

BEFORE THE REGIONAL FORESTER
USDA FOREST SERVICE REGION FIVE

ENVIRONMENTAL PROTECTION)
INFORMATION CENTER AND KLAMATH)
FOREST ALLIANCE)

Appellants)

V.)

MARGARET J. BOLAND)
FOREST SUPERVISOR)
KLAMATH NATIONAL FOREST)
1312 FAIRLANE ROAD)
YREKA CA 96097-9549)

Responsible Official)

In Re: Appeal of the Decision Notice
and Finding of No Significant
Impact for the Knob Timber Sale,
Klamath National Forest, Salmon
River Ranger District.

**NOTICE OF APPEAL
STATEMENT OF REASONS
REQUEST FOR RELIEF**

April 29, 2002

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SENT VIA U.S. CERTIFIED MAIL - RETURN RECEIPT REQUESTED

NOTICE OF APPEAL

Notice of Appeal of the Knob Timber Sale (Sale) Decision Notice and Finding Of No Significant Impact (DN/FONSI), signed by Michael Lee for Margaret J. Boland on March 7, 2002, is hereby given on behalf of the Environmental Protection Information Center and Klamath Forest Alliance (Appellants), pursuant to 36 C.F.R. § 215.

The DN/FONSI adopts Alternative B of the Environmental Assessment (EA) for the Sale, located within the North and South Fork Salmon River Tier 1 Key Watershed on the Salmon River Ranger District of the Klamath National Forest. Alternative B would tractor log approximately 7.3 million board feet (MMBF) of timber from 589 acres through a combination of green tree retention, group selection, commercial thinning, seed tree/shelterwood, sanitation, overstory removal, and salvage logging treatments as well as hazard tree removal. Helicopter, cable, and tractor logging systems would be utilized. One temporary spur road of approximately 250 feet would be constructed and about 300 feet of an existing non-system road would be reopened, and would be closed and restored upon completion of logging activities. Fuels treatment would consist of a combination of handpiling and burning, tractor piling and burning, yarding and removing unmerchantable material, and mastication. Precommercial thinning would occur on approximately 335 acres and release for growth would be conducted on approximately 234 acres in existing plantations within the project area. All actions are scheduled for completion within five to seven years of the decision.

Appellants charge that the DN/FONSI violate the legal requirements of the National Environmental Policy Act and its implementing regulations (NEPA); National Forest Management Act and its' implementing regulations (NFMA); federal Wild and Scenic Rivers Act (WSR); federal Endangered Species Act (ESA); federal Clean Water Act (CWA); Porter-Cologne Water Quality Control Act and North Coast Basin Plan (Basin Plan); Administrative Procedures Act (APA); Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl and Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl (NFP ROD); Klamath National Forest Land and Resource Management Plan (LRMP); Forest Service Manual (FSM); and Forest Service Handbook (FSH).

Appellants charge that the proposed activities will result in significant degradation of the natural environment, constituting an irretrievable and irreversible commitment of resources, and that the proposed activities will significantly affect the human environment by reducing the quality of the Appellants experience in the area.

Appellants charge that the DN/FONSI ignore and/or fails to adequately address significant issues raised by the Appellants. Appellants also charge that the Klamath National Forest, in issuing the DN/FONSI, acted arbitrarily and capriciously by failing to examine the relevant data to articulate a rational connection between the facts found and the decision made, and by failing to employ the best available scientific information as required by 16 U.S.C. § 1536(a)(2).

Appellant Environmental Protection Information Center (EPIC) is a non-profit corporation dedicated to the preservation, protection, and restoration of biodiversity, native species,

watersheds and natural ecosystems in northern California. EPIC has over 3,000 members throughout northern California. EPIC maintains its offices in Humboldt County, California.

Appellant Klamath Forest Alliance ("KFA") is a non-profit corporation dedicated to promoting "sustainable ecosystems" and "sustainable communities" within the Klamath-Siskiyou mountains of SW Oregon and NW California. KFA's primary office is in Etna, California.

Appellant members use and enjoy the Klamath National Forest, including the Salmon River Ranger District, Salmon River watershed, and Knob Timber Sale area, for hiking, fishing, hunting, camping, photography, scenery, and wildlife, and engaging in other personal, scientific, and recreational activities. Appellant members intend to continue to use and enjoy this National Forest frequently and on an ongoing basis in the future. However, the aesthetic, recreational, scientific, educational and religious interests of Appellant members will be adversely affected and irreparably injured if the Klamath National Forest proceeds to implement the Knob Timber Sale. These are actual, concrete injuries caused by the Klamath National Forests' failure to comply with mandatory duties under NEPA, NFMA, ESA, CWA, PCWQCA, NFP ROD, LRMP, APA, FSM, and FSH.

Appellants have standing to appeal the DN/FONSI because we expressed interest and provided comments on the Sale before the end of the 30-day comment period on the EA (previous comments are hereby incorporated into this appeal by reference). According to the DN/FONSI, "Appeals must be filed within 45 days from the publication of a legal notice in the Siskiyou Daily News." DN/FONSI, p. 8. The date that this legal notice was filed was March 14, 2002, and therefore the appeal filing period would expire on Sunday, April 28, 2002, in accordance with 36 C.F.R. § 215.13(b)(1). According to Forest Service Appeal Regulations "when the filing period would expire on a Saturday, Sunday, or Federal holiday, the filing time is extended to the end of the next Federal working day." 36 C.F.R. § 215.13(b)(2). The appeal filing deadline is therefore extended to Monday, April 29, 2002, and this Appeal is timely.

The Klamath National Forest has failed to address many of the significant concerns that Appellants have raised in comments, has failed to perform mandatory duties in the planning and preparation of the Sale, and has failed to provide adequate analysis of significant environmental impacts of the proposed Sale, resulting in the violation of several laws and regulations. For these reasons and others, Appellants request administrative review of the EA and DN/FONSI. Appellants further seek and request relief in the form of a full remand of the DN/FONSI, and a requirement that the Klamath National Forest prepare an Environmental Impact Statement to analyze the significant environmental impacts of the proposed timber sale, in accordance with 42 U.S.C. § 4332(2)(C).

STATEMENT OF REASONS

Issue 1: Watershed Effects

A. Failure to adequately analyze and disclose cumulative watershed effects.

NEPA requires the analysis and consideration of cumulative effects when evaluating proposed actions. 40 C.F.R. § 1508.25(a). A cumulative impact on the environment "results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions...." 40 C.F.R. § 1508.7. Cumulative impacts may result from "individually minor but collectively significant actions taking place over a period of time." *Id.* In determining whether a project will have a "significant" impact on the environment, an agency must consider "[w]hether the action is related to other actions with individually insignificant but cumulatively significant impacts." 40 C.F.R. § 1508.27(b)(7). If several actions have a cumulative environmental effect, "this consequence must be considered in an EIS."¹

The EA and project file for the Knob Timber Sale provide considerable evidence to demonstrate that significant cumulative watershed effects are currently occurring within the project area, and that the proposed logging will contribute to and exacerbate these cumulative watershed effects. However, the EA fails to provide sufficient "quantified" or "detailed" information or taken a requisite "hard look" at potential cumulative watershed effects as required by NEPA.² Specifically, the EA: 1) fails to analyze and disclose cumulative watershed effects at all relevant spatial scales, and 2) fails to demonstrate that project design features and mitigation measures will reduce cumulative watershed effects to a level of insignificance.

