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The Nature Conservancy in Oregon
821 SE 14th Avenue
Portland, OR 97214-2537

tel 503 802-8100
fax 503 802-8199
nature.org/oregon

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Western Oregon Plan Revisions
Bureau of Land Management
P.O. Box 2965
Portland, OR 97208

RE: Comments for the Western Oregon Plan Revision Draft Resource Management Plan and Environmental Impact Statement

Thank you for the opportunity to provide comments on the Bureau of Land Management's (BLM) Western Oregon Plan Revision Draft Resource Management Plan and Environmental Impact Statement (DEIS). The Nature Conservancy is an international conservation organization dedicated to preserving the plants, animals and natural communities that represent the diversity of life on Earth. The Conservancy has an organization-wide commitment to working with partners to accomplish this mission in a science-based, collaborative manner.

Over the past ten years, the Conservancy completed assessments that identify the lands and waters important to the conservation of biological diversity in Oregon. These assessments indicate that the Western Oregon planning area supports important, high-quality populations and habitat for a number of federally listed, BLM Sensitive, globally imperiled, vulnerable and declining species, and a host of other important migratory species. The lands managed by the BLM in Western Oregon are critical to the long-term survival of these species and the habitats they depend on.

We recognize the challenges of this planning effort and the complexities of meeting the BLM's legal requirements and mandates. We appreciate the amount of time and thought that went into developing the DEIS and the substantial number of public information and involvement opportunities the BLM offered to the public. However, after careful review of the DEIS, we have concerns regarding the BLM's interpretation of the Oregon and California Act (O&C Act), the adequacy of the Environmental Consequences analysis, and the reductions in protections and management proposed in all of the action alternatives. These concerns are outlined below and underscore our belief that none of the action alternatives, as written, would help the Bureau meet its obligations under the Endangered Species Act or the Clean Water Act. At this time, we support the No Action Alternative, and make a number of recommendations (summarized at the end of the document) for improving the Environmental Consequences analysis and modifying the Preferred Alternative.

PURPOSE AND NEED

As stated in the DEIS, the Purpose and Need for this planning effort was strongly sensitive to timber production as the "dominant use" of O&C lands.[1] The emphasis on this interpretation has led to narrowly focused action alternatives that we believe could have substantial environmental implications, including impacts on the viability of Special Status Species, the viability and ecological integrity of Areas of Critical Environmental Concern (ACECs), the amount of late-successional forest habitat, will further impair compromised fire resiliency of forests and fire safety of the public and surrounding private lands (including private industrial forests), and will impact water quality. We recommend that you expand your interpretation of the Purpose and Need, and analyze a broader set of action alternatives that carefully integrate conservation measures based on long-term and evolving ecological needs of the landscape with sustainable, ecologically compatible resource uses.

ECOLOGY

Structural States

The Nature Conservancy has been an active partner in developing the science of assessing the historic range of variability in proportions of structural states through the U.S. Department of the Interior/U.S. Forest Service LANDFIRE project, which was based on a review and integration of scientific knowledge around disturbance history (predominantly fire), translating frequency to probability and deriving the spatially explicit models. We support the adoption of this type of assessment by the BLM to guide the development of the DEIS and consideration of environmental consequences. The province-scale analysis is also an important addition for this large planning effort, given the dramatic variation in forest ecology across the plan area.

While the Environmental Consequences analysis provided an historic average ecological basis informed by historic fire frequency and other disturbance, updated probabilities of unavoidable fire in the modern fire exclusion era were not included in the modeled structural states output. Recent work by Spies et al (2006) shows increasing uncertainty of retaining old-growth in the face of a trend toward increasingly large and severe fires, including in the Northwest Forest Plan (NWFP) reserve system. We do not agree with the rationale that such analysis is too speculative, especially for the dry, fire-prone systems in the planning area where fires are common. In addition, we disagree with the assertion that fire and other disturbance "would have little effect on the abundance of the structural stages described" (DEIS, p. 511). The conclusion reached on that same page is unsubstantiated, and not adequately scientifically supported, and therefore should not be included in the DEIS.

