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To: Kevin Martin, Forest Supervisor,
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Comments on the Farley Vegetation Management Project Draft Environmental Impact Statement

The Oregon Chapter of the Sierra Club and the League Of Wilderness Defenders-Blue Mountains Biodiversity Project have reviewed the Draft Environmental Impact Statement Assessment for the proposed Farley Vegetation Management Project and the accompanying notice dated August 11, 2008. The Sierra Club represents over 23,000 members throughout Oregon, including over 1,000 Juniper Group members throughout central and eastern Oregon. LOWD-Blue Mountains Biodiversity Project has many members and volunteers throughout the Northwest. Sierra Club members feel strongly about nature, wilderness, wildlife and the environment. Our members regularly enjoy hiking, camping, birding, wildlife watching, and ecological study within the national forests of central and eastern Oregon, including the project area within the Umatilla National Forest. Members and volunteers of the LOWD-Blue Mountains Biodiversity Project regularly use the Umatilla National Forest, including the project area, for hiking, ecological study, watching wildlife, viewing forest native botanical diversity, and avian species study. Our organizations are adamantly opposed to the Farley project as proposed, which if implemented would significantly and irreparably harm the ecological integrity of the area's forest ecosystems and salmonid waterways, harming wildlife, aquatic, and native botanical species habitat and populations, further jeopardizing viability for ESA and Oregon state listed species and regionally listed species of concern. We jointly have the following comments on the DEIS for the Farley Vegetation Management Project (Farley Project):

Re: Executive Summary:

We incorporate as part of our comments our enclosed field survey sheets and photographs documenting conditions in a representative sampling of Farley (aka Farley "Vegetation Management Project") sale units. We found the majority of the Farley timber sale area to consist of sale units in mid to high elevation (up to over 6,000 feet) natural mixed conifer moist and cold forests, which is verified in various places in the Farley DEIS. These forest types are naturally denser and have infrequent fire return intervals characterized by mixed severity to high severity naturally occurring intervals. It is therefore inappropriate to implement fire risk reduction through fuel reduction or to engage in density thinning ostensibly to improve forest health in the majority of the sale units despite this being two components of the three part expressed Purpose and Need for this project. The first paragraph under Purpose and Need on p. 2-3 of the DEIS is a broad statement characterizing the interior Columbia Basin as a whole, and the referenced surveys conducted in the 1880s are not tied specifically to the Farley analysis area. So it is not site specific to the project area and probably characterizes lower elevation drier stands which are more

prevalent in the region as a whole and which also drew the attention of earlier settlers and scientists as distinctly different from denser eastern forests. Lodgepole pine is known to come in after logging or wildfire disturbance in colder forests with infrequent fire regimes. The susceptibility of Lodgepole pine to widespread insect mortality described in the first two sentences of p. 2-4 is a completely normal scenario for Lodgepole pine, which is subject to stand-replacing fire as well. The stressing of Douglas fir, Grand fir and Subalpine fir by drier years and their susceptibility to defoliating insects, bark beetles and fungal diseases from this stress is admitted as being “a potential natural progression for these forest types” and leads to the high density of larger snags and down wood that makes such habitats ideal for species such as Pileated woodpecker, American marten, Northern Goshawk and a host of woodpeckers. Yet having admitted elsewhere in the DEIS that such old growth multi-strata mixed conifer forest is greatly reduced from historic levels for the area due to past logging, the Farley timber sale (aka Farley Vegetation Management Project) proposes to block natural ecological succession in these cold and moist mid to high elevation forest types and prevent evolution of mid seral stands into old growth by removing mature (large) live trees, large snags and large down wood, essential components for the development of old growth structure. There is no strong science supporting fuel reduction and density thinning for “forest health” in such forest types. Further, our surveys found (and document) that many of the sale units in fact already have significant multi-strata old growth structure, including large live old growth trees, large old growth snags, large down wood, and in some cases, higher canopy closure. Much of this old growth structure (except for live trees over 21” dbh unless they are cut as “hazard” trees) would be lost in planned “regeneration harvest” or virtual-clearcutting, violating Forest Plan requirements to not log old growth habitat when it is below the range of historic variability and defeating the purpose of promoting “long-term sustainability of forest and associated resources (such as fish, wildlife, scenic values, and recreation)”. (p. S-4)

According to the DEIS: “There are approximately 252 miles of streams in the Desolation Creek watershed. Compared to the rest of the Umatilla National Forest, on an aerial basis the project analysis area has more than twice the percentage of anadromous fish streams, half again the percentage of perennial streams, and approximately half the percentage of intermittent streams. Forest management activities for this project are proposed to occur in primarily C7 Special Fish Management and A4 Viewshed 2 management areas designated by the Forest Plan. The analysis area contains habitat for protected anadromous (salmon and steelhead) and resident fish species (bull and redband trout).” This means that the Farley analysis area is critical fish habitat for fisheries recovery. We are very concerned about potential impacts—such as sedimentation of streams and any reduction of shade in 303(d) listed for temperature streams—to water quality and fish from the Farley project’s proposed logging, road-building and burning. The DEIS admits that “—some proposed activities such as prescribed burning could affect streamside vegetation that provides shade and thus affect stream temperatures. Also, soil disturbance from road construction, maintenance, and obliteration could result in sediment reaching streams and degrading fish habitat.” Yet the amount of potential sediment entering streams and the degree of temperature increase in streams that occur from the Farley project are not quantified in the DEIS, nor is the potential impact to fish viability (both population and reproductive success) analyzed in the DEIS. We are opposed to planned logging, precommercial thinning, and roading in currently undeveloped areas, which are important refugia for wildlife species sensitive to disturbance and needing large home ranges of intact wild lands, such as Wolverine, Canada Lynx, Gray Wolf, and American Marten. Such undeveloped areas are now very rare on the landscape in eastern Oregon due to about a century of logging and roading, and need to be preserved to avoid uplisting of increasingly rare associated species, provide for watershed-scale ecological integrity, maintain carbon storage in the advent of catastrophic climate change, and preserve our natural heritage for future generations and indigenous people of the land as well as for the general public.

Proposed extensive opening of closed roads and absurdly high mileage new and temporary road construction is completely in contradiction to prevailing Forest Service direction to reduce the open road

network , decommission unnecessary roads and limit OHV use to designated trails, partly due to the lack of funding for the necessary road maintenance. Road construction and re-construction also makes no ecological sense, as it is detrimental to wildlife security (such as for elk, deer, wolves, wolverines and lynx) and can be expected to degrade water quality and fish habitat through sedimentation and removal of shade.

Regarding “big game” habitat, the Executive Summary admits that the summer range C7 areas are “currently below (Forest Plan) standards for satisfactory cover. In some localized areas where project activities are proposed, thinning, timber harvest, prescribed burning and reforestation activities could reduce vegetation that hides animals from human disturbance resulting in conversion of satisfactory big game cover to marginal cover, or marginal cover to forage. Road construction and use also can increase exposure of animals to human disturbance.” (p.S-6) In other words at least some (if not all) of the Farley proposed action alternatives would violate Forest Plan standards for satisfactory cover for “big game” species, despite repeated assurances throughout the EIS that the Farley project will not violate Forest Plan standards.

Similarly, regarding late/old structure forest habitat, the DEIS admits that another Forest Plan violation could take place: “Past harvest, other silvicultural treatment activities, and insect/disease epidemics have reduced the amount of late old structure habitat as well as reduced the connective corridors between remaining late old structure stands. Existing late and old structure habitat (single and multi-strata) is currently below the Historic Range of Variability (HRV) in the Moist and Cold Upland Forest potential vegetation groups. Single strata old growth is below HRV in the Dry Upland Forest potential vegetation group. Proposed thinning, timber harvest and fuels treatments would have the potential to further reduce this habitat type.” (p. S-6) Yet elsewhere the DEIS admits that the Forest Plan does not allow reduction of LOS habitat when it is below the historic range of variability.

We are concerned that the Farley project may also contribute to the sharp decline in Neotropical bird species and be in violation of the Neotropical Migratory Bird Treaty Act. We are also concerned that identified “species of interest” could be casually lost or uplisted due to the cumulative impacts of logging, roading, and burning that this project poses in combination with similar past management impacts and other ongoing impacts such as livestock grazing: “Proposed thinning, timber harvest and fuels treatments could reduce habitat for species of interest....Spring is a critical and vulnerable time for fledging of birds, small mammal reproduction in burrows, and sensitive plant flowering and seeding. These species could be disturbed or killed under prescribed burning activities, particularly neotropical migratory birds, which are protected under the Neotropical Migratory Bird Treaty Act.” (p. S-7) As we have expressed often before, we are opposed to prescribed burning (and logging, in some cases) during the Spring reproductive season for the reasons given above and as it is a very unnatural time for fire and depletes soil moisture for the coming dry season.

The DEIS includes this unusual admission: “Unit selection and project design and mitigation could create costs that render the commercial sale of trees unfeasible.” (p. S-7) In general, the Farley project seems so exorbitant in economic costs (at considerable net loss to the federal treasury) for implementing what seems to be an out-dated “business as usual” heavy logging timber sale with extensive new and temporary road construction and re-construction and going into last undeveloped areas in critical habitat for listed fish species, elk, and for several relatively rare species such as dispersing Wolves, Wolverines, Canada Lynx and American Marten—and in a quality recreational area adjacent to Wilderness with heavy visitation for natural values by the public—that this sale cannot reasonably go forward with any of the proposed alternatives, which the DEIS admits over and over again are very similar in their effects. The Farley project seems completely out of step with other Districts’ and Forests’ trend toward prioritizing more public consensus-based fire risk/fuel reduction projects in low elevation dry Ponderosa pine-dominated forest types adjacent to or close to local communities that could be affected by severe fire. This focus is also far more consistent with prevailing ideas for curbing the pace of climate change, by reducing the risk of unnaturally large scale fire where ordinarily there would be lower intensity, more frequent fire, rather than trying to block ecological succession to less frequent naturally large fires in

higher, moister forest types. In these higher, moister and colder forest types typical of most of the Farley area, retention of standing forest for carbon storage should be the priority for averting climate change extremes.

Regarding alternative development, the Purpose and Need should not be so narrowly defined as to preclude a full range of alternatives corresponding to public and agency concerns, for instance including a restoration only/non-commercial alternative geared toward removal of ecologically destructive roads and fuel reduction only of small diameter trees in dry, low elevation, Ponderosa pine-dominated sites.

Re: the discussion of alternative 3 that was rejected from consideration: There are unnatural gaps now in trees at or over 21" dbh (the reason for the 21" dbh limit in the eastside screens) due to past logging and increasingly there is a significant gap in trees in the 15" to 21" dbh size class across the region due to their being targeted for achieving commercial volume—a lower dbh size limit for logging such as 12" could help restore these size classes of trees over time and eliminate such gaps. Contrary to the assertion that the objective of activities proposed for this project includes an emphasis on retaining large diameter trees, most of the proposed logging would be virtual clearcuts (so-called "regeneration harvest"), which would involve removal of most trees under the 21" dbh limit and leave sale units very open, as admitted elsewhere in the DEIS. At this point, trees in the 15-21" dbh range must be considered larger trees for purposes of retention for wildlife, aesthetics, and carbon storage. Given that most density—especially in drier sale units more appropriate for fuel reduction—is much less than a mean of 12" dbh (generally the mean density causing competition stress between trees is only 8-10" dbh or less), a 12" dbh limit could go far toward meeting both the fire risk reduction and forest health components of the Purpose and Need—in lower elevation, drier habitat.

The Comparison of Proposed Action Alternatives chart on p. S-9 reveals that most logging planned is virtual clearcutting ("Seed tree", "Overstory removal", "Harvest Shelterwood"), so that only 353 to 390 acres of commercial thinning is proposed out of a total of 1,557 to 2,848 acres of commercial logging, making the fire risk reduction and forest health parts of the Purpose and Need very debatable. We oppose the artificial changing of tree species composition to Ponderosa pine, Western Larch, and Douglas fir in the higher elevation areas that appear to be naturally Grand fir/Ponderosa pine dominant. We are opposed to such conversion away from a more diverse tree species mix both through logging and replanting.

We are disturbed by statements that the intent of a proposed alternative is to conduct management actions on as many stands as possible that were initially identified in the proposed action (which was soundly rejected by the public.) (See p. S-10) Alternatives should make sense in their own right, not as an attempt to salvage a misguided and rejected plan.

There is an insufficient range of alternatives for the Farley project in violation of NEPA. No alternative offers less than 7,000 acres affected by different logging methods or an option of no new or temporary roads or no road re-construction or a non-commercial restoration-focused option. The most often repeated sentence in the DEIS appears to be: "The effects expected under all of the action alternatives generally would be the same; the difference between individual alternatives (in terms of magnitude of effect) would be proportional to the number of acres subjected to the various treatment activities under each alternative." (eg. pp. 126-127 and many other places under "Direct and Indirect Effects" regarding just about every value or issue analyzed.)

The "Consistency with the Forest Plan and Other Applicable...Laws, Regulations, Policies and Programs" statements throughout the DEIS (eg. p. S-11) do not describe exactly how proposed actions would meet Forest Plan and other legal requirements. Just saying they will is not enough to meet NEPA requirements.

There is also the problem throughout the DEIS of inaccurate and misleading portrayal of existing conditions and proposed actions. For instance, re: the discussion of effects common to all action alternatives on p. S-12, most of the Farley sale units we field-checked are naturally multi-strata mixed conifer and not historically single strata and thus shifting the site's growing potential to fewer trees by thinning may be inappropriate and a misapplication of the science cited to naturally more productive sites

in the case of the moist and cold mid to higher-elevation forest types which comprise most of the sale units. There is also the failure to disclose that most “harvest” units (at least among the large number we checked) are already old growth or have significant old growth structure—see our survey sheets re: number of old growth trees, snags and logs per acre and related descriptions and photographs of old growth structure in sale units. Instead the DEIS claims that “most of these stands are young” (p. S-12). Similarly, it is misleading to say that all action alternatives would reduce “stocking” in sale units “primarily by commercial and non-commercial thinning” (p. S-12) when most commercial logging planned is actually the virtual clear-cutting (not just thinning) of seed tree, overstory removal and shelterwood logging methods.

Contrary to the Purpose and Need objective of reducing fire risk, the DEIS admits that “—fire hazard would be increased for up to 5 years by the slash generated by non-commercial thinning” (p. S-14) and elsewhere admits that slash from commercial logging would also increase fire risk over a similar time period. It is not disclosed that the trees growing in to fill the gaps created by logging would be of the most highly flammable seedling size, and in the case of cold, higher elevation sites, would come in as very flammable young dense lodgepole, as can be seen from grown-in clearcuts in the area. However the DEIS does admit that: “Young stands may be particularly vulnerable due to low canopy base heights and small diameter thin-barked trees that are more easily killed by fire. Older forests tend to be more resistant to low and moderate intensity fires due to higher average crown base heights and thicker barked larger diameter trees that are not as easily killed by fire.” (p. S-14) So why are older forests (both mature mid-seral and late/old successional patches) being targeted for liquidation through virtual clearcutting removing most of the mature trees? Some of these stands appear mostly healthy and green and other older (generally cold, higher elevation forest) stands are in a natural state of decadence with insect infestation that makes them ideal habitat for Umatilla National Forest Management Indicator Species such as Pileated Woodpecker, Northern Three-toed woodpecker, American Marten, and elk, most of which we observed signs of in those sale units.

Also contrary to Purpose and Need statements, about restoring historical conditions, is the following admission: “There would not be much immediate change in progression to restore historical conditions to the landscape under any of the alternatives. There would still be an overabundance of young stand initiation and a scarcity of old growth in the treated units as well as throughout the analysis area.” (p. S-14) Wildfire risk is also not expected to be significantly reduced: “Wildfire risk is not expected to change appreciably under any of the proposed alternatives. Fire hazard would increase in areas where fuels generated by project activities are in excess of prescribed treatment maximums. From a fuel management perspective, there is not much overall difference between the alternatives...Fire danger would temporarily be increased due to the fuels (slash) created by the proposed activities in all action alternatives.” (p. S-15)

The DEIS does not disclose the predictable cost or lack of action in maintaining the artificially induced fuel reduction over time through continued small diameter thinning and prescribed burning. Often funds are not available to even remove the slash created by logging, leaving the area at higher fire risk.

The amount and effects of soil disturbance proposed needs to be quantified and specified. Total Maximum Daily Loads need to be disclosed and analyzed publicly before action is taken. (see p. S-16) There is no guaranteed Forest Service budget for road maintenance—new and re-opened roads are likely to contribute to future sedimentation problems. Long-term benefits versus “short-term” or immediate impacts should be assessed with a cost/benefit analysis incorporating ecological costs of logging, mechanical fuel reduction, burning and roading. There’s a large jump predicted in Equivalent Clearcut Area (from 4.5 % to 10.3 to 11.3%) for just one timber sale, leaving not much allowance for error or future activity or future fire effects before the threshold for changes in water yield or peak flows.

