requires that when data is not available an agency should recognize the lack of data and explain why obtaining it was not feasible. 40 C.F.R. § 1502.22. The ESA prohibits the Forest Service from going forward with the proposed sale without ensuring that the project will not result in jeopardy to the species.

In light of this, the proposed action was unreasonably supported, and a final EIS should be prepared that addresses population trends in relation to Juncrock and adjacent sales.

Lack of assessment of impacts to and protection of Critical Habitat Unit OR 2 precludes implementation of the Juncrock timber sale.

The Juncrock FEIS does not rely on adequate information regarding the impact on habitat of the northern spotted owl, and threatens to violate species habitat protection requirements if Alternative III is carried out in Critical Habitat Unit OR 2. 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 CFR § 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.

When designating critical habitat for the Northern spotted owl, the FWS recognized that critical habitat is meant to promote recovery of the species by stating that "the Act's definition of critical habitat indicates that the purpose of critical habitat is to contribute to the species' conservation, which by definition equates with recovery." 57 Fed.Reg. 1822 (1992). Both the ESA and the FWS' Northern spotted owl critical habitat rule reveal that the purpose of designating critical habitat, and thus the FWS' role in protecting the habitat from activities that might adversely affect the habitat, is clearly for the recovery of the species.

The proposed action will result in:

> the loss of 179 acres of NRF habitat, a downgrading of 2 acres of NRF habitat and the direct loss of 36 acres of dispersal habitat. There is an additional degradation of 168 acres of nesting, roosting and foraging habitat, and 71 acres of dispersal habitat…the resulting net change is a loss of 181 acres of NRF habitat and 33 acres of dispersal habitat. FEIS, Appendix C, 4.
>
> The preferred alternative III has been given a "may effect and is likely to adversely affect" spotted owl designation.

This would all take place in the OR 2 Critical Habitat unit, which was established "because of potential for loss of dispersal habitat below levels necessary to ensure adequate dispersal of the species across the landscape." FEIS, Appendix C, 2. All of the action Alternatives 2, 3, and 4 will degrade spotted owl habitat that is already impaired by diminishing NRF and dispersal habitat across the Northwest. The FEIS explains that a desired goal is to have 50% of a given planning area in dispersal habitat, and with no logging, it currently contains 47.8%. FEIS, 55. As a result of the proposed logging, the owl dispersal corridor will most certainly be reduced in effectiveness. By definition, the stands in Juncrock planning area are critical to the survival and recovery of the owl and should not be logged. We question how a loss

of habitat from a key migration corridor will not "appreciably diminish the value of critical habitat" as it relates to the species' recovery. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.02.

There are also other timber sales in the planning area that will reduce spotted owl habitat; however, the FEIS does not discuss the cumulative impact of the present sale in addition to other uncut sales or past sales' effect on the state of the owl corridor. Although those sales affected other spotted owl pairs than those impacted in the Juncrock sale, the Juncrock FEIS should have discussed the effect of past, present, and future projects on the same resource (i.e. CHU OR 2). 40 C.F.R. § 1508.7. Implementing a decision that does not comply with the ESA will be arbitrary and capricious. 5 U.S.C. § 706(2)(A).

The evaluation of impacts to the corridor has not been conducted. What we do know is that habitat for the spotted owl is already in poor shape in the planning area. The White River Late Successional Reserve Assessment (March, 1996) identified the Juncrock planning area as having fragmented northern spotted owl nesting, roosting and foraging habitat (NRF), and dispersal habitat. FEIS, 3. Presumably, this has not improved given the continued the logging in the district since 1996. Implications in the FEIS that critical habitat function is being met by the LSR or other reserve allocations are unsubstantiated by data or analysis. There is no discussion of impacts from additional fragmentation of matrix lands on the ability of the owl dispersal corridor to function as critical habitat. In addition, there is no discussion of whether the corridor is meeting its specific role within the network of CHUs.

The USFS downplays adverse effects to the northern spotted owl from the action alternative. It states that the consequences of the proposed action, while posing a high risk to individuals, does not a risk to the population FEIS, Appendix C, 4, implying that small parts don't add up to a whole and that known short term risk is outweighed by anticipated long term benefit. "The net effect of the proposed action in 10 years verses no treatment is 124 acres less NRF habitat, 24 acres less dispersal habitat but the remaining habitat existing in a healthier condition and capable of withstanding insect, disease, drought, and fire with greater resiliency. Appendix C, 4. Given the precarious state of the northern spotted owl, any potential benefits will most likely be irrelevant if the species is extirpated prior to then. The EIS claims that the proposed action would maintain the owl corridor that allows connectivity north and south across the Mt. Hood National Forest. This seems highly unlikely given the nature of the proposed alternative. The FEIS also states that the proposed alternative III, has the same "may effect and is likely to adversely affect" designation as Alternative IV FEIS, Appendix C, 5), even though it doubles the amount of board feet and results in many more acres of clearcuts. This is hardly believable. How many times would one have to double the board feet before the agency would acknowledge an affect on the spotted owl?