[1] For example, see p. 3 "The Ninth Circuit in Headwaters v. BLM, 914 F.2d 1174 (9th Cir. 1990) confirmed that in the O&C Act Congress mandated timber production as the dominant use of these BLM-administered lands.", p. A-930 "management of timber (including harvesting) is the dominant use of the O&C lands" and p. 107 "The O&C Act requires that the O&C lands that are classified as timberlands are to be managed for permanent forest production following the principles of sustained yield, which includes determining and declaring the annual productive capacity of such lands with the timber from those lands (not less than the annual sustained yield capacity) being sold annually."

The structural states analysis offered appears to obscure differences in conditions and potential outcomes across the planning area; neglecting to show the analysis by system within each district, combining outcomes from systems with varied ecological potential, and lumping the mature and structurally complex classes in the impact analysis. Under each of the action alternatives, the amount of existing structurally complex forests would be reduced, with the most dramatic reductions occurring under the Preferred Alternative. Within 100 years, all existing structurally complex forest will be gone. This decision to eliminate existing structurally complex late seral forest across the harvest land base works against the potential for maintaining healthy watersheds. Altered expression of structural states is a threat to proper functioning and maintenance of biotic values and has been the focus of the National Fire Plan, and is emphasized in watershed assessments completed for the Oregon Watershed Enhancement Board.

Size and Connectivity of the Mature and Structurally Complex Forest Patches

Fragmentation and loss of connectivity are key threats to biodiversity. The No Action Alternative is the only alternative that would increase the size and connectivity of the mature and structurally complex forest patches in the Western Cascades and Klamath provinces. None of the alternatives would increase the size and connectivity of the mature and structurally complex forest patches in the Eastern Cascades province.

BLM's Preferred Alternative would result in a larger increase in the stand establishment forests and a larger decrease in the structurally complex forests in the harvest land base than the No Action Alternative due to the higher rate of regeneration harvest, the reduction of protections afforded by standards and guidelines present in the No Action Alternative, the absence of green tree retention, and the intention to re-enter the stands prior to the development of structurally complex forests almost eliminating them from the harvest land base by 2106.

The DEIS also states that there is inadequate information to quantify the abundance of hardwood stands, and therefore does not analyze any cumulative impacts that could occur to these habitat types as a result of the proposed action. Even though the primary focus of the Purpose and Need of this plan is to maintain a sustainable yield of timber, BLM also has the responsibility to manage for all habitat types found on their lands, including hardwood forests such as oak woodlands.

TIMBER MANAGEMENT

We do not agree with BLM's decision to forgo the evaluation and analysis of opportunities to provide a sustainable supply of timber and other forest products as legislated by the O&C Act through ecologically-based thinning and fuels treatments in the DEIS. The BLM considered, but did not include, an alternative of "*No Old-Growth Harvesting*" (DEIS, p. 107). The rationale that this alternative could not represent sustained yield forestry is incorrect. Yield could be sustained at a lower level with greater accumulation of snags and down coarse woody material. We support a new Preferred Alternative that would consider ecologically-based thinning over a broader area to promote fire resiliency and move towards a more structurally complex forest.

Fire suppression in oak woodlands and savannas, pine woodlands, and "southern mixed conifer" forest has resulted in an increase in Douglas fir or white fir. The analysis BLM used which found

that "thinning only" could meet allowable sale quantity (ASQ) targets for less than a decade should use a broader definition of "thinning" and "small diameter." The definitions developed by the Rogue Basin Small Diameter Stewardship Collaborative would apply more broadly and produce more volume. The Productive Harmony Guidelines characterize "small" as generally less than 20" dbh. Management strategies that rely on logging of small trees (< 125 years old) could also produce a sustainable source of timber from O&C lands while protecting old-growth stand values and function that are under-represented, such as anadromous fish habitat and clean water. The DEIS analyzed the Non-Harvest Landbase Thinning volume, but the results were generated only from young stands in late-successional reserves (LSRs) or late-successional management areas (LSMAs), when considerable volume and restorative benefit could be had, thinning around old fire resistant trees, especially in the Medford district, Klamath Resource Area, and parts of the other districts that are relatively dry and fire-prone (low elevation, south slopes).