The DEIS acknowledges that: “Temporary increases in fine sediments from stabilization and obliteration of approximately 39 miles of existing closed road could occur....It is likely that the proposed activities combined with the effects of past and ongoing management activities would slightly increase the short-term risk for salmonids in the analysis area.” (p. S-18) Potential sediment increases and other impacts to salmonids and other fish species need to be quantified and specified. How would these impacts affect water quality and fish species viability? How much is a “slight” increase in the risk to salmonids and what does this mean for future salmonid population and reproductive viability in the area? In general the DEIS has inadequate analysis for most issues of concern in that it fails to quantify and qualify risks adequately or to evaluate the consequences of these risks for water quality and various species’ viability.

We are concerned by likely predicted adverse effects to Steelhead trout, Steelhead critical habitat, and essential fish habitat, as well as by potential predicted impacts to Redband trout and Chinook salmon as per the Biological Evaluation determination table on p. S-19. There is no analysis presented in the DEIS fully justifying the conclusions that predicted impacts would not lead toward uplisting of these fish species, as well as Bull trout, in violation of the Endangered Species Act.

Hazard tree cutting along 126 miles of road is excessive and questionable as to need. No increase in stream temperatures is allowable for 303(d) listed streams listed for temperature. Yet 3.6 miles of the hazard tree felling are within 100 feet of a perennial stream and could be expected to reduce stream shading. Further: “Approximately 3 miles of closed roads would be reopened in riparian areas for access to proposed project activities and may lead to a short-term loss of existing vegetation where trees and other shade-providing vegetation have re-grown on these roadbeds. There are five stream crossings associated with these closed roads.” (p. S-19) We are opposed to the re-opening of closed roads in riparian areas and with stream crossings involved. On p. S-21 the number of miles of road within 100 feet of a stream with hazard tree cutting for all action alternatives suddenly goes up to 5.8 miles. It needs to be demonstrated that proposed hazard tree felling would not increase stream temperatures.

Construction of fire line in Class 4 RHCAS could increase sediment delivery into streams and should be avoided.

A statement in the DEIS regarding the consequences of a major disturbance on the landscape such as fire, which the proposed actions are ostensibly trying to avoid, could, however, be an equally accurate description of the consequences of the proposed actions themselves: “A major disturbance on the landscape (such as fire) would change these stands to early seral, stand initiation-structural stages, resulting in reduced quantity and connectivity of late and old structure habitats.” (p.S-23) While the DEIS claims that: “No thinning or harvest activities are proposed in late and old forest structure stands,” (p. S-24), our surveys and photographs clearly show that this is not the case. Further claiming that by retaining the largest trees in proposed sale units (thinning from below), commercial logging activities “would create late and old structure habitat in the long term” (p.S-24) ignores that overstory removal, shelterwood and seed tree logging are not thinning from below and are contrary to creating late and old structure, as they remove the next generation of old growth trees, those in the 15”-21” dbh mature tree size class. This is indirectly admitted in the following sentence of the DEIS: “Proposed thinning and harvest in young forest stands would indirectly affect the availability and distribution of late and old structure habitat by delaying or reducing development of future late and old structure habitat in the future, primarily in the moist and cold upland forest potential vegetation groups.” Although we contest that most of the sale units are not “young” stands in that the younger trees are growing up in gaps from past logging among residual old growth structure in some cases and in other units more of the stand may be mature or late and old structure. Again, the Forest Service should not be doing fuel and density reduction in cold and moist upland forest potential vegetation groups. Please identify for us by unit# and on a map which units the Forest Service considers “moist” and “cold” upland forest potential vegetation types.

There should be no road-building in connective corridors—even “temporary” roads fragment habitat and disrupt connectivity over the longer-term through creating openings (and forest fragmentation) that

may continue to be used by off-road vehicles. We are opposed to all new and temporary road construction and to reconstruction and re-opening of closed roads because of potential sedimentation of streams, disturbance of sensitive wildlife (including MIS and listed species) and further degradation of ecological integrity and recreational values.

We also oppose all “regeneration harvest” or virtual clearcutting logging methods such as overstory removal, seed tree logging, and shelterwood logging as contrary to the aims of developing late and old structure to replace that lost to past logging for wildlife and to averting extremes of climate change by retaining carbon storage in mature trees. Avoiding these larger created openings and avoiding associated snag and large down wood removal would also benefit primary cavity excavators, American Marten and other old growth- and interior mixed conifer forest-associated species.

All No Action alternative descriptions are biased toward worse case scenarios for the resource or value in question based on speculative insect, disease, and fire effects and not analyzing the No Action retention of needed wildlife habitat and water quality as positive benefits from No Action. Likewise, the Action alternative descriptions are biased to weight long-term speculative benefits over immediate and definite impacts to species, late and old structure habitat, and water quality. Further, No Action descriptions are biased against natural disturbance processes to favor management intervention that actually blocks natural processes, impairing ecological integrity and retention of biodiversity.

The DEIS claims that “all treated stands would be fully stocked after treatment” (p.S-26) while admitting elsewhere that “regeneration harvest”, or overstory removal, seed tree and shelterwood logging, would leave large openings, increase sight distances and leave few mature trees less than 21” dbh. This would not represent “fully stocked” stands. Another misleading statement: “In the long term, stands would continue to develop multi-layered conditions, resulting in competition for resources and stress.” (p. S-26) Multi-layered conditions in moist and cold potential vegetation groups are natural to these forest types and usually do not cause unnatural competition and stress, and this applies to the majority of sale units since they occur in these forest types. So this statement is a misapplication of science pertaining to dry, lower elevation forest types to other conditions.

Large diameter down wood is not a significant fire hazard and should not be removed. In general, fire hazard is being used as a bogus excuse for heavy commercial logging in this sale. There is no justification for the conclusion that down wood levels would still meet Forest Plan standards and wildlife needs after all the proposed activities which are expected to reduce, consume, char, and break apart down wood listed on p. S-27. This down wood reduction and alteration not quantified or qualified and no analysis of consequences to nutrient recycling, mycorrhizal fungal community integrity, down wood-dependent insects and avian predators of these insects is presented.

We are concerned by reduction in satisfactory cover for elk outside of the C7 management area in conjunction with increased disturbance to elk through re-opening of many miles of closed roads and building of new system and temporary roads. There is no justification given for the conclusion that planned actions are “not expected” to substantially affect calving or result in reductions in calf survival in the analysis area. (p. S-29) Gates and barricades are often ineffective closures and elk could still be disturbed by both non-authorized road use as well as by continued Forest Service administrative road use as new system roads would remain available for use.

We are concerned by continued cumulative reduction in Pileated woodpecker habitat, as this Management Indicator Species (MIS) already has had its habitat greatly reduced in the analysis area and across the region by past clearcutting and other heavy logging of late and old forest. There should be no burning, logging, or mechanical fuel reduction in remaining suitable Pileated habitat. See our survey sheets for evidence of active Pileated use of sale units. Pileated woodpeckers were seen in units bgd, cas, caw/crv and cjv, heard in units ab, ag, bca, bcb, caa, caw/crv, cga, cha/cia, cov, crs/cau, dc, and dd, and fresh Pileated foraging was seen in units aa, bca, bcb, bec, bgd, bhc, cas, cat, caw, cay, caz, cga, cjv, cjw, cma, cos, cot, cov, cry, and ac. Pileated nest holes and/or roost holes were seen in units aa, ab, ae, bca, bcb, bec, bgd, caa, cas, caz, cga, cos, da, and dc. This is not an exhaustive list of Pileated woodpecker use

of sale units as we primarily field- checked easily accessible units and did not field check sale units off long closed roads, off proposed new roads, or in the interior of undeveloped areas.

It is necessary to provide for Pileated and American (Pine) Marten habitat in this suitable habitat in the project area now, as habitat has already been greatly reduced, limiting dispersal options in case of future natural disturbance. More habitat needs to be allowed to develop. No choice is offered in the current narrow range of alternatives for better protecting Pileated and Pine Marten viability, listed fish species, water quality, and other natural values threatened by the action activities proposed.

Among the primary cavity excavators listed on p. S-31, we found evidence of the following in sale units (mostly by sightings): Williamson's Sapsucker, Northern Three-toed woodpecker, Black-backed woodpecker, Hairy woodpecker, Pileated woodpecker, and chickadees and nuthatches. There is no support given for the statement that "there would be no measurable effect on PCE populations under any of the proposed alternatives" (p. S-32) as there are no population survey results or known viability thresholds for these species referenced for the analysis area and no quantification of potential impacts to these species or analysis of the consequences of these impacts to species viability in the DEIS.

Goshawk are naturally adapted to hunt under more closed canopies and in denser stands. We are concerned that both commercial thinning and "regeneration harvest" or virtual clearcutting planned, especially the latter, would eliminate useable goshawk foraging habitat so that is no longer used by goshawk and available habitat is reduced, reducing the goshawk population. There is no quantification or detailed consideration of the magnitude of impacts to goshawk prey or the consequences of such prey reduction to goshawk viability.

We are also opposed to "regeneration harvest" or virtual clearcutting converting suitable Great Gray owl nesting habitat to an unsuitable condition due to reductions in stand density, as it is acknowledged to do on p. S-36. Great Gray owl are not an abundant species and depend on late and old forest structure for nesting. In the absence of population studies in the analysis area, there is no way to guarantee their viability in the area after such heavy logging in suitable nesting habitat.

We are opposed to fuel reduction of all kinds in mid to high-elevation mixed conifer and subalpine forest. We are also opposed to prescribed burning during the Spring reproductive season due to impacts to neotropical songbirds, sensitive plants and other wildlife, as well as due to reduction of soil moisture needed for the dry season. With the sharp ongoing decline in Neotropical songbirds and the lack of population surveys for Neotropical songbird species in the analysis area, a reduction in adequate habitat for these species for up to three years due to these project activities could be critical as a cumulative effect with other such projects across the region—particularly for birds dependent on multi-strata mixed conifer forests with higher canopy closure. Thinning and heavier logging to convert stands to "more resilient species" does not necessarily lead to more and better bird habitat as suggested on p. S-37, as many Neotropicals feed on defoliating insects and some may be adapted to Lodgepole pine and Subalpine or Grand fir as well as to denser forest conditions. It is important to recognize that mature Lodgepole pine stands naturally give rise to Western Larch and Grand fir in the higher elevations, with different bird species adapted to different successional stages and tree species mixes natural to the area.

It is simply not true that "existing patches and elements of old forest would remain" (p.S-37) after logging as our surveys show that timber "harvest" would in fact occur in old forest and descriptions in the DEIS of conditions after the heavier logging predicted clearly specify removal of canopy closure, large green trees up to 21" dbh, larger snags, and large down wood, all key components of late and old forest habitat. For instance, on p. S-38: "The silvicultural prescription for the harvest units would remove most of the mature trees".

The idea that recreationists using the campgrounds would only be affected by the noise and dust of logging is ridiculous in that it presumes that people just stay in the campground despite many of these recreationists being hunters and OHV enthusiasts, as well as anglers, wilderness hikers, and equestrians, all of whom obviously leave the campground and would be negatively affected directly by logged areas they encounter for decades after the logging. The DEIS admits that "hunters tend to be away from camp during the day". (p. S-38) As for OHV users: "Harvest units would straddle or be directly adjacent to

four trails....Most of the stands in these units...would be treated so that few trees would remain....evidence of harvest would be prominent.” (p. S-39) Skid trails adjacent to or crossing OHV trails (cav, ab, and bhc) would likely be used by OHVs as they would often be hard to disguise or block, leading to more soil damage and wildlife disruption.

There should be no non-commercial thinning, commercial thinning, mechanical fuel reduction, burning, or heavier logging within areas with undeveloped characteristics. See the listing of non-commercial thinning units proposed in undeveloped areas on p. S-41. All of these should be dropped. We are also opposed to construction of any new or temporary roads in the undeveloped areas (eg. north of FS rd. 10) and all eleven heavier logging units proposed within the large undeveloped area north of FS road 10 should be dropped: bia, bka, bla, bra, bnb, bwa, bma, bna, ae, af, and ag. (as listed on p. S-42) More detail on reasons for and substantiation for our positions on these and other issues follows below in issue-specific sections of our comments.

It is ridiculous to incur such a great economic loss in order to effectively destroy interior forest and old growth wildlife habitat at mid to high elevations (contrary to contemporary science regarding fuel and density reduction) and threaten precious critical fish habitat and listed fish species with further sedimentation of streams and some potential shade reduction/stream temperature increase. How does this meet your purpose and need? Other projects could be devised elsewhere on the District that benefit the local economy in the short-term without destroying longer-term local social and economic (eg. tourism and recreation) values.

All costs of the project are not taken into account: what about externalized costs to water quality; listed fish species; soil productivity; interior and mixed conifer forest-dependent MIS, Neotropical songbirds, potential Canada Lynx, Wolverine, Gray Wolves, and other ecological and recreational value losses? All of these potential economic and quality of life losses should have been evaluated in the DEIS but are not.

The Farley DEIS fails to demonstrate lack of existing condition correspondence to historic range of variability, or that the proposed actions would increase forest sustainability or resiliency or lower fire risk.

In regard to the lack of adequate analysis of effects to climate change and toxic emissions: It is largely acknowledged by a majority of scientists that loss of long-term carbon storage in mature trees removed by logging from the landscape would also contribute to the negative impacts of climate change, not just direct emissions from burning, fossil fuel use, and plant decomposition, yet this is not analyzed. Why weren't CO₂ and methane emissions estimated for proposed prescribed burning, as climate change is one of the most pressing ecological issues of our time? The public should not have to specify compounds of concern for known toxic emissions to be disclosed. The issues could be analyzed with acknowledgement of data gaps and still help inform decision-making, just as all emitters of greenhouse gases in the Portland metropolitan area will soon be required to report emissions to guide overall planning to reduce these gases. Such cooperation on the part of industry and federal agencies is critical to slowing or averting the most drastic impacts of climate change.

Resource Management Direction and Purpose and Need:

Proposed actions seem contrary to the stated goal of promoting long-term forest stand structure and tree stocking densities that are more consistent with historic conditions as explained above with reference in particular to moist and cold forest types in mid to higher elevations. Since all proposed actions plan to remove most mature trees up to 21” dbh in “regeneration harvest” or virtual clearcutting units, the Farley project also seems contrary to the purpose and need of promoting forest resilience to large-scale wildfire (since mature trees are more fire-resistant and too much clearing can result in hot, dry micro-climate conditions with higher wind speeds through stand openings intensifying fire.) As pointed out earlier, and as the DEIS admits, disease and insect infestations (as well as large scale wildfire) are fairly natural progressions for the cold and moist mixed conifer forest types and should not necessarily be pre-empted, as many wildlife species associated with these forest types are dependent on periodic outbreaks of these insects and diseases (as well as fire) for creation of large snags and rot in snags and logs for cavity excavation for nesting and/or generation of their insect prey. American Marten are dependent on large

amounts of down wood from fallen snags for resting refugia as well as on large snags with sufficient rot and primary cavity excavators' nest holes for denning. Thus in naturally large fire and insect and disease prone late and old moist and cold mixed conifer forest (the majority of the sale area), resilience to these disturbances is not an appropriate objective. Likewise proposed actions also seem contrary to the objective of "long-term sustainability of other forest resources (such as fish, wildlife, scenic values, and recreation) and social and economic values" (p. 10), as potential impacts include sedimentation of streams and increased water temperature threatening fish species, reduction of habitat for MIS and other species dependent on denser, more decadent moist and cold mixed conifer habitat or on isolation from human disturbance, degraded forest appearance and aesthetics for recreationists, and negative economic returns with a very high cost per job created while degrading natural values that could otherwise generate economic returns and higher local quality of life from tourism and recreation.

The Farley project seems to us to fail to be consistent with Forest Plan goals such as the following (all quoted from DEIS p. 10): *"Provide land and resource management that achieves a more healthy and productive forest...", *"Provide for diversity of plant and animal communities and species consistent with overall multiple-use objectives for the Forest. Maintain or enhance ecosystem functions to provide for the long-term integrity (stability) and productivity of biological communities." *"Manage Forest lands to maintain or enhance soil and land productivity", and "Provide and execute a fire protection and fire use program that is cost efficient..." These proposed actions are not cost efficient or responsive to other land and resource management goals in trying to reduce fire risk in natural stand replacement fire regime areas with typically long fire return intervals and high natural regeneration density—at higher elevations well away from wildland urban interface areas. Such a scenario and location is not a high priority or a logical area for fire risk reduction.