1. The EA fails to analyze and disclose cumulative watershed effects at all relevant spatial scales.

The EA provides a list of current and reasonably foreseeable future actions within the Knob Timber Sale assessment area, and states that these actions were included in the cumulative watershed effects modeling analyses for the sale. EA, p. 16-17. However, the cumulative watershed effects analysis is limited to the assessment of actions within the ten 7th field subwatersheds that contain proposed logging units. EA, p. 21, 22, F-5. Several of the projects listed in the EA on pages 16 and 17 occur in other subwatersheds within the North Fork, Upper South Fork, and Lower South Fork Salmon River 5th-field watersheds, but these impacts are not incorporated in the CWE analyses and modeling. For example, the CWE analyses fail to account for logging impacts in the Glassups TS (670 acres), Upper South Fork TS (1,503 acres), and Comet Administrative Study (1,880 acres) that are within additional 7th field subwatersheds in the North and South Fork Salmon River watersheds. The EA and project record fails to even mention the acreage affected by each of the projects listed on pages 16-17, let alone analyzing their cumulative watershed effect.

The EA states that "Impacts from sedimentation and other CWE's in project drainages, if any, would have negligible indirect or cumulative effects on anadromous fish habitat in the North and South Fork Salmon River mainstems, in the mainstem of the Salmon River, or in the Klamath mainstem and estuary." EA, p. 33. The Fish BA/BE also states that "Increases in CWE at scale

¹Neighbors of Cuddy Mountain v. United States Forest Service, 137 F.3d at 1378 (9th Cir. 1998).

²City of Carmel-By-The-Sea v. U.S. Department of Transportation, 123 F.3d at 1151 (9th Cir. 1997).

larger than seventh-field subwatersheds will be negligible.” Fish BA/BE, p. 28. However, there is nothing in the EA or project record to indicate that an analysis at these larger spatial scales was conducted, and the EA and project record fail to provide any data, evidence, or analysis to support this summary conclusion. In fact, the EA explicitly limits the CWE analysis to the ten affected 7th-field subwatersheds only, thereby preventing such an analysis from occurring.³ Although the checklist for documenting environmental baseline and effects of proposed actions on relevant indicators (“Matrix of Pathways and Indicators”) incorporated in the Fish BA/BE make determinations as to the effects of the project on the North Fork, Upper South Fork, and Lower South Fork Salmon River 5th-field watersheds, there is no discussion, data, analysis, or evidence provided anywhere in the EA or project file to document how these determinations were made. As the Ninth Circuit held in *Idaho Sporting Congress v. Thomas*, NEPA does not allow an agency to rely on the conclusions and opinions of its employees without providing hard data and analysis for both the public and the court to review (137 F.3d at 1150). Instead, “NEPA requires that the public receive the underlying environmental data from which a Forest Service expert derived her opinion.” *Id.*

It is well documented that significant cumulative effects currently exist within the North Fork, South Fork, and Main Stem Salmon River watersheds, and that conditions within individual subwatersheds contribute to this larger-scale degradation. Assessing CWEs only at the subwatershed scale masks degradation at other spatial scales and fails to address the cumulative effects of all combined activities affecting the Salmon River watershed. Thus, the CWE analysis conducted for the Sale is inherently incapable of evaluating the downstream cumulative watershed effects that are of most concern (e.g., increased sedimentation, altered temperature patterns, deficits of large woody debris, altered hydrologic regime, anadromous fish habitat conditions). By failing to account for, consider, or disclose actions in other 7th-field subwatersheds within the affected 5th-field subwatersheds or at the basin scale, the CWE analyses ignores impacts from all past, present, and reasonably foreseeable future actions in other 7th-field subwatersheds within the North Fork, Upper South Fork, Lower South Fork, and Main Stem Salmon River 5th field watersheds and the Salmon River basin, thereby preventing the EA from taking the requisite “hard look” at potential cumulative watershed effects.⁴

2. *The EA fails to demonstrate that project design features and mitigation measures will reduce cumulative watershed effects to a level of insignificance.*

The EA and project record provide considerable evidence that significant cumulative watershed effects are already occurring in the affected 7th field subwatersheds, fifth field watersheds, and Salmon River basin. Evidence includes but is not limited to:

?? CWE risk ratios (ERA/TOC model) are near or above acceptable management thresholds within several subwatersheds, including Methodist Creek (0.80 ERA/TOC), Kanaka/Olsen

³ For example, “The Knob TS specialist Report for CWE Models for Surface Erosion, Runoff risk (ERA/TOC), and Mass-Wasting contains methods used in the modeling and displays data outputs based on the alternatives for the 7th field drainages that comprise the assessment area.” EA, p. 22.

⁴ Consideration of cumulative impacts requires “some quantified or detailed information; . . . [g]eneral statements about ‘possible’ effects and ‘some risk’ do not constitute a ‘hard look’ absent a justification regarding why more definitive information could not be provided.” *Neighbors of Cuddy Mountain v. USFS*, 137 F.3d at 1379-80. The cumulative impact analysis must be more than perfunctory; it must provide a “useful analysis of the cumulative impacts of past, present, and future projects.” *Muckleshoot Indian Tribe v USFS*, 177 F.3d at 810.)

(0.82 ERA/TOC), Knownothing Creek (1.00 ERA/TOC), and McNeal/Glasgow (3.02 ERA/TOC) drainages.⁵

- ?? Surface erosion and mass wasting modules indicate that current sediment inputs in the ten 7th-field subwatersheds greatly exceed naturally occurring background levels and established thresholds (surface erosion = 111% - 817% over background; mass wasting = 40% - 406% over background). Knob TS Specialist Report: Cumulative Watershed Effects (CWE) Models for Surface Erosion, Runoff Risk (ERA/TOC), and Mass Wasting. Other 7th-field subwatersheds and 5th-field watersheds within the Salmon River basin also contain excessive sediment loads and inputs, thoroughly documented in the North Fork, Upper South Fork, and Lower South Fork Watershed Analyses.
- ?? Environmental baseline indicators for the affected 7th and 5th field watersheds confirm the CWE modeling results that watershed conditions are currently impaired (e.g., 2 watersheds “not properly functioning” for disturbance history, 1 watershed “not properly functioning” for roads, 6 watersheds “at risk” for disturbance history, 4 watersheds “at risk” for sediment, 4 watersheds “at risk” for substrate, 8 watersheds “at risk” for drainage net increase, 5 watersheds “at risk” for peak/base flows, 7 watersheds “at risk” for road density, 9 watersheds “at risk” for riparian reserves, 5 watersheds “at risk” for pool frequency, 4 watersheds “at risk” for pool quality). Fish BA/BE, pp. 58-100. These environmental indicators are based on actual empirical data describing on-the-ground conditions, and are not simply based on modeling results; however, they are generally consistent with and appear to validate the results of the CWE models.
- ?? Two subwatersheds in the project area and three additional subwatersheds within the Lower South Fork Salmon River are identified in the KNF Forest Plan as being “Areas With Watershed Concerns” (AWWC) Fish BA/BE, pp. 59-100. Areas With Watershed Concerns are identified as being areas “with high CWE or unacceptably high levels of risk.” Evaluation of Cumulative Watershed Conditions in Indian Creek – Validation of Areas With Watershed Concerns, p. 12.⁶