OPTIONS Growth and Yield Modeling

We commend the BLM for having a very high quality data set for the land base and forest inventory for the purpose of spatially explicit modeling, but the Existing Stand Conditions classification works against illuminating the thinning volume that could result from ecological restoration. On page Q-1512, the DEIS describes a decision to use stand age for multi-storied stands assigned to the predominant layer that is being managed. This leads to the misidentification of the stand, and underestimates the acres that could be readily restored to old-growth. On BLM's Medford District and on dry, fire-prone settings found in other districts, a large percentage of multistory stands are assigned an age of the young cohorts that have filled in between older legacy trees that are more widely spaced due to past fire, or past partial thinning. Many such stands could meet the age requirements for old-growth if a percentage of the young cohort was thinned out and contribute to improved fire regime condition class in many sub-watersheds. As a result of this methodology, the description of the current condition of stands has been misrepresented, and thus skewed the degree of impact in the Environmental Consequences. We recommend that age class definitions that recognize restoration opportunities for old-growth stands.

WILDLAND FIRE AND FUELS MANAGEMENT

The DEIS does not provide adequate recognition of the *Healthy Forests Initiative* and the *Healthy Forests Restoration Act* which provide opportunity for public collaboration, in thinning uncharacteristically dense forests or addressing threats in and around the wildland urban interface. This is especially important in the Medford, Roseburg, Eugene and Klamath Districts in the dry fire-prone forests. Many of these areas are already covered in Community Wildfire Protection Plans which provide priorities for forest health and threat abatement. The special designation of the Adaptive Management Area or similar recognition should be maintained for BLM lands in the Applegate Watershed to help support the ongoing successful collaboration with the Applegate Partnership, the Fire Learning Network, the Watershed Council, and the local community. The Preferred Alternative that is eventually chosen for implementation should provide special attention to the proposals developed by these collaborative efforts.

The proposed action alternatives increase fire hazard and severity and reduce the resiliency of forests to fire in the dry, fire-prone forests of southwestern Oregon, predominantly on the Medford

District, Lakeview District - Klamath Falls Resource Area, and parts of the Coos Bay, Roseburg, and Eugene Districts. The Preferred Alternative would accomplish almost all of its logging by regeneration harvests, creating even-aged plantations without any standing, large, fire resistant trees, making it the worst management option in terms of fire severity, hazard and resiliency, particularly in the Medford District, and the dry fire-prone forests types in the other districts. We recommend incorporating actions identified in Alternative 3 that leave stands of older age that can develop fire resilience into the Preferred Alternative.

Spies et al (2006) and others suggest that landscape-level strategies are needed that prioritize fuel treatments by vegetation zones, develop shaded fuel breaks in strategic positions, and thin and apply prescribed fire to reduce ladder fuels around remaining old trees. There is no indication of such strategic application or planning for BLM's proposed fuels treatments to reduce fire hazard in areas other than timber sale units that would occur on approximately 110,000 acres per decade – with the majority of treatments occurring in the Medford District and Klamath Falls Resource Area.

The Fire and Fuels Management Objectives that are common to all alternatives appear to conflict with the specific management actions and the effects of the Preferred Alternative. For example, the Management Objective that states "Promote ecosystem function and resiliency," is difficult to reconcile with the management action stating "Immediate action to control and suppress all wildfires would be taken in all areas," except on certain large, contiguous blocks of BLM lands. The Conservancy supports planning for Wildland Fire Use for resource benefit where appropriate, and anticipates that other management will need to be strategically aligned to support it. The No Action Alternative would provide BLM's Western Oregon planning area with a better fire management setting that any of the action alternatives propose.

While the amount of mature and structurally complex forests has increased under the NWFP, the drier provinces have suffered large losses to wildfire (Moeur et al. 2005, Spies et al. 2006). In these dry fire-prone forests, extensive areas of closed canopy old-growth structure favored by the northern spotted owl have developed as a result of fire exclusion and are now at heightened risk from uncharacteristically high-severity fire. The NWFP calls for fuel reduction activities within late-successional reserves, however the rate of fuel reduction to date has not been adequate to address this issue.

It is important that the Preferred Alternative that is eventually adopted by BLM include an increased use of fire, through prescribed burns or in Wildland Fire Use for resource benefit as an integral part of forest management. Thinning may reduce stocking density, but by itself doesn't restore ecosystem function; restoring fire in dry forest types is necessary to restore forest function.