#3 Failure To Account For Significant New Information About Status Of Northern Spotted Owl

On April 30, 2004, the Regional Interagency Ecosystem Committee commissioned Northern Spotted Owl Status Review team submitted a draft of their report (Anthony et al., "Status and Trends of Demography of Northern Spotted Owls") to the Interagency Regional Monitoring Program (available at http://www.reo.gov/monitoring/trends/NSO_Demo_Report_2004.pdf). In addition, on April 21, 2004 the Haig, Mullins and Forsman's paper, "Subspecies relationships and genetic structure in the Spotted Owl" was made available. These papers demonstrate that Northern Spotted Owls are a distinct subspecies from the California Spotted Owl (Haig et al., 2004) and that the Northern Spotted Owl populations continue to decline at an alarming rate.

In addition, the FWS has recently recognized the importance of interspecies competition with spotted owl, and the role that barred owls play in northern spotted owl survival. *A Range Wide Baseline Summary and Evaluation of Data Collected through Section 7 Consultation for the Northern Spotted Owl and its Critical Habitat: 1994-2001*, 11. This document was prepared in response to litigation and dated June 26, 2001, and precedes the Juncrock FEIS. In it, the FWS states that "the barred owls' increasing expansion

into the range of the spotted owl may eventually pose a serious threat" to spotted owl survival. *Id.* The recently released draft of the Anthony et al. paper further analyzes the impact of barred owl encroachment on northern spotted owl habitat. The authors of this report conclude that the annual changes in population is generally lower than previously reported and identify that increased monitoring is required to fully understand the influences for this decline. Only cursory monitoring for owls has been done in the Juncrock project area and no long-term, historical population data exist for the project area.

There is no indication in any of the documents associated with the Juncrock project that the Forest Service has considered any of this new information about northern spotted owls, which is clearly significant. These studies provide significant new information about the status of Northern spotted owls. More information and implication for forest management will become available when the status review is complete later this year. This project impacts designated critical habitat and a connectivity corridor in addition to dispersal and nesting, roosting and foraging habitat. The NEPA analysis for this project is tiered to the Northwest Forest Plan, which was created in the first place to respond to the ESA listing of the northern spotted owl. The decision on this project was made without taking any of this just-released and soon-to-be released information about the status of owls into consideration. As we noted in our comments on the DEIS, the Forest Service does not assess how spotted owl would be impacted by interspecies competition: it only addressed the impacts to the species because of habitat loss. The BE does not discuss impacts to spotted owls as the result of edge habitat creation and other raptors excluding spotted owls from their existing ranges.

Based on this significant new information, NEPA requires the Forest Service to withdraw Juncrock if a decision is made on any of the action alternatives until a reasoned examination of how barred owls affect spotted owl survival range wide and within the planning area, and how implementation of the Juncrock sale will contribute to this situation. 40 C.F.R. § 1502.9(c)(ii). "If there remains 'major federal action' to occur, and if the new information is sufficient to show that the remaining action will 'affect the quality of the human environment' in a significant manner or to a significant extent not already considered, a supplemental EIS must be prepared." Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 374 (1989)).

#4 The Juncrock Sale Should Be Withdrawn Because Of Pending Litigation

Recently, several conservation organizations – including Appellants – filed suit in federal court against the Fish and Wildlife Service for violations of the Endangered Species Act. *Gifford Pinchot Task Force et al. vs. United States Fish and Wildlife Service*. The plaintiffs in that action allege that the FWS has failed to comply with the ESA in failing to track the level of incidental take issued since the adoption of the Northwest Forest Plan: without an adequate environmental baseline – which necessarily counts the number of incidental takes issued on each national forest – the FWS cannot legally approve a timber sale and ensure that each successive sale will not contribute to jeopardy of the species. In addition, plaintiffs also allege that clear cutting thousands of acres of critical habitat is degradation and/or adverse modification of critical habitat, in violation of the ESA.

The same problems identified in *GPTF et al. v. FWS* are present in the Juncrock timber sale. The Forest Service has neither assessed nor adjusted the spotted owl environmental baseline for the Juncrock planning area. It has not completed population surveys for the species as required by the ESA, and has no idea how many owls and owl pairs are located in the Juncrock planning area. Using a habitat model as a surrogate for population surveys may be acceptable in the context of assessing the impacts of timber sales on management indicator species, but threatened and endangered species demand greater protection pursuant to the ESA. While it is true that *GPTF et al. v. FWS* involves the FWS and not the USFS, the USFS has the same legal obligation to comply with the ESA in *preparing* timber sales as the FWS does in refraining from *approving* timber sales that do not protect the owl from jeopardy.

