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January 10, 2008

Western Oregon Plan Revisions  
PO Box 2965  
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**RE: Draft Environmental Impact Statement for Western Oregon Plan Revisions, August 2007**

Dear Ed Shepard, Dick Prather, and WOPR Project Team,

I am submitting these comments in behalf of the Deer Creek Valley Natural Resources Conservation Association, also known as the Deer Creek Valley Association (DCA), of Selma, in Josephine County, is a 32 year old community organization dedicated to retaining and restoring the health of forest and human communities in the Deer Creek and other watersheds.

October 2005, **DCA submitted the Natural Selection Alternative (NSA) with the request that it be included in the alternatives to be evaluated in the Western Oregon Plans Revision process.** The NSA is based on 14 Criteria for Sustainability, proposed by DCA and local community for use on BLM lands in the Deer Creek Watershed since 1997.

Please incorporate DCA October 21, 2005 scoping comments; Orville Camp's Scoping Comments; our March 16, 2006 Response to Scoping Report and Proposed Planning Criteria and State Director Guidance; and all previously submitted comments and supporting documents submitted by DCA regarding the WOPR.

We include by reference: *Scientific Evaluation of the Implications of the BLM's Western Oregon Plan Revisions (WOPR) to Forests and Watersheds of Southwest Oregon* by Rich Nauman and Dominick DellaSala of the National Center for Conservation Science & Policy, September 4, 2007; *The Brandt Report, Answering the Economic Questions Sidestepped by the WOPR* by Roger Brandt December 2007; and *WOPR DEIS Comments* by Gordon Lyford, December 17, 2007. These comments along with those of our forest advisor, Orville Camp will focus on the proposed Natural Selection Alternative and the premises and principles on which it is based. We will also discuss some of the impacts of the WOPR on the Deer Creek Watershed and surrounding areas.

We will also respond to this Newsletter 7 request:

*"As you share your interests and suggestions with us, your comments will be most useful to us if they address one or more of the following:*

- *Errors in our analysis.*
- *New or missing information that would have a bearing on the analysis.*

- *Suggestions of a new alternative or management principles that address the purpose and need of the plan revisions and meet all the statutory requirements applicable to the lands managed by the BLM in western Oregon. An example would be an alternative composed of parts of the other alternatives analyzed in the EIS.*

#### **WOPR DEIS:**

##### ***Alternatives Considered but Eliminated from Detailed Study [pg 104]/Harvest Only Naturally Selected Dead and Dying Trees [pg107]***

*This alternative would remove only “naturally selected dead and dying trees, conditioned upon meeting the needs of other species.” Timber harvesting of such trees would be accomplished with small equipment from a network of narrow roads.*

*This alternative was eliminated from detailed study because it would not meet the purpose and need, which states that the resource management plan revisions must meet all applicable laws. One of the applicable laws is the O&C Act. 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.*

*Also, while this management approach may be practical for managing a small woodlot on relatively flat terrain, such an approach is impractical for managing a landscape of the size and ruggedness that is managed by the BLM in western Oregon. The level of roaded access and survey efforts that would be necessary to identify and harvest the trees that die on BLM lands in western Oregon every year would be prohibitively expensive both in financial and environmental terms.*

**What was the basis for these statements? They are false statements. The community supported Natural Selection Alternative (NSA), fulfills the plan’s purpose and need.**

Conversation with BLM officials at BLM meetings and open houses indicate that you did not understand our comments, the NSA or its basic assumptions. **The NSA is a new to BLM alternative and offers new “management principles”; fulfills the purpose and need of the plan revisions and meets all the legal responsibilities applicable to the lands managed by the BLM in western Oregon.** It is not included in any of the WOPR proposed alternatives. This is why we submitted the alternative during scoping. We wished to give every opportunity for the BLM and the NSA to fulfill the NEPA requirement to rigorously explore and objectively evaluate a reasonable range of alternatives.

Our response to BLM statements regarding eliminating the NSA from detailed study, are further addressed later in these comments, and in DCA Forest Advisor, Orville Camp’s comments.

WOPR Newsletter #7 has identified areas that need to be addressed in the WOPR because of expected impacts of the proposed alternatives, and *where comments and ideas could be most helpful in developing the revised resource management plans:*

- *How can we increase the fire resiliency of the forests in the Medford District and the Klamath Falls Resource Area of the Lakeview District?*
- *How can we better manage the harvestable land base in such a way that will increase the rate of recovery of the northern spotted owl and the marbled murrelet in the short term, while still providing a consistent and stable timber supply?*
- *How can we speed the redevelopment of structurally complex forests after regeneration timber harvesting?*
- *What management techniques might we use to lessen the effects to special status species?*

The NSA and natural-selection-based principles addresses all these areas. The Natural Selection Alternative reduces fire hazards and severity and increases fire resiliency in forests. The NSA retains and restores natural forests thereby increasing the rate of recovery of the northern spotted owl and the marbled murrelet in the short term and long term, while still providing a consistent and stable timber supply. Did the WOPR team consider these things before it eliminated the NSA?

You ask "*How can we speed the redevelopment of structurally complex forests after regeneration timber harvesting?*" This implies that it is possible to restore structurally complex forests after cutting them down. Orville Camp comments in detail as to why this is a false premise. The NSA recognizes that it is other species that retain and restore forest ecosystems. Please explain the rationale for not including any alternatives based on this premise.

The NSA provides a sustainable solution and would greatly contribute to the long term economic stability of the communities in the BLM Western Oregon planning areas and achieve permanent forest production. The NSA places forest health first, which lays the foundation for all forest products and uses at a sustainable level, providing community long term economic stability and social health. It cannot work the other way around.

The Natural Selection Alternative: 1) retains natural forests for all of the species that create and sustain them, 2) retains optimal forest health for optimum productivity, 3) has no down time, the reason why it produces more timber than forestry tree stand plantations, 4) retains visual, spiritual, historical, educational, cultural, recreational, and other non timber values, 5) provides the best possible forest fire protection possible through stewards that retain late successional forests and fire fighting capabilities, an extremely valuable feature for protecting forests during global warming, 6) extraction occurs when trees have reached the dead and dying stage because this reflects what the forest can truly produce at any given point in time, not what someone thinks it will produce through management, which is never as much as what Nature's forests produce, 7) is appropriate, practical, universal and economical approach for the smallest to largest landscapes. While the BLM road system is large and impacting, and degrades the landscape, the NSA small contour access system is appropriate in much steeper terrain with much greater sensitivity, and less impact on the hydrological, ecological and aesthetic values of

these lands. The NSA contour access trail system is minimal impact while providing permanent access for all products and uses, 8) will shift from high impact and destructive logging methods to forest and community friendly permanent stewardships, providing a steady supply of forest products in perpetuity and easy access for and constant availability of fire fighting equipment.

Sustainable forests necessitate retaining suitable environments for all of the species that create and sustain natural forests including timber. Species that create and sustain forests must be allowed to continue doing so. None of the proposed BLM tree stand/plantation alternatives would retain natural forests, and there is no evidence to support the contention they can. Managing natural forests as tree stand plantations has not sustained forests or tree production.

Historical BLM forestry tree stand management practices have not been sustainable, are not sustainable, and cannot be made sustainable. The BLM proposed action alternatives are not biologically or ecologically based, they are based upon the same management-based assumptions and conversions of natural forests into tree stand plantations, and deforestation practices that have caused our current high fuel and fire hazards, biological, ecological, environmental, social and economical disasters.

The Natural Selection Alternative, the first of its kind for public forests, addresses virtually all major forest issues and has the potential to contribute greatly to the social and economic values of the rural communities and counties of Western Oregon.

*"For the last ten years these lands have been managed under six Resource Management Plans that were developed using the standards of the Federal Northwest Forest Plan. Implementation of these Resource Management Plans has been very successful on some fronts, but has not been successful on others -- particularly in meeting commitments made with local counties and communities for timber production." WOPR newsletter 1, pg3*

*It's time to take a close look at these Resource Management Plans and make some adjustments if possible. Your contribution to this process is vital. WOPR newsletter 1, pg1*

DCA asked in our scoping comments for adjustments to be based on sound data and analysis. We offered to join in this effort as the NSA will better effect the implementation of the O&C act, ESA, CWA, MUSY, FLPMA, and other laws the BLM must meet while building bridges between communities, agencies, and past and future generations to live in these regions and benefit from the multiple uses of these resources locally and globally. Our contribution doesn't seem very vital at this point, but it could have been and it still could be. Think of it as a new alternative and this as a new opportunity, since it was a missed opportunity during the scoping process.

The BLM had assured us during the WOPR process:

“The BLM believes the key principles which guided the development of alternative for the Northwest Forest Plan are still valid.”

## Northwest Forest Plan

On April 2, 1993 President Clinton asked at the Forest Conference in Portland: "How can we achieve a balanced and comprehensive policy that recognizes the importance of the forest and timber to the economy and jobs in this region, and **how can we preserve our precious old-growth forests**, which are part of our national heritage and that, once destroyed, can never be replaced?"

The President set forth five principles to guide the federal interagency effort to develop a strategy to protect the old-growth related species and produce a sustainable level of timber: President Clinton said, "First, we must never forget the human and the economic dimensions of these problems. **Where sound management policies can preserve the health of forest lands, sales should go forward.** Where this requirement cannot be met, we need to do our best to offer new economic opportunities for year-round, high-wage, high-skill jobs. Second, as we craft a plan, **we need to protect the long-term health of our forests, our wildlife, and our waterways.** They are gifts from God, and we hold them in trust for future generations. Third, our efforts must be, insofar as we are wise enough to know it, **scientifically sound, ecologically credible, and legally responsible.** Fourth, the plan should **produce a predictable and sustainable level of timber sales and non-timber resources that will not degrade or destroy the environment.** Fifth, to achieve these goals, we will do our best, as I said, to make the federal government work together and work for you. We may make mistakes but we will try to end the gridlock within the federal government and we will insist on collaboration not confrontation."(24)

**It is now apparent from the WOPR DEIS that the BLM intends remove NWFP protections to remaining old-growth forest and old-forest associated species, and abandon the NWFP Aquatic Conservation Strategy. [Nauman and DellaSala 9/07]**

How can “The BLM believe[s] the key principles which guided the development of alternative for the Northwest Forest Plan are still valid.” while contemplating WOPR changes that will unravel the protections of the Northwest Forest Plan?

As was presented in our scoping comments, the NSA is based on the key principles which guided the development of alternative for the Northwest Forest Plan, one of the stated goals of the WOPR.

The Natural Selection Alternative proposed a viable solution to meet the vision of the Northwest Forest Plan and comply with the O&C Act and all applicable laws.

Brandt Report *Answering the Economic Questions Sidestepped by the WOPR*, December 2007, page 27 concludes:

*"The WOPR is a management strategy that produces the lowest economic output at the greatest expense to society. Each acre of land is managed to produce one timber harvest every 80-100 years. The result of this is the commitment of two million acres of O&C forest land to create a meager 3,600 jobs, all of which come at the expense of job loss in other sectors, loss of property value, and tax liabilities. It makes far more sense to retain values that contribute to quality of life and use the forest to put other economic sectors to work. The outcome of this strategy will make these forest lands productive every year rather than once every 80-100 years.*

*Many far-reaching economic objectives could be achieved with less cost to society by retaining and growing forest values that contribute to quality of life, which opens the door for using O&C lands to contribute to the economic stability of communities and industries. This can be accomplished while HARVESTING A SUSTAINABLE YIELD OF TIMBER. The authors of the WOPR miss this point completely as well as miss the fact that this is how the O&C Act directs the BLM to manage the timber on O&C lands.*

*The O&C Act directs the BLM to manage timber to achieve five purposes, and these five purposes will not go away no matter how much the authors of the WOPR engage in cut and paste distortion of law. This behavior does nothing but validate the public perception of BLM arrogance and the confirmation that the WOPR is nothing more than a federally sponsored anti-trust program with a price tag of economic deterioration for Oregon and financial loss for Oregon residents."*

WOPR has attempted to misrepresent the O&C act's clear conservation ethic, the first federal statute to impose sustained-yield constraints on timber cutting, to protect streams and watersheds, to view the long-term economic stability of local communities as priority over short-term economic gain, and to consider recreation as part of the purpose of these lands.

The NSA fulfills the real intention of the O&C act and the sustained-yield constraints on timber to retain values that contribute to quality of life and long term priorities over the destructive practices that it was created to prevent. The five purposes, easily met by the NSA, would not be met by WOPR proposed alternatives. The WOPR alternatives will not make these forest lands productive every year in perpetuity, the NSA would. Rejecting the Natural Selection Alternative (NSA) is arbitrary and capricious.