AQUATIC RESOURCES

Current conditions across the BLM Westside Oregon planning area are not meeting the habitat needs of many aquatic species and communities. This is evidenced by numerous listings of species as threatened and endangered under the Endangered Species Act, aquatic habitat conditions well below benchmarks, the majority of streams in the planning area listed as water quality limited

under the Clean Water Act. While the contributors to the status of aquatic species include many factors that are beyond the BLM's control, given these current conditions and federal responsibilities under Endangered Species Act and Clean Water Act, the DEIS should reflect an overall approach of ecological caution, and a focus on protection and restoration of critical habitat for these species. All of the action alternatives appear to reduce protection for aquatic resources.

Riparian Management Areas

Although the DEIS uses the term "riparian management area" to refer to streamside areas up to 100 feet from the stream channel, management in these areas does not reflect riparian values or a focus on protecting listed species such as salmon. Under the Northwest Forest Plan, management of riparian areas includes protections to promote development of mature and structurally complex forests that promote or benefit aquatic species. The Preferred Alternative allows timber harvest activities within 100 feet of streams, with standards for canopy retention as the only environmental control. Standards on large wood recruitment and sediment delivery from these areas are not included as guidance for these areas. Beyond 100 feet, there are no standards and guidelines related to riparian protection in the Preferred Alternative. Along with loss of shade and large wood, harvest activities in riparian areas could have significant impacts on sediment delivery to streams from impacts of machinery (compaction, skid trails) and loss of sediment buffers. Given that the streams currently do not meet state water quality standards for stream temperature, have low large wood values relative to benchmarks, and numerous salmonid species listed as threatened or endangered, we support the No Action Alternative and added protections for riparian management areas.

Peak Flows

The peak flow analysis divides the watersheds within the planning area into those that are rain dominated and those that are rain-on-snow dominated. For the rain dominated watersheds, the analysis assumes that changes in peak flows are not detectable until > 40 percent of the basal area is removed. This assumption is based on the Grant et al. report, which is unavailable for review. Thus, there is no way to assess the technical validity of this assumption, and it should not be included in the DEIS.

An additional concern for the assessment of peak flows is the lack of any inclusion of the effects of roads on peak flow changes. Roads can cause significant changes in flow regimes, as roads intercept subsurface flow and route it to surface flow, which creates a much more direct path to water courses. Peak flows can be greatly increased and timing of peak flows altered, by extensive road networks. Although this mechanism is identified in the Affected Environment section of the DEIS, it is not included in the analysis of Environmental Consequences. We recommend that a new analysis of the Environmental Consequences of the alternatives is done to address the impacts of roads on peak flows.

Sediment Delivery to Streams

The analysis assumes that the only source of sediment is from roads within 200 feet of stream channels. The assessment does not include any diffuse sources of sediment to streams, including impacts of non-road timber harvest activities, e.g. ground compaction and skid trails from tractor or cable logging. This is especially a concern in riparian associated areas, where any ground disturbance could potentially deliver sediment directly to streams. The Preferred Alternative has

the highest amount of disturbance in riparian areas. Simply relying on Best Management Practices, which are guidelines rather than standards, is an inadequate justification for concluding that the alternatives will have a negligible effect on sediment delivery to streams. In addition, the analysis compares new roads to the existing road network, and finds that comparatively, new roads will have much less impact than existing roads. We agree that standards for building new roads have improved, and mile-for-mile, in general, new roads have fewer impacts than the existing roads. However, they will have an impact. The existing road network is already causing problems; adding any additional impacts should be considered in the cumulative effects analysis. The current analysis also does an inadequate job of assessing the potential for significant road failures, or other mass movement or failure that could potentially deliver large volumes of sediment to streams in a single event.

Large Wood

The analysis of impacts to large wood delivery is based on five representative watersheds and how well those five watersheds meet maximum potential for large wood delivery. Although the five watersheds represent a range of BLM ownership percentages, they do not seem to adequately represent the range of other characteristics such as geography, climatic zones, vegetation types, hydrologic processes, etc. Selecting five out of 260 fifth field watersheds is less than 2 percent of the total number of such watersheds. Three of the five watersheds are in the Klamath Provence, with only one watershed representing the Coast Range and Western Cascade provinces, despite the fact that these three provinces are approximately equal proportions of the planning area. There are no watersheds representing either the East Cascades or Willamette Valley provinces.