This issue is currently before the Ninth Circuit Court of Appeals. While this issue is under litigation, timber sales that have been prepared by the USFS and approved by the FWS may be under injunctive relief.

#5 Arbitrary "Functionality" Rating Biased Toward Timber Production

The determined functionality of Juncrock's forest is skewed in favor of wood production. The project is said to respond to current conditions, which are described as only 31% fully functional. "A stand was considered fully functional if it met designated needs such as canopy cover, individual tree structure, percent canopy gaps, or stand complexity and would continue to do so for 20 or 30 years." (FEIS, 3). Certainly, a significant portion of the remaining 69% of the landscape provides some function for some species of wildlife. Nowhere in the FEIS does the Forest Service describe how functionality is quantified, nor if stands would become fully functional at some period of time after logging, despite appellants expressing concern about this index in the DEIS. Although the FEIS (page 3) refers the reader to Chapter IV in order to read the list of people responsible for determining if the stands were functional or not, there is no description of the functionality index, for what species the 31% of the stands in the project area are considered functional, whether sufficient fully functional habitat exists, or how close to fully functional the other 61% of the project area is. In fact, in the cursory two pages of response to comments, there is no justification for use of this index.

This index of functionality does not appear in the Northwest Forest Plan, the Mt. Hood Forest Plan, or the White River Watershed Analysis. From the information the Forest Service has presented to the appellants, we must conclude that the Forest Service developed this functionality index for the Juncrock project. There is no indication that the functionality index has been peer reviewed. This functionality index was used by the Forest Service as a coarse filter; stands considered functional are not proposed for logging but some of those not considered functional are proposed for logging. The Forest Service cannot develop a system of determining which stands to log that is neither tiered to a peer reviewed and broadly accepted methodology or demonstrate in the NEPA documents that this system has a basis in science.

NEPA requires that the federal agencies rely upon "high quality" information and "accurate scientific analysis." 40 C.F.R. § 1500.1(b). The scientific information upon which an agency relies must be of "high quality because accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA." Idaho Sporting Congress v. Thomas, 137 F.3d 1146, 1151 (9th Cir. 1998) (internal quotations omitted); see also Portland Audubon Society v. Espy, 998 F.2d 699, 703 (9th Cir. 1993) (overturning decision which "rests on stale scientific evidence, incomplete discussion of environmental effects . . . and false assumptions").

The values of characteristics of native forests continue to be discovered and discussed in the scientific literature. The values of snags and the refutation of biological potential indexes in the past few years is just one such example. Different characteristics found in native forests have value for different types of wildlife. No one forest type with a certain form of structure can provide all the benefits for the range of habitat types required to promote populations of wildlife that the Forest Service is required by NFMA, ESA, NFP, and the RMP to protect, not to mention habitat types that approximate those we would expect given historic range of variability.

In a personal conversation with Mike Hernandez, Barlow's district ranger, on September 22, 2003, when asked to describe a healthy forest. Mr. Hernandez responded that "healthy" depended upon the purpose and need for that particular area. Based on this approach, the level of function is one that adjusts according to what the objectives are for the project and is not fixed or determined by scientific principals. Given the stated motive for wood products in this FEIS, and the lack of importance given to species

considerations, appellants draw the conclusion that this approach was used to create the Juncrock proposed action. In fact with this sale, it appears that the PSQ was determined at the outset, with the justification coming afterward. This is supported by the fact that the purpose and need for this sale abruptly changed from a fire risk reduction sale to a wood products production and "forest health" sale; yet the proposed actions remained fundamentally the same.

#6 Failure to protect Management Indicator Species.

The USFS has not conducted its required population monitoring of MIS, relying instead upon habitat modeling. NFMA requires the Forest Service to designate MIS within each forest in a Forest Plan. 36 C.F.R. § 219.19(a)(1); see also 16 U.S.C. § 1604(g)(3)(B). To ensure that viable populations are maintained, the Forest Service regulations require that the Service identify management indicator species (MIS) and that "[p]opulation trends of the management indicator species will be monitored and relationships to habitat change determined." 36 C.F.R. § 219.19(a)(6). This monitoring is "essential to verify and, if necessary, modify the forest plan's assumptions about the effects of timber harvesting and other management activities on wildlife…In order to meet the monitoring requirement, planners will need to obtain adequate inventories of wildlife populations and distribution." Charles F. Wilkinson and H. Michael Anderson, *Land and Resource Planning in the National Forests*, 304 (1987).