There is apparently no Forest Plan requirement for reducing fuel loading in the greater than 3-inch diameter class. How is it determined whether this biomass exceeds needs for soil protection and wildlife habitat? The DEIS acknowledges that a large amount of dead and down material in Lodgepole pine and mixed conifer "are not necessarily outside of the expected fire regime and condition class" in the upper reaches and elevations of the watershed. (see p. 11) Larger amounts of dead and down wood in higher elevations is a naturally occurring integral part of ecological functioning there and should not be removed.

Why is there no reference to INFISH as a tiering document and guideline that needs to be incorporated in Farley project planning? INFISH guidelines likely are essential legal requirements to be followed for protecting fish species and riparian habitat at issue.

Freedom of Information Act request (if necessary to obtain copies): Please send us copies of the cited Biological Opinions on DEIS p. 13 regarding Land and Resource Management Plans for seven National Forests by NMFS dated March 1, 1995 and regarding Effects to Bull Trout from continued implementation of LRMPs as amended by INFISH from NMFS dated August 14, 1998. Also we would like to receive copies of:

*Desolation Ecosystem Analysis, *Umatilla National Forest Roads Analysis Report and *all specialist reports in the project record, including additional information and supporting technical documentation except those pertaining to cultural resources and mining/energy and special uses. (See listing of the requested resource subject areas on page 14 of the DEIS.) We also request hard copies of: Hessburg and others (1999) and Powell 1998.

The criteria cited for deciding the appropriate alternative to choose for the Farley project is artificially skewed to favor the proposed alternatives by not including criteria such as: *best protection of existing natural values such as the viability of listed and MIS species native to the area associated with representative potential vegetation groups, water quality, recreational and scenic values of a natural setting, soil stability and productivity; *responsiveness to public concerns; and *reduction of climate change impacts.

We recommend adoption of the No Action alternative or development of a completely different action that limits any fuel reduction to low elevation dry pine sites only with retention of all healthy mature trees and otherwise implements only ecologically sound restoration such as decommissioning of ecologically destructive roads, restoring of hydrological functioning, and any riparian hardwood planting or streambank stabilization that may be needed.

Forest Vegetation:

Some DEIS substantiation of our points above re: the forest not being in an unnatural epidemic of disease or insects: “These diseases are not unusual for the types of stands in the Farley area and appear to be occurring at characteristic levels when taken as a whole across the landscape.” (p. 56) Re: cumulative impacts of logging which the Farley project would exacerbate: “Compared to historical conditions, structural diversity of forest stands across the landscape of the project analysis area has decreased; with the loss of old forest structure and an increase in the occurrence of lodgepole pine. The mosaic (arrangement on the landscape) of stands and structures has changed over the years with fire suppression and other management practices (Hessburg and others 1999).” (p.57)

“Past harvest dating from the early 1970s and 1980s shifted structural stages back to stand initiation (SI) or understory re-initiation (UR).” (p. 57) Compare this HRV deficiency with planned further cumulative increases in understory re-initiation and stand initiation structural stages with planned Farley logging: “The stands being treated to promote OFMS would be harvested with seed tree or shelterwood methods....The effect of this treatment would be to shift the current structure of Young Forest Multi-Strata (YFMS), Stem Exclusion Open Canopy (SEOC) or Understory Re-initiation (UR) in the cold and moist upland forests to UR, SEOC, or Stand Initiation (SI) structure (Table 3.1.4).” (DEIS p. 60) This represents a step backwards to earlier stages away from mature stand development into old growth structure for almost two thousand acres or more, depending on the alternative chosen.

Obviously 9-21” dbh can no longer be considered “small diameter” trees since there are only 1,022 acres of trees greater than 21” dbh out of a total of 56,222 acres of trees in the Farley analysis area. (see Table 3.1.1 on p.58) This size class is critical to future old growth development, as the remaining 39% of the forest is in smaller size classes.

Based on Table 3.1.2, there should be no removal or conversion of old forest multi-strata (OFMS) in cold and moist potential vegetation groups and no removal or conversion of old forest single stratum in dry sites as both are below the historic range of variability.

It is not accurate to say that active management is the only foreseeable avenue for promoting an increase in old forest single stratum, as natural disturbance can and does create conditions for this structure to be achieved (eg. natural thinning through insects, disease, wind-throw and fire). How else could it have developed between fire returns before Europeans arrived? Indigenous people’s burning of the forest did not affect all or it—especially not in higher elevations. (See DEIS p. 58) We need to be intentionally moving away from suppression of natural fires.

Contrary to assertions on p. 59, Ponderosa pine and Western Larch are already the primary large trees in drier units except for micro-climate wetter hollows and north slopes where there is historic evidence of Douglas fir or Grand fir co-dominance with Ponderosa pine. (See our survey sheets.) There is Pacific Northwest Research Center science noting that Grand fir surviving spruce budworm epidemics tend to be more resilient to future epidemics and other stress such as drought. Overstory removal and heavy removal of overstory mature trees with seed tree and shelterwood cutting does not allow younger forest in multi-strata stands to move most quickly into old forest status as it removes the next generation of old growth trees and sets these stands back in time away from achieving old forest structure. Thinning to decrease density for faster large tree growth is only indicated for smaller diameter trees, typically in lower elevation, drier sites, not for mature larger trees (eg. up to 21” dbh) in moister, more productive sites. The Blue Mountains is an overly broad area from which to extrapolate HRV for the Farley area as much of the Blue Mountains is lower elevation and drier than the Farley area.

Page 61 of the DEIS seems to misinterpret the intent of the Eastside Screens, which is to increase the quantity of late and old structural stages of forest over time, not to push forest stands back to earlier stages when late and old structure is below the historic range of variability.

The Forest Service habit of basing unit location on GIS database queries for greatest density biases choice of units toward higher elevation, naturally dense stands being targeted for density reduction instead of drier, more out of balance sites. “Over-stocking” can not be judged by the same criteria across different potential vegetation groups (nor is the concept equally relevant across different PVGs.) Table 3.1.6 commits this error. 4.5% versus 51.1% “over-stocking” in the analysis area is a huge discrepancy between the Desolation Ecosystem Analysis and the current analysis for the Farley project.

The DEIS admits: “The amount of lodgepole pine-dominated stands in the area may be within the natural or historic range of variability, and therefore, the potential for future mountain pine beetle epidemics may be within historic ranges of variability (as lodgepole pine stands follow their characteristic life cycle).” (p.62)

Sensitive Plants:

Drop unit bwa to allow for potential expansion of *Botrychium montanum* into suitable habitat within this area.

Invasive Plants:

We are concerned that: “The proposed Farley project with its associated ground disturbing activities would have substantial potential to spread the already existing invasive plant infestations that have not yet been approved for treatment.” (p.66) All inventoried invasive plant sites within project activity units should be designated “No activity zones” and flagged and buffered so that ground disturbance does not cause dispersal of invasive species.

Fire and Fuels:

1939 does not reflect pre-European settlement conditions but could be after prior logging in the area. Figure 3.2.1 shows an increase in the stand initiation stage from action alternatives though it is already excessive, at the expense of young forest multi-strata (and, as we have argued, at the expense of existing patches of old forest multi-strata as well) though YFMS is now within HRV and the stage preliminary to development of OFMS, thus not representing a return to HRV conditions. (See p. 71)

The DEIS acknowledges that a full 70% of the analysis area is in fire regime IV (natural high severity, 35-100+ years fire return intervals), with only 29% of the analysis area even appropriate for fuel/fire risk reduction, according to fire regime conditions presented in Table 3.2.2 (p.73) There seems to be no clear trend toward bigger, more severe fires according to Figure 3.2.2, especially when comparing recent acreage burned to the 25,598 acres thought to have burned in 1893. (p. 74) Only 38% of the Farley area is estimated to be highly departed from pre-fire suppression conditions—notably moist and cold forest are not within that fire regime condition. (See Table 3.2.3 and discussion below on p. 74) The DEIS further admits: “FRCC class 2 and 3 areas are not departed from historical conditions so much due to fire exclusion. Departures are mainly due to stand fragmentation, changes in species composition and stand structure, harvest of large diameter trees, depletion of large snags, and some associated blowdown from past timber harvest that has occurred on approximately 42 percent of the project area.” (p. 74) These causes of departure from historic fire conditions would all be replicated additionally with the Farley project logging, including stand fragmentation, changes in stand structure, removal of large trees and snags and predictable blowdown. Again, fuel reduction is more appropriate to warmer, drier sites: “Fire exclusion has had an effect on vegetation condition departure from natural conditions, on some of the warmer, drier sites.” (p.74)

The DEIS notes that after five years, areas that were non-commercially thinned would revert back to the pre-project fire regime condition class. “There would not be much immediate change in progression to restore historical conditions to the landscape under any of the alternatives.” (p. 76) “Stand replacement fire generally is considered to be a severe and undesirable event, even though this may be the typical but

infrequent pattern of fire events in the longer return interval fire regimes. Tree density thresholds (Powell 2005) were used to evaluate crown fire potential on each forest stand in the Farley project....These results do not suggest any great deviation from fire regimes from a stand perspective.” (DEIS p. 76) These statements, which are specific to the Farley analysis area, suggest a need for public or agency education about the natural ecological role of fire in infrequent, high severity fire regimes, rather than a need to log to reduce fire risk in the Farley area. Figure 3.2.4 shows that crown fire potential for the Farley area is actually mostly low. (p.77)

“The Umatilla National Forest Plan provides guidelines only for small diameter fuels in some of the land management area categories. Small diameter woody fuels (3 inches and less) have the greatest influence on spread rate and intensity of surface fires and associated torching and crowning.” (p.77) This supports our contention that any needed fire risk reduction should focus on non-commercial size material rather than on larger live trees, larger snags and large down wood.

“Wildfire risk is not expected to change appreciably under any of the proposed alternatives. Risk of wildfire largely is dependent on ignition potential and fuel conditions, which are largely dependent on weather conditions.” (p.78)

Soils:

It seems that “regeneration harvest” on the very ashy soils of the higher elevation cool to cold and moister units would be in the high to very high erosion hazard class and also could be removing more than 25-40% effective ground cover (the maximum allowed) due to the type of logging. (See DEIS p.82) Proposed logging would almost double the detrimental soil condition percentage of acres with just this one timber sale! How was it calculated that there would be no sale units exceeding Forest Plan standards for detrimental soil conditions following project activities? This seems unlikely—would resulting conditions meet Forest Plan standards for DSC before or after mitigation? Sub-soiling or other mitigation might not be funded, so standards should be met before mitigation. Only “light on the land” equipment should be used for any logging and grapple piling should be avoided. We prefer utilization of slash rather than burning (due to climate change concerns) whenever possible.

“Land stability is of some concern in the Farley project area, primarily related to proposed road construction....there are some areas of mapped slumps/slides within the project area.” (p.85) This information concerns us regarding the potential of significant sedimentation into streams from land slides due to road construction. The DEIS further cautions: “because of existing conditions (roads and stream conditions) and proposed activities, sediment may be a concern....” (p. 87)

Water quality and hydrology:

This project seems in conflict with ongoing restoration to improve water quality in the Desolation watershed. We do support obliteration of closed roads and removing existing stream crossings with measures taken to prevent sediment from entering streams but not creating additional sources of sedimentation (new and temporary roads, road reconstruction, heavy logging, burning too close to streams.) The DEIS gives ample reason to be concerned about additional sedimentation from this project and existing sources of sedimentation of streams: “The effect of the road system (and skid trails) in a watershed on erosion, sediment transport, and physical and biological conditions in stream systems often exceeds that of all other activities combined, especially in forested mountainous areas. The road system connects directly to the stream system at road crossings. Crossings are often the places where eroded soil enters streams. Currently there are 182 stream crossings (on both Forest Service and county roads) in the analysis area.” (p.88)

Some of the closed roads are already “put to bed” by grown-in plants, including sapling size trees; others are currently functioning as new stream channels contributing sediment to adjacent streams and should be obliterated and re-contoured, not re-opened.

Figure 3.4.1 shows high increases in erosion (and potential sedimentation of streams in some cases) for the first three year and continued additional erosion thereafter. (p. 92) There is no analysis of the effects

of this predicted sediment increase to water quality or listed and MIS fish species. What are the cumulative contributions of sediment above background levels from proposed logging, roading, and burning in combination with livestock grazing, mining, OHV use, and other sources? There is no quantitative or qualitative assessment of the effects of combined planned and ongoing management plus potential wildfires to water quality and fish species.

Please send us a description of the data used and the means used to calculate the equivalent clearcut area. Another example of inadequate cumulative effects analysis is no assessment of the combined effect on water yields and peak flows of this project and other management activities and potential fires.

“All named streams within the Desolation Creek watershed are designated critical habitat for Mid-Columbia steelhead.” (p.99) This makes it all the more vital that water quality and hydrology in the Desolation watershed are not impaired by the Farley project. There is grossly inadequate analysis of potential impacts to the several listed fish and their critical habitat in the analysis area, neglecting to assess the current status of these fish populations, the effects of chronic habitat degradation, the trends in these fish populations over time and whether the cumulative impact of this project on top of other habitat degradation could cause extirpation of any of these fish species in the area in the near term when most impacts would occur. The DEIS also fails to analyze potential indirect impacts to fish from logging itself as well as from new and temporary road construction and road re-construction, as well as re-opening and use of closed roads. The Forest Service needs to quantify and further clarify terms like “slightly”. Have fish population and reproduction studies been done for these streams? If so, please send us copies, and why are the results not disclosed in the DEIS? Have fish populations been fragmented, as suggested on p. 101 of the DEIS? “Fish occupying the managed areas would have been subjected to chronic effects for many years” (p.101)—what have been the consequences of these chronic effects to the different fish species in the area? There is a flaw in the reasoning that unmanaged areas probably function as source areas for re-population of disturbed areas: if fish can no longer reach unmanaged areas (generally in the headwaters) or there are only intermittent streams there, they may not serve to repopulate degraded areas. Even if they could serve this function, this is an argument for not degrading unmanaged (“undeveloped”) areas as planned.

Please send us a copy of the full Biological Evaluation. Why are its rationales for determination of effects not included in the DEIS? Analysis needs to be disclosed in the DEIS for informed decision-making as to why the Columbia Bull trout is considered not likely to be adversely affected by this project when it is one of the most sensitive fish species to impacts to water quality and apparently exists in the planning area (and is listed as Threatened) and as to how much Steelhead trout, essential fish habitat, Redband trout, and Chinook salmon would be adversely affected and whether their viability would be threatened. Why would Westslope cutthroat trout not be affected? There is no guarantee that these fish species would not trend toward uplisting as a result of this project or not show a loss of viability due to increases in sediment in streams and/or increased water temperatures. As several streams in the project area are 303(d) listed for failure to meet the stream temperature standard, no shade reduction is allowed for these streams under the Oregon Clean Water Act. This means no hazard tree felling of trees that could be contributing to stream shading.

There also needs to be no reduction of shade in the nine miles of RHCA road obliteration and stabilization and no re-opening of closed roads in riparian areas or of closed road stream crossings (5 planned) and no underburning within riparian buffers or fire-line construction that would diminish shade to streams and no new system road construction in RHCAs (across five class 4 streams planned). There is no clear justification of the conclusion that loss of shade on class 4 streams could not lead to a measurable change in water temperatures downstream when water is flowing in the class 4 streams. "Past activities, including timber harvest and thinning in riparian areas, road construction and maintenance...likely have all affected stream temperatures." (DEIS p. 104) Restoration is far more expensive than preventing a degradation in water quality and a far slower way to attain these values than prevention of impacts.

There have been no stream surveys for sediment since 2002--what sediment-contributing events and activities have occurred since then? There is no way to know current stream conditions without current stream surveys. What measures would be taken to ensure sediment would not reach streams and to prevent soil exposure and movement within 500 feet of streams? None of this is disclosed. How "short-term" would be the increase in soil movement and sediment entering streams? What amount of increase in sediment would be caused and with what effects to fish? There is no analysis of effects to fish and other aquatic life from predicted increases of sediment from this project. Sediment from class 4 streams in headwaters can still wash downstream with seasonal water flow--especially with snow melt and storm surges. There needs to be evaluation of this and contributions from firelines and road construction in RHCAs and the effects to downstream fish. Cumulative impacts with livestock grazing and other open road sediment contributions are also not assessed. We are concerned that there are already 37.5 miles of road within RHCAs, with 23.9 miles of road within RHCAs of fish-bearing streams. (p.117)

"Roads can substantially elevate onsite erosion and sediment delivery, disrupt surface flows, and can contribute to increased peak flows....Higher road densities indicate that there is more soil disturbance and a higher potential for sediment transport in the analysis area particularly if roads are concentrated in RHCAs....An increase in drainage density from the construction of roads and their associated ditch lines across streams would likely increase the transport of sediment directly to streams." (p. 119) This is a strong argument for not building new roads and stream crossings in such a critical area for fish species.