Although the DEIS states that streamside areas within one site potential tree height are important as large wood source areas, the Preferred Alternative does not protect these important source areas. Figure 102 (DEIS, p. 370) shows that one site potential tree height is generally much greater than 100 feet for all physiographic provinces. Numerous studies have shown that large wood originates from greater than 100 feet from stream channels, yet the action alternatives allow for harvest within 100 feet of streams. Although this may not have an effect on "effective shade," it will likely have an effect on large wood availability and delivery to streams. Interestingly, the Environmental Consequences section states that large wood contributions will increase over time under all four alternatives and vary only slightly among the alternatives for several reasons, including "Areas outside of the riparian management areas would contribute large wood to streams" (DEIS, p.729). Thus, the DEIS assures us that we should not be concerned about having extensive riparian reserves to provide for large wood because we will get large wood from other places, however these other areas are not protected for their large wood values.

The Environmental Consequences section of the DEIS states that there are short-term effects on large wood, and that even in the long term, large wood will not reach maximum potential. By not protecting the potential wood delivery areas, we are sacrificing an important process in the formation and habitat for aquatic species. Given the existing low benchmark levels of large wood identified in the document, we recommend increased protection for sources and delivery of large wood to streams.

Stream Shade/Temperature
The analysis provided in Appendix I of the DEIS shows that significant temperature increases do not occur when effective shade is greater than 80 percent. The graphs and data provided in the Appendix show that to get 80 percent effective shade you need approximately 80 percent angular canopy density (Figure 310, p. I-1116). To get 80 percent angular canopy density, you need a buffer strip width of 100 feet (Figure 309). Despite this analysis, the Preferred Alternative recommends less than a 100-foot buffer strip, specifically only 80 percent shade retention from 25 to 60 feet and 50 percent canopy retention from 60 to 100 feet. Appendix I states that forest treatments are *assumed* to fully meet effective shade within primary and secondary shade zones when vegetation thinning will not result in less than 80 percent effective shade in the primary shade zone and less than 50 percent canopy closure in the secondary shade zone. There is no supporting documentation that the management actions proposed will provide sufficient angular canopy density and effective shade.

Elimination of Key Watersheds
Each of the action alternatives proposes to replace the use of key watersheds as an approach for prioritizing watershed restoration efforts with Areas of High Intrinsic Potential, which is based on the assessment by Burnett et al. We are unable to review this analysis to determine the technical validity of the areas of high intrinsic potential, or the potential gains/losses from moving from key watersheds to streams with high intrinsic potential, and thus it should not be considered within the DEIS.

While we appreciate the Bureau's effort to incorporate new data and analysis to refine priorities for restoration, we do not agree with the way these data were incorporated. The change in approach trades a watershed perspective for a stream reach perspective. The DEIS attributes BLM's success in improving conditions in key watersheds with greater road decommissioning – restoration that occurs in the watershed, and not at the stream reach scale. Alternatively, we recommend that the data provided by Burnett et al be used to identify additional key watersheds that should be prioritized for restoration.

WILDLIFE

The LSMAs of the Preferred Alternative are tied to the *Draft Northern Spotted Owl Recovery Plan* that the U.S. Fish and Wildlife Service released earlier this year. However, this draft recovery plan recently received negative scientific peer reviews due, in part, because it would lower habitat protection for the northern spotted owl in relation to the NWFP. The approach of using large fixed reserves as a foundation for the conservation of this and other old-growth dependant species is well supported in the scientific literature (Courtney and Franklin 2004, Noon and Blakesley 2006).

Under the Preferred Alternative, the percentage of suitable habitat for the northern spotted owl outside of large blocks would steadily decrease over the next 100 years. This alternative would result in a lower percentage of suitable habitat outside large blocks than Alternative 1, because the Preferred Alternative would allocate fewer acres to riparian management areas. LSMAs identified in the DEIS can also be salvaged (regeneration harvested) after a natural disturbance under the Preferred Alternative. Cases where salvage activities may be beneficial to the northern spotted owl

would be few, if any, and there is currently not enough research to justify the benefits of this action to the species.

Habitat fragmentation throughout the planning area is a concern, and should be linked to BLM management solutions. The DEIS does not adequately analyze the impacts of proposed habitat fragmentation that the action alternatives would create, especially as a result of reduced riparian reserves and the lack of green tree retention in Alternatives 1 and 2. Green tree and snag retention (including both conifer and hardwood) should be included in the Preferred Alternative as they can provide critical habitat components to help minimize adverse impacts of timber harvest for coniferous forest birds.