The EA also provides ample evidence that the proposed Knob Timber Sale will contribute to existing significant CWEs, surface erosion, and mass wasting (e.g., “The estimates from the CWE model indicates the potential for projected increases in disturbance levels, surface erosion, and mass wasting...” DN/FONSI, p. 5; “Timber harvest, fuel reduction, and road activities, could cause soil erosion or trigger slope failure, which could increase sediment in streams and affect listed fish species.” EA, p. 7; Tables 3 -1 to 3-3, EA, pp. 25-26). The EA also provides evidence that present and future planned actions (e.g., Glassups Timber Sale and Comet Administrative Study) will also contribute to and exacerbate existing significant CWEs in the affected watersheds (e.g., EA, pp. 26-31). However, no analysis or discussion is presented as to how these contributions will exacerbate existing CWEs, relate them to beneficial uses, or describe how these impacts will affect watershed recovery. In addition, as mentioned above, the

⁵ “The TOC is an estimated upper limit to land use, expressed in the same terms as percent ERA.” KNF FEIS, p. 4 - 23; “An ERA/TOC ratio of greater than 1.00 indicates that disturbance levels have exceeded the natural capacity of the watershed to “absorb” these disturbances. A basin is assumed to be healthy again as soon as sub-threshold ERA values are re-attained.” Westside CWE Process Paper, 1998

⁶ “A number of areas were identified as having watershed concerns due to their current condition. They would be managed to improve their watershed condition. Until they met certain recovery standards, no more than minimal timber yields would be removed from these areas and then only if the removal aided in improving watershed health.” KNF FEIS, p. 2-12; The Lower South Fork Salmon WA (following the KNF LRMP) identifies the west side of Knownothing and the entire McNeil Creek watersheds as having “watershed concerns” (Fig. 3 -2). This includes Knob units 201, 202, 204, 206, 208 and 209. The east side of Methodist is also listed for watershed concerns. This includes Knob units 114, 113, 115 and 111.

CWE analyses fail to address cumulative impacts from these activities outside of the ten 7th-field subwatershed directly affected by the Knob Timber Sale.

Despite the presence of existing significant CWEs, evidence that the Knob timber sale will contribute to these CWEs, and evidence that other current and planned activities will further exacerbate these CWEs, the EA dismisses cumulative watershed impacts from the Knob timber sale as “minor,” “insignificant,” “negligible,” and having a “low risk” of adversely affecting water quality and beneficial uses (e.g., EA, pp. 31 -33, F-1, F-2, F-4, F-7; DN/FONSI, pp. 3,4,5,6; Fish BA/BE, pp. 26, 27, 29). The EA and project record relies on the following rationale to support these conclusions: a) The small size and widely dispersed nature of the actions would minimize impacts; b) treatment intensities are generally low; c) project design standards including BMPs would minimize impacts; and d) the retention of buffers around unstable lands and stream courses will prevent direct impacts and minimize watershed effects. These arguments are inadequate for the following reasons:

- ?? Simply claiming the impacts of the individual Knob TS units are small and dispersed ignores cumulative impacts in the affected watersheds. Cumulative impacts may result from "individually minor but collectively significant actions taking place over a period of time." 40 C.F.R. § 1508.7. In determining whether a project will have a "significant" impact on the environment, an agency must consider "[w]hether the action is related to other actions with individually insignificant but cumulatively significant impacts." 40 C.F.R. § 1508.27(b)(7).⁷
- ?? Treatment intensities are NOT generally low - The Knob Timber Sale will clearcut 30 acres, log modified clearcuts (shelterwood, seed tree) on another 89 acres, clearcut 2- 2.5-acre patches on another 59 acres⁸, and remove large overstory trees on another 77 acres. 215 acres of the sale will be either tractor or cable logged. These impacts contribute to existing significant CWEs. As stated above, the EA admits that there will be increases in surface erosion, mass wasting, and CWEs from the project. Project design features and BMPs are intended to reduce on-site impacts. They only minimize surface erosion and mass wasting concerns, and do not eliminate CWE's altogether.⁹ In addition, PDFs and BMPs do nothing to address or mitigate hydrologic impacts associated with canopy removal, and the EA fails to include any analysis or evidence that cumulative hydrologic impacts will be effectively mitigated.¹⁰ In addition, The EA and project file assert that unstable areas will be avoided but the KNF geomorphic database indicates that several units are located on earthflow terrain. Experience in the Klamath Mountains indicates that these areas can and do fail

⁷ For example, “The FEMAT report, which was instrumental in developing ACS, emphasized the importance of curtailing incremental aquatic habitat degradation because the effects of numerous actions can cause significant damage to fish species and their habitat. See FEMAT, *Forest Ecosystem Management: An Ecological, Economic, and Social Assessment V-2* (1993).” *Pacific Coast Federation of Fisherman’s Associations v. NMFS*, 253 F.3d 1147 (9th Cir. 2001).

⁸ According to USFWS’ Biological Opinion for the Knob Timber Sale (February 22, 2002), “Approximately 20 percent of [a group selection unit] is regeneration harvested in 2- to 2.5-acre groups.” (Wildlife BO, p. 4). The group selection treatment is prescribed for a total of 295 acres in the Knob timber sale, therefore 20% of this total is equal to 59 acres.

⁹ “Attempts to avert cumulative impacts through the implementation of best management practices” (BMP’s) have failed in the past in part because they ...did not fully reflect the possibility that significant adverse cumulative effects might accrue even from reduced levels of impact.” (Reid, L.M., *Cumulative Watershed Effects: Caspar Creek and Beyond*, Pp. 117-127 in USDA Forest Service General technical Report PSW-GTR-168, 1998).

¹⁰

catastrophically even when NOT clear cut. Reduction in root strength increases the risk of failure and subsequent CWEs.

?? Riparian and unstable area buffers are intended to reduce mass wasting risk and minimize sediment delivery to streams, but they do not eliminate them altogether. In addition, buffers do not mitigate hydrologic impacts associated with canopy removal. For example, the Klamath National Forest FEIS states: "Leave areas are difficult to maintain in some areas due to logging damage and site preparation burning. While the use of leave areas is one of the most commonly used landslide mitigation measures, it deals only with on-site effects of the vegetation, primarily the mechanical support provided by the roots. It does not address the potential changes in slope hydrology which may be caused by vegetative manipulations upslope from the area. In summary, it is a fairly straightforward process to leave vegetation on an unstable site to retain local support, but the effectiveness of this action is linked to the assumption that root reinforcement is the only role trees play in the stability of a slope. It is much more difficult to mitigate the potential adverse effects of reduced evapotranspiration, since much larger areas are involved and the hydrology of slopes is generally quite complex." KNF FEIS, p. 4-7.

?? While prevention or minimization of adverse impacts at the site-level is indeed necessary, it is not sufficient to avoid contributing to significant adverse cumulative effects (CEQ 1997). The argument that applying a BMP while conducting a specific forest practice minimizes site-specific effects and thus also minimizes cumulative effects is logically flawed. Every BMP is an action and has an effect. Thus generally, the more the BMPs are applied, the greater the cumulative effect. Only by minimizing the number of actions, i.e., the number of individual applications of BMPs, would cumulative effects be minimized (Beschta et al. 1995). However useful BMPs are in minimizing effects of individual actions, they still do not address the cumulative effects of multiple actions occurring in the watershed which, though individually "minimized" through application of site-specific BMPs, may still be significant and have undesirable consequences for beneficial uses such as clean water and fish habitat.¹¹ The EA fails to address the potential cumulative effects associated with all potential activities, despite the implementation of BMPs and other mitigation measures, in violation of NEPA 40 C.F.R. §§ 1502.14; 1502.16; 1508.14. The EA also fails to meet the standards under NEPA which require the Forest Service to provide analytical data or research which substantially supports the efficacy of the proposed mitigation measures designed to minimize or prevent significant environmental damage to the soils and water quality in the Sale area. 40 C.F.R. § 1502.24.¹²

?? As the CEQ explains: "to ensure that environmental effects of a proposed action are fairly assessed, the probability of the mitigation measures being implemented must also be discussed. Thus the EIS and the Record of Decision should indicate the likelihood that such measures will be adopted or enforced by the responsible agencies. Sections 1502.16(h), 1505.2. If there is a history of nonenforcement or opposition to such measures, the EIS and

¹¹ "Even with [the protection of Riparian Reserves], the Northwest Forest Plan is careful to point out that riparian reserves and their accompanying standards and guidelines are not in themselves sufficient to reverse the trend of aquatic habitat degradation. ...The Northwest Forest Plan thus recognizes that BMPs alone are not sufficient, although they can be an important component of a broader, landscape-scale approach to recovery from impacts." Reid, 1998.