We concur with Gordon Lyford's WOPR comments of December 3, 2007 Western Oregon Plan Revisions (WOPR) revised 12/17/2007 pg 7 states:

*"Page 107, rejecting the Natural Selection Alternative (NSA) is arbitrary and capricious. How is it that the BLM accepted the NSA as meeting the Purpose and Need for a portion of the South Deer Landscape Management Project (on O&C Lands) and not for the WOPR? The NSA is based on sustainable yield principles, and is suitable on steep lands. The WOPR is simply wrong in its description of the NSA. The NSA is not prohibitively expensive in financial and environmental terms. The fact of the matter is the exact opposite as demonstrated at the many locations in the Pacific Northwest where the NSA has been successfully employed for decades. The WOPR clearcutting plan is however prohibitively expensive in both financial and environmental terms. The WOPR states that*

*the No Old-Growth Harvesting alternative would not meet the Purpose and Need. The O&C Act does not require the liquidation of old-growth trees. This statement shows that the true Purpose and Need of the WOPR is to liquidate old-growth forests."*

**The DEIS failed to provide viable solutions to the BLM stated Preliminary Issues raised for the Scoping Process. The NSA provides a solution for each of these as briefly described:**

### **BLM Stated Preliminary Issues**

BLM Issue: How should BLM provide a sustainable supply of wood and other forest products as mandated by the O&C Lands Act while meeting applicable laws and regulations?

DCA: Sustainable supply of wood and other forest products require sustainable forest ecosystems. The WOPR proposed alternatives destroy functioning ecosystems by converting them into non-sustainable tree plantations.

Issue: How can BLM-managed lands contribute to the conservation of species consistent with the Endangered Species Act?

DCA: Retain environments that these species are dependent on. WOPR proposed alternatives destroy functioning late successional ecosystems that these species are dependent on.

Issue: How can BLM-managed lands contribute to meeting the goals of the Clean Water Act and the Safe Drinking Water Act?

DCA: Retain fully functioning ecosystems that retain forest floor, underground natural "piping" system; and protect from heavy equipment and vehicles from operating in the forest, but keep on ecologically responsibly constructed forest access systems.

Issue: How should BLM manage public lands to reduce the risk of wildfires and integrate fire back into the ecosystem?

DCA: Removing only dead or dying trees addresses climate change issues through optimal green plant and carbon storage while reducing fuel and fire risks. Closed canopies cause trees to grow taller, understory is reduced or disappears, and ground fires are less likely to reach the canopy. Address forest fire issues through natural processes that eliminate costly management costs.

**How does the BLM respond to each of the following points in the *Scientific Evaluation of the BLM's Western Oregon Plan Revisions (WOPR) Impacts on Forests and Watersheds* by Richard S. Nauman and Dominick A. DellaSala of the National Center for Conservation Science & Policy, September 4, 2007 in considering the issues and intentions discussed above and laid out by BLM during scoping?**

- The BLM proposes to eliminate Northwest Forest Plan (NWFP) protections of old-growth forests and old-forest associated species and abandon the NWFP Aquatic Conservation Strategy.
- The preferred alternative more than doubles the area of old-growth forest clearcut.
- The DEIS claims minimal or no-effect on fish, wildlife, peak flows, and sediment in spite of an overall 3-fold increase in logging.
- The BLM interprets the O&C Act as placing timber production above other land uses and values including protecting watersheds, regulating stream flows, and providing recreational facilities that are specifically mentioned in the O&C Act as well as the protection of areas with special designations such as Areas of Critical Environmental Concern.
- The proposed alternatives increase fire hazard and severity throughout the plan area while reducing the resiliency of forests to fire.
- The DEIS fails to adequately assess the impacts of Global Climate change and does not address the effects of logging old forests on carbon cycles.
- The DEIS underestimates the potential impacts of the exotic plant disease Sudden Oak Death and fails to disclose the effects of a large increase of logging on the spread of this emerging disease.
- Relies on a flawed Recovery Plan for the Northern Spotted Owl.
- Alternative management strategies could produce a sustainable source of wood from BLM lands while protecting the last remaining stands of old-growth timber on BLM lands and the forests, salmon, and clean water valued by Oregonians.

It appears that the intentions BLM laid out during scoping (Issues) were either, arbitrary and capricious, or the WOPR DEIS is. There can be no other conclusion by the way in which the issues laid out have failed to be addressed by any WOPR alternatives. The Natural Selection Alternative addresses each of the above four significant issues and was given no comprehensive evaluation.

### **Methodology requests**

On what basis did the BLM decide not to use or respond to the following standards put forth by the DCA of natural-selection-based criteria to analyze impacts of resource extraction on the human and natural environment? Would the BLM consider them at this point, if they did not before?

Indicator #1: Natural-selection-based criteria will provide a standard and methodology by which to analyze environmental and socio-economic consequences of each alternative and how timber production can determine economic stability.

Methodology: Use “14 Criteria for Sustainability” as submitted by the DCA in scoping as a standard for planning criteria to analyze each alternative.

Indicator #2: Species traits and the environment determine “natural-selection-outcomes.”

Methodology: Human actions that change climate, soil, water, air, food, shelter, habitat and/or reproduction necessities, will be evaluated in terms of the “cumulative effects of natural-selection-outcomes”.

**DCA raised many of the following issues during scoping and do not feel that they have been addressed by the WOPR DEIS. Additional issues and concerns raised by the DEIS are included here. Please reply to the following issues and concerns in the WOPR FEIS:**

### Alternatives

**Issue: The Purpose and Need Statement for the WOPR must be broad enough so that it does not foreclose the consideration of reasonable alternatives.**

NEPA regulations require environmental analyses to include a statement that "shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action". 40 C.F.R. § 1502.13. The statement of purpose and need must be broad enough so that it does not foreclose the consideration of reasonable alternatives. City of Carmel-by-the-Sea v. United States Dep't of Transp., 123 F.3d 1142, 1155 (9th Cir. 1997) (“The stated goal of a project necessarily dictates the range of ‘reasonable’ alternatives and an agency cannot define its objectives in unreasonably narrow terms.”)

**Issue: The BLM is NOT committed to alternatives harvesting a minimum amount of timber volume irrespective of environmental consequences to be in compliance with the NWFP and/or O&C Act.**

BLM forest lands are intended to provide for more than timber production. The BLM is not committed to harvesting a minimum amount of timber volume irrespective of environmental consequences to be in compliance with the NWFP and/or O&C Act. This narrow reading of the requirements of the NWFP; the O&C Act and or other laws would artificially lead the BLM to truly consider only those alternatives that propose significant harvesting activities. Timber production at all costs is not required by the NWFP or the O&CAct and should not be the principal focus of the BLM in developing and evaluating alternatives for the WOPR.

Additionally, the Federal Land Policy and Management Act (“FLPMA”) obligates the BLM to manage public lands for multiple use and sustained yield. 43 U.S.C. § 1701(a)(7). The term “multiple use” includes “the management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people ....” Id. at § 1702(c). The term “sustained yield” means “the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the public lands consistent with multiple use.” Id. at § 1702(h). Similarly, the Oregon and California Railroads Act (“O&C Act”) requires that O&C lands "shall be managed . . . for permanent forest production, and the timber thereon shall be sold, cut, and removed in conformity with the principle of sustained yield **for the purpose of** providing a permanent source of timber supply, protecting watersheds, regulating stream flow, and contributing to the economic stability of local communities and industries, and providing recreational facilities." 43 U.S.C. § 1181a.

Single user alternatives proposed in the WOPR violates FLPMA because of preference and priority for a short term economic gain for a single industry; the timber industry; over the various resource values for the rest of the local communities and American public. The exception is for OHV industry as a second use; it too violates the majority of local community values and uses where Emphasis Areas are proposed. There are community based forest product users and OHV users that are compatible with FLPMA, we are not referring to those. What has been the role of the timber industry and the OHV industry on this process? What has been the role of the rest of the public?

The Natural Selection Alternative ("NSA"), closely implements the NWFP, and the multiple use/sustained yield objective of FLPMA. The NSA would provide a broader spectrum and sustainable supply of forest products and uses from these lands than the proposed WOPR alternatives. The ecological superiority of the NSA is revealed throughout the BLM, Medford District South Deer EA, as the environmental impacts of the NSA are described as negligible. Similarly, the NSA alternative that would to meet both of the principal objectives of the BLM WOPR, which are to conserve the ecosystem and provide a sustainable supply of raw materials. WOPR proposed alternatives would not. The NSA provides for a diversity of economic, recreational, educational and other benefits and proposes to provide a sustainable supply of a variety of forest products, including timber, and is an alternative that conforms to O & C Act requirements for permanent forest production under the principle of sustained yield to contribute to the economic stability of local communities and industries.

**Issue: WOPR is mandated by NEPA regulations to fully evaluate the NSA**

NEPA regulations mandate that an agency "shall to the fullest extent possible: 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." 40 C.F.R. § 1500.2(e). NEPA also requires the BLM to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(2)(E). Environmental analysis documents must "[r]igorously explore and objectively evaluate all reasonable alternatives" to the project. 40 C.F.R. § 1502.14(a). A decisionmaker must explore alternatives in sufficient detail to "sharply defin[e] the issues and provid[e] a clear basis for choice among options by the decisionmaker and the public." *Id.* § 1502.14. All reasonable alternatives must receive a rigorous exploration and objective evaluation "of environmental effects and values." *Id.* § 1501.2(b).

**WOPR DEIS:**

***Alternatives Considered but Eliminated from Detailed Study [pg 104]/Harvest Only Naturally Selected Dead and Dying Trees [pg107]***

*This alternative would remove only "naturally selected dead and dying trees, conditioned upon meeting the needs of other species." Timber harvesting of such trees would be accomplished with small equipment from a network of narrow roads.*

*This alternative was eliminated from detailed study because it would not meet the purpose and need, which states that the resource management plan revisions must meet all applicable laws. One of the applicable laws is the O&C Act. 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.*

**We request further explanation of what you are saying here.** You seem to be saying that the NSA was rejected because DCA did not determine and declare the annual productive capacity of BLM lands. Let me elaborate on our confusion over this statement, and perhaps you may better be able to clarify the above statements.

The NSA has declared that it takes the dead and dying, conditional upon meeting the needs of other species. The NSA would produce not less than the annual sustained yield capacity as it would retain the net worth of the forest ecosystem which is necessary to retain maximum productivity over the long term.

Do you wish to have actual numbers presented from DCA? Is that not the role of the BLM? How would we have access to this data for BLM lands?

At the BLM WOPR technology presentation in Oct 2007 a specialist working with the models assured me that BLM has the ability to model natural tree mortality. Does not the BLM have the data and the models necessary to generate the annual productive capacity of BLM lands and the timber from those lands being sold annually under the NSA? This is part of the NEPA requirement placed on BLM. It appears that you are saying that the NSA was eliminated because it did not receive rigorous exploration and objective evaluation that is part of the BLM EIS process.

Do you have the ability to model natural tree mortality? Can you, and did you calculate volume of down wood? What is the natural rate of mortality for each age group? Was the down wood and natural rate of mortality calculated in your analysis of fuel reduction treatments in each of the alternatives? Do the models incorporate trees removed under the fuels reduction treatments that are part of all the alternatives?

Did you evaluate each alternative to see if it could sustain volume in perpetuity? If not for how long did you run simulations? How far into the future are the simulations considered reliable? How do the fuels and fire reduction portion of the alternatives play out in each alternative over the long term? Was this included in the modeling?

Why was computer modeling relied so heavily upon to guide this process? What is the margin of error? Has there been an objective, empirical study, research project and or peer review done to analyze limitations and potential problems with using these models? What is the amount of

proven and tested experience that these models have in their ability to be able to make predictions that have been born out on the ground?

At a public meeting I asked about the science used for the WOPR DEIS, I was directed to a meeting that I also attended (October 2007). The dependence on computer simulations and the absence of biological science in the presentation has raises some serious questions. What was the role of biological and ecological science in the evaluations and what percentage of the evaluation was focused on quantitative science and computer simulations? There seems to be a shortage of biological science (how do forests grow) in the assessing the alternatives.