MIS are proxies used to measure the effects of Forest Service management strategies on the forest, species diversity and species population viability. Species selected as MIS are selected because their population changes are believed to indicate the effects of management activities on other species with similar habitat needs and population characteristics. 36 C.F.R. § 219.19(a). The effects of management, natural disturbance, and other influences on the health of the forest cannot be determined without population monitoring.

The Ninth Circuit has stated that the duty to ensure viable or self-sustaining populations "applies with special force to "sensitive" species." *Inland Empire Public Lands Council v. United States Forest Serv.*, 88 F.3d 754 (9th Cir. 1996) citing *Oregon Natural Resources Council v. Lowe,* 836 F.Supp 727, 733 (D.Or. 1993). NFMA clearly directs the Forest Service to create regulations to "insure research on and (based on continuous monitoring and assessment in the field) evaluation of the effects of each management system to the end that it will not produce substantial and permanent impairment of the productivity of the land." 16 U.S.C. § 1604(g)(3)(C); *Sierra Club v. Martin*, 168 F.3d 1 (11th Cir. 1999).

In light of this direction, NFMA's regulations require inventorying and monitoring on the National Forests under 36 C.F.R. §§ 219.12(d) and (k) as well as 36 C.F.R. §§ 219.19(a)(6), 219.26, and 219.19(a)(2). The regulations state "each Forest Supervisor shall obtain and keep current inventory data appropriate for planning and managing the resources under his or her administrative jurisdiction." *Id*. § 219.12(d). The regulations further require that "at intervals established in the plan, implementation shall be evaluated on a sample basis to determine how well objectives have been met and how closely management standards and guidelines have been applied." *Id*. § 219.12(k). To ensure biological diversity, the regulations specifically require that "[i]nventories shall include quantitative data making possible the evaluation of diversity in terms of its prior and present condition." *Id*. § 219.26.

Although NFMA clearly requires the monitoring of MIS populations, the Forest Service has traditionally relied upon the availability of suitable MIS habitat, rather than population surveys, to meet NFMA's viable populations requirement. *Inland Empire Public Lands Council v. United States Forest Serv.*, 88 F.3d 754 (9th Cir. 1996). Recently, however, the Ninth Circuit has revisited its holding in *Inland Empire*, and held that if the Forest Service utilizes a "proxy-on-proxy" approach to meeting the agency's NFMA obligations, any habitat models must be grounded in fact and field verified. *Idaho Sporting Congress v. Rittenhouse*, 2002 U.S. App. LEXIS 19108 (9th Cir. 2002). The court also acknowledged that other courts

have expressly disavowed the holding in *Inland Empire*, casting additional doubt on the validity of that case. *See generally*, *Sierra Club v. Martin*, 168 F.3d 1 (11th Cir. 1999), *Utah Environmental Congress v. Zieroth*, 190 F. Supp. 2d 1265, 1272 (D. Utah 2002) (holding that § 219.19 unambiguously requires collection of population data), *Forest Guardians v. U.S. Forest Service*, 180 F. Supp. 2d 1273 (D.N.M. 2001) (same). On January 30, 2004, Colorado District Judge Weinshienk halted logging in Colorado Wild v. *U.S. Forest Service [Civil action 03-Z-2592 (PAC)]* of a post-fire logging project called Missionary Ridge, pending compliance with monitoring of MIS populations.

Given this developing reinterpretation of the legal requirements attendant to management indicator species, appellants believe that the Forest Service has not fulfilled its multiple mandates in NFMA and its implementing regulations requiring population monitoring and surveying for the Juncrock project. NFMA requires that site-specific projects remain consistent with area forest plans. 16 U.S.C § 1604(i); 36 C.F.R. § 219.10(e). NFMA also requires the Forest Service to provide animal and plant diversity in the national forests. 16 U.S.C. § 1604(g)(3)(B). To further these goals, NFMA's implementing regulations require that the Service identify management indicator species (MIS), ensure that population trends of the management indicator species will be monitored, and that relationships to habitat change will be determined. 36 C.F.R. § 219.19(a)(6).

The Mt. Hood National Forest Plan states that management indicator species shall be protected from adverse modification through the curtailment of conflicting activities, or avoiding the area. Some of the management indicator species for the Mt. Hood National Forest include: snag dependent species, pileated woodpecker, and pine marten. The Mt. Hood National Forest is required by NFMA to do surveys for these species so that it can monitor the condition of the forest wildlife habitat as a whole. 36 C.F.R. § 219.19(a)(6).