¹² See *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146, 1149-50 (9th Cir. 1998).

Record of Decision should acknowledge such opposition or nonenforcement. If the necessary mitigation measures will not be ready for a long period of time, this fact, of course, should also be recognized." (CEQ 40 Questions). The Knob timber Sale EA and project record fail to provide this required information and discussion. By failing to discuss or disclose the adequacy, effectiveness, and likely implementation of proposed mitigation measures and other Sale design features, the EA and Sale record violate NEPA. 40 C.F.R. §§ 1502.14; 1502.16; 1508.14. They also violate the Forest Service Handbook, which states: "For each alternative, estimate the direct, indirect, and cumulative environmental effects, including the effectiveness of the mitigation measures, that would result from implementing each of the alternatives, including the no action alternative." F.S.H. 1909.15(10)(15).

- ?? The site-specific project design features and mitigation measures to be implemented in the Knob Timber Sale (EA, pp. 12-15; Appendix B) do not address the risk of runoff, and therefore do not mitigate for the increased CWEs detected by the ERA/TOC model. ("The ERA/TOC model provides a simplified accounting system for tracking disturbances that affect watershed processes, in particular, estimates in changes in peak runoff flows influenced by disturbance activities. ... ERA/TOC (or "risk ratio") estimates the level of hydrological disturbance or relative risk of increased peak flows and consequent potential for channel alteration and general adverse watershed impacts." (Westside CWE Process Paper, 1998).
- ?? The DN/FONSI argues that CWEs are not a concern because "the situation was not as severe as the modeling alone would indicate due to inability of the model to accurately express all conditions on the ground." DN/FONSI, p. 2. However, the three CWE models (ERA/TOC, surface erosion, and mass wasting), the Matrix of Pathways and Indicators, and the three Salmon River Watershed Analyses all conclude that significant CWEs are currently present within the affected watersheds. The Forest decided to use these models in the first place, and use them to justify all of their forest management decisions. It is not appropriate for Forest Service to simply dismiss the results when they don't support their position in a particular circumstance. In addition, this argument fails to address the fact that other data and evidence confirms the models' results. The EA also argues that CWEs are not a concern because "the evaluation of experienced professionals in the fields of Fish Biology and Hydrology reviewed actual site conditions and found that water quality standards would be met." The EA fails to provide any data, analysis, or evidence to indicate that this analysis occurred or to support the conclusions made by the "professionals." NEPA does not allow an agency to rely on the conclusions and opinions of its employees without providing hard data and analysis for both the public and the court to review. Instead, "NEPA requires that the public receive the underlying environmental data from which a Forest Service expert derived her opinion."¹³ In addition, the site-specific review could only address site-specific resource concerns related to erosion and mass wasting (note: they could not completely eliminate increased surface erosion and mass wasting risk, only minimize it). More importantly, the field review could not address impacts to forest hydrology from the proposed logging and which are not adequately mitigated by BMP's and the project design features. The ACS is explicitly intended to maintain good quality aquatic habitat where it exists, and restore it where it is degraded. The only effective way to address CWE's in situations like this is to regulate the rate of harvest and defer logging in cumulative impacted watersheds until conditions recover.

¹³ Idaho Sporting Congress v. Thomas, 137 F.3D at 1150 (9th Cir. 1998).

The Knob and other planned timber sales will exacerbate existing cumulative impacts in degraded watersheds, contrary to the intent of the ACS and Basin Plan.

?? Contributing to an existing significant CWE is itself a significant impact, and delays watershed recovery. (“It is important to note that an activity is partially responsible for a significant cumulative impact if it contributes to an incremental addition to an already significant cumulative impact. For example, if enough excess sediment has already been added to a channel system to cause a significant impact, then any further addition of sediment also constitutes a significant impact.” Reid, 1998.)

In summary, all evidence available in the EA and project file indicates that existing significant CWEs are already occurring within the affected area, and that the Knob Timber Sale and other current and planned timber sales will exacerbate and contribute to these CWEs, further degrading aquatic conditions and delaying watershed recovery. The EA and DN/FONSI, however, conclude that these cumulative impacts are “insignificant” for the purposes of NEPA, but do not provide sufficient reasons, analysis, or evidence to support this conclusion. The EA and project record therefore fail to adequately analyze and disclose significant cumulative watershed effects, and fails to support the “Finding of No Significant Impact” for the sale, in violation of NEPA. 40 C.F.R. §§ 1500-1508.

B. Failure to demonstrate compliance with the Aquatic Conservation Strategy.

1. The EA fails to properly assess ACS compliance at multiple scales.

The Aquatic Conservation Strategy (ACS) is clearly intended to be implemented and assessed at multiple spatial scales. FEMAT, pp. V-58, V-59. The CWE analysis in the Knob EA fails to address the primary intent of the ACS, which "seeks to prevent further degradation and restore habitat over broad landscapes as opposed to individual projects or small watersheds." ROD, p. B-9. The decision to assess CWEs only in the ten subwatersheds within the project area and the failure to consider effects at the fifth-field watershed and basin-scales thus constitutes a violation of the ACS, which requires that agencies have adequate information to determine whether proposed actions will "maintain and restore" watershed conditions. ROD, p. B-10.¹⁴ This approach also ensures that significant cumulative effects of concern are not adequately considered at all relevant spatial scales, in violation of NEPA, the federal CWA, and North Coast Region Water Quality Control Plan.

C. Failure to demonstrate compliance with Basin Plan water quality objectives.

The EA states “Although the BMP process is the method of evaluating the impact of silvicultural and road activities on water quality, the evaluation of the Knob TS also utilized the regulatory guidelines in the Board’s North Coast Water Quality Control Plan (WQCP). The following Water Quality Objectives are of specific relevance to this project:

¹⁴ “The purpose of ACS is to maintain and restore ecosystem health at watershed and landscape scales to protect habitat for fish and other riparian -dependent species and resources and restore currently degraded habitats. This general mission statement in NFP ...does nothing to restore habitat over broad landscapes if it ignores the cumulative effect of individual projects on small tributaries within watersheds.” Pacific Coast Federation of Fisherman’s Associations v. NMFS, 265 F.3d at 1028 (9th Cir. 2001)

“Sediment: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. (WQCP, pg. 3-3.00)

Turbidity: Turbidity shall not be increased more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof.’ (WQCP, pg. 3.3.00)” EA, p. 21; see also Fish BA/BE, p. 48.

The DN/FONSI concludes “The proposed project does not threaten a violation of Federal, state, or local environmental protection laws. It is consistent with ...The Clean Water Act and the California Porter Cologne Water Quality Act (pages 21, F-1 through F4, and F-6 through F-7 of the EA).” DN/FONSI, p. 8.