Computer simulation projections by their nature lack certain biological and ecological components. A great deal of, current and contrary, biological and ecological scientific studies seem to be left out of the EIS evaluation process. Technological analysis and quantitative science seems to be the dominant form of analysis in the WOPR DEIS. How can a computer simulate the endless components of the natural world? Biological, ecological and social science and research seem to be out of balance with technological/quantitative science; how can a balanced assessment be made? Will your projections vary according to forests that are healthy with all evolved species and those forests that are degraded by decades of logging, climate change, blister rust, invasive species, disease infestations; pine beetle, etc? Have you analyzed the limitations of your technology? While the wonders of technology and computer simulations offer new and remarkable kinds of information; they must not be overly relied upon; simple miscalculations; program limitations; faulty premises or data entry can result in large errors and hypothetical conclusions far from reality.

Full assessment would include using models or processes that are appropriate to the alternative itself, not necessarily one that is based on traditional logging practices and in the case of the NSA may fail to account for the biological and sustainability benefits of the NSA, which could result is a skewed estimate of timber volume.

How do you justify not including disturbances into your projections, just because you cannot model it? If you do not have the tools to justify your actions, how does that cover legal requirement to do an analysis? Disturbances will come and because your models cannot include them, the models are of questionable value. This is very concerning in light of such conditions as global warming; the fact that proposed alternatives would create combustible plantations in place of fire resistant ecosystems; flooding will occur; etc. A forest plan based on hypothetical situations that we know are not realistic is more than problematic; it is arbitrary and capricious. If your model does not include natural "disturbance", how can it present what the forest conditions will be in one hundred years with no disturbance (no harvest) as compared with historic conditions before European settlement that included natural "disturbances"? Are not these comparing apples and oranges? It seems that the "No Harvest" bars on your graphs are only computer projected data with such limits with regards to what will happen in reality, as to be predictably invalid and unreliable.

See Sierra Club v. Bosworth, 199 F.Supp.2d at 980 (finding that environmental analysis itself must address lack of scientific support). "Agencies shall insure the professional integrity,

including scientific integrity, of the discussions and analyses. 40 CFR §1502.24. NEPA requires that agency decisions be based on the highest quality data and analysis to provide for full public participation and informed decision-making. 40 CFR §1500.1. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA. 40 CFR §1500.1(b).

### **Impacts to Socioeconomics**

#### **Issue: How may sustainability relate to local economic stability and resource extraction?**

None of the proposed WOPR alternatives provide the sensible logical and realistic approach to sustainable resource extraction, such as that proposed in the NSA which is: 1) to take small amounts of timber across the cutover forestlands over long periods of time, allowing the stands to regenerate at a natural pace and supplying perpetual work for small-scale harvesters, and allowing local communities to develop small businesses and enterprises because there will be a constant supply of resources over the long term; 2) recover ever more fire resilient forests; 3) have an increased rate of recovery of the northern spotted owl and marbled murrelet in the short and long term as 4) structurally complex forests are restored and retained 5) providing ever healthier forest habitat to support the recovery of special status species. WOPR alternatives propose to bring in outsiders to cut down community forests and transport these resources out of the communities; leaving instead clearcuts, scarred landscapes; loss of endless resource values for economic and quality of life values, including much greater fire risks. This will not further the goal of sustainable use of BLM land and resources; would place the northern spotted owl and marbled murrelet at the brink of extinction or to extinction, as structurally complex forests are converted to tree plantations, seriously degrading habitat necessary to protect special status species.

#### **Issue: WOPR's Environmental Justice Assessment stated that the consequences of the alternatives are not expected to fall disproportionately on minority or low-income populations.**

Have you assessed the impacts to humans and communities in terms of small contractors as compared to large operations? The NSA proposes to create forest stewardships for small, local operations that would extend for many years. This type of cutting-edge contract would provide environmental justice opportunities for small operations and restore local economic stability to disenfranchised rural economies. Will the opportunities to purchase contracts be designed equally advantageous for the small contractor as the large contractor? Have you assessed the economic and quality of life impacts and benefits and impacts comparatively for the independent forestland owner; small fishing business owner; mom and pop businesses dependent on tourism and recreation; the rural landowner; the rural resident; and corporate business owner? What are the benefits of each alternative to each? What are the negative impacts to each? Have you factored in human health issues resulting from prescribed burning, including increased risk to homes from runaway fires; use of pesticides; use of herbicides; noise; pollution of water and air; stress from clearcuts and loss of quality of life and property values? Why do the BLM service contracts of repairing the damages caused by logging fall disproportionately on minority and lower income populations and timbersale opportunities are designed for large corporate timber companies? Why do the costs of implementing these timbersale and restoration projects fall onto

the American taxpayer and not on the beneficiary, the timber industry; creating a disproportionate advantage to the large corporate forestland owner over the small forestland owner and other forest related small operations? Why weren't there a responsible analysis of environmental justice issues, such as these and many others, evaluated in the EIS?

BLM failed to fulfill the requirements for the BLM to integrate social science and economic information in the preparation of informed, sustainable land use planning decisions. Section 202 of FLPMA requires BLM to integrate "physical, biological, economic, and other sciences" in developing land-use plans [43 USC § 1712]. Section 102 of NEPA requires Federal agencies to "insure the integrated use of the natural and social sciences . . . in planning and decision making" [42 USC § 4332]. FLPMA regulations 43 CFR §1610 and the BLM Manual 1601 Land Use Planning and H-1601-1 Land Use Planning Handbook elaborate on the legislative mandate. Federal agencies are also required to "identify and address . . . disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States," in accordance with Executive Order 12898 on Environmental Justice.

**Issue: Diversity of forest products provide for local economic stability; not timber priorities as in WOPR alternatives.**

Why weren't the alternatives evaluated for non-timber forest products and resulting multiple economic benefits for a wide range of non-timber beneficiaries? For example, the NSA pays close attention to opportunities that use the forest to produce timber in a way that attracts the interest of the traveling public and helps the community to capture a share of the significant tourism dollars that pass through each region annually. The NSA has the potential for bringing revenues to both timber, tourism, and other industries. This would mean more productivity from the forest, and a diversification of businesses that the BLM forest can support and stronger contribution to the economic stability of local communities as required by the O & C Act.

The NSA creates a forest environment that is both attractive and accessible for recreational activities. Recreational opportunities increase local property value, community health, and offer additional activities for travelers that help to make this area a travel destination. The NSA would allow the public to recreate in their forest while at the same time accommodating the needs of local forest workers to earn a living. It would create a compromise between conflicting forest uses that would cast a positive light on the local communities as productive and collaborative societies that are able to generate an innovative, diverse, stable and sustainable economies with a minimum of controversy. Was this given any value when you considered the NSA?

Why weren't the values of these types of opportunities evaluated for each alternative or considered in the development of alternatives?

**Issue: Resource extraction using natural-selection based criteria contributes to economic stability**

The natural-selection-based approach to timber production outlined above also produces other values that produce revenue that diversify the economic benefits provided by the forest. This is in following with the stated purpose of the O&C Act "... timber will be sold, cut and removed..."

on a sustained yield basis... *for the purpose of...* contributing to the *economic stability* of local communities and industries..." BLM Planning staff must understand that there has been no court decision or interpretation of the O&C Act or mandate in legislative history that clearly indicates *timber production* is "dominant" over *economic stability*.

**Issue: Economic outputs include all commodities that will contribute toward a sustainable economy**

When considering economic outputs of each alternative we asked to include all the commodities the forest will contribute toward a sustainable economy for the community. It seems that it is primarily timber in the WOPR Alternatives. We asked that the estimate should be projected out over the life of a project area from initiation of a plan to the achievement of its objective. Examples are of other products are wood products such as small diameter trees, hardwood products, wood crafts and other added value wood products; tourism products; quality of life commodities include recreation, scenic landscapes, clean water and other resources (These commodities have a secondary economic benefit that must be included in the overall analysis of cost-benefits for each alternative); research opportunities; and other products.

**Issue: Recreational opportunities help to improve the health of a community**

Improved public health has been correlated with a reduction of health care insurance. Ultimately we all benefit by paying lower insurance rates. This must be included to in an economic analysis to provide the data necessary for assessing how the alternatives meet congressionally directed purposes for managing BLM administered lands to sustain the health and economic well-being of the people of this country.

**Issue: Each alternative needs to be examined as to how it will affect unique recreational and educational opportunities**

For example Unit 38S-07W-21-003A of the South Deer Project in Selma is unique because it is a mature/old growth forest on flat ground with road access for passenger vehicles. Old growth forests on flat ground in Josephine County have all been logged decades ago except for this small parcel. What provision has the WOPR to protect these types of areas from being lost? In order to retain and not degrade or destroy recreational opportunities the analysis of alternatives must include the potential impacts to all forms of recreation by proposed logging and road building.

**Issue: Visual Resource Management goals need to be reevaluated.**

A casual observer walking through the forest should experience VRM level 1 across the landscape. Retaining forest health is synonymous with retaining visual and aesthetic values. If it looks and feels like a forest is the best indicator that it is a healthy forest: Common sense born out in cutting edge forest ecology. The level of change of the existing landscape should not exceed that which would occur in a natural course of events. The NSA will achieve this objective. The WOPR will have devastating affects to visual and aesthetic values.

**Issue: "In Oregon, the relationship between the environment and the economy is changing. Industries that extract raw materials are stagnating, while industries that benefit from the presence of environmental amenities are growing rapidly."(20) NSA p 2.**

The use of public lands for recreation and tourism is at an all time high and these uses along with the fishing industry values need to be assessed.

A significant consideration not part of the original NWFP plan is the mid-1996 milestone date when the state's electronic technology sector overtook timber as its leading industry. A report by a panel of economists led by Thomas Power found that between 1988 and 1994, despite declines in the timber and aerospace industries, overall employment in Oregon and Washington had grown by 18%, two and a half times the national average. Even many rural economies have, not as was then thought, found new life. Current data regarding the electronic technology role in Western Oregon needs to be analyzed. What are the implications and values of the forests with regards to this new information?

**Issue: The effects to our communities from below cost timber sales were not analyzed in the development of the NWFP and need to be analyzed in the WOPR FEIS.**

The public is tired of selling timber below cost. If sales cannot be made at the going rate for timber, they should not be made. This is a loss to the public that they are unwilling to support. Government below cost timber sales, combined with enforcement and use of forestry silvicultural practices, cause the loss of private owned forests. Private owners cannot compete with governments that sell timber below cost.

O & C Act requirements for sustained yield of forest products, necessitates assessment to clarify how the alternatives will contribute to or detract from the economic stability of local communities.

**Issue: Current practices that are prepared under the influence and direction of the Healthy Forest Initiative launches the forest into a commitment of long-term, tax dependent activities necessary to bring the forest into the intended level of productivity.**

An alarming aspect of this plan, especially in these times of extreme deficits, is the imminent problems that will arise if at anytime tax dollars are not available to carry the plan through to completion. These include the escalation of fire hazards to extreme levels coupled with an uncertain future for forest productivity. Plans are extremely tax dependent and if tax support fails, which is very likely, its outcome will be a burden on society to cover the cost of fire control and rehabilitation of damaged lands. This is a very unstable situation likely to result in an unstable and unpredictable economic future for the community. DCA requests that the EIS address this issue and its long term implications. How much of the WOPR cost is expected to be paid by the Healthy Forest Initiative and other tax dollars?

These practices and plans impose a permanent impact on future business opportunities in the community. The plan provides no data for the present and future impacts to non-timber industries including tourism, cottage industry, artists and others. Tourism is especially important in Western Oregon as is detailed in comments by Roger Brandt. The EIS needs to evaluate how the alternatives might make it more difficult for tourism businesses to capture this business. The expertise of Roger Brandt, see *Brandt Report Dec 2007, "Historical Economic Performance of Oregon and Western Counties Associated with Roadless and Wilderness Areas"* by Southwick

Associates (Cited in the NSA p5), attached article by Bruce Baraco on the new economic paradigm. The BLM may implement a forest management program that will deprive the community millions of dollars in sustainable income by excluding business opportunity on BLM land for decades or enhance local economies and economic stability. The DEIS failed to incorporate new research, data and information of these important components of the socioeconomics of Western Oregon, or analyze their impacts.