The Mt. Hood National Forest has failed to conduct population studies of management indicator species in the planning area, and has not studied the relationship between habitat change and the viability of the MIS as required by NFMA and the MHMP. The failure to study the effects of the project on management indicator species is in violation of NFMA and is arbitrary, capricious, and not in accordance with the law. 5 U.S.C. § 706; 16 U.S.C § 1604(i); 36 C.F.R. § 219.10(e).

Snag-Dependent MIS Species

The USFS also failed to respond to the issue that logging will remove snags and down woody debris from a planning area that is already deficient in these features. Snags are very important for wildlife and are necessary for a properly functioning forest. The Mt. Hood National Forest ignores the fact that removing snags will decrease the viability of those species that depend upon snags for habitat, regardless of size. The EIS states that areas of past timber harvest are at or below the recommendations of 40% snag biological potential, and therefore it is even more unclear how the proposed action will necessarily meet the standard, particularly where there is no assessment of the effects of windthrow and other natural events on leave tree recruitment.

As we stated in our comments, the standards of the Northwest Forest Plan regarding snags are based upon outdated science. Although the Forest Service does cite some of the research from DecAID and even describe the snags that would be left per acres at various DecAID tolerance levels for the "Eastside Mixed Conifer Forest, East Cascades/Blue Mountains, Small/Medium Trees Vegetation Condition" (FEIS, page 69), the FEIS goes on to state that "all harvest activities would reduce the number of snags and down logs" (FEIS, page 70) and that the mitigation measure for this is to retain only 4 snags per acre, even allowing GTR trees to substitute for snags.

The Forest Service is obligated to use the best available science in managing snags. "Information obtained through monitoring, together with research and other new information, will provide a basis for adaptive management changes to the selected alternative, including changes in the Standard and Guidelines" (Northwest Forest Plan ROD, 57). NEPA requires that the federal agencies rely upon "high quality" information and "accurate scientific analysis." 40 C.F.R. § 1500.1(b). The scientific information upon which an agency relies must be of "high quality because accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA." Idaho Sporting Congress v. Thomas, 137 F.3d 1146, 1151 (9th Cir. 1998) (internal quotations omitted); see also Portland Audubon Society v. Espy, 998 F.2d 699, 703 (9th Cir. 1993) (overturning decision which "rests on stale scientific evidence, incomplete discussion of environmental effects . . . and false assumptions").

The Northwest Forest Plan ROD is clear that "a renewable supply of large down logs is critical for maintaining populations of fungi, arthropods, bryophytes and various other organisms… Models for computing expected numbers and sizes of logs should be developed for groups of plant associations and stand types which can be used as a baseline for managers to develop prescriptions for landscape management." (C-40) The ROD clearly states that the 240 linear feet of logs per acre greater than or equal to 20 inches in diameter standard is to be used until better, vegetation-type specific standards are developed. Now that this model is currently available (DecAID), it must be applied.

Whether USFS is of the opinion that DecAID is best applied at larger scales than a timber sale project area is immaterial to the implementation of updated policies that reflect the current science. In fact, USFS should amend the Northwest Forest Plan to get rid of the biological potential based retention standards. Recently on Mt. Hood National Forest, the DecAID standards were adopted during the Special Management Area Forest Track amendments to the Columbia Gorge National Scenic Area because MHNF staff recognized that the use of biological potential based retention standards were not based on current science.

However, with the Juncrock sale, the Forest Service has elected to use a biological potential based measure. Just a few of the passages from DecAID that criticize biological potential models are below. Note also Aubry, another agency scientist also criticizes biological potential. We have summarized his recent report in the pileated woodpecker section below.

> Since the publication of Thomas et al. and Brown, new research has indicated that more snags and large down wood are needed to provide for the needs of fish, wildlife, and other ecosystem functions than was previously recommended by forest management guidelines in Washington and Oregon. For example, the density of cavity trees selected and used by cavity-nesters is higher than provided for in current management guidelines…
>
> Research results have expanded the number and variety of decaying wood categories over what was previously presented in Thomas and Brown…
>
> Both snag- and down wood-associated wildlife more or less equally participate in dispersal of seeds and fruits (although the particular species they disperse may differ); however, snag-associated wildlife play a greater role in dispersal of invertebrates and plants, and down wood-associated wildlife play a greater role in dispersal of fungi and lichens. Down wood-associated species might contribute more to improving soil structure and aeration through digging, and to fragmenting wood. This is one example of the far greater differentiating power afforded by a well-constructed set of matrixes than was previously available in Thomas and Brown…

USFS fails to look at the research generated by its own scientists in regard to the pileated woodpecker. In the October 2003 Science Findings, published by Pacific Northwest Research station. PNW researcher Keith Aubry calls the biological potential threshold for woodpeckers "untested hypotheses" and says that the new information contained in the report be "immediately applied to existing standards and guidelines." This report outlines that snags and decadent trees are essential for nesting, with 48% of nests found in live, dead top trees, despite the rarity of decadent trees on the landscape, meaning that decadent trees appear to be more important for nesting than snags. Pacific silver fir, found in Juncrock units, is preferred for nesting. Trees used for roosting are never used for nesting. Lastly, down logs do not support populations of carpenter ants and therefore do not provide foraging habitat. This finding is particularly important for Juncrock, as many of the left snags and large trees retained after logging would fall over.