The EA and project record (including the pages referenced in the DN/FONSI above, Fish BA/BE, Earth Scientist’s Report, and Knob TS Specialist Report for CWEs) do not contain any hard data or evidence to support this conclusion, and contain no further discussion of this issue. By failing to provide data or evidence to support a conclusion, the DN/FONSI violates NEPA.¹⁵ By failing to provide any evidence that water quality objectives outlined in the Basin Plan are currently being met, that beneficial uses are being protected, and that the proposed timber sale will not violate those objectives, the DN/FONSI fails to demonstrate compliance with the Basin Plan, and violates NEPA’s requirement that Federal actions do not threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment.” 40 C.F.R. §1508.27.

Comments provided by the North Coast Region Water Quality Control Board staff on the EA and DN/FONSI (hereby incorporated by reference, and attached to this appeal) confirm that water quality objectives are not currently being met because of significant adverse cumulative effects, that concerns expressed by Water Board staff were not adequately addressed, and that reasonable measures recommended by the Water Board staff to address “controllable water quality factors” were not incorporated into the sale. Because the EA do not demonstrate compliance with applicable water quality objectives and do not implement all controllable water quality factors, and DN/FONSI fails to demonstrate compliance with Basin Plan requirements, and fails to demonstrate that there is not a “controversy” over the environmental effects of the sale, in violation of NEPA. 40 C.F.R. § 1508.27.

The DN/FONSI argues that “Some of the measures requested by the [Water Quality Control Board staff] would not allow the area to move towards the desired condition and others measures requested were not within the scope of this proposal.” DN/FONSI, p. 2. The EA fails to demonstrate that logging 589 acres of mature and old growth forest in a key watershed will move the area towards the desired condition for aquatic habitat, fisheries, and other beneficial uses. In fact, evidence in the EA supports the opposite conclusion – that the Knob TS will cause additional CWEs in significantly impacted watersheds and that the Klamath National Forest is planning further damaging activities in these same watersheds. Compliance with existing laws and regulations protecting water quality and beneficial uses (ESA, NFP, CWA, Basin Plan) are not discretionary and are not subservient to timber harvest objectives. The “other measures” Water Board staff requested, such as implementation of silvicultural and yarding methods that

¹⁵ Idaho Sporting Congress v. Thomas, 137 F.3D at 1150 (9th Cir. 1998).

have the least impact and implementation of additional measures to directly reduce CWEs (e.g., obliteration of unnecessary roads and skid trails, limiting access with locked gates, upgrade and/or removal of watercourse crossings, rocking of roads within or adjacent to Riparian Reserves, etc.) were deemed necessary by Water Board staff to meet water quality objectives and adequately protect beneficial uses. The FS failed to provide any reason why these activities were “outside the scope of the proposal” and why they consider them discretionary. The additional requested measures clearly relate to “controllable water quality factors” and the failure of the Klamath National Forest to include them violates the Porter Cologne Water Quality Control Act and Basin Plan. (“Controllable water quality factors shall conform to the water quality objectives contained herein. When other factors result in the degradation of water quality beyond the levels or limits established herein as water quality objectives, then controllable factors shall not cause further degradation of water quality. Controllable water quality factors are those actions, conditions, or circumstances resulting from man’s activities that may influence the quality of the waters of the State and that may be reasonably controlled.” Basin Plan, p. 3 -1.00).

Because the DN/FONSI fails to articulate a rational connection between the facts found and the conclusions made, the decision to implement the sale is not based on a consideration of the relevant factors, the EA and project record fail to provide the underlying data used in an environmental analysis, the conclusions do not have a basis in fact, and there has been a clear error of judgment, the DN/FONSI is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law” and should be reversed. 5 U.S.C. § 706(2)(A).

D. Failure to adequately analyze and disclose impacts to Threatened, Proposed, Sensitive, and Management Indicator fish species.

The Fish BA/BE states that “implementation of Knob TS will not adversely affect anadromous salmonid populations because project design criteria will ensure that watershed effects from most treatment areas are minimized, and because the proposed action is consistent with ACS objectives.” Based on this rationale, the Fish BA/BE determined that the Knob Timber Sale “may affect, but is not likely to adversely affect SONCC coho salmon”, and “is not likely to result in a trend toward listing of KMP steelhead trout or Upper Klamath -Trinity (spring) chinook salmon.” Fish BA/BE, p. 30. However, as discussed above, the analysis conducted within the Fish BA/BE, EA, and project file do not support these conclusions, and in fact indicate that the project will contribute to existing significant cumulative watershed effects and adverse effects to fish species of concern. Because the EA and project record failed to substantively analyze cumulative effects, the Forest Supervisor is incapable of making proper determinations as to the effect of the proposed actions in combination with other past, present, and reasonable foreseeable future actions. Adequate details of past and present activities within the North and South Fork Salmon River watersheds were not properly linked to the direct and indirect effects of the proposed action on species. This leaves both the decision maker and the public without enough information to conclusively know that the project will have no significant effect to Threatened and Endangered Species, in violation of NEPA. 40 C.F.R. § 1508.27.

E. Failure to demonstrate that the project will protect and enhance “outstandingly remarkable values” in the Wild and Scenic Salmon River watershed.

Section 10 of the Wild and Scenic Rivers Act requires that “Each component of the national wild and scenic rivers system shall be administered in such manner as to protect and enhance the values which caused it to be included in said system” and that “In such administration primary

emphasis shall be given to protecting its esthetic, scenic, historic, archeologic, and scientific features.” 16 C.F.R. § 1281(a).

According to the Knob Timber Sale EA, “Portions of units located along the North Fork of the Salmon River, which is designated as Recreational in the Wild and Scenic River (WSR) System, have the potential to adversely affect WSR values. ...Outstandingly Remarkable values identified within the project area vicinity are for anadromous fish. The proposed activities are not anticipated to impede free flow conditions or cause direct and adverse effects on outstandingly remarkable fish values.” EA, pp. 9; see also p. 40.¹⁶ The EA further states that “A Section 7 WSR Act Analysis was not considered necessary because the scale of the action alternatives would not have adverse direct impacts that could invade or unreasonably diminish or adversely alter channel conditions, riparian and floodplain conditions, or adversely impact hydrologic and biologic processes.” EA, p. 9. To support these conclusions, the EA states that “The effects on Wild and Scenic Rivers were analyzed using the analysis of water quality on pages 17 through 34, the scenery analysis summarized on page 9, and other resource analyses in the EA. The conclusions are documented on pages 4 and 40.” EA, p. F-6.

As discussed in the previous section in this appeal, the analysis conducted within the EA, Fish BA/BE, Specialist Report for CWEs, and other documents in the project file do not support these conclusions, and in fact indicate that the project will contribute to existing significant cumulative watershed effects and adverse impacts to “outstandingly remarkable” anadromous fish values present in the Salmon River watershed.

The EA only mentions the four proposed timber harvest units within the actual WSR corridor. However, all of the proposed units in the Knob timber Sale have the potential and are likely to adversely affect anadromous fish in the Salmon River watershed. Because the EA and project record failed to substantively analyze cumulative effects, the Forest Supervisor is incapable of making proper determinations as to the effect of the proposed actions on anadromous fish. Adequate details of past and present activities within the North and South Fork Salmon River watersheds were not properly linked to the direct and indirect effects of the proposed action on fish species. This leaves both the decision maker and the public without enough information to conclusively know that the project will have no significant effect to anadromous fish species, in violation of NEPA. 40 C.F.R. § 1508.27.