**Issue: Quality of life**

The NSA offered an alternative that supports a diversity of business resources as well forest work to create a forest environment that offers a diversity of recreational and aesthetic resources. These are values that give residents in a community the resources they need to pursue the life style of their choosing. A community with these opportunities will likely attract self employed entrepreneurs or affluent retirees who all bring with them their own incomes, all of which contribute to the economic stability of a community. These are important economic assets that can be made possible if the forest is managed so equal enthusiasm is devoted to the production timber *and* non-timber products. Without assessing how an alternative will produce all the products and resources a forest can provide, the BLM will subject communities to an unstable and uncertain economic future, which runs counter to O&C Land Act requirements for contributing to the economic stability of local communities and industry (43 U.S.C 1181a)

**Issue: Concentrated off-highway vehicle (OHV) usage is not compatible with the checkerboard of public and private land ownership in the proposed "Illinois Valley and Elliott Creek Emphasis Areas"**

OHV Emphasis Area is not acceptable in the Deer Creek watershed this area and that it is up to the BLM to establish criteria as to where they should be prior to suggesting any particular areas. It is not compatible with adjacent private land ownerships. It is not compatible with the multiple recreation uses that we have been promoting (other than what OHV use there would be without making it an Emphasis Area).

The proposed OHV Emphasis Area designation gives priority to one form of recreation at the expense of all other recreation and uses that the community vision, as has been expressed in the community created and supported NSA. The NSA community plan includes true multiple use for all products and uses while retaining biological and ecological values, with no vehicles off road even for timber removal (While OHV's are supposed to stay on trails/roads, but they do not).

While the NSA allows for responsible on road vehicle use, and provides enhanced quality experience, it also provides for protection of biological and ecological values that provide for all forms of recreation, education and tourism experiences. The NSA access system if created for on-going resource extraction of all products and uses.

The NSA was designated by BLM to be implemented in one of the sections of the South Deer Project area where the WOPR has proposed to create an OHV Emphasis Area. These uses are highly conflicting.

Page J-1205 of WOPR (Vol III) states: Non-motorized travel is allowed on all access routes (e.g. horseback riding, hiking, and mountain biking) but is not encouraged due to potential conflicts and safety hazards.

DCA offers education and information events. At one recent event where Oregon Heritage Forests made a local presentation, the room was packed with 60-70 concerned citizens, a majority of which had heard of the proposed Illinois Valley and Elliot Creek Emphasis Areas and wished to find out how to oppose it. This matter would bring great conflicts between local residents and OHV users.

**Issue: Planning Criteria for OHV Management Must Reflect Applicable BLM Regulations.** Existing law and policy requires the agency to designate ORV areas and trails only where they “protect the resources of those lands,...promote the safety of all users of those lands, and...minimize conflicts among the various uses of those lands.”

Executive Order No. 11644 (1972 as amended by Executive Order No. 11989 (1977)) and 43 C.F.R. § 8342.1 require the BLM to ensure that ORV areas and trails are located:

- to minimize damage to soil, watershed, vegetation, air, or other resources of the public lands, and to prevent impairment of wilderness suitability;
- to minimize harassment of wildlife or significant disruption of wildlife habitats, and especially for protection of endangered or threatened species and their habitats;
- to minimize conflicts between ORV use and other existing or proposed recreational uses of the same or neighboring public lands and to ensure compatibility with populated areas, taking into account noise and other factors; and
- outside officially designated wilderness areas or primitive areas and in natural areas only if BLM determines that ORV use will not adversely affect their natural, esthetic, scenic, or other values for which such areas are established.

These items represent the primary factor by which the BLM must designate both ORV areas and specific routes. When viewed through the crucible of these regulations, the BLM's role in either assessing or promoting ORV “use opportunities” (currently listed as a Primary Factor of the Analysis) becomes irrelevant in comparison to higher priority issues such as the condition of public land resources, health of wildlife habitat and protected species, and avoidance of conflicts with other (non-motorized) recreational uses. The CFRs imply that BLM is to allow ORV use only where it does not interfere with these other factors. Consequently, BLM must revise its current Planning Criteria to accurately reflect the requirements of 43 C.F.R. § 8342.1, which should instead constitute the Primary Factors of Analysis for ORV management.

It is BLM's responsibility to establish criteria prior to proposing potential OHV Emphasis Areas

## **Species/Habitat**

### **Issue: Wildlife protection:**

WOPR alternatives fail to protect wildlife, particularly special status species, or to achieve their recovery in compliance with the Endangered Species Act.”

### **Issue: Impacts to plants and wildlife**

The plan must consider impacts to wildlife and plants and provide greater safeguards than exists today in order to protect plants and wildlife and fulfill legal requirements of the NWFP, ESA, O&C Act, CWA, FLPMA and NEPA and other environmental protections.

The only remaining refugia for forest dependent wildlife is on public lands and now these areas are being stripped of mature and old growth trees. For example: 48% of the volume of the South Deer Timber Sale comes from mature and old growth trees. Mature/old growth trees are known to be fire resistant and provide habitat for late successional forest dependent species. Nearly all of the conifers of this size have been logged from private lands in the Deer Creek Watershed. Removing protection for Bald Eagle management areas, Riparian Reserves and spotted owl habitat such as Owl Cores and CHU-72 in the Deer Creek watershed in violation of the NWFP, ESA, O&C Act, CWA, FLPMA and NEPA.

### **Issue: Proposed alternatives should be evaluated to comply with the principles laid down in the NWFP**

That is what you said you would do.

**Issue: We object to removal of survey and manage requirements as laid out in the NWFP**  
We are dependent on other species for forest production and to sustain global climate and life on the planet. Proposed alternatives must include survey and manage for special status species prior to ground disturbing activities.

To Remove Modify the Survey and Manage Mitigation Measure Standards and Guidelines before they have even been implemented is inconsistent with the “*Vision*” of the Medford District RMP/EIS p vi which states: “a carefully designed program of monitoring research and adaptation will be the change mechanism for achieving this vision.”

The assertion that “*Survey and Manage Standards and Guidelines are frustrating the Agencies’ ability to meet the resource management goals and objectives as set forth in the Northwest Forest Plan*” is based on faulty assumptions. The reasons that the agencies may not meet these goals and objectives, are not “Survey and Manage Standards and Guidelines” of the NWFP, but other reasons.

Productivity of forest resources within the Range of the Northern Spotted Owl dependent on retaining healthy functioning ecosystems, not on the ability to remove specific volumes and not on the ability to modify or remove Survey and Manage Standards and Guidelines protections for species as included in the NWFP. Survey and Manage litigation is the result of failure to implement sustainable practices on our public lands. Survey and manage costs are a critical

investment in having fully functioning ecosystems which are essential for sustainable forest resources and sustainable communities dependent on those resources.

Past forest management practices have substantially reduced the available timber supply. Current ecosystem productivity is far below historic forest levels. No one knows how to restore a late successional ecosystem. Species that created those ecosystems will restore them if they are protected and allowed to do so. The remaining islands of late successional forest ecosystems need to retain the protections provided in the NWFP including Survey and Manage Standards and Guidelines in order to retain their health and productivity and to restore degraded landscapes.

The proposed changes to remove or reduce survey requirements will reduce the productivity of these forest ecosystems. Productivity is related to green foliage and the ability of all the species that created forest ecosystems to restore and sustain them.

The concern that, “*the Survey and Manage Standards and Guidelines are one of the factors frustrating the achievement of the stated needs of the Northwest Forest Plan...to protect the long-term health of forests, wildlife, and waterways because they restrict forest health treatments*”, is not true, because it is based on the faulty assumption that the proposed thinning and fuels programs would protect the long-term health of forests, wildlife, and waterways. This is not accurate or based on best science.

We do not agree with this popularized “frame” that promotes ongoing deforestation of our public lands: “The forest is unhealthy and must be logged to return to its natural state”.

For millions of years wildfire has played a vital role in shaping our western forests.

Current science, such as the study "*Watershed Impacts of Forest Treatments to Reduce Fuels and Modify Fire Behavior*" ([www.pacrivers.org](http://www.pacrivers.org)), demonstrates that:

- Fire suppression has NOT altered fire behavior in the vast majority of our western forests
- Fires in most forest types are a product of weather rather than fuels
- Fuels "thinning" is ineffective at stopping most fires, is temporary at best, and in many cases increases fire risk
- Fuels "thinning" does the same ecological damage as clear-cutting, including widespread tree removal; erosion and siltation of waterways from road construction and use; and soil compaction from heavy machinery
- Fuels "thinning" ignore the greatest fire risks of all: logging, grazing and more fire suppression

Wildfire is a natural, beneficial and essential element of our western native forests. So called. “forest health and fuels treatments”, are largely inappropriate, ineffective, and can increase fire risk. Typical forest management logging practices and grazing are main causes of uncharacteristic wildfire. Our forests must be returned to their natural fire regimes.

The NSA provides an alternative to unsustainable forest practices; would provide no threat to Survey and Manage Species or provoke litigation. It enhances all these species habitats; allows for maximum productivity and a sustainable supply of timber; allows native and old growth forests to be retained, and to recover; provides the best solution to fire and fuels issues. Failures with implementation of the plan are not those related to Survey and Manage requirements, it is failure to recognize that healthy forest ecosystems are sustained and restored by the functions of all the other species, not by so called “forest health treatments” performed by humans. Sustainable forest management practices that support sustainable supply of forest resources and sustainable local

economies necessitate retaining environments favorable to the species that create and sustain forests. The Survey and Manage Standards and Guidelines are essential to determine human impacts on those species.

**Issue: There should be no data free analysis or analysis free decisions.** There should be evaluation of the entire plan based on baseline data that must be obtained if missing and monitoring that must be done where there are inadequacies. Where monitoring and statistics are not available to demonstrate the improvement and or retaining of ecological values by the proposed plan (or preferred alternative), all planning and current activities must be halted until such time they are made available.

Surveys and Monitoring are essential to the creation of a scientifically sound, ecologically credible, and legally responsible alternative.

There must be accurate baseline data describing seral ages of all forest ecosystems.

Analysis needs to be made by highly qualified scientists in biology, ecology and the other sciences, subject to non-agency non-timber industry connected peer review; and consistent with the most current science independent, non-timber industry or government connected researchers or institutions.

**Issue: Owl Cores should be retained and protected**

The NWFP requires that activities in areas adjacent to owl cores must be “designed to reduce risks of natural disturbance.” NWFP at C-11. Timber harvest increases fire severity more than any recent human activity. EIS must examine and disclose scientific studies regarding wildlife risks associated with harvesting operations. Activity in areas adjacent to spotted owl cores that are not designed to reduce risks from natural disturbance and as a result, fail to demonstrate compliance with this requirement of the NWFP and should not be approved in the WOPR; as they are necessary protections for the recovery of the northern spotted owl.

How does the WOPR justify elimination of these protections to owl cores? In fact two owl cores are included in the IV OHV Emphasis Area, and another two are in adjoining sections that are part of CHU-OR-72.

**Issue: The need to comply with the endangered species act**

Section 7 of the ESA requires the BLM, as a federal action agency, to consult with the FWS to “insure that any action authorized, funded, or carried out by such agency ... is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification” of critical habitat. 16 U.S.C. § 1536(a)(2), (a)(4). To assist in this consultation effort, action agencies must prepare biological assessments for all species that the FWS has identified may be present within a program area. 16 U.S.C. at § 1536(c). Section 7 mandates a limitation on the commitment of resources by a Federal agency after the initiation of consultation. Specifically, the Federal agency shall not make any irreversible or irretrievable commitment of resources, which has the effect of foreclosing the formulation or

implementation of any reasonable and prudent alternative measures that would insure that agency actions are not likely to jeopardize the continued existence of listed species. 16 U.S.C. § 1536(d).

**Issue: Habitat for the Northern Spotted Owl must be retained; and Protection from adverse impact to Spotted Owls depends on reliance on sound data and analysis**

Given the worsening condition of the owl, an indicator species for forest health, a recovery plan should not allow BLM to abandon current minimal protections on public lands. The WOPR fails to take into consideration the dire situation for late successional species extinction and notoriously the northern spotted owl.

Proposed alternatives must be assessed for the question if they will degrade primary constituent elements within designated spotted owl habitat. Sound data and analysis must prevail over arbitrarily justifying losses by stating that the owl will exist somewhere, therefore it is acceptable to destroy their habitat by eliminating existing CHU's (such as CHU OR-72 in the Deer Creek Watershed) and creating extreme fire hazard conditions by regeneration harvest and other treatments in nearby areas.

A recent Ninth Circuit opinion has addressed the importance of primary constituent elements and has concluded that CHUs must be conserved in order to contribute to the recovery of the spotted owl. Gifford Pinchot Task Force v. United States Fish & Wildlife Serv., 378 F.3d 1059 (9th Cir. 2004) . The Court in Gifford Pinchot Task Force concluded that it is not enough for the FWS to determine that a project will not jeopardize a species, the FWS must also conclude that the project would contribute to the recovery of the species. 378 F.3d at 1071.