BOTANY

One of the purposes of the Endangered Species Act is the preservation of the ecosystems upon which endangered and threatened species depend. The Bureau's Special Status Species policy is to ensure that agency management actions do not contribute to list additional species. Based on the interpretation of the O&C Act for this planning effort, the conservation provisions of BLM's Special Status Species policy would only apply where they are consistent with the timber management provisions of the O&C Act. The Environmental Consequences Chapter of the DEIS shows a decline in the likelihood of persistence of Special Status Species endemic to forests. Under the action alternatives, some populations of BLM sensitive and assessment species in the conifer habitat group on O&C lands in the harvest land base would be lost. There would be low to moderate risk of local extirpation for some species in the conifer forest habitat group, but little risk of extirpation from the planning area or extinction. Forty-one percent of known populations of BLM sensitive and assessment species in the conifer habitat group would occur within the harvest land base under the Preferred Alternative. Impacts to Special Status Species populations are likely to result in more species listings, creating future conflicts with BLM's Resource Management Plans, and impacts on other public and private lands. Additional species listings could further limit the O&C Act's goal of achieving and maintaining permanent forest production.

The risk of local extirpation to species in the conifer habitat group would increase under each of the action alternatives. Populations of species in the conifer habitat group would be subject to forest management activities, and would not receive special management attention unless those species had 20 or fewer populations; as a result, populations would be lost, such as *Cupressus bakeri* which is only found in the Baker Cypress ACEC. Under the action alternatives, nine ACECs that contain special status species as a relevant and important value would not be designated under one or more alternatives. There are 14 additional ACECs with the BLM's sensitive and assessment species that would be reduced in size under one or more of the alternatives. BLM should maintain these existing ACECs in order to avoid species population declines and potential future listings.

INVASIVE SPECIES

Invasive species are one of the greatest threats to native plants and animals in Oregon. The cost to Oregonians in crop losses and control efforts from invasive species is escalating into the hundreds of millions of dollars per year. Under all alternatives, invasive plants would increase and alter the existing plan community for all habitat groups. Susceptibility to the introduction of invasive plant species would be greatest under the Preferred Alternative with 171 watersheds out of 260 having some level of susceptibility that is associated with timber harvesting activities over the next ten years. We recommend that the DEIS should identify where priority weed infestations are currently located as well as areas that are currently uninfested, and identify management prescriptions and strategies to control current infestations and prevent the spread of new infestations.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

The DEIS did not provide sufficient information regarding its evaluation of proposed ACECs and determination of appropriate management. We are concerned that there is no clear documentation as to how existing ACECs that will become part of the harvest land base were eliminated from meeting the relevance and importance criteria. Under the Preferred Alternative, 31 of the 124 existing and potential ACECs would not maintain their designations. We believe that existing ACECs should be retained, and proposed ACECs should be adopted, based solely on their ecological relevance and importance, and not dismissed if their proposed boundaries contain O&C lands.

In particular, Wassen Creek ACEC needs to remain designated and protected from timber harvest under each of the action alternatives. This ACEC has been identified by BLM has possessing wilderness characteristics, as well as meeting the relevance and importance criteria for three values: scenic, fish and wildlife, and natural processes. Wassen Creek is one of the last remaining watersheds that adequately represent Coastal forest habitats in their natural condition. The ACEC contains late-seral and old-growth habitat which are rare and fragmented in the Coast Range, and is contiguous with Siuslaw National Forest lands to the west that also provide late-seral and old-growth habitat. Keeping larger, contiguous blocks of this habitat is important for a wide variety of species that depend on it, including the northern spotted owl, marbled murrelet, coho salmon and steelhead. The high water quality and important fish habitat provided by the Wassen Creek watershed are irreplaceable. These values are rare in the regional landscape and are vulnerable to management activities such as timber harvesting and road building.

Although under each of the action alternatives, BLM identifies Wassen Creek ACEC as a unit to receive special management in order to maintain wilderness characteristics, these special management actions would not apply to portions of the unit that occurs on O&C lands suitable for timber production. We feel these characteristics should apply to all lands located within the current ACEC boundaries.