Wildlife:

Although listed cumulative effects to late and old forest habitat are substantial, there is no adequate cumulative effects analysis acknowledging that sale units include late and old habitat structure that would be degraded by planned "regeneration" logging and the combined effects of this and the planned set-back of mid-seral stands that would develop late and old structure sooner if most mature trees and large snags and large down wood were not removed as planned with overstory removal, seed tree, and shelterwood logging. The DEIS does admit that: "Proposed activities would regenerate mid-seral stands that would have developed late and old structure...." (p.122) The cumulative effects discussion does not evaluate the effects to species dependent on LOS habitat from the combined effects of Farley reduction and set-back of LOS structure and past degradation of LOS habitat, as well as future potential set backs from other timber sales or fires.

There should be no new system roads, temporary roads, re-opening of closed roads or commercial logging in existing connectivity corridors given existing poor connectivity of LOS habitat and C1 and C2 old growth due to past logging and wildfire. (See p. 122) New system roads would still be used and create openings in corridors that could disrupt wildlife movement, especially for road and disturbance-sensitive species such as Gray wolves, Canada lynx, Wolverine, and elk.

All snags over 20 inches in diameter should be retained regardless of the number of snags per acre as this size class is below historic levels and is needed by wildlife due to past over logging. The DEIS supports this concern with stated low tolerance levels for key large snag-dependent species, including White-headed woodpecker, Pileated woodpecker, and American marten. (see p. 126) "Snag densities would be expected to be reduced in regeneration harvest units. As a result, primary cavity excavator habitat would be reduced." (DEIS p. 127) Despite meeting Forest Plan standards, snag densities would still not meet even 50% tolerance levels for the greater than 20" dbh size class of snags for Whiteheaded and Pileated woodpeckers and American marten, all management indicator species. Planned road-building and associated hazard tree logging would also further reduce available snags. "Currently, there is approximately 22-30 percent more area in the moist and cold upland potential vegetation groups without snags than occurred historically. This is largely due to past clearcutting and removal of snags." (DEIS p. 130) The DEIS admits there would be cumulative reductions in snags at both the watershed and stand levels. "At the stand scale, potential habitat (nesting, foraging, and roosting) for primary cavity excavating birds would be reduced." (p.131) Yet the cumulative effects discussion fails to analyze the consequent effects to primary cavity excavating bird species and American marten.

Regarding down wood, there is no means explained to ensure that down wood requirements would be met after purposeful removal in commercial logging units and through burning and charring. There is no quantification given for potential down wood loss cumulatively or how this would effect nutrient recycling, dependent insects, avian insect predators, and other ecological webs involving down wood.

Regarding elk: How much marginal cover would be set back by proposed logging and not allowed to become needed satisfactory cover to make up for the deficit in satisfactory cover? The intent of Forest Plan standards is to meet them, not to allow for their continued violation when they're not met. There is no assessment of the effects of reductions in elk cover to elk viability. What is the current population and reproduction success rate of elk in this area? How would proposed logging affect elk viability? There is no justification given for the conclusion that elk calving and elk survival would not be affected by proposed logging and roading. There is no clear assessment of the impact of new system road construction and use and reconstruction of closed roads and use on elk viability. There is no analysis of the possibility of pushing elk out of the analysis area and of where they could go that has suitable habitat and resources for more elk. The assumption that HEI would increase under alternative 1 is questionable, considering the net reduction in marginal cover, more road disturbance and no improvement in satisfactory cover and not much in forage due to disturbance. We are greatly concerned by the impacts posed by further fragmentation of habitat to elk, lynx, American marten, Pileated woodpecker, potential Gray wolves, wolverines, and other species sensitive to disturbance and fragmentation. There is insufficient cumulative effects assessment regarding the effects of past and planned logging and roadbuilding to elk cover and security. What is the extent of the cumulative reduction in marginal and total cover anticipated and how does this effect elk viability?

“Preferred habitat (foraging and nesting) for the Pileated woodpecker includes dense moist forest types (mixed conifer) in late seral stages with a high density of dead down wood habitat.” (DEIS p. 143) This statement characterizes most of the higher elevation and some mid-elevation sale units and we found evidence of Pileated using most of these units, which are mostly surrounded by past clearcuts of young Lodgepole pine (not suitable habitat). Patch size and connectivity of suitable Pileated habitat did not appear good on the ground, contrary to GIS analysis conclusions. Table 3.6.10 reveals a high proposed reduction of suitable Pileated habitat—up to almost 10% of nesting habitat and up to about 7% of foraging habitat, assuming that there is really as much suitable habitat as claimed. Pileated woodpeckers are thought to need at least 60% canopy closure for successful nesting and a minimum of 40% canopy closure for foraging (to protect them from avian predators). “Commercial thinning and regeneration harvest would reduce overstory canopy closures in suitable foraging habitat under all of the action alternatives. Commercially thinned foraging habitat would have 35 to 40 percent canopy closure after project activities. Regeneration units would have much lower canopy closure...” (p. 145) “Timber harvest on private land also has reduced potential habitat for this species. An unknown number of acres of pileated woodpecker habitat have been converted to early seral stands. The vast majority of suitable pileated woodpecker habitat now exists on National Forest System lands in the Desolation Creek watershed.” (DEIS p. 146) The DEIS admits “there would be a cumulative reduction in nesting and foraging habitat and potential nesting, foraging, and roosting structures (snags) for this species in the areas proposed for silvicultural treatment activities. All of the action alternatives would contribute to past reductions in pileated woodpecker habitat by reducing potential nesting habitat through commercial thinning and regeneration harvest.” (p. 146) Without quantification of the existing Pileated population, its viability threshold, and the potential impact of proposed reductions in nesting and foraging habitat to its viability, the reassuring conclusions given (after all these impacts are acknowledged) are unsubstantiated.

We saw Northern Three-toed woodpeckers in sale units ab (two seen, a possible pair) and cga (an adult male and an active nest)—both positive identifications. Yet even though the Northern Three-toed woodpecker is a Management Indicator Species with suitable habitat in the analysis area, the DEIS fails to include any analysis as to potential direct, indirect, and cumulative effects to this species from the Farley project and other activities potentially degrading its habitat.

We saw lots of good Pine marten habitat in sale units (as described in the DEIS, p. 147). We also saw plenty of potential prey—squirrels and snowshoe hares, which are also lynx prey. As with Pileated woodpecker and elk, No Action is recognized to be beneficial to development of Pine marten habitat while the action alternatives can be expected to significantly reduce available suitable habitat. (See DEIS pp. 147-148) Pine marten are not likely to use “regeneration harvest” logged units as they are admitted to become very open and large down wood would be removed. We are concerned by the predictable reduction of suitable Pine marten habitat and the absence of any alternative that would not degrade Pine marten habitat. In the absence of Pine marten population surveys for the analysis area and without an identified viability threshold and assessment of the number of Pine marten that could be lost due to this project, no Finding of No Significant Impact is warranted. Population surveys for Management Indicator Species are required under the National Forest Management Act, as is management for their continued viability. Without population surveys for Pine marten in the analysis area, it cannot be assumed that all reproductive habitat has been identified and avoided by the Farley project for proposed logging, mechanical fuel reduction, and burning. There seems to be no justification for the conclusion that there will be no cumulative effects of project activities on Pine marten habitat, given planned reduction of downed wood, cover, and large snags suitable for denning.

There apparently have been no population surveys for primary cavity excavating species. “Canopy closure in these commercially thinned stands would be approximately 40 percent following treatment. In commercially thinned stands, ponderosa pine, Douglas fir, and western larch would be favored for retention. Lodgepole pine and grand/white fir would generally be targeted for removal....Black-backed and northern three-toed woodpecker are associated with habitats that have a high proportion of these tree species and would be unlikely to use these stands following treatment due to reduced stand densities and changes in the species composition.” (DEIS p. 152) We saw Blackbacked, Northern three-toed, Hairy, and Pileated woodpeckers and Williamson’s sapsuckers in sale units (see survey sheets)—these sale units should be dropped as the DEIS admits logging would remove habitat from use by these species and there is no information presented as to these species’ population status, viability thresholds, or projected reduction in numbers from project impacts. For Blackbacked woodpecker, these sale units are: aa, crv, and caw. For Northern Three-toed woodpecker, these sale units are ab and cga, with cga having an active nest and ab having a probable pair. As with Pileated, these are not exhaustive of active habitat in sale units as we did not field-check all sale units, particularly those off extensive closed roads or proposed new roads. All “regeneration” (overstory removal, seed tree, and shelterwood logging) units should be dropped due to concern for the viability of unsurveyed multiple species (including MIS) dependent on this kind of habitat. Again there is no assessment of quantitative and qualitative impacts to the viability of individual species in the cumulative effects discussion. There is no identification of where nesting and foraging habitat is located, how much there is, how much would be affected by this sale—for any species other than Pileated woodpecker, or of consequences to these primary cavity excavating species.

What about potential roosts under loose bark of snags being lost for Townsend’s Big-Eared bat?

The DEIS notes with regard to Gray wolf: “The gray wolf prefers areas with few roads, generally avoiding areas with an open road density greater than one mile per square mile (NatureServe Explorer 2007)....Numerous unconfirmed sightings of gray wolves have occurred on the North Fork John Day Ranger District in the past several years. The Idaho wolf population has been increasing steadily, and dispersal into the Blue Mountains is expected in the future. Habitat for this species occurs throughout the Farley analysis area, primarily in roadless and undeveloped habitats in the mid and upper elevation, and potential prey is readily available.” (DEIS p. 159) With unconfirmed sightings on the District, known wolf dispersal into Oregon and the first wolf pack confirmed in the Blue Mountains (not disclosed in the DEIS), and suitable habitat in the analysis area, we are concerned about potential impacts to Gray wolves both directly by road construction and indirectly by reduction of cover for elk and deer. “Proposed project activities would affect wolf prey habitat under all of the Action Alternatives....Road construction associated with timber harvest increased road densities within the analysis area, making the area less suitable for gray wolf....An unknown amount of timber harvest activity has occurred in the past on

private lands adjacent to National Forest System lands that has affected big game habitat and populations, and has increased road densities. All potential wolf habitat in the analysis area currently occurs on National Forest System lands.” (DEIS p. 160) All this makes protection of wolf habitat in the Farley analysis area very important for recovery of this listed species. There could be negative impacts to Gray wolf from use of reconstructed closed roads and continuing use (administrative and unauthorized) of new system roads. Gray wolves could easily disperse to the Farley area given the proximity of known dispersing wolves in Oregon and the new pack discovered.

What is omitted in the brief discussion of Wolverine is their incredibly vast home ranges and dispersal needs which could well include the analysis area due to its proximity to the North Fork John Day Wilderness and roadless areas at high elevations, which could provide suitable core habitat. Despite this, the DEIS fails to include any analysis of potential direct, indirect, and cumulative effects to Wolverine from the Farley project.

The analysis area is acknowledged to have suitable Lynx habitat, unconfirmed sightings, and historical Lynx occurrence in the Blue Mountains. Yet no surveying has been done for Lynx since 2001, so it is not certain that Lynx do not use the analysis area. We have seen Lynx (definite sightings) in suitable habitat in the Ochoco’s further south and apparently dispersing south in unsuitable habitat across private and BLM forested land in Wheeler County in 2005 and 2007, respectively. It is not certain that the proposed alternatives would have no direct or indirect effects on Lynx as claimed as Lynx could be using the analysis area. Though Lynx are federally listed as Threatened, this project would eliminate 6.6 to 12% of suitable identified Lynx habitat in the Farley area. This is approaching the 15% limit identified in the Lynx Conservation Assessment and Strategy rapidly and should be lessened as a potential impact by eliminating all “regeneration” units, dropping the extra 50 acres of commercial thinning in Lynx habitat in alt.s 1 and 4, not logging or roading in connective corridors, and reducing the amount of non-commercial thinning in Lynx habitat. Fragmentation of forested habitat is known to adversely affect Lynx. Construction of new roads and reconstruction of closed roads could also negatively affect Lynx.

No more loss of suitable habitat should be allowed for federally and state-listed species as this could cause a declining population trend and uplisting of species. The potential effects of this project and snowmobile use to Lynx is not assessed. The natural occurrence of fires in higher elevation areas (including larger, more intense fires) is important for Lynx in maintaining Snowshoe hare abundance, yet this project is predicated on unnaturally altering the high elevation fire regime through fuel reduction.

What would be the indirect effects to Columbia Spotted frog of more sediment reaching streams from Farley logging and burning? There is inadequate analysis regarding effects to Columbia Spotted frog. The DEIS admits: “There is a potential that sediment could reach streams as a result of proposed activities.” (DEIS p. 164)

If there have been no formal surveys for Inland Tailed frog but suitable habitat is available, why is there no analysis of potential effects to it from the Farley project?

Dropping “regeneration” logging units would benefit Northern goshawk. Commercial thinning units should retain at least 40% canopy closure for goshawk foraging. The cumulative effects analysis for goshawk does not provide any population study data to indicate if populations in the analysis area are stable or not, nor any viability threshold, so there’s no basis for a conclusion of no significant impact, given that the project would cause a cumulative reduction in high quality foraging habitat. Species require good foraging habitat as well as nesting habitat.

“Regeneration” logging would convert suitable nesting habitat for Great Gray owls to an unsuitable condition. In the absence of population data for Great Gray owls in the analysis area, there is no basis for a conclusion of no significant impact, as there would be cumulative reduction of nesting habitat.

In the absence of more information on forest-dwelling bats’ ecological needs (eg. For how many snags of what size located where?) and no population studies for them in the analysis area, the DEIS discussion is virtually meaningless. There is no way to judge from it if the bats’ needs would be met post-logging and burning.

The listing of cumulative impacts to bat roosting habitat indicates the Farley project would have a negative cumulative impact by removing green trees and snags. We ask that no trees be removed over 15" dbh to preserve habitat and replenish old growth structure over time for bats and other mature forest-dependent species.

"Neotropical migrants account for a substantial portion of the avian biological diversity in the Desolation Creek watershed...Of the 122 species of birds known or suspected to occur, 57 species...are neotropical migrants." (DEIS p. 176) With the sharp decline of Neotropical songbirds, we are concerned by potential impacts from the Farley project including: loss of closed canopy and multilayered canopy interior forest, alteration of natural mixed conifer tree species composition and fuel reduction of shrubs in high elevation moist and cold forest. "With approximately 30 percent of the national forest areas in the analysis area in a stand initiation or understory reinitiation stage, and a large interior private holding that has been previously harvested, opening up more forest canopy could be detrimental to many bird species. The Farley project proposes regeneration harvest of 1,831 acres (Alternative 5) to 2,418 acres (Alternative 1) that would create additional open patches in the forest canopy." (DEIS p. 178) The cumulative effects analysis is inadequate regarding the effects to viability of Neotropical birds by these impacts. Neotropical songbirds need suitable habitat now, not "eventually".

Recreation and "Visual Resources":

Forty-five dispersed campsites and two developed campgrounds indicates high recreational use of the analysis area, which suggests that a natural appearing, more ecologically intact setting should be prioritized over heavy logging. Drop units crw, cma, bgc, and ac as no sale units should have little overstory remaining and these are near dispersed campsites, degrading recreational values. The conclusion of no cumulative effects on camping assumes that logging does not degrade the camping-associated broader recreation experience and ignores other impacts such as livestock grazing. "The Desolation Creek corridor is one of the few areas in northeastern Oregon that provides numerous desirable dispersed camp sites, good roaded access to backcountry portals, opportunities to hunt within roaded areas, and an adequate big game population." (DEIS p. 182) The listing of recreational uses of the area (pp. 182-183) also indicates high recreational value. Yet the Direct and Indirect Effects discussion ignores the aesthetic degradation of logged-out areas such as proposed with Farley "regeneration" units. Drop units ab, caw, cav, crw, bhd, bhc, bwa, and bja to avoid impacts to trails and wildlife. There is inadequate cumulative effects analysis regarding trails and dispersed recreation, with no discussion of impacts from this project.

More virtual clearcuts are a negative effect whether or not they are irregular in shape. Hunters and others using the area often come year after year and will notice the difference. The cumulative effects discussion is incredibly biased with no consideration of impacts to visual resources of the Farley project.

Candidate Wild and Scenic Rivers:

The wildlife, ecological diversity, and recreational values associated with the river corridor are dependent on adjacent and nearby forest habitat outside the immediate corridor to persist, so logging and roading planned could affect those Outstandingly Remarkable Values.