Critical Northern Spotted Owl habitat is designated as such because it is considered "essential" to the recovery of the listed species. 16 U.S.C. § 1532(5)(A). If the BLM authorizes the adverse modification of this habitat, then the BLM will impact the listed species ability to recover. This is particularly true if the habitat is mature and old growth forest, which requires decades (perhaps centuries, depending on how severely it was degraded) to re-establish

Moreover, there is a variety of new information regarding the distribution of spotted owl populations that necessitates new environmental analysis pursuant to NEPA. New region wide information includes: evidence of competition increasing from barred owls, impacts from the West Nile Virus and the Sudden Oak Death syndrome in the southern portion of the range, impacts of wildfires, and the impact of increased logging pursuant to the Healthy Forest Initiative. According to Courtney *et al.* (2004) concluded that the risks currently faced by the northern spotted owl are significant, and their qualitative evaluation is that the risks are comparable in magnitude to those faced by the species in 1990. The BLM and the FWS cannot accurately assess the potential impacts to spotted owls without an assessment of this new information.

BLM must consider the large degree of scientific controversy that surrounds the impact of fire prescriptions on reducing future fire risks. BLM cannot rely on a conclusion that degrading essential habitat with the current fuels practices, will benefit owl recovery without examining this conflicting science.

In 2007, the greatest range-wide threats to the spotted owl were identified as competition from barred owls, loss of habitat amount and distribution as a result of past activities and disturbances, and ongoing habitat loss as a result of timber harvest. BLM plans must address these key threats and management plans must allow spotted owls to move and persist across their range given that, “based on existing knowledge, large continuous blocks of suitable habitat are still viewed as necessary for the Northern Spotted Owl” (Franklin and Courtney 2004:15; emphasis in original)

The proposal to eliminate critical habitat for endangered species such as the northern spotted owl is a violation of the ESA. The WOPR proposes to eliminate CHU-OR-East IV/Williams-Deer LSR (#RO 249)72 areas in the Deer Creek Watershed. We have seen two spotted owls in this area in the past several months. There is known spotted owl activity here and these forests are visited by hundreds of people annually. The DCA has sponsored public tours and workshops in these forests teaching people from around the world how natural forests function. These ancient forests are a local and national treasure that belongs to all Americans not the timber industry or to be lost for short term economic needs. These forests are a critical part of our culture, critical part of our ability to retain private forestland health and protected under the ESA and other legal obligations and responsibilities that the WOPR must fulfill.

**Issue: Each alternative should be evaluated for two ecological large scale issues/functions of concern: “(1) the condition of critical terrestrial linkage between the watershed where resource extraction is occurring and other provincial watersheds; and (2) the condition of the aquatic habitat particularly as it relates to salmonoid species.**

We raised the above issue as it is particularly relevant in the Deer Creel Watershed. The *Deer Creek Watershed Analysis*, October 1997 stated the following

*Dear Reader:*

*The purpose of this watershed analysis is to identify the various ecosystem components and their interactions at a landscape scale. It looks at historical ecological components, current ecological components and trends. It makes recommendations for future management actions that are needed to reach recommended ecological conditions.*

## **VI. RECOMMENDATIONS**

*Synthesis of data/information and interpreting current trends in the Deer Creek watershed points out two primary ecological large scale issues/functions of*

concern: (1) the condition of a critical terrestrial linkage between the Deer Creek watershed and other provincial watersheds; and (2) the condition of the aquatic habitat particularly as it relates to salmonid species. The desired future condition of the watershed and the recommendations in this section emanate from these two important ecological functions.

### 1. **Terrestrial Links**

*The northern mountainous ridge line that separates the Deer Creek watershed from the Cheney/Slate Creek watershed is an important dispersal route for terrestrial species, especially old-growth dependent species. This dispersal route includes all of the designated Late-Successional Reserve (LSR) lands and connects watersheds of the Illinois River basin with those of the Rogue River basin and thus provides a vital linkage with the coastal mountain range. Maintaining and increasing the effectiveness of this dispersal route would require the forest vegetation to be managed to provide the habitat conducive to old-growth dependent species. Along this dispersal corridor, the forest canopy closure and structure required by old-growth dependent species should be maintained on lands currently in that condition and created on lands that do not currently exhibit those conditions. ...*

*The recommended desired vegetation condition along the dispersal corridor would be an old-growth forest. ...*

#### **Issue: The EIS needs to evaluate new information not considered in the NWFP planning document.**

For example, the dwindling of late successional forest resources along with private land owners massive degrading of the forests in a way that could not have been foreseen at the onset of the NFP.

The coho salmon is now listed as endangered and that wasn't taken into account when the RMP/EIS was written for the NWFP. The pressure of meeting timber targets has placed the already severely impacted salmon and other fish over the edge.

#### **Issue: The EIS must gather data and take into account what citizens of the Northwest want with regards to protections for their federal forests.**

The public didn't realize that the NWFP would fail to protect resource values on the public lands, the government didn't realize the strong position against logging on public lands that would come from the majority of the public. This must be included in the EIS.

The proposed WOPR action alternatives fail to protect our forests so that future generations can enjoy special places and heritage forests of the Northwest that Americans treasure?

**Issue: Necessary data must be gathered and current forest conditions must be assessed along with theories on which current practices are based, and proposed alternatives are evaluated.**

For instance: Current management decisions have been based on the premise that if dense second-growth forest plantations were aggressively thinned to reduce competition and open the canopy, they would acquire old-growth characteristics sooner, accelerating their use by spotted owls. Information has become available disproving this and incorrect assumptions about these forests ability to become old-growth forests. Many of the sites prescribed for this type of treatment are not able to be improved upon and have all the components necessary to evolve into classic old growth ecosystems, whereas projects implemented and proposed will and have degraded these ecosystems to a state where they are likely to never achieve old growth conditions. For these reasons, all projects and forest conditions must be reevaluated along with theories on which current practices are based, including all current studies and contrary science to tree plantation science now being used to justify these practices. The photos of the spotted owl attached to this document are on Camp Forest where NSA practices have allowed natural forests to recover without thinning as has been proposed. The owl is here because there is a CHU within a short distance and there is a full canopy and healthy recovering natural forest as occurs under the NSA.

**Issue: Bureau sensitive fungal species conservation issues**

Bureau Sensitive fungal species conservation and the Oregon State Office of the BLM has a stated policy which vows that no BLM action will “contribute to the need to list any of these species” This is a good thing, however: Surveys providing “specific information regarding connectivity, range..., habitat requirements, and disturbance effects are lacking. Given the current enormous lack of knowledge, it would be sheer luck if there were no significant impacts to either Sensitive fungal species or their habitat in implementing current management practices. Relying on luck is not the hallmark of a responsible land management agency. If no surveys are performed and/or an unknown population of one or more of these species were damaged or eliminated (from let us say for example that this loss occurred due to increased ambient temperatures and decreased humidity, leading to excessively dry soils, all resulting from excessive opening of the forest canopy), the consequences could be dire for the species. Keep in mind that 1) these species are part of the exceptional species diversity which has made the areas like the Illinois Valley in Southern Oregon world famous, and they are worth preserving for this reason only, but in addition, 2) all of these species are mycorrhizal, with conifers as typical hosts. Host plants do not typically thrive, especially as seedlings, without the appropriate mycorrhizal fungus attached to their roots. If the health and vigor of conifers, which form the backbone of the extractive economy of southern Oregon, are of concern, then it is wise to preserve the fungi which contribute substantially to this health and vigor.

Survey and Management requirements of the NWFP are critical to fungi species and their protection. The NSA protects all these species.

**Issue: All forest ecosystems must be allowed to naturally evolve and go through each stage of ecological succession.** This is the process that builds soils, provides for sustainable nutrient cycles, species habitat and retains natural fully functioning ecosystems that are necessary to retain fully productive forests, clean water, sustained timber yields, aesthetic and recreational values and local economic stability.

Since the BLM documentation nor any other analysis has shown scientifically how the reduction of canopy cover in late successional stands and riparian reserves will lead to “improved conditions for late successional or riparian ecosystems”, “provide a sustainable supply of forest products”, “provide connectivity”, “retain habitats for late-successional forest species”, or “maintain ecologically valuable structural components such as down logs, snags, and large trees”, the proposed tree rotation/plantation practices should be reevaluated.

The goal of “providing early successional habitat” has been accomplished beyond natural conditions for the next 500 to thousand years, or longer. There is a dangerously small portion of natural late successional and old growth forests and creation of early successional forests not be a goal anywhere until the ecological need can be scientifically justified at a landscape level and older forests have been reestablished across the landscape to original conditions.

**Issue: Accountability**

Activities have occurred and continue to occur where threatened and endangered species have been overlooked by inadequate monitoring. There must be built in safeguards, accountability and consequences for violations regarding environmental protections.

**Water/Streams/Watersheds**

**Issue: Impacts to drinking water, water quality and hydrology**

It is not plausible that the proposed alternatives would maintain or improve water quality. The last time our watershed was logged we had polluted domestic water for 20 years following logging and serious erosion problems from logging roads that cause problems whenever a vehicle uses them. Deer Creek Valley has had serious domestic water shortages and problems; our creeks and streams have been severely impacted by logging practices. We object to the WOPR proposed alternatives and to the water and erosion problems that would be caused by Illinois Valley and Elliot Creek OHV Emphasis Areas. We object to the lack of research on the effects of forest practices on water. Research on soils and hydrology by Richard Hart should be included in the science and data considered for the revised plans. We object to the lack of objective analysis of effects on drinking water, water quality for aquatic species and for natural healthy hydrological functions.

**Issue: Impacts from road work**

We request that objective analysis of the NSA’s proposed access system be done. NSA proposes narrower roads that maintain full canopy cover, contour the land, and result in less impact. While BLM management approach may be practical for large industrial

timber operations that do not feel a responsibility to retain forest ecosystems for all values including biological, ecological and hydrological values, it is inappropriate on a landscape of the ecological complexity and statutory protections required by BLM in western Oregon. The problems with current road standards on BLM lands and proposed for future roads under WOPR proposed alternatives are prohibitively costly in economical and ecological terms.

The road system proposed by the NSA has a proven track record in the US and Canada where it has been implemented in rugged and extremely rocky terrain. The roads have been heralded as the most ecologically, economically and aesthetically superior forest roads built. The opportunities for permanent forest production across the landscape will provide for local economic stability and reduce costs to taxpayers and the environment in perpetuity.

**Issue: Soil compaction conditions**

The significant effect of operating heavy equipment on forest soils and potential compaction is excessive, destroys forest productivity and forest health. The NSA does not operate heavy equipment off roads.

**Issue: Soil compaction and erosion resulting from Machine Mastication (MM) treatment.**

No matter how low the ground pressure of the equipment, it will result in potentially considerable damage to soils. Use of MM may result in a thick layer of chips which may cause smoldering when burned. If it is too thick and/or too dense, it has the potential to also act as a mulch layer before burning, effectively burying and killing the herbaceous vegetation. While this would obviously eliminate a portion of the fine fuels, one would hope that we would all agree that this would not be a healthy stand, with no herb layer.

**Issue: Harvest methods must minimize soil and litter disturbance.**

The NWFP requires that the BLM modify site treatment practices, particularly the use of fire, and harvest methods to minimize soil and litter disturbance. NWFP at C-44. The NWFP recognizes that soil and litter dwelling organisms are sensitive to soil and litter disturbance and that site treatments or harvest methods may adversely impact these organisms. Did the WOPR determine otherwise?

The BLM has not demonstrated that it has complied with this restriction. This is especially problematic in light of the failure of the BLM to comply with the Survey and Management requirements of the NWFP, which require surveys of fungi species and their protection if surveys reveal their existence. Sustainable forest practices require efforts be made to protect them.

It does little good to have science describe what is necessary to retain and restore our water and soil if practices are prohibited from following them based on a timber quota priority. It is incredible that mechanical harvesters are given priority over the objective to improve and /or maintain soil productivity. The NSA is an alternative to improve soil conditions and jobs in a manner that far exceeds the current practices.

Logging should not occur in forests which include landslide prone areas and other unstable soils.

**Issue: Impacts of fuel reduction program and the impacts of removal of woody material and impacts to species must be evaluated.**

Woody material builds topsoil that sustains species that provide the needs of new green plant growth. Removing or burning up woody material and topsoil causes long-term adverse effects on forest health and are unacceptable. What assessment process was used to evaluate the impacts of each alternative on soils?