We are pleased that BLM has proposed to maintain several ACECs under the Preferred Alternative that the Conservancy had nominated for designation in the Salem and Eugene Districts, such as Mill Creek Ridge and Waterloo. However, there are several potential ACECs

(McGowan Meadow and Oak Basin Prairies) that should be designated under the Preferred Alternative as they were originally proposed, including O&C lands. The Conservancy supports using timber harvesting in these potential ACECs as a management tool to help restore these habitats to their pre-settlement conditions, but feels that any regeneration harvesting done within the boundaries of the existing unit will degrade the relevant and important values they were designated for. Two existing ACECs, North Santiam in the Salem District and Coburg Hills RFI in the Eugene District would not be carried forward under any of the action alternatives. These two ACECs are located near sites that the Conservancy has identified as important for biodiversity, and they should be maintained.

In the Medford District, the existing ACECs of French Flat, King Mountain Rock Garden, and Rough and Ready Creek possess great relevance to the botanical diversity of the region, and should be protected from timber harvest under each of the action alternatives. The DEIS should also identify land acquisitions to expand the Table Rocks ACEC in the Preferred Alternative as it was originally proposed to BLM.

RECREATION

The number of off-highway vehicle emphasis areas proposed under the action alternatives on the Medford District is extreme compared to the rest of the planning area. The Worthington Road/Obenchain emphasis area is centered on the Round Top Butte Research Natural Area, and should not be included in the Preferred Alternative that is eventually brought forward. The Anderson Butte off-highway vehicle emphasis area, and Lake Creek off-highway vehicle emphasis area are both centered in locations identified in The Nature Conservancy's Klamath Mountains Ecoregional Assessment that are important for biodiversity. Promoting off-highway vehicle use in these areas will threaten the sites with the introduction of weeds, and soil erosion that could degrade the grassland, oak savanna, mixed hardwood/conifer woodlands and rare plants, and wildlife habitat that are found there.

SUMMARY OF RECOMMENDATIONS

As stated at the beginning of our comments, we currently support the No Action Alternative. We would also support the development of a new Preferred Alternative that better addresses the needs of Special Status Species, the viability and ecological integrity of ACECs, that increases the amount of late-successional forest habitat, and improves fire resiliency of forests and water quality. The following recommendations relate to changes we feel are necessary in the description of the Affected Environment, Environmental Consequences, and/or the Preferred Alternative.

Purpose and Need

- Modify the Purpose and Need to carefully integrate conservation measures based on long-term and evolving ecological needs of the forest *first*, while allowing for ecologically conservative, compatible, and sustainable uses, including the legislated sustained even flow of timber. The "annual sustained yield capacity" should reflect live and dead, standing and down biomass necessary for long term forest health, watershed health, and to meet other laws.

Ecology

- A new Preferred Alternative should be developed that better ensures watershed protection. This new alternative should address the fundamental limiting factor of seral stage representation by including land use designations and management prescriptions that would result in adequate representation of structurally complex early, mid, and especially late seral forest that is informed by the natural range of variability, as in LANDFIRE fire regime condition class, and that anticipates biodiversity impacts from climate change in all sub-watersheds, terrestrial and aquatic federally-listed species, and sensitive species.

- A new Preferred Alternative should be designed to retain and augment late-successional reserves and riparian reserves while emphasizing treatments to enhance development of structurally complex late seral stands, including relatively open canopy stands and fire resiliency in dry fire-prone types, as appropriate for the natural range of variation by biophysical setting.

- A new Preferred Alternative should include protections and management prescriptions to restore and sustain oak woodland and savanna in the Willamette Valley, as well as the numerous Special Status Species that depend upon them. Within the Willamette Valley and foothills, mixed oak-Douglas fir stands should be managed to move them towards the pre-settlement conditions of dominance by oak trees and grassland understories.

Timber Management

- The dismissed alternative "*Use Historic Variability, Retention of All Mature and Old-Growth Stands, and Small Tree Harvesting*" (DEIS, p. 105) should be given more consideration in developing a new Preferred Alternative. There are growing opportunities to utilize the small diameter, yet valuable trees and understory biomass that make up the bulk of the unnatural fuel loads and uncharacteristically dense stands in second growth, and dry fire-prone forests, especially at low and mid-elevations, to produce a variety of products and contribute to a significant sustainable supply of wood. The new Preferred

Alternative should also incorporate language that enables and encourages the different BLM districts to participate in collaborative stakeholder groups centered on these issues.