Inventoried Roadless and Undeveloped Areas:

We are strongly opposed to any logging, thinning, burning, mechanical fuel reduction, or road construction in any of the undeveloped areas. Undeveloped areas are all too rare now due to past logging and roading and need to be protected as refugia for wildlife that need large blocks of intact forest with little or no disturbance (eg. Lynx, Wolverine, Gray wolf.) Drop units bia, bka, bla, bra, bnb, bwa, bma, bna, ae, af, and ag as they would destroy the undeveloped character of the large undeveloped area north of Forest road 10. Drop all non-commercial thin units in undeveloped areas. (Listed on p. 189 of the DEIS.) Close the motorized trails that are inside the large undeveloped area north of road 10. The connective corridor between the North Fork John Day wilderness and the two inventoried roadless areas must be left

intact. “The proposed activities would cumulatively decrease the undeveloped character (natural appearance, sense of remoteness and solitude) of this area for up to 20 years.” Residual effects of reduced and changed species composition from fragmentation of undeveloped areas would last a lot longer than 20 years—stumps are the tip of the iceberg.

Reviews have identified the Skinner Creek roadless area as of particular concern. Located between Howard Creek and the North Fork Desolation Creek, on the east side of the main Desolation Creek, this area is approximately 3,100 acres, and only separated from the Wilderness by road 1010. Under Alternative 1 there would be new system roads built in it and several "harvest" (not thinning) units. Under Alt. 2, there are still some though fewer units and so-called temporary road construction to access units. Under Alt. 4 apparently drops logging in this area. And under Alt. 5 there is a permanent road and a couple of units, though less than in Alt. 1 and 2. There should be no logging, thinning, or roadbuilding in this and other project roadless areas, as noted above.

Economics:

To spend \$210 an acre to reforest in order to artificially convert tree species composition for timber production is absurd and futile in the naturally moist and cold mid to higher elevation forest, which is most of the project area. We are given the farcical choice of losing \$25,072 to \$638,822 to further degrade the ecosystem. This is an absurdly high cost per job created (eg. About \$13,733. per job for alt. 1.) There is no guarantee that jobs generated would go to local residents. Please send us your calculations and data used to arrive at the figures in Table 3.10.7. Tourism largely depends on natural aesthetics that would be sacrificed, especially with virtual clearcutting and roading. It is from consideration of the overwhelmingly negative ecological impacts not considered in the cumulative effects discussion that we conclude this sale should be dropped based on a cost-benefit ratio with these externalized costs taken into account.

Timber Volume Targets Driving NW Timber Sales

Over the past years, conservation efforts have achieved many negotiated changes, upholding federal laws and limiting timber sales to protect old growth, forest ecosystems, wildlife, and fish. Recently negotiation attempts have been detrimentally affected as Forest Service staff throughout the Pacific Northwest region acknowledge they are expected to meet the elevated timber quota targets adopted by the agency in April 2007. Due to the expected quota contribution to timber volumes from local national forests and ranger districts, the ability of agency planners and decision-makers to modify timber sales to lessen harms to wildlife, salmon, and other important ecological concerns has been unreasonably severely reduced. Yet agency NEPA project documents fail to disclose the significant determining role timber quotas have in shaping projects, or the effect these quotas have in discouraging agency decision-makers from modifying the logging extent of projects if such modification would reduce final timber volumes. The region's Forester at the time, Linda Goodman, wrote the following internal agency letter (included *italicized* in full below), confirming the existence of board foot volume targets driving the region's timber sales.

While the agency may believe it has the discretion to impose timber volume quotas, continuing to issue logging project “purpose and need” statements and analysis documents that fail to publicly disclose timber volumes are a major purpose behind the region's projects violates environmental policy laws. NEPA requires that the public as well as the decision-maker have all pertinent information concerning proposed projects. As these quotas exist, the agency must comply with environmental policy laws and clearly disclose their existence, the specific timber target goals for the affected forest and district, and the percentage of these the particular project is expected to contribute.

The failure of the NEPA analysis to disclose the existence of Pacific Northwest Regional timber volume target quotas, and their expected local national forest and ranger district percentages, driving agency projects and influencing the development and selection of alternatives violates the clear disclosure requirements of the NEPA. The failure to disclose that decision-makers are influenced in their selection of

an alternative by the expectation that their forest must meet its expected contribution to the region's timber quotas violates the requirements of the NEPA. Holding appeal resolution meetings wherein undisclosed quotas set the parameters limiting the decision-maker's ability to modify a project violates the NEPA, violates agency compliance with environmental policy laws, and violates agency accountability to the affected public.

NEPA requires unbiased, scientifically-based, objective analysis and a full range of reasonable scientifically-sound alternatives. The existence of undisclosed quotas unduly influencing this project towards meeting predetermined agency timber volume targets violates the requirements of the NEPA. Quotas sabotage agency projects, illegally predisposing agency analysis towards developing ecologically unwarranted logging-driven alternatives. This predisposes decision-makers to approve scientifically controversial or unfounded logging that is likely to result in significant harms to imperiled wildlife and biodiverse forest ecosystems. Such is the case with this project, which fails to disclose the existence or influence of timber volume quotas.

Written in "obfuscate-speak" style, one doesn't have to work hard to read between the lines of the former Regional Forester's April 2007 internal letter to understand timber corporation economics trump wildlife and ecological concerns in Pacific Northwest Region Forest Service projects.

Among the ever-growing ranks of harmful sales spawned by timber quotas are: Five Buttes, Snow Fuels, BLT, Black Crater, and GW in the Deschutes; Spears and East Maury in the Ochoco; Thorn, Knox, Black Rock, Crawford, and Egley in the Malheur; and **Farley**, Wildcat, Monument, Skull, Flat, Sugarbowl, and Otter Fire in the Umatilla. Together these and other sales total many thousands of acres and millions of board feet. The logging they plan to implement would harm wildlife and salmonid spawning habitat, destroy spotted owl nesting habitat; harm pileated, black-backed, and white-headed woodpeckers; degrade habitat for marten; wolverine; lynx; goshawk; neotropical migrant and native birds; pygmy, flammulated, and great gray owls; and many other biodiverse native species of concern.

It is doubly ironic that this is done under Northwest Forest Plan cover – prioritizing timber volume goals above this plan's original focal objectives of recovering the populations of threatened-listed spotted owl and other imperiled old growth forest-dependent species of concern and protecting essential forest habitat from logging and other management harms. The plan has failed dismally to meet population recovery and old growth habitat protection goals for spotted owls and other wildlife, whose populations continue to decline steadily. As noted in the letter, eastside forests are expected to meet westside NFP timber targets – jeopardizing eastside wildlife and forests as well. This latter is illegal, as eastside volume must be based upon LRMPs and site-specific project analysis, not westside timber volume targets which have no relevance or legal bearing on eastside national forests. The agency's blanket requirement of the region's forests to meet arbitrary timber targets violates federal environmental policy laws. Failure to disclose and analyze the impacts of this additional timber directive violates the NEPA. The following is the timber quota letter announcing the increased timber quotas in the Pacific Northwest Regional Forester's own words:

"Linda Goodman - Regional Forester, Pacific Northwest Region:"

"As we get older, we accumulate things. Sometimes our closets show our life story by the old shirts, slacks or shoes that "hang out" in them. And sometimes, we face the need to downsize our closets and find the usable items that may have benefit to others. We often provide clothes, appliances and other useful items for the greater good of others.

Sometimes, our forests resemble those closets—a bit cluttered and in need of "tidying up." This tidying up not only aids the environment by creating a healthier forest, it also can provide benefits to our local communities.

It takes money and time to do this. For a long time, we have known we didn't have the funds to get this work done. That has changed.

The President and Congress have given us an additional 24.7 million dollars to use for our fuels management and timber program. These dollars come with an expectation for us to increase our

timber volume for the Northwest Forest Plan and also the east-side Forests.

We're going to increase our timber offered program to 675 million board feet this year, and 800 million board feet in fiscal year 2008. That is up from 520 million board feet last year. We're going to do this in both young and mature stands to accelerate growth, reduce hazardous fuels, and improve wildlife habitat. This work will help us fulfill the requirements of the Northwest Forest Plan.

One of the key provisions of the Northwest Forest Plan is to provide economic stability to local communities. Unfortunately, due to a host of factors, the local communities have not seen the stability as envisioned by the Plan. By offering an increased volume of timber, local communities will benefit, both in terms of jobs, revenue, and healthy forests.

I realize this work, so late in the fiscal year, won't be easy, and will require a united approach to handle the work. I've appointed Willamette National Forest Supervisor Dallas Emch to spearhead our efforts. Dallas will be working with Forests to make sure we can get the work done in a timely and efficient manner. We know you already had a full schedule of work so we want to look at a full range of options to assist employees in meeting our work. Our goal remains to do this work in a collaborative effort, with counties, partners and citizens all working together for the good of the land and the people

"Tidying up" our forests and providing benefits to local communities makes good sense."

Interesting letter for interesting times? Yet forests are not "closets." Forests are an integral part of Earth's interwoven ecosystems, supporting innumerable biodiverse species, supplying clean waters, and providing all with the wondrous beauty of untrammled nature. Forests should not be subject to the political wiles of corporate timber, which has already imperiled not only spotted owls but numerous other LOS dependent wildlife and salmonid species, decimated old growth, and left forest ecosystems in fragmented tatters. We respectfully call for these Northwest Forest Plan dollars to be employed for legitimate restoration, forest protection, and recovery of imperiled species – and not used to toss more irreplaceable trees into the black hole of insatiable timber profits. The agency must begin to responsibly address the failure of their Northwest Forest Plan provisions to prevent the continuing serious decline of ESA threatened-listed spotted owls, and a host of other imperiled forest species of concern. Similarly, the agency must also address the failure of their Eastside "Screens" provisions to adequately protect and recover the populations and habitat of numerous old growth forest dependent species of concern. A scientifically and ecologically based restoration project needs to be developed for the project analysis area, and the current legally non-compliant logging project needs to be withdrawn.

The EIS is premised upon erroneous and scientifically controversial management assumptions and actions, which are incapable of meeting the ecological goals and objectives of the project's purported purpose and need.

The Farley DEIS identifies the purpose and need as:

"The purpose and need for the proposed project are to conduct timber harvest, commercial and non-commercial thinning, fuels treatment, prescribed burning, and reforestation on Umatilla National Forest lands in the Desolation Creek watershed in the Blue Mountains of northeastern Oregon to:

- capture present economic value of raw forest materials for the benefit of local and regional economies
- reduce forest fuel loads and to promote long-term forest stand structure and tree stocking densities that are more consistent with historic conditions
- promote forest resilience to large-scale wildfire, disease and insect infestations and the long-term sustainability of forest and associated resources (such as fish, wildlife, scenic

values, and recreation), as well as economic and social values.”

The purpose as expressed above is illusory and the analysis in the DEIS is unsound for at least two reasons. First, the historic forest conditions and forest health justification for this project is inherently flawed due to the belief that logging can correct past bad management practices, including fire suppression. While there is limited scientific support for the removal of small diameter trees and flash fuels in frequent fire-interval low elevation ponderosa pine forests, there is significant scientific controversy and strong recommendations against logging-thinning in mid and high elevation mixed conifer forests to: “reduce forest fuel loads and to promote long-term forest stand structure and tree stocking densities that are more consistent with historic conditions;” and to “promote forest resilience to large-scale wildfire, disease and insect infestations and the long-term sustainability of forest and associated resources (such as fish, wildlife, scenic values, and recreation).”

Indeed, the DEIS ignores and fails to disclose the majority of credible peer-reviewed scientific research that clearly indicates the project’s actions are incapable of achieving its stated ecological purposes quoted above, and instead would increase the risk and extent of severe fires in the project area (see Exhibit A). The underlying assumption that a forest is generally healthier if properly functioning parts of the forest are removed is similarly unsupported by fact.

The agency’s interpretations of scientifically controversial research addressing regional forest ecology is based upon the selective and contextually inappropriate misuse of a combination of limited scientific studies, agency assumptions, and politically-contrived timber volume agendas. While there is emerging scientific consensus concerning pre-European settlement era forest stand compositions and varied historical fire patterns in the region, the Forest Service has largely misapplied scientific conjecture in this project’s interpretation of “historic conditions” and in developing its planned actions within the planning area. The resulting project is a hodge-podge of only partially accurate historic stand assumptions mixed with erroneous and misapplied scientific interpretations. Consequently, overall the project’s logging plans will result in far more ecological harm than benefit to the area’s complex ponderosa pine and mixed conifer forest ecosystems and their dependent wildlife, native plant, and aquatic species. Agency contentions regarding “historic forest stand conditions” are ecologically simplistic, and largely incapable of factually representing area plant associations and forest conditions that occurred prior to human manipulation of the environment.

Forest stand overstocking is a term that applies to lower elevation frequent fire cycle forests, not high elevation mixed conifer forests which are naturally more varied and dense. Due to past logging in the area, what “overstocking” exists occurs primarily among young understory trees that have little if any merchantable timber value. Significant portions of the project also contain areas with unnatural logging created openings, old logging skid trails, far too many resource damaging unmaintained logging created roads, and overall degraded forest ecosystem conditions due to a combination of past and ongoing management, including logging, road building, fire suppression, invasive plant introduction and spread, and livestock grazing, and OHV use and abuse is also a growing concern.

Past and recent logging projects have exacerbated current fire risk throughout the area by removing fire resistant old growth, mature, and maturing trees, leaving high levels of logging slash in piles and spread across the forest floors. Fire resistant trees removed by logging have been – and are being - replaced relatively quickly with more fire prone vegetation including grasses, invasive plants, shrubs, forest vegetation, and small seedling and young trees.

Still, despite the presence of widespread cumulative management harms, a considerable portion of the planning area contains healthy maturing and old growth trees and forest stands, as well as more unmanaged roadless areas. As past high-grade logging removed many of the largest diameter trees, significantly altering the area forests, much of the project’s forest stands are still in the process of natural recovery from past over-logging. Old, mature, and maturing trees, including many of those planned for logging removal, play an essential role in the ongoing natural recovery process of the area’s forests. As many of the area’s old growth and large mature trees have been removed during past logging, the area’s

remaining trees greater than 12” diameter provide essential forest stand structure for wildlife habitat viability and the long term ecological integrity and recovery of the area. Removing many of these inherently fire resistant old and maturing trees as planned would be in contravention to the recommendations of the majority of scientific research studies and to the purported ecological portions of the project’s purpose (above). Such logging removal also cannot be justified under the stated ecological “needs” for this project.

As noted by scientific research, trees begin to exhibit fire resistant characteristics as they mature, with increased height of branches, thickening bark, vigorous growth, deepening roots, and greater moisture capacity retention. Varying somewhat by tree species and localized conditions, inherent effective fire resistance of growing trees begins to be attained between 5” to 10” diameter. Former Forest Service Chief Dombeck has been quoted as stating there is no valid rationale for removing trees greater than 12” diameter to meet fuels and fire risk reduction goals. As noted herein, removing too much of an area’s basically fire resistant maturing tree forest stand structure actually increases the risk of fire severity and extent of spread, due to greater solar drying, higher wind speeds, and greater prevalence of fire prone brush, vegetation and small diameter trees that soon replaces the more fire-resistant shade-providing/moisture retaining trees removed. Additionally, logging slash that remains in the forest increases the risk and extent of severe fires far above the pre-project implementation risks. Yet this purported “fuels reduction” project fails to adequately disclose or address cumulative issues of logging slash from other past and current projects, as well as project generated “fuels” that currently exist or will exist post-project in the area. Removal and/or reduction of existent logging and thinning generated fuels where appropriate should have been effectively addressed by the DEIS, especially given the purported purpose and need for the project.

As planned, the project would further harm the ecological integrity of the area by its planned removal of far too many of the area’s old and mature trees, including the scientifically insupportable logging in high elevation mixed conifer forests and the logging of inherently fire resistant mature and old growth trees. Such scientifically and ecologically unwarranted logging will seriously degrade existent wildlife habitat, jeopardizing the viability of forest-dependent species of concern throughout the greater project area. The planned logging violates the purpose and need for the project and the high quality science, expert advice, and reasonableness requirements of the NEPA. Project logging actions violate the qualified scientific objectives that comprise the foundation of the Eastside Screens. Project logging violates fire and fuels reduction scientific recommendations. Project logging of mature and old trees and degradation of forest habitat would likely extirpate or harm the habitat and populations of affected ESA listed species and imperiled forest dependent native species of concern in violation of the NFMA.