In addition, under section 10 of the Wild and Scenic Rivers Act, the Forest Service has an obligation to ensure that all Forest Service actions are consistent with protecting and enhancing the river, which is substantively different than merely finding that the sale won't adversely affect the “outstandingly remarkable values” for which it was designated, in this case anadromous fish. Given the fact that the Fish BA/BE acknowledges that the Knob Timber Sale “may affect” coho salmon, chinook salmon, and steelhead trout in the Salmon River watershed, and the EA and CWE analyses document that adverse effects will occur due to increased CWEs, sediment production, and mass wasting, the DN/FONSI has demonstrated that the proposed project will not, in fact, protect and enhance the “outstandingly remarkable values” present in the Salmon River Watershed, in violation of 16 C.F.R. § 1281(a).

¹⁶According to the EA, “The Salmon River is important refugia for the last remaining wild spring Chinook salmon in the Klamath Basin and has one of the few remaining summer steelhead runs in California. It is suspected that coho salmon occur throughout the mainstem and forks of the Salmon River and in some of the larger tributaries.” EA, p. 21.

The Forest Service also has the affirmative duty under WSRA to cooperate with the State of California and other entities to diminish or eliminate pollution in the North Fork Salmon Wild and Scenic River. 16 U.S.C. § 1283(c). The State Regional Water Quality Board has identified several concerns with the proposed sale, including the lack of adequate data and monitoring results that could ensure that the sale will not further exacerbate conditions that are already surpass the Threshold of Concern. Unless and until the Forest Service has obtained such data and performed such monitoring, the agency has illegally failed to cooperate with the State as the WSRA requires.

Issue 3: Plants and Wildlife

A. Failure to adequately analyze and disclose cumulative effects to Threatened, Sensitive, and Management Indicator wildlife species.

The EA, DN/FONSI, and Wildlife BA/BE determined that the Knob Timber Sale “may affect, and is likely to adversely affect” the Threatened northern spotted owl (NSO) due to the destruction of 168 acres and degradation of an additional 92 acres of suitable NSO habitat, including 125 acres of Critical Habitat, which is anticipated to destroy three NSO nest sites. EA, p. 42; DN/FONSI, p. 7; Wildlife BA/BE, p. 19, 28; BO, p. 28. The BA/BE also determined that the timber sale “may impact individuals, but is not likely to result in a trend toward Federal listing or loss of viability” for peregrine falcon, northern goshawk, California wolverine, Pacific fisher, American marten, and pallid bat. Wildlife BA/BE, pp. 31, 34, 39, 41, 42, 45; DN/FONSI, p. 7. These effects determinations were made based on the direct and indirect impacts of the Knob Timber Sale on these wildlife species and their habitat.

According to the “Response to Comments” section of the EA: “The EA discusses cumulative effects in detail in Chapter 3. ...with the conclusion that there are no cumulative effects for other wildlife species of concern due to the lack of direct and indirect effects on those species. Additional supporting information is also available in the Biological Assessment/Evaluation for Wildlife (Wildlife BA).” EA, p. F -3. This argument does not logically follow the facts in this case. First, the BA/BE already acknowledges that direct and indirect adverse impacts to these wildlife species will occur, as noted above. Second, the BA/BE cannot make any reasonable conclusion regarding cumulative effects by simply looking at the direct and indirect effects of a particular activity – this conflicts with the very intent of cumulative effects, which are defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” 40 C.F.R. § 1508.7. According to the Forest Service Handbook, “Individual actions when considered alone may not have a significant impact on the quality of the human environment. Groups of actions, when added together, may have collective or cumulative impacts, which are significant.” F.S.H. 1909.15 15.1.

The EA and Wildlife BA/BE do not provide any analysis of cumulative effects on wildlife associated with the Knob timber sale and other past, present, and foreseeable future planned actions by the Forest Service within the Salmon River watershed that have or will remove suitable or critical NSO habitat (e.g., Upper South Fork Timber Sale, Glassups Timber Sale, and Comet Administrative Study). The EA completely fails to provide any analysis of cumulative

effects to wildlife species, and instead relies on the supposed “analysis” contained in the Wildlife BA/BE. However, the Wildlife BA/BE also fails to provide any substantive analysis of cumulative effects to wildlife species. The “Cumulative Effects” section on pages 49-51 of the Wildlife BA/BE focuses on explaining how previous management activities and fires have affected wildlife species in the Salmon River drainage, and how the Knob Timber Sale is so much better than previous timber sales in the area (“The Knob TS is a much different project than these ‘old style’ timber sales.” The project is scattered amongst ten different subwatersheds. Of the 28 units over half are less than 20 acres. Only seven units would have clearcut or regeneration type prescriptions (GTR, shelterwood or seed tree). The effects to late-successional species from this project are much less than previous projects.”). BA/BE, p. 50.

The only mention of cumulative effects from Forest Service activities in the BA/BE is the following:

“Although this section of the Biological Assessment is set aside to discuss cumulative effects from private land activities it will be mentioned what other Forest Service activities are occurring or are planned for the near future. Briefly, other large-scale activities (all timber sales) include:

1. Upper South Fork Timber Sale (7.5-10 mmbf) is just finishing harvest in St. Clair, Cecil Creek and Ray’s Gulch; Knob also has units in St. Clair and Ray’s gulch.
2. Glassups Timber Sale (about 4 mmbf) is planned to occur in Jessups and Glasgow Gulches; Knob has two units planned in Jessups Gulch. The EA has been completed but is has not sold yet.
3. Comet Administrative Study (still in the conceptual stage with some uncertainty if it will occur, where, or to what extent). Many of the potential units are adjacent to or near Knob units.” Wildlife BA/BE, p. 51.

Although the Wildlife BA/BE does mention that previous timber sales have adversely impacted NSO in the planning area, it does not provide any specific details about their specific impacts to NSO and its’ habitat in the project area, i.e., what timber sales had what effects on suitable habitat and wildlife population, and their relationship to the proposed actions. Further, the Wildlife BA/BE mistakenly believes that it was only required to address cumulative effects from private or state lands in the project area. Wildlife BA/BE, p. 50. This may be correct for a BA, which is only intended to meet ESA requirements. 19 U.S.C. § 1536(c). However, the document in question is also a BE, which is required to “ensure that Forest Service actions do not contribute to loss of viability of any native or desired non-native plant or contribute to animal species or trends toward Federal listing of any species,” and to “provide a process and standard by which to ensure that threatened, endangered, proposed, and sensitive species receive full consideration in the decisionmaking process.” F.S.M. § 2672.41. To accomplish this task, BE’s are required to assess cumulative effects of the proposed activity in relationship to all past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. 40 C.F.R. § 1508.7; F.S.M. § 2672.42.

The cursory discussion of cumulative effects in the Wildlife BA/BE hardly constitutes the “hard look” and substantive analysis of cumulative effects that is required by NEPA, and hardly forms the basis for a viability determination for wildlife species of concern. No mention is made of the acreage or habitat affected by these other activities, whether there will likely be any direct or indirect impacts from these other activities, or any information on population viability. The BA/BE’s statement on page 50 regarding the Comet Administrative Study is particularly lacking

and inaccurate because more detailed information of that action was readily available when the BA/BE was completed (April 24, 2001). For example, the Comet TS Specialist Report on CWE's, dated December 15, 2000 and incorporated by reference in the EA on page 4, outlines the specific silvicultural prescriptions, logging systems, and fuel treatments considered for the action, and the EA incorporates this information throughout.