Impacts to soil are critical for assessing the impacts of proposed alternatives. Potential soil impacts must be determined based on real data, and future impacts estimated so that a cumulative effect analysis can be prepared and included in the EIS. The DEIS failed to provide adequate analysis.

**Issue: Forest and timber productivity models must have biological and ecological basis that retain the web of life that create and sustain forests.**

Forest productivity is relative to green foliage. Green foliage productivity is relative to the degree of steady flow of dead green plant and non green plant debris that creates and sustains top soil; how well the needs of decomposers that create and sustain natural water pipelines that regulate rain water runoff; and the recycling of nutrients for new green plant growth. Disruption of this food chain has negative consequences and the impacts are relative to disruption.

Computer modeling limitations must be recognized. Planners must take into account fuels treatments, effects of biological and ecological relationships of the forest and how they contribute productivity. Modeling and projections limitations regarding forests for future generations must be considered.

**Issue: Forest productivity and other consequences of reduced dead wood due to fire suppression policy, fuels reduction, and logging still need to be analyzed along with recent scientific literature about fire effects to wildlife and about the important ecological services that snag forests provide for fish and wildlife** (see Hutto 1995, Kotliar et al. 2002, Conservation Biology Vol. 18 No. 4, and Lyon et al. 2000).

**Issue: The critical role of riparian reserves is severely compromised by the new plan. The EIS failed to fully evaluate the impacts of each alternative for all ACS objectives and on the current description of riparian reserve values. The ACS and riparian reserves are central to accomplishing the goals and principles the WOPR promised to uphold in the NWFP.**

As an initial note it is important to recognize that as with the illegal ROD proposing amendments to the Survey and Management requirements of the NWFP, the present administration has similarly proposed illegal modifications to the Aquatic Conservation Strategy ("ACS") requirements of the NWFP. The WOPR cannot tier to these illegal

modifications and insure the protection of old growth species as intended by the NWFP. The severe loss of ecosystem values of these remnant late successional habitat areas is not acknowledged by the WOPR.

DCA was founded 32 years ago by concerned citizens that noticed serious problems in Deer Creek. They discovered the problems to be coming from logging in the uplands of the Deer Creek watershed. BLM cannot implement WOPR proposed alternatives and pretend that they will not have serious consequences for streams, water and fish. Our experience tells us otherwise. We are finally experiencing the return of coho and late successional habitat. These forest ecosystems are just recovering from the ravages of the 1980's; WOPR proposed alternatives are unacceptable to the members of Deer Creek Association and the larger community.

**Issue: In riparian areas and such sensitive and high ecological value areas, it is best, to just stay away and let nature take its course and create old growth conditions at its own pace.**

The Natural Selection Alternative retains all naturally evolved successional habitats across the landscape including riparian reserves.

### **Wildfire/Fuels**

**Issue: EIS needs to address the conflicting science and the uncertainty surrounding the BLM's fire and fuel treatment proposals.**

Another criterion for "significance" is "[t]he degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks." 40 C.F.R. § 1508.27(b)(5). Professional fire and vegetation ecologist Dennis Odion in comments for the South Deer Landscape Management Project described the degree of uncertainty surrounding the fire treatments proposed by BLM. Meaningful review of these comments and the contrary science is required by NEPA and is examined further below. EIS needs to address the conflicting science and the uncertainty surrounding the BLM's fire and fuel treatment proposals.

**Issue: Evaluate and disclose credible scientific evidence that the NSA is a preferable technique for the ecologically sensitive management of fire risks.**

Significant comments provide credible scientific evidence that the NSA represents the best alternative to manage fire risks must receive full analysis as well as other conflicting science

While NEPA does not mandate that an agency base its decision on a particular scientific methodology, NEPA does not allow an agency to rely on conclusions and opinions presented without supporting analysis and data. Idaho Sporting Congress v. Thomas, 137 F.3d at 1150; Marbled Mountain Audubon Society v. Rice, 914 F.2d 179, 182 (9th Cir. 1990). NEPA requires the BLM to objectively evaluate and disclose credible scientific evidence that contradicts its course of action. 40 C.F.R. § 1502.9(b). Specifically, NEPA

requires the BLM to examine and disclose contrary evidence as to whether its proposed alternatives would reduce fire risks. Sierra Club v. Bosworth, 199 F.Supp.2d 971 (N.D. Cal. 2002); Sierra Club v. Eubanks, 335 F. Supp. 2d 1070 (E.D. Cal. 2004).

Comments from professional fire and vegetation ecologist Dennis Odion, Ph. D, on the South Deer EA stated that he preferred the NSA. Dr. Odion reached his conclusion in part based on his finding that the NSA would not create the fire hazards associated with the other action alternatives. In particular, Dr. Odion expressed concern regarding the increase in fire risk that will result from opening forests and promoting more combustible understory vegetation. Dr. Odion questioned the need to log old growth forests that often dampen the spread and intensity of fire. Dr. Odion also took issue with the relevance of studies relied on by BLM as support for the proposed alternative and addressed the potential impacts of the proposed alternative. In support of his comments, Dr. Odion cited fifty-seven different studies, which were included with his attached comments in DCA scoping comments on the WOPR. The concerns of Dr. Odion were echoed by several other commenters and great numbers of the general public.

The DEIS failed to provide meaningful response to this issue, the scientific issues they raise, and to objectively evaluate and disclose the extent and scientific basis for the controversy. The DEIS was not in compliance with NEPA, as it failed to include discussion and analysis of the conflicting science.

**Issue: The RMP requirement regarding the proposed use of natural fire under the NSA.**

Fire management plans are supposed to be dynamic, “living” documents that are reviewed and updated frequently as better information becomes available. It is the BLM’s responsibility to update and improve their FMP in the WOPR especially with the additional resources provided by the National Fire Plan (see <http://www.blm.gov/nhp/efoia/or/fy2001/ib/b2001-052.htm>). Therefore, there is nothing preventing the BLM from implementing a new or revised fire plan that allows for the appropriate use of natural fire in a project area. The lack of particular provisions in a fire plan must not be used as an excuse not to employ the best available fire management strategies.

**Issue: The National Fire Plan does not require the adoption of the current fuel hazard reduction programs.**

An increased application and management of prescribed fire and other fuel treatments is inconsistent with the National Fire Plan and its priorities and the proposed WOPR fire and fuels plan is not the best one to meet its direction or best science.

Wildfire – even periodic “catastrophic” fire – has beneficial effects in our forests. For example, it contributes to species diversity, mosaic effects, nutrient cycling, and hardening snags for wildlife habitat. Many species have evolved to depend on fires.

One of the five priorities of the National Fire Plan is hazardous fuels reduction, with the ultimate goal of “restoring forest and rangeland ecosystems to closely match their

historical structure, function, diversity, and dynamics” (see <http://www.fireplan.gov/overview/whatis.html>). The proposed harvest and commercial thinning would not serve this goal, but the gradual extraction under the NSA would. The BLM alternatives would perpetuate the cycle of over-cutting and over-thinning, thick regeneration, and resulting increased fire risk. By removing (or reducing) the canopy coverage in these stands, BLM alternatives would allow more light to reach the forest floor, drying out the existing fuels and allowing regeneration of small-stem trees and shrubs which contribute greatly to fuel loading. Thus, BLM’s proposed commercial thinning treatments to reduce fuels end up backfiring and increasing fire risk.

**Issue: Several scientific studies have demonstrated that the timber industry’s contention that commercial thinning reduces wildfire risk is controversial at best.**

In fact, many studies show that fire risk increases when large trees are removed. D.A. Perry, *The Scientific Basis of Forestry*, 29 Ann. Rev. of Ecology & Systematics 435 (1998); S.L. Stephens, *Evaluation of the Effects of Silvicultural and Fuels Treatments on Potential Fire Behaviour in Sierra Nevada Mixed-Conifer Forests*, 105 Forest Ecology & Mgmt. 21 (1998); C.N. Skinner et al., *Plantation Characteristics Affecting Damage from Wildfire*, Proceedings of the 17<sup>th</sup> Annual Forest Vegetation Management Conference, Redding, CA, 137 (1996); Sierra Nevada Ecosystem Project, *Status of the Sierra Nevada: Sierra Nevada Ecosystem Project, final report to Congress*, Wildland Resources Center Report 37:I-II, University of California Davis, Center for Water and Wildland Resources, Davis, CA (1996); J.W. van Wagtenonk, *Use of a Deterministic Fire Growth Model to Test Fuel Treatments in Status of the Sierra Nevada: Sierra Nevada Ecosystem Project, final report to Congress*, Wildland Resources Center Report 37:II, University of California Davis, Center for Water and Wildland Resources, Davis, CA (1996). Former Forest Service Chief Mike Dombeck claimed that the cycle of small tree regeneration after overstory removal makes it “unlikely that commercial timber harvest can solve our forest health problems.” Mike Dombeck, *How Can We Reduce Fire Danger in the Interior West?*, 61(1) Fire Mgmt. Today 5 (2001).

By contrast, the NSA would minimize openings in the canopy and allow a gradual return to the natural structure, function, diversity and dynamics of these stands. Lopping and scattering methods under the NSA would not significantly increase the fuel loading because the NSA proposes to extract trees here and there across the landscape. The selective logging proposed by the NSA will likely improve fire hazard conditions; in contrast, adverse consequences to fire risks caused by typical thinning and removing portions of the canopy and extreme hazards caused by so called regeneration harvests also known as clearcuts. You asked in Newsletter 7: *How can we increase the fire resiliency of the forests in the Medford District and the Klamath Falls Resource Area of the Lakeview District?* We have already answered this and all your other concerns with the NSA.

**Issue: The EIS must fully assess the fire risk benefits that would be produced by proposed alternatives.**

For instance, in the NSA, stewards on site with fire tankers will increase immediate response to fire. This can have a greater effect in terms of fire safety than any type of

fuel treatment however that does not replace the importance of the resiliency of natural closed canopy late successional forests; also part of the NSA and not of the WOPR proposed alternatives.

**Issue: The best use of our limited resources is to focus fuel reduction treatments on the areas immediately adjacent to homes and other structures.**

The National Fire Plan emphasizes such community assistance activities as one of its five priorities. To prevent loss of structures, the most effective activities involve changes to the structures themselves and their immediate surroundings, not large-scale wildland fuels reduction activities. If the goal is community and structure protection, it is unnecessary to engage in fuel reduction activities that are a substantial distance from the areas targeted for protection. P.H. Morrison, *Recommendations for Wildfire Risk Management and Historic Structure Preservation in the Polallie-Cooper Planning Area and Adjacent Sites on the Mt. Hood National Forest*, Pac. Biodiversity Inst. (2004).

Instead, fuels reduction activities that are within a distance of 100-200 feet of homes should be our first priority. Simple, cost-effective strategies like metal roofing and “zero fuel” zones around buildings will have maximum fire-stopping effects. Firefighting is dangerous wherever it is done, but the justification for the risk to firefighters is greater when they are protecting our homes than when they are protecting the economic interests of the timber industry in remote forests.

The NSA would use a “higher level of resource extraction ... in areas ... that have dwellings within the home-ignition zone.” NSA p 2. It also allows the most fire-resistant trees to be left on site. This way if a wildfire comes through a project area, it will cause minimal risk to human life and homes, while simultaneously allowing the forest area to return to its natural ecological functioning.

**Issue: Moreover, another goal of fuels reduction projects under the National Fire Plan is to limit the proliferation of invasive species and diseases.**

The NSA accomplishes this goal because it minimizes site disturbance from thinning, maintains canopy coverage and consequently optimal conditions for native species, and intentionally selects trees that are the most disease-resistant. In turn, reducing invasives and diseases in this way lessens fire risk. Proposed WOPR alternatives will create irreversible epidemics of non-native species that will in turn be treated with chemical and biological warfare on natural and human communities. These health hazards to people and forest ecosystems must be included into the DEIS.

**Issue: Examination of the impacts of fuel treatments and including all available information on fire risks from prescribed burning is required by the public disclosure requirements of NEPA.**

See Sierra Club v. Bosworth, 199 F.Supp.2d at 980 (finding that environmental analysis itself must address lack of scientific support). “Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses. 40 CFR §1502.24. NEPA requires that agency decisions be based on the highest quality data and analysis to provide for full public participation and informed decision-making. 40 CFR

§1500.1. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA. 40 CFR §1500.1(b). BLM must disclose accurate information about the comparative fire risks of the analyzed alternatives.