Scientific research noted herein, and contained within Exhibit C, clearly recommends against commercial logging-thinning as proposed by this DEIS. With the limited and illegal exception of the agency’s first purpose and need goal (above and addressed more fully later herein), the agency’s ecological purpose and need goals will not be met by the planned logging. Instead this project if implemented would:

- Unreasonably log in high elevation mixed conifer forest ecosystems;
- Remove fire resistant mature and old trees,
- Increase forest fuels by increasing the presence of logging slash, woody debris, and the growth of fire-prone brush, vegetation, and small diameter seedling trees;
- Increase risk of severe fires by increased solar exposure and reduced forest and soil moisture; resulting in increased risk of fire intensity and extent, and reduced capabilities to control of wildfire.
 - Endanger firefighter and public safety, by degrading the resiliency of area forests and increasing the risk of severe widespread fires,
 - Irreparably degrade wildlife habitat and other forest values,

- Irretrievably harm riparian areas and salmonid waterways,
- Provide forest products inconsistent with, and at the irreparable sacrifice and violation of federal environmental policy laws and ecological scientific research recommendations.

In brief, if implemented the project would increase the risk of severe fire by: excessive opening of the forest structure and canopy and resultant increased solar exposure and drying; and by the increased presence in subsequent post-project years of fire-susceptible brush, grasses, invasive plants, small diameter trees and other small diameter flash-fuel prone vegetation where fire resistant maturing and older trees had previously stood. It would also harm forest resilience, violate forest natural/historic range of variability, degrade wildlife and aquatic habitat, irreparably harm forest soils, and fragment the areas forest harming its ecological integrity. Its economic goals – by which the agency plans to sacrifice the ecological integrity of the project area, are also illusory, especially given the ongoing economic collapse and lack of need or demand for wood products throughout the region and nation. Simply put, the project defies federal laws and policy, credible science, economic realities, and plain common sense.

The agency's inferred premise that it can somehow improve upon nature's millenas long forest ecological and natural recovery processes by thousands of acres of widespread logging is scientifically controversial its best stretch – especially in high elevation mixed conifer forests - and largely insupportable when weighed in light of the full extent of credible peer reviewed scientific research, especially within the area's mixed conifer forests, and to the extent of commercial logging removal of essential maturing/mature forest structure in mixed conifer stands. Issues regarding scientific controversy were raised earlier in the scoping process, and are raised again herein with Exhibit C of applicable scientific research studies as part of our comments. We request these studies' recommendations be addressed and incorporated into the project, and that the agency disclose and address the ongoing scientific controversy concerning its proposed management actions. It is the agency's legal responsibility to found its NEPA projects upon the best available science and expert advice, to develop a full range of varied alternatives based upon pertinent science, and to disclose the full extent of applicable science and the existence of scientific controversy and scientific recommendations that differ with proposed agency actions. The DEIS however, in clear violation of the requirements of the NEPA, chose to ignore substantive issues of scientific controversy, failing to disclose or address scientific research that contradicts or recommends against the project's actions. Agency dismissal of scientifically based concerns and recommendations, and the DEIS's mere listing of scientific research reports, fails to meet the requirements of the NEPA to meaningfully and reasonably incorporate, disclose, and address applicable science within the DEIS, including the development of proposed actions and project analysis.

We also request that the agency substantiate the scientific basis of its proposed alternatives and selected management actions. The DEIS notes selective scientific research to support its thinning contentions, but fails to correlate the extent of its thinning with these studies, in particular as related to high elevation mixed conifer forest ecosystems, the forests natural range of variability, area fire ecology cycles and patterns, affected wildlife and aquatic species habitat needs and occurrence, forest structural integrity, ongoing natural recovery processes, and the full range of cumulative impacts from past and ongoing management. The agency fails to develop a range of reasonable alternatives based upon credible scientific research that is not in accord with the myopic logging-permitting research cited, thus failing to provide the decision-maker and the public with a full range of reasonable scientifically supported alternatives, or even the awareness that the planned actions are scientifically controversial and largely scientifically insupportable at best.

The agency may not arbitrarily selectively pick only among the limited scientific studies that appear to support its logging plans. It may not just merely list scientific studies in its index, as if these were all incorporated or consulted. The analysis within the DEIS must disclose which studies were incorporated in its planned actions, and must also disclose which studies recommend against such actions, providing the public and decision-maker with NEPA's requisite scientifically and meaningfully informed analysis on

which to weigh the impacts, benefits and harms, and efficacy or lack thereof, of proposed agency actions. Alternatives presented where there exists credible scientific controversy must reasonably include a range of actions substantiated by the varied research, so the public and decision-maker can choose which actions may be most effective or desirable in the long-term in a given project area. The project however, only develops four action “alternatives” (in addition to the no action ‘alternative’ - which the agency generally never selects), all of which are commercial logging proposals that differ only marginally in the number of acres logged, with about a 640 acre range between alt. 1 (at 2,848 acres) and alt. 5 (at 2,206 acres) in commercial logging. All action alternatives are based upon the same controversial logging premises. Despite NEPA’s legal requirements the DEIS contains no action alternatives that are developed based upon the preponderance of credible peer reviewed ecological science.

In its arbitrary dismissal of other potential alternatives, the agency fails to disclose the existence of any scientific controversy. Instead the agency misuses its limited selective studies, internal agency premises, and the apparent proposed logging-alternative biased prerogatives of its EIS planning team staff to arbitrarily and capriciously dismiss a wealth of substantive pertinent peer reviewed scientific research, management directives, the Eastside Screens - ICBEMP science recommendations and goals, and accurate site-specific conditions and concerns. These serious analysis development deficiencies violate the requirements of the NEPA, and have resulted in this ecologically harmful, legally non-compliant, logging focused timber volume DEIS.

Further, the agency fails to effectively and adequately modify its logging plans to incorporate the recommendations of scientific research on the habitat and viability needs of the many affected native forest-dependent species in the greater project area. Here again, to a large extent, the DEIS fails to adequately disclose pertinent scientific research on affected native species. The DEIS fails to adequately inform the public or decision-maker of scientific recommendations against such logging, overall wildlife viability recovery objectives, cumulative impacts issues, and the accurate extent of the likely harmful consequences of its actions to species of concern that are or may be within the project area.

The depletion of the HRV of LOS forests is represented by the many old clearcuts and widespread past high grading of mixed conifer forests, which removed old and mature sized trees of all species throughout the project area. This has been documented by the surveys in the project area. The project as proposed would only further harm the areas forests, and must be withdrawn or significantly revised. Given all the above, it defies common sense, and NEPA’s reasonableness and accuracy requirements, for the DEIS to make its many scientifically controversial and insupportable claims that extensively logging the project area as planned could do anything other than further degrade and harm the project area forests and watersystems.

National Environmental Policy Act Issues

1. The DEIS does not analyze a full range of alternatives

The DEIS does not include a restoration alternative, or a range of other scientifically-based alternatives, even though it is “reasonable” to include a restoration alternative, and even though NEPA requires a full range of reasonable scientifically sound alternatives.

Analyzing alternatives is “the heart of the environmental impact statement.” 40 C.F.R. 1502.14. An agency is required under NEPA to “rigorously explore and objectively evaluate *all reasonable* alternatives.” 40 C.F.R. 1502.14(a) (emphasis added). An agency may not decline to evaluate an alternative simply on the grounds that it is not a “complete solution” to the agency's goals. Citizens Against Toxic Sprays, Inc. v. Bergland, 428 F. Supp. 908, 933 (1977). Furthermore, an agency should use the NEPA process to “identify and assess the reasonable alternatives to proposed actions that will

avoid or minimize adverse effects of these actions upon the quality of the human environment.” 50 C.F.R. 1500.2(e).

The range of alternatives to the Farley DEIS is inadequate, because the EIS never analyzes a restoration-only alternative. A restoration-only alternative is certainly a reasonable alternative to consider for this purported fuels and fire risk reduction project, especially considering that the stated needs of the project are to:

- capture present economic value of raw forest materials for the benefit of local and regional economies
- reduce forest fuel loads and to promote long-term forest stand structure and tree stocking densities that are more consistent with historic conditions
- promote forest resilience to large-scale wildfire, disease and insect infestations and the long-term sustainability of forest and associated resources (such as fish, wildlife, scenic values, and recreation), as well as economic and social values.”

Mechanical fuels treatment, by itself, is not enough to reduce the risk of severe fire; treatments must be accompanied by efforts to remove the underlying causes of fire risk, like logging and fire-suppression. (Rhodes, 2007).

A restoration alternative would focus on maintaining the “ecological integrity” of a forest ecosystem, upholding the overall goals of the NFMA, Umatilla LRMP, and Eastside Screens. Ecological integrity means ecological wholeness and would consider actual high elevation mixed conifer forest natural range of variability; forest integrity; fire patterns, cycles, and natural risks; and natural roles and fluctuating patterns of insects and disease; protecting and restoring wildlife or fish habitat; and hydrologic condition and functioning. (Brown et al, 2004) "The essence of maintaining ecosystem integrity is to retain the health and resilience of systems so they can accommodate short-term stresses and adapt to long-term change." Id at 19. None of the action alternatives focus on restoration of the ecosystem, even though restoration is the best approach for maintaining the wholeness of the forest and its habitat and reducing fire risk in the long-run.

All action alternatives both focus largely on commercial logging. However, commercial logging is not the only way to reduce the risk of natural disturbances, nor is it the best way. Commercial logging has, in fact, not been shown in any scientific literature to reduce the incidence of large-scale fire. (Carey and Schumann, 2003) Commercial logging in important habitat does not make sense in light of the objective to protect habitat. Cutting maturing and mature and old trees not only degrades wildlife habitat, but it exacerbates wildfire severity. (Brown et al, 2004; Carey and Schumann, 2003; Noss, et al 2006; Rhodes, 2007; Morrison and Smith, 2005) See also additional studies included in Exhibit C.

Managed forests should not only support ecologically appropriate fire regimes and forest resiliency, they should also support viable populations of species. (Noss, et al 2006). The Forest Service must at least *consider* an alternative that will truly protect important habitat without destroying it. NEPA requires the agency develop science based alternatives, including a restoration-only alternative, as well as a full range of scientifically varied action alternatives. As the project contains logging units within contiguous viable habitat for species of concern, immediately adjacent to old growth, roadless, and wilderness, logging within project units would degrade potential habitat for ESA listed and other imperiled species of concern, disrupting forest connectivity and available habitat. The DEIS fails to adequately disclose and address this significant issue, and instead proposes to compound existent cumulative impacts habitat degradation with even more logging harms.

Throughout the region the Forest Service has employed dubious fire models to claim that commercial logging is the only way to serve the Forest Service's needs. These models do not give, nor can they give, an adequate explanation of how mechanical fuels treatment can reduce the risk of fire. (Morrison and Smith, 2005; Veblen 2003; Carey and Schumann, 2003, and new science studies by Veblen, Rhodes, and others included in exhibits) The NEPA regulations allow the agency to explain why a particular option is not feasible, or otherwise not reasonable, and hence eliminate it from further consideration. 40 C.F.R. 1502.14. However, the reasons given must be adequately supported. Muckleshoot Indian Tribe v. U.S. Forest Service, 177 F.3d 800, 813-15 (9th Cir. 1999). The DEIS claims that an alternative limiting logging to 12" dbh trees and below does not sufficiently reduce the risk of fire and meet project goals, but fails to include sufficient information to support its scientifically insupportable and/or controversial conclusions. Without fully analyzing a restoration alternative, the Forest Service and the public will never know how the forest will be affected without commercial logging. The Forest Service cannot make a fully informed decision without full analysis of a restoration alternative.

The Forest Service must analyze an alternative that will eliminate scientifically controversial commercial logging and all fuels treatment that is not based in sound ecological principles, as this is reasonably within the stated purpose and need of the project. Each current alternative significantly degrades viable mature and old forest habitat in mixed conifer mature and old forests, adjacent to old growth areas, roadless areas, salmonid watersystems, and wilderness. The Forest Service does not present any alternative that actually protects viable old and mature forest habitat, that protects essential forest connectivity, and that addresses cumulative impacts harms throughout the project area. The DEIS claims that forest habitat is *at risk* of destruction by "catastrophic fire" but does not disclose that old and mature forest habitat and connectivity are *certain* to be irreparably injured under this project. The effects to the interior mature and old forest dependent wildlife under this project are immediate and certain, while the risks the project is attempting to avoid are distant, hypothetical, and scientifically insupportable. The Forest Service must analyze an alternative that would actually "avoid or minimize adverse effects of these actions," as NEPA requires it to do. 50 C.F.R. 1500.2(e).

Undisturbed mature forests require little or no restoration. (Baker et al,) Passive restoration is the best way to return forests back to the condition first perceived by the European settlers. (McIver and Starr, 2001) At a minimum, the Forest Service must analyze an alternative that would exclude the most important mixed conifer and pine mature and old forest habitat from ecologically harmful active forest management actions and protect the area's connective forest habitat, especially surrounding and linking old growth, roadless, salmonid waterways, and wilderness with adjacent mature and old forest, and high elevation forest habitat.

The DEIS only analyzes "alternatives" that are virtually identical to each other

The Ninth Circuit has found that an EA/EIS that analyzes a no-action and other virtually identical action alternatives violates NEPA. Muckleshoot Indian Tribe v. U.S. Forest Service 177 F.3d 800, 813-15 (9th Cir. 1999). The Farley DEIS takes this very same approach with its alternatives. There are only logging action alternatives in the project DEIS: the no action alternative; Alternative 1, which commercially logs on 2,848 acres; Alternative 2, which commercially logs on 2,502 acres, Alternative 4 which commercially logs on 2,454 acres, and Alternative 5 which commercially logs on 2,206 acres. The action alternatives are essentially similar, especially in regards to their focus on commercial logging/thinning. The overwhelming scientific recommendations do not support the DEIS contention that the *only* possible alternative in this case necessarily involves wide-scale commercial logging in mature and old pine and mixed conifer forest habitat, and as such all of these alternatives violate the NEPA, requiring that actions are based in expert advice and high quality science. In an EIS, the Forest Service

has a duty to fully consider alternatives to the wide-sweeping logging impacts that are posed by this project. The Forest Service must include a sufficient range of scientifically credible alternatives in order to provide a basis for sound forest management decisions.

Purpose and Need of the Project is Impermissibly Narrow

The Farley DEIS states the project's purpose and need as:

- “• capture present economic value of raw forest materials for the benefit of local and regional economies
- reduce forest fuel loads and to promote long-term forest stand structure and tree stocking densities that are more consistent with historic conditions
- promote forest resilience to large-scale wildfire, disease and insect infestations and the long-term sustainability of forest and associated resources (such as fish, wildlife, scenic values, and recreation), as well as economic and social values.”

An agency must not define the purpose and need of a project so narrowly that the proposed action is the only possible course of action. EPIC v. USFS, D.C. No. CV-04-01705-GEB (9th Cir. 2006)(attached). In the recent EPIC case, the Ninth Circuit found that the purpose and need of a timber sale project was so narrow that it was impermissible. The proposed action was the only possible course of action to fulfill the purpose and need, so there was no real analysis of alternatives. The purpose and need of the Farley DEIS timber sale is also far too narrow. The Forest Service has limited possible actions to only scientifically controversial and largely insupportable logging actions which are incongruous with its ecological objectives above. The Forest Service narrows their objectives and analysis in the DEIS, failing to address cumulative impacts issues from past and recent projects, failing to accurately disclose or address the harmful logging impacts of this project, and failing to effectively address a range of restoration actions that encourage and restore forest resiliency and LOS habitat, and instead focusing almost exclusively on scientifically controversial logging actions to accomplish its stated objectives. Given the DEIS's stated purpose 1 above, the only possible action that could fulfill the need to “capture present economic value of raw forest materials for the benefit of local and regional economies” is commercial logging. Because of the narrow purpose and need, the Forest Service only analyzes alternatives that include commercial logging.

In Methow Valley Citizens Council v. Regional Forester, 833 F.2d 810, 815, rev'd in part, 490 U.S. 332 (1989) (internal citations omitted) the Court determined that the EIS was inadequate because it failed to examine all reasonable alternatives. The Court held that “the range of alternatives considered must be sufficient to permit a reasoned choice.” Here, beyond the statutorily required “no action alternative,” only largely similar logging alternatives were developed and considered. These logging alternatives differ only by extent and focus of acres logged. They do not differ in substance concerning the action methods, scientifically controversial premise, logging impacts, changes to forest stand structure and wildlife habitat, or economic timber volume objectives. The Forest Service failed to consider other reasonable activities in violation of NEPA.