In summary, there is no evidence or support in the EA and project record for a Finding of No Significant Impact, or compliance with the species viability requirements of the National Forest Management Act, because the cumulative effects analysis to wildlife species was not adequately discussed or disclosed in the EA or BA/BE, in violation of NFMA and NEPA. 36 C.F.R. § 219.27; 40 C.F.R. § 1508.7. This leaves both the decision maker and the public without enough information to conclusively know that the project will have no significant effect to Threatened, Sensitive, and Management Indicator wildlife species, in violation of NEPA. 40 C.F.R. § 1508.27.

B. The EA fails to prevent the destruction or adverse modification of northern spotted owl critical habitat.

The ESA and consultation regulations mandate that federal agencies evaluate the effects of its' actions on critical habitat for listed species. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(g)(3). According to the 1992 Final Rule designating critical habitat for the northern spotted owl: "Section 7(a)(2) of the federal Endangered Species Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to destroy or adversely modify critical habitat. This Federal responsibility accompanies, and is in addition to, the requirement in section 7(a)(2) of the Act that Federal agencies ensure that their actions do not jeopardize the continued existence of any listed species. Jeopardy is defined at 50 CFR 402.02 as any action that would be expected to appreciably reduce the likelihood of both the survival and recovery of a species. Destruction or adverse modification of critical habitat is defined at 50 CFR 402.02 as a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. The regulations also clearly state that such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical. 57 FR 1796.

The EA and DN/FONSI authorizes the direct removal of 125 acres of critical habitat in the project area. The DN/FONSI states that "Timber harvest and associated activities could have short-term adverse effects on individual NSOs due to the removal of some constituent elements of critical habitat" DN/FONSI, p. 4. This admission that the action will impact the "primary constituent elements" must necessarily result in a determination that the action results in adverse modification of critical habitat. 50 CFR § 402.02. Yet, the KNF and USFWS arbitrarily concludes that the adverse impacts "would not likely result in adverse modification" of this critical habitat. BO, p. 24

According to the Final Rule designated NSO Critical Habitat, "Activities that disturb or remove the primary constituent elements within designated critical habitat units might adversely modify the owl's critical habitat. These activities may include actions that would reduce the canopy closure of a timber stand, reduce the average dbh of the trees in the stand, appreciably modify the multi-layered stand structure, reduce the availability of nesting structures and sites, reduce the suitability of the landscape to provide for safe movement, or reduce the abundance or availability of prey species." 57 FR 1796. There is considerable evidence in the EA and project file that the

Knob Timber Sale will result in these very impacts, and yet the EA and DN/FONSI conclude that there will be no such impacts. The EA fails to provide data or evidence to support such a conclusion, and in fact, there is considerable evidence to support the opposite. Thus, the EA and project file are in violation of NEPA. 40 C.F.R. § 1508.27.

The BA/BE, EA, DN/FONSI, and BO for the Knob Timber Sale acknowledge that destruction of critical habitat will occur but fails to evaluate the continuing role of that habitat and its constituent elements in the conservation of the owl and also deems that destruction inconsequential in terms of the percentage of critical habitat lost. The EA completely fails to explain why these adverse effects do not result in a destruction or adverse modification determination, and fails to provide a rational connection between facts found and conclusions made.¹⁷

The U.S Fish and Wildlife Endangered Species Consultation Handbook explains that the adverse modification threshold is exceeded when the proposed action will adversely affect the critical habitat's constituent elements or their management in a manner likely to appreciably diminish or preclude the role of that habitat in both the survival and recovery of the species. USFWS Handbook, p. 4-39. The EA and project file has failed to assess the value of the critical habitat and the physical and biological features of the critical habitat that the project will destroy and adversely modify. The EA fails to assess whether destruction of owl critical habitat will appreciably diminish its value or adversely modify the features for which it was designated in violation of the plain meaning of the ESA. The EA cannot fulfill its duty by merely listing the amount of critical habitat destroyed.¹⁸ These failings render the DN/FONSI for the Knob Timber Sale arbitrary and capricious, in violation of 5 USC § 706(2)(A).

The DN/FONSI states "While the Selected Alternative would reduce some constituent component of habitat within Critical Habitat for the NSO, cumulative effects to CHU's are negligible. This is due to the small number of habitat acres lost, maintenance of constituent elements needed for life function, and the Late Successional Reserve system being in place and functioning as discussed on pages 17 through 21 of the EA. Due to these considerations, the Wildlife Biologist has determined that the Selected Alternative is "may affect, likely to adversely affect" NSO habitat, and "may affect, not likely to adversely affect" NSOs as documented in the Wildlife BA and on page 42 of the EA." DN/FONSI, p. 6.

These arguments are not supported by data or evidence in the EA or project file, and are insufficient to support a Finding of No Significant Impact. First, there is no cumulative effects assessment in the EA, and the Wildlife BA/BE and BO do not address the cumulative effects from other federal actions in the project area. Second, the ESA does not allow for the removal of constituent elements without a determination that the project would adversely modify the critical habitat. And third, the EA cannot rely upon other "protected" areas devised by the Northwest Forest Plan (NFP) such as Late Successional Reserves (LSRs) to allow for the destruction and adverse modification of lawfully designated critical habitat. The Forest Service's duty, pursuant to the ESA, is to determine whether the actions will appreciably diminish the value of critical habitat or adversely modify the physical or biological features for which the habitat was designated as critical. Nothing in the Act, regulations, or internal guidance allows the Forest Service or to satisfy this duty by pointing to other areas that have a "protected" status under the

¹⁷ Oregon Natural Resources Council, 109 F.3d 521, 526 (9th Cir. 1997).

¹⁸ Greenpeace v. National Marine Fisheries Service, 106 F.Supp.2d 1066 (W.D. Wash. 2000).

NFP, which may or may not provide suitable habitat for the owl. It is worth noting that the updated “Baseline Assessment” conducted by the USFWS and FS to assess LSR’s ability to support owls is based entirely upon untested habitat models and unsupported assumptions regarding the “likelihood” of NSO occupancy. This is because the Forest Service has failed to continue NSO surveys to determine actual occupancy of a given stand and information of population numbers, age, breeding, status, and reproductive success – all important factors in determining “a population’s ability to recover from the loss of individuals.” USFWS Handbook, p. 4-29. In addition, the clear language of the Final Rule designating NSO critical habitat emphasizes the importance of all critical habitat, not just a subset of it, and also emphasized the importance of all suitable northern spotted owl habitat for the recovery of the species.¹⁹

The ultimate goal of the ESA is to provide for the recovery of the northern spotted owl, and designated critical habitat is defined as the habitat that is essential to the recovery of the listed species. FWS is violating the ESA by not assessing the actions’ impacts on critical habitat in the context of spotted owl *recovery* independent of the impact on the species’ *survival*. As a result, FWS’s biological opinions that timber harvest of thousands of acres of critical habitat results in “no destruction or adverse modification” of critical habitat are arbitrary and capricious.

In summary, because the EA and DN/FONSI violate the federal agencies duty to prevent critical habitat modification and destruction, the DN/FONSI and underlying analyses are arbitrary and capricious, in violation of 5 USC § 706(2)(A).

C. Failure to assess impacts to northern spotted owl from habitat fragmentation, loss of connectivity, gopher baiting, and increased competition and predation .