**Issue: Potential of fuel treatments to spread disease or infestations**

Scientific literature on the best method to control fire risk needs to be fully examined with adequate discussion of scientific controversy. /or analyze whether the fuel treatments now used in current BLM plans will lead to a decline in forest health because the fuel treatments will stress trees' immunities and allow for the introduction of disease or infestations. And analyze whether the infestation will be exacerbated by the introduction of fuel treatments. Comments from mycologist Joe Cerecedes on South Deer (EA#OR110-05-10) suggest that this will be the case and the WOPR needs to analyze this potential risk. These comments were included as an attachment to DCA scoping comments. Similarly, BLM should address the comments of ONRC on South Deer (EA#OR110-05-10) that raise the issue of the potential for thinning to attract insects:

“Thinning activities attracting beetles to the area through the release of terpenes from fresh wood chips, slash, or wounded green trees. If insect attack is a concern, the agency must consider and disclose the factors that tend to attract insects and determine whether thinning will make things better or worse.”

**Issue: Silvicultural prescriptions for commercial harvest areas must be objectively analyzed in terms of degrading forest health and increasing fire hazard.**

Stands opened up excessively to the sun respond with a flush of growth of shrubs and hardwood trees, increases the fuel loading and the vegetative competition for the conifers in just a few short years after treatment. It then becomes necessary to make another entry to reduce these fuels and this competition with slashing, burning, herbicides, or some combination of these methods. Not only is there a spike in growth of understory and ground vegetation, but the increase in solar radiation reaching the forest floor dries the fuels much more than before, further increasing fire hazard, and sometimes creating a hostile environment even for the conifers. The result is sometimes drought stress, which can lead to infestations by the mountain pine beetle and other insects. (It must be emphasized that in these cases, it is not the beetle we should be concerned about, but the opening of the stand which originally made the trees vulnerable to the beetle.) All of these effects may be eliminated or minimized to insignificant impact by using the NSA which retains natural canopies.

Retaining natural closed canopies and removing the dead only, in the NSA, will help to reduce the risk of a high intensity stand-replacement fire, since the larger trees are nearly always more fire resistant than the smaller ones. The NSA will also, further the development of old growth characteristics, which are so ecologically important to so many species.

No one can justify clearcutting at this time in history; a time of global warming crisis; a time where we have the science to understand the effect on the natural and human environment; a time when we are in the midst of the greatest loss of species since the last great extinction 60 million years ago.

**Issue: The so-called modified group selection creates a large amount of edge, which maybe good for edge dependent species, but this has serious consequences as do other management based practices.**

We already have an excess of edge, on public and especially private lands. What we need much more of is *large blocks of intact, closed canopy forest*, where spotted owls can be free of predation from great horned owls and barred owls, or where song birds can avoid nest parasitism by brown-headed cowbirds, or allow natural fire conditions to be restored back into the landscape.

**Issue: The EIS must adequately assess the direct, indirect, and cumulative impacts of the proposed alternatives as required by NEPA.**

It is the responsibility of federal agencies to take a "hard look" at the environmental effects of a proposed action. See Vermont Yankee v. Natural Resources Defense Council, 435 U.S. 519, 535 (1978); see also Kern v. U.S. Bureau of Land Management, 284 F.3d 1062, 1066 (9th Cir. 2002) (NEPA establishes "action-forcing" procedures that require agencies to take a "hard look" at environmental consequences). The "hard look" requirement means that the BLM must adequately examine the potential direct, indirect, and cumulative impacts arising from each alternative.

**Issue: Cumulative Impacts**

In determining whether the Revised Plan will have a significant impact on the environment, the BLM must consider “[w]hether the action is related to other actions with individually insignificant but cumulatively significant impacts.” 40 C.F.R. § 1508.27(b)(7). “Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment.” *Id.* CEQ NEPA regulations, applicable to the BLM’s implementation of NEPA, define “cumulative impact” as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.” 40 C.F.R. § 1508.7.

The DEIS failed to consider the impact from activities occurring on the interspersed private lands through the Planning Region in developing the proposed action alternatives and explaining those impacts to the human and natural environment in the DEIS. BLM Lands are a patchwork of public and private lands, and over-exploitation of private lands has placed a stress on the need to manage BLM lands responsibly. There needs to be a thorough analysis and data as to how the overuse of private lands cumulatively impacts BLM lands and influences the decision-making process.

What is the impact of the Biscuit Fire and other fires and the post fire salvage operations in terms of large scale loss of suitable spotted owl habitat and the cumulative impact of fire and salvage operations in conjunction with the proposed revised plans. This examination of the cumulative impacts relating to the revised plans must not be artificially constrained. See e.g., *Native Ecosystems Council v. Dombeck*, 304 F.3d 886, 897 (9th Cir. 2002)(finding that NEPA requires examination of cumulative impacts of all reasonably foreseeable road density amendments within entire National Forest).

Many watersheds are poor condition. Revised Plans must reveal impacts that will degrade valuable remaining owl habitat that has been heavily impacted in Western Oregon.

What are the impacts to the human communities and ecosystems of OHV Emphasis Area? The EIS must assess and reveal cumulative impacts to soils, property values, noise level (peace and quiet), wildlife, water, fish and streams, hiking and horseback riding and other forms of recreation, etc.

**Issue: Important data and science are missing from your planning process critical to the basis for formulating reasonable alternatives that are scientifically sound ecologically credible, and legally responsible.**

NSA Alternative “Literature Cited” was submitted (along with the entire alternative) for objective evaluation, and to begin to fill missing data gaps in the science and empirical data used to formulate WOPR alternatives. We requested that tree farm science not be given priority over best current science in order to open the door to sustainable solutions. Why did you ignore community input, such as this and so much more?

**Issue: DCA requested that the revised plan evaluate the proposed alternatives for effects of timber extraction practices on forest structure, local microclimate, and fuel accumulation to the extent that they create in an increase risk in fire severity.**

We further requested that it weigh the costs and environmental impacts from fuel hazard reduction measures that are necessitated from timber extraction practices. Please see NSA and “Literature Cited for examples of current research”. Other current, non-tree plantation biased science should be looked at to give an objective evaluation of the real costs and advantages of all alternatives.

**Issue: The National Fire Plan needs to be evaluated for sound science and assessed for contradiction to current and best fire science.**

For instance in the South Deer EA, BLM states: “Ninety-five percent of the South Deer project area lies in Wildland Urban Interface, designated by the National Fire Plan. Eighty five percent of the project area classifies into fire condition class 3. Condition class 3 results from a reduction in fire frequency.”

A greater risk for increased fire size, intensity, and severity in is not in the late successional legacy forests, and it isn’t because of “a reduction in fire frequency. It’s the conversion of late successional forests to early successional tree plantations that caused a greater “risk for increased fire size, intensity, and severity.”

*"Timber harvest, through its effects on forest structure, local microclimate, and fuels accumulation, has increased fire severity more than any other recent human activity". --Sierra Nevada Ecosystem Project, 1996, final Report to Congress*

Many forests that have been managed under BLM typical forestry practices, currently lack species diversity and structure. It needs to be recognized that the causes of the problems are past management practices and the WOPR gives us the opportunity to end this vicious cycle and recognize that every part of every forest must go through each stage of ecological succession to retain and restore natural and healthy levels of productivity of all forest values, including timber.

**Issue: Gather data, empirical research, analyze and resolving statements that are setting a foundation for tree plantation practices, but lack scientific basis.**

Common held belief: “Importantly, high stocking density and underbrush competing for light and water resources have reduced stand vigor and resiliency, prolonging succession toward a diverse stand condition. Low-diversity, over stocked stands provide poor wildlife corridors and instream large wood recruitment potential. Additionally, stand growth rates and resiliency to disease are reduced.”

Contrary belief: “High stocking density and underbrush competing for light and water resources” is a natural biologically and ecologically healthy condition. So called “overstocked stands” provide good wildlife corridors for many species. “Reduced stand vigor and resiliency, prolonging succession toward a diverse stand condition” implies a need for human intervention and treatment that has no basis in fact.

Common held belief: High stand densities are resulting in declining vigor of conifers and shade intolerant species (i.e., ponderosa pine, sugar pine, black oak, Pacific madrone). It has been asserted that fire exclusion has contributed to growth stagnation as well as to slow seral stage progression/succession. .

Contrary belief: High stand densities are how environmental testing, and reproduction of best species traits are accomplished, how species adapt to ever-changing environments. Fire may remove some stems and make more room for others to grow, but this does not generally increase overall growth and generally sets back “seral stage progression/succession.”

Common held belief: in the Klamath Mountains – as a result of fire suppression and other human activities – large fires are occurring more frequently and are larger and more intense than they were in the past (Atzet et al. 1988, USDA Forest Service 1994, 1995, 1996, 1998b, Brookes 1996). This position is predicated on assertions, that, because of fire suppression: 1) the number of fires in the region has declined over time, 2) fires are substantially larger today than in the past, and 3) large, intense fires are the results of unnaturally high levels of fuels accumulation

Contrary belief: However, none of these assertions have been supported with empirical data from the Klamath Mountains or by analysis demonstrating that a change in fire frequency, size or severity has occurred from historic to present. If this hypothesis is not true, it may lead to inappropriate forest management and adverse impacts to regional biodiversity.” (21)

Common held belief: (from South Deer EA p.124) there would be a loss of future large woody debris recruitment from a high severity fire

Contrary belief: the opposite would be true. Post-fire wood inputs to streams from snags would be very high as has been reported for the Biscuit Fire Area and elsewhere (Biscuit FEIS). This is an example of the need for current and contrary science to be included in the WOPR process.

Analysis of recent fires over large areas of the Klamath Ecoregion indicate that these closed canopy forests, which have not burned for decades, have lower likelihood for stand replacing fires than open stands (Odion et al. 2004). Important new scientific information contradicts BLM findings and assumptions regarding fire and fuels in their current management plans. For example, page 73 the South Deer EA makes an erroneous statement based on untested models rather than recent peer reviewed publications (Odion et al. 2004): "Based on FMA modeling, all untreated stands modeled would initiate and sustain active crown fire behavior."

Converting trees to perpetual sprouting shrubs is contrary to fuels and fire objectives. If cutting hardwood trees 8-12 inches dbh and greater is being done to increase conifer growth, then increased fuel loading and fire hazard needs to be stated. This type of information is essential to a fair evaluation of alternatives and wasn't included in the DEIS.

Where high fire hazard conditions combine with increasing rural residential development designated Wildland Urban Interface (WUI), current research needs to be taken into account in the WOPR.

Research for the Structure Ignition Assessment Model (SIAM) conclusions: “SIAM modeling, crown fire experiments, and WUI fire case studies show that effective fuel modification for reducing potential WUI fire losses need only occur within a few tens of meters from a home, not hundreds of meters or more from a home.” “These research conclusions redefine the WUI fire problem as a home ignitability issue largely independent of wildland fuel management issues.” See NSA “Literature Cited (22).

If common held beliefs are without basis in science or in empirical data, they must not be used to justify forest management practices. Using fire issues erroneously results in interference of a natural functioning healthy forest. Introducing fire in early successional forests is costly, and causes more problems over the long term than it solves. Late successional forests in much of western Oregon don't have high fire hazard conditions. The challenge is to serve our needs without degrading other species' ability to restore early successional forests to low fire hazard late successional forests.

If catastrophic fire is a consequence of harvest practices, then alternatives that include these practices must be abandoned, as that is a science based decision.

The WOPR process would have greatly benefited by including the NSA as an opportunity to gather new data and look at new possibilities for solutions to long time problems that will have best results for forest productivity and sustainable practices. The introduction of the Natural Selection Alternative requires that old premises and biases be revisited and allow for resolution through this innovative, yet common sense paradigm shift.

**Issue: Flood and sediment effects are a threat to coho salmon and each alternative needs to quantify exacerbated sediment effects and describe impacts from a major flood during or immediately after project implementation.**

Floods are at least as threatening to fish habitat as wildfire. In our area severe flooding and stream habitat damage has occurred 3 times in the past 40 years (1964, 1972, and 1997) making floods a more likely event than catastrophic wildfire (South Deer EA p. 39). Analysis must not focus on one risk such as fire and ignore sediment risks from others such as floods. Weather resulting in severe flooding cannot be controlled. Such occurrences need to be assumed because the occurrence of a large flood producing rainfall events would exacerbate management related sediment delivery.