Violations of the Core Tenets of the NEPA

The DEIS violates the very core tenets of the NEPA:

- 1) Directing that actions not harm the environment: "NEPA, CEQ Regulation part 1500 - Purpose Policy and Mandate" "Sec. 1500.1 Purpose. (c) Ultimately, of course, it is not better documents, but better decision that count. NEPA's purpose is not to generate paperwork - even excellent

paperwork - but to foster excellent action. The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions **that protect, restore, and enhance the environment**. These regulations provide the direction to achieve this purpose."

- 2) Directing the agency to develop and analyze a reasonable range of alternatives that avoid or minimize environmental harms: "Sec. 1502
 - a. (e) Use the NEPA process **to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment.**
 - b. (f) Use all practicable means, consistent with the requirements of the Act and other essential considerations of national policy, **to restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of their actions upon the quality of the human environment.**"
- 3) More directions on the range of alternatives: "Sec. 1502.14 Alternatives including the proposed action. This section is the heart of the environmental impact statement. Based on the information and analysis presented in the sections on the Affected Environment (Sec. 1502.15) and the Environmental Consequences (Sec. 1502.16), it should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public. In this section agencies shall: (a) **Rigorously explore and objectively evaluate all reasonable alternatives**, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated."
- 4) And finally, the very core of NEPA - Congressional intent and directives to "prevent or eliminate damage to the environment" From "The National Environmental Policy Act of 1969; Purpose Sec. 2 [42 USC § 4321]. The purposes of this Act are:
 - a. (a) To declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality."
 - b. (b) In order to carry out the policy set forth in this Act, it is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may –
 - i. 1. fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
 - ii. 2. assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
 - iii. 3. attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
 - iv. 4. preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice;
 - v. 5. achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
 - vi. 6. enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

- c. (c) The Congress recognizes that each person should enjoy a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment.”

Clearly, the DEIS itself serves as perhaps the best evidence that the Forest Service fails to begin to meet these most basic NEPA requirements. The project’s contrived purpose and need, similar logging action alternatives, analysis failures, environmental harms, and failure to adequately disclose and address significant scientific controversy and contravention to the selected and presented alternatives violate the most elemental requirements of the NEPA.

While the agency seems to believe – as stated by one regional official - that “NEPA doesn’t require decision-makers to choose the best alternative, and instead only requires that impacts be addressed,” –this perspective is clearly incorrect regarding NEPA’s requirements to utilize sound purpose and need, expert advice and high quality science, develop a full range of reasonable alternatives that “take actions that protect, restore, and enhance the environment” (CEQ 1500 §1501.1(c)) and a host of other NEPA core directives that follow above regarding the development of reasonable alternatives that “ identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions” to the final directive above about the responsibility “to contribute to the preservation and enhancement of the environment.” Clearly the DEIS fails the requirements of the NEPA, necessitating that this EIS be withdrawn and project be revised in a new legally compliant EIS analysis process that develops a full range of environmentally beneficial, scientifically based, LRMP, Eastside Screens, and legally compliant action alternatives.

The Need for A New EIS or SEIS

NEPA requires the Forest Service to prepare an EIS for all major federal actions that “may significantly affect the quality of the human environment.” 42 U.S.C. § 4332(2)(C). If an agency decides not to prepare an EIS, it must supply a “convincing statement of reasons” to explain why a project’s impacts are insignificant. *Blue Mtns. Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1212 (9th Cir. 1998) (also holding that a “plaintiff need not show that significant effects will in fact occur” that it is enough for the plaintiff to raise “substantial questions whether a project may have a significant effect” on the environment). Because this decision includes widespread scientifically controversial commercial logging actions in an area with significant public recreational, wilderness, waterway, and wildlife values, which has extensive past and ongoing cumulative impacts issues, and the DEIS has numerous legal and analysis deficiencies, and the actions as proposed would result in irreparable illegal environmental harms, NEPA requires the current EIS be withdrawn and a new legally compliant EIS or SEIS be developed for this proposed project before a decision may be issued. The issues raised herein, which are supported by credible scientific research and legal rulings, clearly indicate that the project DEIS is arbitrary and capricious and scientifically and legally insupportable for a project of this extent and level of irretrievable impacts.

Science Inadequate

The NEPA regulations require the Forest Service to “insure the professional integrity, including scientific integrity, of the discussions and analyses” in the NEPA documents that it prepares. 40 C.F.R. § 1502.24. Furthermore, the Forest Service must disclose the extent to which the impact of the proposed action is scientifically controversial. See *id.* §§ 1508.27(b)(4), 1508.27(b)(5).

Purpose and Need is Not Based on Best Available Science and is Scientifically Controversial

The project purports it will reduce fuel loadings through mechanical fuels treatments, including over two thousand acres of commercial logging. However, the mechanical fuels treatments would actually degrade and destroy habitat in both the short and long-term. The planning area includes diverse stands of forest that are green, healthy and thriving. The project area is home to a diverse array of species, many of which depend upon complex interior forest. The Forest Service's proposal to "protect" wildlife habitat in the future by destroying wildlife habitat in the present fails to make ecological sense, and is scientifically insupportable.

The Forest Service never presents science showing that wildlife habitat and biodiversity is benefited in the future by destroying habitat in the present. To the Forest Service, the theoretical risks of fire, insects, and other disturbances are just as great as the actual impact of logging. Where is the science to support this hypothesis? The Forest Service's plan to protect forest habitat with mature, late, and old-structured stands and mature and large trees is to cut them down. The actual planned action is, then, inherently antithetical to its stated purpose.

Part of the stated and implied purpose and need of the project is to protect habitat, however, the project does the exact opposite. The activities planned for this sale may cause both a short-term *and* a long-term degradation of suitable habitat. Area forest species of concern, including lynx, wolverine, wolves, salmonid species, goshawk, marten, pileated and three toed woodpeckers, neotropical and migrant native bird species, and others, require extensive connective forests with mature and late-successional characteristics, including large diameter trees and healthy functioning watersheds and water systems. (Lint, 2005) It is these forests that are most fire resistant, as they have moist interiors, a complex canopy, and are impenetrable to wind. (Rhodes, 2007 and others – see below) Commercial logging the area's mature and old fire resistant trees up to 21 inches in diameter (DBH) would irreparably degrade wildlife species of concern and listed-species habitat, including connectivity, *and* increasing the risk of fire. It is well documented that mechanical logging fuels treatments may not reduce the risk of fire, but it does certainly destroy habitat.

The Forest Service fails to address cumulative impacts properly, and fails to provide any science showing that destroying viable mature and old mixed conifer and pine forest habitat in the present benefits the area's many diverse forest species of concern in the future. Without protection today, the future viability of the area's listed species and species of concern is absolutely uncertain. In light of the new scientific information revealing the importance of forest connectivity and evidencing population declines of numerous old and mature forest dependent species, the Forest Service makes a very risky move to further stress these populations in the present with this project's planned logging.

Additionally, ongoing scientific research has confirmed that many old growth dependent species of concern continue to use even severely burned mature and old forest habitat, while other research concludes that many forest species of concern are deterred from utilizing forest habitat that has been degraded by commercial logging and thinning. Research concludes that logging extirpates and harms populations of goshawks, marten, lynx, eagles, osprey, wolverines, wolves, great gray and other owls, and many other species of concern, as well as populations of their prey species. The failure of the project DEIS to disclose and address this pertinent information in its analysis deprives the public and the decision-maker of essential information critical to designing a reasonable project with a likelihood of accomplishing its purpose and need goals. The project is premised in large part on the perceived need to protect area forests and wildlife habitat from the effects of severe fire(s). As such, it is extremely important that project analysis address scientific research that indicates affected species of concern are not extirpated from forest habitat from fire – and comparatively assess scientific research that indicates these species are extirpated from forest habitat from commercial logging and thinning. The failure to include

this analysis within the EIS, and the failure to include a restoration alternative based upon relevant scientific research violates the NEPA.

Plan for Reducing Fire Risk does not use the Best Available Science and is Scientifically Controversial

There is ample scientific controversy about whether mechanical fuels treatment reduces fire risk. Mature, old-growth stands have dense, moist interiors and little wind, which inhibit the spread of wildfire. (Morrison and Smith, 2005; Rhodes, 2007) Fuels treatments that reduce stand density and open up the forest actually enhance fire spread, as fire moves more readily through an open environment. (Morrison and Smith, 2005; Rhodes, 2007) An opened forest allows fuels to dry out faster and winds to blow through the stand. (Morrison and Smith 2005; Rhodes, 2007) Thinning the understory is more effective at reducing fire risk than thinning the overstory. (Carey and Schumann, 2003) Complex and varied canopies may actually prevent the spread of wildfire better than dense, young, single-storied canopies. (Morrison and Smith, 2005) The Forest Service plan to disturb the canopy and interior forest conditions of mixed conifer forests is not based in the best available science. “Although the assertion is frequently made that reducing tree density can reduce wildfire hazard, the scientific literature provides tenuous support for this hypothesis.” (Carey and Schumann, 2003, page 14). The Forest Service is at least required to discuss this very lively scientific controversy about the role of mechanical fuels treatment in reducing the risk of fire in the project EIS.

There is no scientific support to show that commercial thinning reduces fire risk. (Carey and Schumann, 2003) Despite the stated intention to protect habitat, the project EIS focuses more heavily on commercial logging than it does on needed restoration and protection actions. Commercial thinning is especially controversial when the permitted diameter limit allows the logging of fire resistant mature and old trees, and maturing trees essential for forest ecological integrity, resilience, wildlife habitat, and watershed functioning. Science overwhelmingly concludes that logging mature and large, fire resistant trees does not reduce the risk of fire and actually can contribute to more intense fires. (Brown et al 2004; Carey and Schumann, 2003; Noss et al, 2006; Rhodes, 2007; Morrison and Smith, 2005; Baker et al, 2006) A percentage of the trees to be logged in this project will be mature trees up to 21” DBH, yet this total is not accurately disclosed in the DEIS nor are the impacts adequately assessed and disclosed. The Forest Service apparently erroneously concludes that *commercial logging* of mature and old fire resistant trees is the only way to reduce the risk of fire in the planning area. The Forest Service does not need to cut trees up to 21” DBH, or for that matter to cut any trees in mixed conifer high elevation forests – especially trees that evidence fire resistant mature and old characteristics. The DEIS plans to cut an undisclosed number of old and mature large fire-resistant trees fail to utilize the best available science. Also, the DEIS never “disclose[s] the extent to which the impact of the proposed action is scientifically controversial,” regarding the Forest Services’ decision to reduce fire risk by commercially thinning mature stands of mixed-conifer forest. 40 C.F.R. 1507.27(b)(4).

A significant portion of the commercial thinning and fuels reduction will occur in mixed-conifer forests. However, thinning is not needed in mixed-conifer forest to prevent fire. Mixed-conifer forests are wetter and have a mixed-severity fire regime. (Noss et al, 2006; Rhodes, 2007) The mixed-conifer stands have developed with both low-severity fires and high-severity fires, thus there is no support to show that the stands’ fire regimes have been altered. If the fire regime is not altered, then fuel “treatments” do not help to reduce the risk of severe fire or restore the stand to its natural fire behavior. (Rhodes, 2007) The EIS does not present any proof that mixed-conifer forests are at “uncharacteristically severe levels” with their fuel load. The Forest Service just claims that fuels are outside their “desired condition,” so a large fire is

expected. However, the forest is not outside of its desired condition unless the current time period without fire is longer than any time period in the areas' history. (Rhodes, 2007) The mixed-conifer forests in the project timber sale area do not require fuels management, especially when the "treatment" will destroy important old and mature connective forest habitat for regional species of concern and ESA listed species. Fire is a natural and inevitable component in a functioning forest ecosystem, and the mixed-conifer forests in the project area are within their natural range of fire behavior. The Forest Service has not based its determination to alter the natural fire regime of the mixed-conifer forests in the best available science.

Mycorrhizae.

The EIS did not sufficiently recognize the importance of mycorrhizal fungi on forest growth and productivity. The EIS failed to adequately discuss how mycorrhizae will be impacted by the proposed timber project. The EIS failed to sufficiently assess how logging has affected mycorrhizae in areas nearby the analysis area. Mature and old growth forests within the project area are rare within the Umatilla, and must be protected from adverse logging impacts. Scientific evidence suggests that mycorrhizae and other soil organisms and processes are extremely important and are easily destroyed by ground-based logging, including thinning using BMPs as well as post-logging subsoiling, which devastates subsurface soil microbial communities upon which healthy functioning forests depend. Affected wildlife species, including prey species for raptors and predators also rely on the fungi, but there is no discussion of how the project will affect this important food source for these species. Without an adequate discussion of the impacts to soil mycorrhizae, including the harmful impacts of subsoiling and ineffectiveness of BMPs, the public and the decisionmaker are precluded from making an informed decision regarding the proposed project, and the USFS cannot assert that there will be no permanent impairment of the soil. 30 C.F.R. §§ 219.27(a)(1), 219.14(a)(2) (prohibiting activities unless technology is available to prevent impairment of soil or water resources).

Lynx

Among our many concerns is that of this proposed project's effect on lynx. Based on data from the U.S. Fish and Wildlife Service's (USFWS) Portland office, there have been past sightings of lynx in the Oregon Cascades region, including the Umatilla NF. Historic evidence of lynx in these areas include positive occurrence records, lynx bounty claims, and Forest Service Wildlife Statistical Reports. Positive reports of lynx occur as far south as Modoc County, California. As this is the case, the project area may be important to lynx recovery. It is plausible that lynx are rare in the project area (and in Oregon on the whole) due to bounties, aerial poisonings, and other efforts to eliminate them (and other predators) that were performed systematically for decades, and not due to a lack of habitat, as is the current situation with wolves as well.

The USFS should have adequately addressed how further fragmentation of the planning area will affect lynx. It is clear that lynx habitat is very fragmented, and that large blocks of intact forest are required to maintain viable populations of the species. Without these large blocks, lynx may need larger ranges to survive. The project is located in higher North Fork John Day District's mountain forests, in and within range of mixed conifer forest habitat known to be preferred by lynx, including mixed conifer forests, and connective forest habitat with roadless and wilderness areas. The proposed logging in the planning area may adversely affect whatever lynx recovery is occurring, as lynx may use portions of this area for both nocturnal foraging as well as migratory and dispersal routes and refuge. Continuing to squeeze lynx out of their habitat range by intensively managing the land runs afoul of NFMA's requirement that the agency maintain viable populations of wildlife that are well distributed across the

landscape. 36 C.F.R. § 219.19. The USFS has an obligation to accurately assess the impacts of its project on lynx.

Next, it is clear that data is lacking on the food habits of lynx in Oregon's forests, which represents a critical research need. Ruggiero, 1999b; Aubry, 1999. It is well accepted that lynx are dependant on snowshoe hares as a prey base, but in the southern portions of lynx range squirrels, other rabbits, small rodents, birds and other wildlife may always be an important part of lynx diet. Some of these same prey species may also be important to raptors and other wildlife species of concern. It is critical to understanding how this project may impact lynx to examine how it will impact lynx prey.

Snowshoe hares, squirrels, and other mammals have different habitat needs, but many of these species could be negatively impacted by the fragmentation, logging, road building, and other actions associated with this project. Most of these prey species require adequate cover (USFWS, 1999), especially conifer cover in winter (GTR-RM-254), and foliage that is accessible during winter snowpack conditions. Hares, squirrels, and forest-dependent species are typically associated with dense forest cover, including shrubs and "dog hair" thickets of small trees. McKelevey, 1999a. Many of these prey species also perform important roles in the recovery of fragmented forest habitat, helping to spread seeds of forest plants and trees, distributing nutrients throughout area soils, and loosening compacted soil areas—none of which was sufficiently disclosed or addressed in the EIS. Edge areas within and adjacent to dense mixed conifer forests provide viable habitat for many species, including potential prey species for lynx. The adjacent wilderness and roadless areas also provide potential habitat, and the project area likely serves as dispersal and migration corridors, as well as supplemental habitat for lynx which may occur within, or traverse through, the project area. The proposed action alternatives which would log connective mature and old forest habitat, would result in significantly further reducing needed cover for wildlife, jeopardizing both lynx and their prey species viability across the area—in violation of the NEPA, NFMA, and the ESA.

Different timber harvest methods can have detrimental impacts on many of these species, including squirrels, rabbits, rodents, and birds, as well as snowshoe hares. Koehler and Britnell (1988) predict that it may take up to seven years after logging an area for hares to recolonize the site and up to 25 years before they reach their highest densities. Bull (1999) examined the results of a variety of harvest prescriptions on hares and found that in lodgepole stands, the number of snowshoe hares decreased in all types of harvest. She reports that mixed conifer stands appear to be "no longer suitable for hares after harvesting." This same is also true for many of the other forest-dependent species which comprise the lynx's diet.