- Design the Preferred Alternative to use more ecologically conservative forest stand tending practices, while still producing a sustained even flow of timber. Specifically, make sure that large living trees and dead legacy biomass in both clumped and dispersed patterns in managed stands are retained.

- For the dry, fire-prone forest portions of the Klamath Resource Area, and the Eugene, Douglas, Coos Bay, and Medford Districts, selective harvest methods should be the primary harvest method in a new Preferred Alternative.

- To deliver more effective conservation of wildlife, while remaining consistent with the intent of O&C Act, include some components of Alternative 3 into a new Preferred Alternative, including the retention of northern spotted owl activity centers and recommendations on down wood, and green tree and snag retention.

Wildland Fire and Fuels Management

- The Preferred Alternative should include design plans for thinning and harvest that support improved capacity to manage both future wildfire and prescribed fire.

- A new Preferred Alternative should also include ecologically-based applications of mechanical fuel treatments and prescribed fire should be implemented in areas prioritized through a collaborative process with local, state and regional stakeholders. Treatments should be implemented in an adaptive and scientifically-based manner that results in learning from successes and failures. BLM should make use of regional biological diversity assessments and LANDFIRE data in assessing ecological conditions, determining priority areas and designing treatments.

- For Jackson County, BLM should focus on linking harvest to fuels reduction for economic and forest health and resiliency benefits throughout the district, as recommended by the Natural Resource Advisory committee.

Aquatic Resources

- A more rigorous cumulative impacts analysis needs to be done with regards to aquatic resources, including a better assessment of the potential for large wood delivery, the impacts of grazing and timber harvesting in riparian areas, and the impacts of climate change on peak flows, sediment delivery and stream temperature changes.

- Several aspects of the cumulative impacts analysis for aquatic resources were based on technical analyses contained in unpublished and non-peer reviewed studies that are currently unavailable for the public to review. The foundation for conclusions reached in the DEIS should be based on scientific work that has undergone rigorous scientific review and is available to the general public.

- The analysis for effective shade in Appendix I of the DEIS does not adequately demonstrate that the proposed management actions will fully meet effective shade requirements. The Preferred Alternative should take a conservative approach to the management of shade to ensure that there are appropriate levels of shade to protect stream temperatures.

- Potential impacts from new and existing roads on peak flows and sediment delivery should be included in the cumulative impacts analysis for aquatic resources. A new Preferred Alternative should include provisions to reduce or manage the road network to provide net benefits to water quality.

Wildlife

- A new Preferred Alternative should include management prescriptions to protect all remaining legacy trees (including both conifer and hardwoods), and provide for the development of new legacy trees, snags and coarse woody debris.

- A more complete cumulative impacts analysis should be done on the effects of habitat fragmentation that the alternatives would create, especially as a result of reduced acreages of riparian reserves. The Preferred Alternative should be designed to reduce habitat fragmentation.

- Under a new Preferred Alternative, protections for Sensitive Species should be maintained on all BLM-managed lands to prevent new listings under the Endangered Species Act.

Areas of Critical Environmental Concern

- BLM should maintain existing ACECs in the Preferred Alternative that contain Special Status Species as a relevant and important value in order to avoid species population declines and potential future listings.

- The Wassen Creek, North Santiam, Coburg Hills Relic Forest Islands, French Flat, King Mountain Rock Garden, and Rough and Ready Creek ACECs should remain designated and protected from timber harvest under the Preferred Alternative.

- The Preferred Alternative should identify land acquisitions to expand the Table Rocks ACEC in the Medford District as originally considered in the establishment of the ACEC.

Recreation

- The Worthington Road/Obenchain off-highway vehicle emphasis area is centered on the Round Top Butte Research Natural Area, and should not be included in the Preferred Alternative.

- The Anderson Butte off-highway vehicle emphasis area and the Lake Creek off-highway vehicle emphasis area are both centered in areas identified as important for biodiversity, and should not be included in the Preferred Alternative.

SUMMARY

We welcome the opportunity to work with the BLM in further refining the Western Oregon Plan Revisions DEIS and project alternatives. We again would like to thank you for the opportunity to review and provide comments on this important planning document.

Sincerely,

Russ Hoeflich
Vice President and Oregon State Director

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