MIS protected Pileated Woodpecker and Pine Marten

There is no evidence that the Forest Service surveyed for pine marten and pileated woodpecker populations within the planning area. Forest Service regulations require the identification of management indicator species (MIS) and that "[p]opulation trends of the management indicator species will be monitored and relationships to habitat change determined." 36 C.F.R. § 219.9. Additionally, "[i]nventories shall include quantitative data making possible the evaluation of diversity in terms of prior and present conditions." *Id.* § 219.26. Although the Ninth Circuit has concluded that the Forest Service may assess viability based on habitat conditions in some circumstances, the FEIS makes no such assessment. Inland Empire Public Lands Council v. U.S. Forest Service, 88 F.3d 754 (9th Cir. 1996). Appellants conclude that the Forest Service has failed to make any determinations of whether the standards and guidelines for core areas in the Mt. Hood Forest Plan (MHFP) are sufficient to actually maintain viable populations, as these standards are not calibrated with population data specific to #2151M, B5-018, B5-020 and B5-021. The MHFP allowances for logging in these designated areas is irrelevant, as the Forest Service is not complying with NFMA requirements for population monitoring. The FEIS also states that "[a] pine martin [sic] area, #2151M has 286 acres of core area." (FEIS, page 67) The FEIS fails to disclose where this area is located and whether it will be affected by the proposed logging.

#7 Failure to protect Region-6 sensitive Oregon Slender Salamander

The Juncrock Timber Sale will not be able to maintain sufficient canopy closure for the Oregon slender salamander on 289 acres of the planned sale units (FEIS, page 63). This is an increase from the 100 acres estimated to be unsuitable in the Biological Evaluation (page 10.) Although the FEIS indicates that after 20 to 40 years there would be sufficient canopy closure to provide for the needs of the Oregon slender salamander, the Biological Evaluation's conclusion that proposed activities are not likely to impact populations seems unlikely, as 20 to 40 years will pass without sufficient habitat for the salamanders in much of the sale area. The Forest Service has provided no information regarding how low the populations are expected to get in the units that will become unsuitable following logging, if there are populations adjacent to the units that can move into the stands after sufficient canopy develops, what the dispersal capacity is of the Oregon Slender Salamander, if enough suitable habitat exists, and if that suitable habitat is being used.

In addition, the Biological Evaluation (BE) fails to demonstrate whether the loss of habitat will result in a decrease in species viability or create trends towards federal listing. It fails to provide recommendations for avoiding or compensating for adverse effects, and fails to account for the cumulative effects of loss of habitat as required by FSM 2672.42. The BE seems uncertain of the effects when it uses words such as "apparently" to describe healthy populations elsewhere on the ranger district, and "likely" to describe why no salamanders were found in a fall survey. This fails to "provide a sound base of information to support management decision-making affecting wildlife and fish, including endangered, threatened, and sensitive

animal and plant species, and their habitat", as required by FSM 2620.2. Salamanders need wet conditions. When it is dry, salamanders are unlikely to be detected because they are looking for wet conditions underground, under logs, and deep in snags. Appellants are concerned that the surveys for salamanders were conducted in the fall when conditions are not suitable to easily detecting their presence, indicating that either protection of Oregon Slender Salamanders is not a priority for the Fish and Wildlife Service or the Fish and Wildlife Service lacks a basic understanding of the biology of one of the species they are instructed to protect.

The species protected by the Forest Service Region 6 Sensitive program "must receive special management emphasis to ensure their viability… There must be no impacts to sensitive species without an analysis of the significance of the adverse effects on the populations, its habitat, and on the viability of the species as a whole. It is essential to establish population viability objectives when making decisions that would significantly reduce sensitive species numbers." (Chapter 2672.1, Forest Service Manual).

8. Failure to adequately consider the cumulative environmental impacts of grazing on the proposed project

The FEIS must consider and disclose adequately the cumulative impacts of the proposed action, and has not done so in regard to grazing. Grazing has a detrimental effect on riparian areas and native fish habitat, and the FEIS has not adequately responded to these issues. The FEIS responded to this public comment by stating that "Grazing management and its effects to the environment are out the scope of the decision to make by this document." FEIS, 115. The Juncrock proposal is designed to address vegetation and road system management. What do cows eat? Vegetation! Then how can it not be incorporated into a discussion on impacts? It should be included in cumulative impacts assessment, as it interplays with vegetation management in addition to stream quality and watershed health. NEPA requires the agency to evaluate "cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement." 40 C.F.R. § 1508.7. § 1508.24(a)(2).