Squirrels have different habitat needs than snowshoe hares and are associated with mature, cone-producing forests. Ruggiero, 1999a; Buskirk, 1999b; McKelvey, 1999a. They tend to reach their highest densities in late-successional, closed-canopy forests with substantial quantities of course woody debris. The EA fails to adequately address potential impacts this project may have on squirrels, and ignores an important component of lynx diet. The discrepancies and deficiencies of EIS assertions further underscores the failure of the EIS to adequately disclose and analyze this important issue.

The EIS failed to provide a thorough examination of how the project will impact both hares and squirrels, as well as other wildlife species which are potential lynx prey. Without complete analysis of how these prey species will be impacted, it is impossible to quantify and qualify the impacts to lynx. The EIS must analyze the cumulative impacts of this project on lynx prey in association with other projects on the District, Forest, and surrounding lands.

In sum, The Lynx Conservation Assessment and Strategy (LCAS) clearly asks that the Forest Service perform project specific analysis for each project. The lack of project specific analysis has been a long-standing problem with the Forest Service. The USDA Office of the Inspector General in its January 1999 report (No. 088001-10-At.) tries to correct this problem but the Forest Service has ignored the recommendations of this report. The LCAS executive summary states:

Plans that incorporate the conservation measures, and projects that implement them, are not generally expected to have adverse effects on lynx.... However, because it is impossible to provide standards and guidelines that will address all possible actions, in all locations across the broad range of the lynx, project specific analysis must be completed.

It is clear that the Forest Service has not completed NEPA required accurate analysis and therefore is in violation of the LCAS, as well as the ESA and NFMA. The EIS makes little mention as to any site-specific to protocol recent surveys supporting its determinations, fails to adequately disclose surveys or survey protocol, methodology, areas or frequency. As such, this determination is arbitrary and capricious and therefore illegal. The DEIS must be withdrawn and a new EIS conducted which addresses and corrects these analysis deficiencies and illegalities.

Wolverine

It is suspected that wolverine may use the planning area as part of their seasonal and nocturnal foraging and territorial wandering patterns. Winter season surveys by our organization over the past decade have found likely wolverine snow tracks within the region's forests. Wolverine are known to have a 150 square mile or more winter range, and are also known to utilize roadless and wilderness areas—including the areas surrounding these preferred places. It is also well known that human disturbance related to the proposed activities is likely to alter the movement patterns of wolverine and other wildlife species. Failing to adequately and accurately address the likely impacts to wolverine by the proposed projects, given the large home ranges of these animals (approximately a 150 square mile winter range), and the likelihood of wolverines in the project area, violates both NEPA and NFMA.

The EIS fails to adequately analyze how wolverine will be affected by the proposed project. Because it is probable that the species utilizes the planning area for some life cycle needs, the USFS is required to accurately address how the commercial logging and road building projects will affect those needs and the species itself. The EIS's failure to do so, and its irresponsible dismissal of the proposed project's likely adverse impacts to wolverine, including the project's likely incremental role in ongoing trends pushing this species towards uplisting under the ESA, violates NEPA and NFMA. 40 C.F.R. § 1502.16 (environmental consequences); 36 C.F.R. § 219.19 (fish and wildlife resources).

Given the sensitive nature of this species, it is likely that the proposed project will decrease Wolverine viability through the actual loss of connective travel, nocturnal, and seasonal foraging habitat, and possible loss of individuals. This is inconsistent with the Forest Plan as amended and NFMA because the project would contribute incrementally to Wolverine populations trend towards listing, 36 C.F.R. § 219.19.

Wolverine are already listed as "Sensitive" in Oregon by the Oregon Department of Fish and Wildlife, however the Forest Service fails to adequately address this within the EIS or disclose any consultation with ODF&W regarding recovering and protecting wolverine and their habitat. These failures are in violation of the requirements of the NEPA, and in contravention to the necessary cooperative interagency efforts needed to begin the recovery of this species and its required habitat.

Northern Goshawk and Other Forest Raptors

We have several concerns regarding Northern Goshawk, and related concerns to other forest raptors in the area, including osprey, eagles, owls, as well as large water-adapted predators such as

herons. It is known that Goshawks currently are (and historically have) utilizing the forests of the proposed project and surrounding areas for nesting, fledgling, and foraging. It is also known that Goshawks, similar to many predatory species, rotate their nesting and foraging territories over time, so as to not deplete their prey species populations and thus maintain their viability over the long-term. As such, to ascertain potential Goshawk use, agency surveys must be conducted seasonally each year to determine the rotational patterns of Goshawks for the project and adjacent area forests. Goshawks also have an extensive foraging territory. It is likely that nesting pairs may utilize significant portions of the project area's mature and old forest areas, as well as adjacent wilderness, old growth and mature areas, and roadless forests. It is also known that forest edge areas may be utilized as foraging territory by this species. The EIS fails to adequately address impacts to this species such as how logging removal of forest canopy cover, and further fragmentation of the area's forests, will affect adult and juvenile Goshawks and other raptors, or other direct, indirect, or cumulative effects to goshawks and other raptor species. The EIS fails to adequately address impacts to Goshawk nesting areas, including sufficiently assessing historic nesting areas, within or adjacent to the proposed logging project. Similarly, the EIS fails to adequately address potential direct and cumulative impacts harms to existing raptor nests of other species in the area.

Several scientific studies exist regarding significantly detrimental logging impacts to Goshawks due to logging within or near Goshawk PFA's, as well as from fragmentation of natural forest habitat. (Reynolds et al, 1982, 1989, 1991; Moore and Henry, 1983; Fleming, 1987; Hall, 1984; Saunders, 1982; Crocker Bedford et al, 1988, 1990, 1991; Patla, 1991; Hayward and Escano, 1989; Kennedy, 1988; Shuster, 1980; Speiser and Bosakoski, 1987; Woodbridge et al, 1988; Bendire, 1892, Bull, 1988; Hargis et al, 1991; Bryan and Forsman, 1987; Andeson and Shommer; among others). Some of these studies were conducted for the agency. However the EIS violates the NEPA by failing to adequately and accurately disclose or assess this pertinent information. As such and the agency fails to uphold its responsibility to address these issues thoroughly as required by both the NEPA and the NFMA. The EIS fails to address the cumulative impacts of the proposed project along with past, present, and reasonably foreseeable future actions, in violation of NEPA, 40 C.F.R. § 1508.7.

We are concerned about the affect of the planned transformation of the commercial logging units from mature and old mixed-conifer multi-storied forests, to more open forest areas preferred by other raptors such as red-tailed hawks, which could extirpate goshawks from logged unit areas. It is known that suitable goshawk habitat contains a mix of dense multi-storied stands for nesting – such as currently exists in the project area. The project will remove necessary foraging, fledgling, and nesting habitat, which may result in the loss of potential Goshawk nesting habitat, as these features are inextricably linked within the greater Goshawk territory, thus resulting in fewer pairs of nesting birds within the area, or a loss of either or both fledgling juveniles and/or adults to predation or other mortality associated with logging impacts. The failure of the project's action alternatives to protect goshawk habitat would further reduce potential nesting and foraging habitat and thus violate NFMA's requirement to maintain viable populations of these and many other forest canopy-dependent species, 36 C.F.R. § 219.19. It is clear that the agency must prepare a new EIS to deal with this issue legally and adequately

American (Pine) Marten

There is not sufficient analysis in the EIS of the effects of the proposed project on American marten in the planning area. The forests of the Umatilla, including the project area, have historically provided marten habitat. It is likely that the project currently provides marten habitat—both for denning and foraging, as well as dispersal and travel corridors. Recent scientific research confirms that old forest dependent wildlife species are well adapted to the cyclic changes in the region's fire ecology forests ever changing mosaic patterns. Many old forest wildlife species, it is being discovered, continue to use even severely burned old forest and roadless area habitat – if these are left unlogged. The EIS fails to sufficiently and accurately address this issue.

The agency has an obligation under NEPA to assess the direct, indirect, and cumulative impacts to all species that will be affected by the proposed action. 40 C.F.R. §§ 1502.16. The Forest Service also

has an obligation to obtain missing information or state why it could not be obtained if that information is necessary to make an informed decision. *Id.* § 1502.22. Finally, the agency has a duty to prepare a new EIS when there are unknown risks to the environment—and its current EIS is deficient in addressing these issues. *Id.* § 1508.27.

In this case, the Forest Service failed to accurately and adequately assess how the proposed timber sale will impact marten. The Umatilla NF clearly is not meeting the requirements of NEPA and NFMA as they apply to pine marten, and is precluded from implementing the proposed project as a result.

Neotropical Migrant and Native Birds

Neo-tropical migrant and native forest-dependent birds (as well as numerous other forest species) are in serious decades-long population declines due to the adverse cumulative impacts from over a century of commercial logging in Oregon (see “Avian Population Trends” by Brian Sharp). The EIS for this planned project fails to fully and adequately disclose the current population status and trends of native forest dependent Neotropical migrant and native avian species within the analysis area and adjacent forest. Compliance with both the NFMA and the MBTA requires that all alternatives presented within the EIS must be capable of protecting forest habitat for these many native forest species, and of reversing any current downward population trends. Such a course of proactive protective action is also required by the ESA and the NEPA, Presidential and USFS directives, and the Migratory Bird treaty Act, as well as credible conservation science and ethical integrity. However, in violation of these legal and ethical requirements, the EIS presents action alternatives which would degrade habitat and further imperil neotropical and native avian species populations, resulting in both individual mortality to these species as well as irreparable habitat and population level harms.

The proposed timber sale(s) would significantly impact migratory birds in violation of the Migratory Bird Treaty Act, 16 U.S.C. §§ 703—712 (1994). It is well known amongst the conservation-science community that many migratory birds which are currently experiencing severe population decline trends are “strongly associated” with old and mature interior forest and related habitat. The proposed commercial “thinning” logging would likely directly kill nesting and fledgling migratory birds. The proposed logging would significantly reduce existing mature and old forest-dependent migratory bird habitat, which has already been significantly diminished due to the cumulative impacts of past management throughout much of the Umatilla National Forest, including the project area.

The proposed logging units would irreparably fragment migratory bird habitat. Areas that were not logged would also be negatively impacted by generalist bird species favored by the environmental conditions created in highly fragmented logged forests. Other avian and predator species more adapted to open logging thinned forests would move into the project area, further adversely impacting interior mature and old forest dependent neotropical and migrant avian species. The impact these abundant and highly competitive bird species would have on sensitive bird species dependent on less fragmented forests should have been adequately disclosed and evaluated in the EIS. The adverse impacts that the proposed logging would have on migratory birds are supported by multiple scientific studies.

Forest fragmentation, including loss of viable nesting habitat within central and eastern Oregon’s national forests, is considered to be a primary cause behind declines observed in many forest songbird species. Further loss or fragmentation of habitat could lead to a collapse of regional populations of some forest birds (Robinson *et al.* 1995). As landscapes become increasingly fragmented, regional declines of migrant populations may result (*Id.*). In the Pacific Northwest, researchers have found that old growth forests and natural forest processes (including natural fire-recovery) are integral to the survival of migratory birds. The past and continuing logging-oriented management of the forests of Oregon and Washington, which provide nesting and fledgling habitat for numerous migratory birds, has resulted in severe ongoing population declines in forest canopy-dependent migratory and native birds. (*reference:*

“*Avian Population Trends in the Pacific Northwest*” by Brian Sharp). Among the many avian species experiencing population declines due to Forest Service logging projects are: band-tailed pigeon, rufous hummingbird, olive-sided flycatcher, winter wren, song sparrow, golden-crowned kinglet, pine siskin, solitary vireo, willow flycatcher, tree swallow, red-eyed vireo, yellow warbler, yellow-breasted chat, and others as well. This information was not adequately addressed in the EIS despite the obvious direct adverse impacts to many migratory and native bird species from the removal of forest canopy cover and forest structural continuity which would occur with the implementation of this project. Failure to sufficiently disclose and comprehensively analyze this pertinent, essential, scientific information violates provisions of the NEPA. Implementation of this project would violate both NFMA and the Migratory Bird Treaty Act. As such the mature and old pine and mixed conifer forest commercial logging portion of this project must either be withdrawn from the proposed action alternatives, or a new EIS must be prepared which addresses these issues.

In August 1999, the FWS outlined what it perceived to be the agency’s legal obligation in terms of migratory birds and timber harvest. FWS stated that agencies should take “an extremely cautious position with respect to the intentional take of migratory birds by federal agencies.” *Letter from Acting Director, United States Fish and Wildlife Service, to Regional Directors, Regions 1–7 and Assistant Director, Refuges and Wildlife (August 17, 1999), 3*. FWS also cautioned that “the Service should not assert in any communication or correspondence that federal agencies are not covered by the prohibitions of the MBTA [Migratory Bird Treaty Act].” *Id.*

In July 2000, the Eighth Circuit Court of Appeals held that federal agencies are required to obtain a take permit from FWS prior to implementing any project that will result in take of migratory birds. *Humane Soc’y of the United States v. Glickman*, 217 F.3d 882 (8th Cir. 2000). Due to this litigation, the FWS is operating under the assumption that the Migratory Bird Treaty Act applies to the Forest Service and its activities. 16 U.S.C. § 703 et seq. The Act states that “it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill . . . any migratory bird.” 16 U.S.C. § 703.

In January 2001, President Clinton signed Executive Order 13,186 that outlined the federal government’s responsibility to comply with the Migratory Bird Treaty Act. Exec. Order No. 13,186, 66 Fed. Reg. 3,853 (2001). President Bush has not rescinded this Order. Recent legal analysis confirms that the Forest Service must actively prevent the take of migratory birds, or obtain a permit for incidental take of individual species. *Helen M. Kim, Chopping Down the Birds: Logging and the Migratory Bird Treaty Act*, 31 *Envtl. L.* 125 (2001).

The Forest Service has failed to comply with these legal and scientific obligations. Until the agency can demonstrate that it has complied with the requirements of the Migratory Bird Treaty Act, the current deficient DEIS for this project must be withdrawn and a new EIS must be prepared.

Further, the EIS did not accurately address the direct, indirect and cumulative impacts that the project would have on migratory birds. The USFS has on record a study by Brian Sharp (“*Avian Population Trends in the Pacific Northwest*” as cited above), which concludes that commercial logging in public forest lands in Oregon plays a significant role in the continuing population declines of several neotropical migrant bird species. The failure to disclose the full conclusions and implications of this study in the EIS is particularly egregious in that the study was done for Region 6 of the Forest Service specifically on Central/Eastern Oregon forests. The lack of adequate scientific assessment of this study fails to meet NEPA’s requirement for high quality scientific analysis that would satisfy the “hard look” standard. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 353 (1989); *Blue Mountains*

Biodiversity Project v. Blackwood, 161 F.3d 1208 (9th Cir. 1998) *cert. denied*, *Ochoco Lumber Co. v. Blue Mountains Biodiversity Project*, 119 S.Ct. 2337 (1999).

Salmonid Waterways, Habitat, & Aquatic Resources:

The project area includes headwaters and tributaries to the area's salmonid waterways. Both the North Fork John Day River and Desolation Creek are listed by Oregon State as 303(d) water quality impaired for water temperature and sedimentation.

The EIS fails to adequately address or disclose issues of soil stability, displaced soil movement patterns, erosion channels and cumulative impacts issues, sedimentation, airborne sediments from logging activities, stream headwaters and reaches, peak flows, water quality recovery concerns and objectives, salmonid populations and spawning areas, and other concerns. Beyond a mere list of some listed-species and species of concern, and unsubstantiated findings (that the project is not likely to adversely affect, etc.), the project NEPA documents fail to disclose sufficient information and analysis to substantiate the decision's determinations, provisions, and claims. The notice fails to disclose any substantive information regarding riparian associated wildlife and plants, and aquatic habitat and/or species of concern that may be in or near the proposed project areas.

It is clear from our organization's surveys of the area, and from pertinent scientific research, that the project as proposed will have significant irreparable harms to the area's salmonid waterways, habitat and populations. The EIS fails to adequately and accurately analyze whether the Farley project is consistent with the standards and guidelines of INFISH and PACFISH. Because the FS has failed to reasonably demonstrate that the Farley sale is not inconsistent with either INFISH or PACFISH its proposed actions are arbitrary and capricious, and likely to result in irreparable harms.

Conclusion:

We request that this DEIS and its proposed actions be withdrawn, and a legally compliant, ecologically protective, scientifically-founded restoration project be developed for this area that works with – instead of against – natural forest processes, forest resiliency, and integrity. We look forward to discussing these issues further with agency staff and decision-makers. As this is filed before the due date of Oct. 20th, and as there are many additional significant DEIS legal and ecological deficiencies and concerns, we may supplement these comments with additional ones as time and focus allow.

For the Natural Heritage of us all,

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