The EA and project file fail to assess impacts from the proposed logging on NSO from habitat fragmentation and increased competition and predation, particularly from barred owls and great horned owls. The EA and project file argue that impacts will be small because the logging units are scattered and widely dispersed, “so the effects are diluted in their significance across the watershed.” BA/BE, p. 22. The BA/BE and EA neglects to mention that the “scattering” of clearcuts throughout a larger area is one of the primary factors leading to the listing of the NSO as Threatened in the first place. For example, the Final Rule designating NSO critical habitat states that “Timber harvest (predominantly clearcutting) along with natural perturbations results in the loss of owl habitat and increases forest fragmentation. In many areas, management practices have left small fragmented patches of older forests, separated by large stretches of younger forests that have yet to develop habitat characteristics used by owls. These practices have had an impact on the current presence and distribution of spotted owls, their survival and reproductive success, and their ability to successfully disperse, and also may have led to increased competition with barred owls (*Strix varia*) and predation by great horned owls (*Bubo virginianus*) and other open-forest predators. As habitat has become more fragmented, the direct effects of increased competition and predation may have become more pronounced. ...Timber harvest, employing a pattern of small dispersed clearcuts, eventually leads to a situation where the remaining patches of older forests are so small as to be influenced by edge effects (e.g., windthrow, microclimate changes) which may reduce the ability of the area to support

¹⁹ “Critical habitat consists of areas with habitat characteristics that are essential to the conservation of a listed species”; “Not all suitable nesting and roosting habitat was included in critical habitat. ...This does not mean that lands outside of critical habitat do not play an important role in the owls' conservation. These lands are also important to providing nesting, roosting, foraging, and dispersal habitat for owls.” 57 FR 1796.

successfully reproducing owls. ... Because of the extent of past harvest using these patterns, the remaining effective (i.e., to support successful reproduction) suitable nesting and roosting habitat may be considerably less than the total amount of owl habitat remaining over the owls' range." 57 FR 1796.

The EA, BA/BE, BO, DN/FONSI, and project file all fail to adequately assess the spatial distribution of suitable spotted owl habitat, impacts to connectivity from the proposed actions, increased fragmentation, impacts from incidental ingestion of prey poisoned from the gopher baiting, and increased competition and predation. Thus, the EA fails to adequately analyze significant impacts to NSO from the proposed action, in violation of NEPA. 40 C.F.R. § 1508.27.

D. Failure to adequately analyze and disclose impacts to Survey and Manage species.

The EA and project record fail to adequately analyze potential impacts to survey and manage plant and animal species within the project area, and fail to demonstrate that all necessary measures will be taken to protect existing S&M populations within the affected area. The EA and project file, including the Wildlife BA/BE, Botanical Analysis and EA Input for S&M, Watch List, and Noxious Weed plant species, conclude that sufficient surveys were conducted, and that all necessary mitigation measures will be in place for all S&M species. EA, p. 8. However, the EA and project file fail to provide sufficient information or analysis to document that this is the case, in violation of NEPA. 40 C.F.R. § 1508.27.

Issue 4: Soils and Long-Term Productivity

A. The EA fails to ensure that Regional Soil Quality Standards are met.

Regional Soil Quality Standards (SQS's) provide threshold values that indicate when changes in soil impairment and soil conditions would result in significant chance or impairment of the productivity potential, hydrologic function, or buffering capacity of the soil. Detrimental soil disturbance is the resulting condition when threshold values are exceeded. Regional SQS's included threshold values for soil cover, soil porosity, soil organic matter, soil moisture regime, and soil hydrologic function. The EA and project record fail to contain any information or analysis to ensure that these SQS's will be met, in violation of FSH 2509.18.

B. The DN/FONSI fails to ensure that soils and long-term site productivity will be protected and ensure the conservation of soil and water resources.

As a result of the failure to address the direct, indirect, and cumulative impacts associated with the proposed activities, the EA fails to ensure that timber will be harvested only where soils will not be irreversibly damaged. In addition, the EA fails to identify and disclose technology and mitigation measures necessary to prevent irreversible damage to soils and site productivity from the proposed activities. Because the EA and project record do not adequately analyze impacts on soils and long-term productivity, they fail to ensure compliance with the LRMP for the Klamath National Forest, which requires the Forest to "Maintain soil productivity" KNF LRMP, p. 4 -5. In addition, because of these deficiencies, the EA and project record also violate NFMA, which requires the Forest Service to: "... insure that timber will be harvested from National Forest System lands only where (i) soil, slope, or other watershed conditions will not be irreversibly damaged; ... (iii) protection is provided for streams, streambanks, shorelines, lakes, wetlands,

and other bodies of water from detrimental changes in water temperatures, blockages of water courses, and deposits of sediment, where harvests are likely to seriously and adversely affect water conditions or fish habitat ..." 16 USC 1604(g)(3)(E); 36 CFR 219.27.

Conclusions

Because the DN/FONSI fails to articulate a rational connection between the facts found and the conclusions made, the decision to implement the sale is not based on a consideration of the relevant factors, the EA and project record fail to provide the underlying data used in an environmental analysis, the conclusions do not have a basis in fact, and there has been a clear error of judgment, the DN/FONSI is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law" and should be reversed. 5 U.S.C. § 706(2)(A).²⁰

REQUEST FOR RELIEF

As documented in the STATEMENT OF REASONS above, the Knob Timber Sale EA and DN/FONSI violate the National Environmental Quality Act; National Forest Management Act; federal Endangered Species Act; federal Wild and Scenic Rivers Act; federal Clean Water Act, Porter Cologne Water Quality Control Act and North Coast Basin Plan; Record of Decision and Standards and Guidelines for the Northwest Forest Plan; the Klamath National Forest Land and Resource Management Plan; Forest Service Manual and Handbook; and the Administrative Procedures Act.

Appellant desire and request the following relief:

1. Declare that the decision to approve and proceed with the Knob Timber Sale without preparing a sufficient and legally adequate EIS is arbitrary, capricious, an abuse of discretion, and in violation of NEPA, NFMA, and FSM;
2. Declare that decision to approve and proceed with the Knob Timber Sale without adequate assurance that the Sale will ensure the diversity and viability of MIS and sensitive species is arbitrary, capricious, an abuse of discretion, and in violation of NFMA;
3. Declare that decision to approve and proceed with the Knob Timber Sale without adequate assurance that the Sale will ensure the diversity and viability of federally threatened species is arbitrary, capricious, an abuse of discretion, and in violation of the federal ESA;
4. Declare that the decision to approve and proceed with the Knob Timber Sale without adequate assurance that the Sale will not significantly impair or irreversibly damage soils, and comply with applicable Forest Plan standards, is arbitrary, capricious, an abuse of discretion, and in violation of NFMA;
5. Declare that the decision to approve and proceed with the Knob Timber Sale without adequate assurance that the Sale will ensure that water quality and beneficial uses will not be impaired is arbitrary, capricious, an abuse of discretion, and in violation of the federal CWA, PCWQCA, and North Coast Basin Plan;
6. Immediately withdraw the DN/FONSI and prohibit the Klamath National Forest from taking any action to implement the Knob Timber Sale, including advertising, offering for sale, or awarding any contracts, until such time as the Klamath National Forest has adequately

²⁰ See also *Motor Vehicle Mfrs. Ass'n v. State Farm Mutual Auto. Ins. Co.*, 463 U.S. 29, 42-43 (1983); *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360 378 (1989); *Oregon Natural Resources Council v. Lowe*, 109 F.3d 521, 526 (9th Cir. 1997); *Arizona Cattle Growers'*, 273 F.3d at 1236; *Idaho Sporting Congress*, 137 F.3d at 1150-1151; *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.2d 714, 717 (9th Cir. 1998).

analyzed and disclosed all potential direct, indirect, and cumulative environmental impacts in a legally sufficient EIS, and can demonstrate full compliance with all applicable provisions of NEPA, NFMA, ESA, WSR, NFP ROD, PCWQCA, Basin Plan, LRMP, FSM, and FSH.

Submitted this 29th Day of April, 2002.

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