Grazing is recognized to reduce the rate of regeneration. The FEIS (page 102) acknowledges that scientific opinion supports this view; however, they also claim that there is a competing view that there are other more significant factors, apart from grazing, that contribute to seedling mortality. These two views are outlined, but there is no analysis of the overall scientific opinion, or whether the latter view is the scientific minority or majority. At any case, the latter view does acknowledge cattle grazing as a contributing factor. Given the time and expense of reforestation, and the fact that replanting will take place in a significant portion of the logging units under Alternative III, these studies need more clarification and context.

The NWFP Aquatic Conservation Strategy says that grazing in riparian reserves should not "retard" attainment of ACS objectives. However, that's clearly what's happened in the White River Watershed, as stated in the WRWA: "We believe there may be a significant amount of cattle damage caused by past gazing that has never recovered adequately" (WRWA Executive summary, 4). There is no indication that an alteration in grazing practices has made this observation of 1995 obsolete. Grazing's destructiveness is very evident throughout the planning area of the sale. For example, the clearcuts to the northeast and south of unit 8, have struggled to regenerate ground cover due to grazing. Also the riparian area that runs through the northeastern area has been ravaged. Last summer, the banks were cut and eroding, with cow manure omnipresent in the stream. The stream is currently dried up. It's hard to tell to what degree this is due to depletion of riparian vegetation or simply due to a dry spring. Both are likely contributing factors. The one measure that would help reduce impact—keeping cows out during the rainy season—has not been enforced. Grazing is supposed to end on September 30 (FEIS, 101), however during a field trip on

October 11, 2003, Appellants spotted dozens of cows. Cows were also spotted on October 12 and October 19, 2003. The Juncrock project does nothing to address the threat that livestock grazing causes to forest regeneration and watershed quality. The FEIS describes the effects "on" range resources (e.g., forage, access, cost of permit), but fails to disclose or analyze the effects "of" livestock on forest health and the desired future condition of vegetation composition. FEIS, 101-102. The FEIS failed to address these issues and failed to consider alternative ways of avoiding these impacts by not grazing. The combination of fire suppression, past high-grading, and livestock grazing together caused the overstocked condition of some of the stands in the analysis area. To be effective, livestock grazing must be eliminated. Grazing and logging cause cumulative effects that must be considered together in one NEPA document.

#9 The Juncrock Timber Sale Inadequately Analyzes the Impact to Aquatic Systems by Logging in Riparian Reserves

Appellants are concerned that entry into the riparian reserves will cause unnecessary damage to sensitive riparian areas, that the agency has not designated adequate buffer widths, and that the agency has not adequately considered the adverse impacts from entering these areas.

The stated purpose of entering into riparian areas is to improve them. It appears, however, that the sole purpose of the riparian logging in several Juncrock units (1R, 2R) is to access large trees that reside inconveniently within the riparian reserves. The entry into the riparian reserves proposed in Alternative III will not only NOT improve the health of the riparian areas, but cause unnecessary damage to sensitive aquatic systems. The proposed action map also indicates that Unit 11 overlaps the A9 Key Site Riparian area, which should be off limits to management. The agency has not demonstrated how the areas chosen for riparian logging would benefit and not be harmed by the activity. A number of the riparian areas that would be logged are next to units that will be clearcut (1R, 2R, 3R and 4R), and the riparian area 16 R will be logged adjacent to a Final Overstory Removal, essentially a clearcut. The Forest Service has not assessed the potential impact of blow down or sedimentation of these new clearcuts on the riparian areas. The Forest Service has also not assessed the impact of increasing the accessibility of the riparian areas to cows. The damaged riparian area in the clearcut to the northeast of Unit 8 illustrates the adverse impacts of increased accessibility to cows. This area would essentially function as a clearcut. These factors have not been addressed in the FEIS.

The FEIS does not designate adequate buffers for fish bearing streams in the planning area. It says that "No equipment would be closer than 50 feet of the centerline of Clear Creek Ditch.' (FIES, 31). Clear Creek Ditch is functioning as a fish-bearing stream, and therefore, the NWFP-required 300-feet buffers should apply. Fish-bearing streams need a buffer that is "equal to the height of two site-potential trees, or 300 feet slope distance, whichever is greatest." (NWFP, C-30). The purpose of this buffer is to provide adequate shade for fish and to prevent compaction and other destruction from heavy equipment. This guideline should apply to all fish bearing bodies of water in the Juncrock area. In that same vein, evidence of old skid trails should not justify bringing heavy equipment within 300 feet of a riparian area, whereas the FEIS gives exception to even that minimal protection, saying that "No skid trails are allowed closer that [sic] 50 feet of the ditch unless they are located on existing skid trails or roads" (FEIS, 31). This is totally unacceptable. Many of the existing skid trails and roads near streams are well on their way toward recovery and should not be used as an excuse for reentry into sensitive areas that should never have been logged in the first place.

There also appears to be inconsistent and in some cases inadequate buffers given to non-perennial and intermittent streams, which are supposed to have protection buffers the distance of the "extension from the edges of the stream channel to a distance equal to the height of one site-potential tree, or 100 feet slope distance, whichever is greatest." (NWFP. C-30.). On November 3, 2001, members of Bark measured riparian buffers from the boundary marker to an intermittent tributary to Clear Creek. Our

measurements began within the indentation of Unit 2 and moved west along the Unit 2 boundary. Distances to the intermittent stream were 99 ft., 112 ft., 144.6 ft., 98 ft., 138 ft., and 105.5 ft. On November 18, 2001, we continued to measure riparian buffers along the western edge of Unit 2. Our measurements were 85 ft., 137 ft., 72.5 ft., and 86.7 ft. Additional measurements continued to reveal the lack of adequate distance between streams and unit boundaries. On June 23, 2002, we finalized measurements of the northwest corner of Unit 2 (in addition, we measured the riparian area between Unit 2 and Unit 14). Our buffer distances in this area were 90 ft., 105 ft., 48 ft., 48 ft., 40.6 ft., and 56 ft. All but one of these measurements were below the 100 feet required by the Northwest Forest Plan.

Appellants are concerned that the agency has not adequately considered the overall adverse impacts from entering riparian areas. Nor has the Forest Service adequately protected riparian areas from the impacts of full-scale logging.

#10 The Juncrock Timber Sale Inadequately Analyzes the Impact to Historic Resources.

The FEIS states that a possible segment of the Oak Grove/Oregon City Wagon Road was also found to lie within the Juncrock Planning Area, and that it was constructed in the late 1800s as an alternative route to the Barlow Road. It is apparently "one of the few remaining portions of the road" FEIS, 95, in existence. Although the FEIS did not state where the road is, Appellants have located historic blazes and signs of an old road directly adjacent to unit 1. We are assuming that this is the road in question. Although the road lies within a Green Tree Retention Area, it is directly adjacent to a large clearcut unit on a fairly steep slope. This historic road will most certainly be adversely affected by the planned logging, and it's highly likely that Blowdown of remaining trees could knock down blazed trees or cause them to weaken due to exposure to the elements. This was not given any discussion in the FEIS. The Barlow road, and spur roads into it, are an important piece of Oregon's history and should be preserved.

CONCLUSION

The Juncrock Timber Sale analysis area provides important habitat for a multitude of species. However, the proposed project and adjacent projects would result in the removal of significant sections of the valuable forest habitat in a landscape that has been highly fragmented by logging and degraded by grazing. The pursuit of old growth timber at the cost of multiple use values such as wildlife and recreation is taking its toll on the forest. While many opportunities for thinning of second growth forest exist, the Mt. Hood National Forest continues to focus on clearcutting late successional and old growth forest, even as old growth dependent species are in dramatic decline.

Although the agency has spent significant amounts of time, energy, and money on logging and creating plans to justify logging, the Forest Service has spent little energy trying to evaluate the existing state of the forest in light of decades of forest liquidation. Information about non-game sensitive and listed wildlife species is seriously lacking. Habitat conditions strongly indicate that the Forest is not providing for viable populations of species affected by high road densities and the near-total loss of interior forest habitat in almost all sub-basins. Water quality information is lacking, but what information does exist indicates that serious problems. Exotic weeds are spreading throughout the forest and decreasing wildlife habitat value, which is further exacerbated by logging.

In light of these existing conditions, the proposed project will have significant cumulative impacts when viewed in conjunction with other past, present and future timber projects. The threats are aggravated by non-federal activities on adjacent lands. These were not revealed in the EIS.

The MHNF should withdraw the project until thorough environmental analysis is conducted that includes surveys of MIS, listed, and sensitive species on a forest-wide basis. Anything short of this ignores the

multiple use objectives of NFMA, and the ESA's and NEPA's requirement of high quality science, leaving the Forest Service with little basis for concluding the Forest is meeting the requirements of the National Environmental Policy Act, Clean Water Act, Endangered Species Act, and the National Forest Management Act.