**Actions in the region should be evaluated by their impacts on the outstanding and remarkable values of the each watershed and especially in and near our last precious wild areas.**

**Areas such as CHU-OR-72 in the Deer Creek Watershed should be protected. Why wasn't this area included in an administratively withdrawn area or an ACEC?**

CHU OR-72 is located on the Medford District BLM and the Siskiyou National Forest. Eighty-nine percent of this CHU is located within the East IV/Williams LSR. This unit provides a very important east-west and north-south intra-provincial (Klamath Mountains Province) connectivity, in an area of high fragmentation. The high fragmentation is a result of the geology, fire history, ownership patterns, and past management practices. This unit is an important link for the Highway 199 Area of Concern (Rogue River/South Coast BA, FY 04-Fy 08, Appendix B). The following South Deer KSOAC's are located within CHU OR-72: Bare Nelson (#2660) and Thompson Illinois (#1307) (See Map 2, Appendix A)

CHU OR-72 needs special protection for its importance as some of the rare, last, low elevation and late successional ecosystem remaining and necessary to provide connectivity and protection threatened and endangered species. It no appears that it would be subject to regeneration/clearcut practices by the proposed WOPR. This is the last remaining large island of intact forest in the area and providing a very important east-west and north-south intra-provincial (Klamath Mountains Province) connectivity, in an area of high fragmentation. It has numerous special status species that depend on natural late successional and old growth forests.

The CHU OR-72 includes is the largest area of rare low elevation late successional and old growth forests left in the area. It is important not only to endangered species unique to these areas, it is significant as that it offers one of the rare opportunities for family oriented recreation and opportunity to visit a natural old growth forest. This is a culturally significant area to the local community, used over decades for public education on how natural old forests function and training for sustainable forest practices.

CHU OR-72 provides visual, spiritual, recreational, educational, historical and tourism opportunities. Highway 199 is the premiere recreation and nature-education development opportunity for Oregon's coastal mountains. CHU OR-72 is within this visual corridor and there is easy access from 199 past Lake Selmac through South Deer to the Oregon Caves.

The Thompson Creek Overlook Trail System in CHU OR-72 has a long history of being used for visual, spiritual, recreational, educational and hiking values. Further development of this trail system will develop aesthetically pleasing, hiker-friendly trails, creating opportunities for recreation, nature-based education, and tourism and would provide hiking access to higher elevation BLM lands along the ridge above Thompson Creek and has been approved by BLM in the Sept 2005, South Deer ROD

*(Alternative 4-Natural Selection Alternative trails: Implement the six miles of trail construction in the Thompson Creek area, sections 22, 23, 26 and 27 (T38S, R7W) as identified in Map 7 in the EA. Allow only non-motorized use of these trails, with the exception of roads 27.1 and 27.2, which would be open for motorized vehicles to access the trailheads.)*

This is part of the Natural Selection Alternative submitted for South Deer; addressing Deer Creek community needs for experiencing firsthand our heritage forests and for recreation and tourism values to help support the local economy. The upgraded trail system will have 6 miles of various looping hiking options through a variety of ecosystems including late successional legacy forests and rock outcroppings with spectacular panoramic views of South Deer, Grants Pass, Oregon Coast Range and California mountains. See attached photos.

**Each alternative should be evaluated for it's involvement of the local communities from planning through implementation.**

The significant differences, ecologically, economically, and socially between the alternatives must be adequately developed to provide a clear choice between alternatives. The ecological, economic and social benefits and costs of the alternatives need to be displayed and discussed; including a balance sheet approach, indicating what values will be retained, restored and or lost over time. The EIS needs to adequately disclose the significant cumulative impacts to the human environment.

Clearcutting forests is recognized as a major disruption to the climate and contributor to global warming. What importance has this been given in terms of research and developing alternatives? What is the total carbon released into the atmosphere; loss of stored carbon?

We request that the WOPR EIS include the replacement values of all the resources that will be degraded or lost by implementing each of the proposed alternatives

For example: What would it cost to replace and repair forest ecosystems and forest ecosystem services such as clean air, clean water, fish habitat, loss to fishing industry, loss to property values, scenic values, recreation opportunities; microclimate and macroclimate values such as cooling and warming local and global environments; restore degraded ecosystems. There are significant and cumulative impacts that will be beyond the comprehension of most people. It is the responsibility to make these impacts known to the American public.

The DEIS failed to inform the public about the true costs and impacts that will result from the WOPR.

**Oregon portion of the California Floristic Province, of global environmental significance, is within the WOPR management area (map attached)**

The California Floristic Province is one of 34 hotspots of biodiversity recognized by Conservation International. This is one of the earth's biologically richest and most endangered terrestrial ecoregions.

The following are excerpts from an document from the Center for Applied Biodiversity Science at Conservation International which may be found on the Internet titled

California Floristic Province by William R. Konstant, Dean Taylor, David A. Wake, Scott Robbins Loarie, Roxanne Bittman and Barbara Ertter:

*"The California Floristic Province is one of the five Mediterranean-type hotspots on the planet and the only hotspot that occurs largely within the borders of the United States of America. As its name implies, the California Floristic Province is an ecological construct based on plant species composition, a unique mixture of northern temperate and southern xeric elements fostered by a Mediterranean climate of hot, dry summers and cool, wet winters. Four other hotspots share this climate: Central Chile, the Cape Floristic Region, Southwestern Australia, and the Mediterranean Basin (Barbour et al. 1993; Dallmann 1998)."*

*"Four subregions within the Province stand out as centers of exceptionally high plant diversity: the Sierra Nevada, Transverse Ranges, Klamath-Siskiyou region, and Coast Ranges (Stebbins 1978; Davis et al. 1997). The Klamath-Siskiyou region bridges the coastal mountain ranges of California and Oregon, and is home to approximately 20 rare plant communities, including the most diverse temperate coniferous tree community in the world (Vance-Borland et al. 1995–1996). This region also represents the contact zone between the Pacific Northwest Floristic Province and the California Floristic Province."*

*"Some of the highest levels of plant diversity within the California Floristic Province are found in the southern part of the Sierra Nevada Range and in the Klamath-Siskiyou region (Davis et al. 1997)." High levels of species diversity and endemism have developed within this region due to its varied topography, climate zones, geology, and soils. Plant diversity is exceptional, with 3 488 native vascular species, including 2 124 endemics. Fifty-two of the region's plant genera are also unique. The total number of plant species is greater than that for the central and northeastern United States and adjacent portions of Canada, an area almost 10 times as large (Raven and Axelrod 1978; Raven 1988; Davis et al. 1997)."*

*"In conclusion, while the California Floristic Province lies largely within one of the world's richest nations and contains some of Earth's most famous and most popular national parks, it suffers from threats similar to those operating in hotspots found within countries that are much more disadvantaged economically. Furthermore, a great deal remains to be done in order to ensure that the unique and threatened biodiversity of this hotspot is adequately safeguarded in suitable protected areas. Biodiversity loss clearly is not a problem unique to developing tropical nations."*

"The Siskiyou Field Institute located in the Deer Creek watershed, Selma, Oregon, has had Susan Harrison and Ellen Damschen of Washington University – St Louis research this past year researching species in the Illinois Valley area. They are following Whittaker's studies, collecting data in the same places as Whittaker did 50 years ago and analyzing what has happened in the changes have taken place to the vegetation and flora since 1950, whether these changes are consistent with being caused by a warming and drying climate, and whether the changes have been any greater (or lesser) on serpentine as opposed to other soils

The following document was submitted during the SFI 1st Conference of Siskiyou Ecology by Art R. Kruckeberg<sup>1</sup> and Frank A. Lang<sup>2</sup> <sup>1</sup>Department of Botany, University of Washington, Seattle, A 98195; <sup>2</sup>Department of Biology, Southern Oregon University, Ashland, OR 97520, November 4, 1997, It was obtained from the SFI website.

*"Few places in North America offer the physical and biological complexity of the Klamath-Siskiyou Bioregion. It is one of those places on our planet that can evoke wonder, reverence, and unending curiosity among all who delight in the natural world. Nowhere is such a rich display of landforms, geology, and an indigenous, richly endemic biota more grandly displayed in the American West. Its richness, displayed in all branches of natural science and in major economic mineral and timber resources, as come to provoke the ultimate question: How to preserve this province and bioregion in all its distinctive ecosystems – in the face of ongoing resource extraction and other human incursions? "*

.....

The flora of the Klamath-Siskiyou includes an unusually high number of endemic species, many of them serpentine. Smith and Sawyer's 1988 study of northwestern California and southwestern Oregon discovered 281 endemic taxa from the broader area that includes the Klamath Mountains. Their study emphasizes the botanical importance of the area.

One square mile (2.6 sq. kilometers) in the Russian Peak Wilderness in the Salmon Mountains is home to 17 different conifers, a record seldom rivaled on this planet or any other. In the Siskiyou Mountains portion of the bioregion the Bear Basin Butte Botanical Area has 16 conifers within a 500 hectare area. Botanists describe these places as "enriched stands in the Klamath Mountains." Thirty one conifer species are native to the Klamath Mountains. Some species, Douglas fir (*Pseudotsuga menziesii*) and incense cedar (*Calocedrus decurrens*), are common and widely distributed. Others, such as subalpine fir (*Abies lasiocarpa*) and Alaska yellow cedar (*Chamaecyparis nootkatensis*) reach their southern limits in craggy Klamath heights. Foxtail pine (*Pinus balfouriana*) has an odd distribution split between the southern Sierra Nevada many miles to the south and scattered populations in the Klamath Mountains as far north as Lake Mountain above the Klamath River. Other species, Brewer spruce (*Picea breweriana*) and Port Orford cedar (*Chamaecyparis lawsoniana*) are the Klamaths' own.

Port Orford cedar is at risk. Its straight-grained fragrant wood is worth a fortune in Japan. Not only is it and its relative Alaska yellow cedar the only conifers that can still be exported from federal lands to foreign markets as whole logs, but POC, as it is abbreviated by its enthusiasts, is at great risk from another foreign threat, a devastating root-rot, *Phytophthora lateralis*. At higher elevations in the mesic western Siskiyou impressive old-growth stands of POC still remain . . . for the time being.

The Klamath-Siskiyou forests are not all conifers. Evergreen hardwoods mix liberally with the conifers to form a complex series of plant communities. Many are members of the oak family: golden chinquapin (*Chrysolepis chrysophylla*), tan oak (*Lithocarpus densiflorus*), and canyon live oak (*Quercus chrysolepis*). The madrone (*Arbutus menziesii*) is a member of the heath family, and its broad evergreen leaves, handsome smooth red bark, clusters of creamy flowers, or masses of red berries, depending on the time of year, always make it a welcome sight.

The abundant serpentine exposures in Klamath-Siskiyou country have their own singular plant associations. Throughout the region a Jeffrey pine-grassland savannah commonly occurs on serpentine flats and gentle slopes. Upslope to ridges, serpentines are clothed with xeric shrub communities that include an endemic shrub form of the tan oak (*Lithocarpus densiflorus* var. *echinoids*), the huckleberry oak (*Quercus vaccinifolia*) and Brewer oak (*Q. garryana* var. *breweri*). On serpentine exposures along barren ridge-tops, sparse, prostrate patches of Siskiyou mat (*Ceanothus pumilus*) and *Juniperus communis* var. *jackii* commingle with widely spaced, often endemic herbs such as evergreen everlasting (*Antennaria suffrutescens*) and the Siskiyou fritillaria (*Fritillaria glauca*) to create the sere barren landscape so typical of the serpentine "syndrome."

Nowhere is the "syndrome" better seen than at Rough and Ready Botanical Wayside south of Cave Junction, Oregon in the Illinois Valley. These dry, barren looking serpentine flats look like a desert in late summer, fall, and winter. In the spring and early summer these dry areas are a riot of color: pink, purple, lavender and blue from phlox, onions, rock cress and larkspurs. Later, yellow wild buckwheat, wall-flowers and composites dominate the scene. Many of these are rare, unusual species: more local serpentine endemics.

Yet of all serpentine habitats, the most spectacular has to be the Darlingtonia fen. These wetlands support an amazing flora dominated by various sedges, rushes and grasses, and the insectivorous California pitcher plant (*Darlingtonia californica*). Western azalea (*Rhododendron occidentale*) with its masses of cream and peach colored, heavenly scented flowers surround the wetlands along with California lady-slippers (*Cypripedium californicum*) and Vollmer's lily (*Lilium pardalinum* var. *vollmeri*). Other members of the community include yellow California coneflower (*Rudbeckia californica*) and California bog-aspedel (*Narthecium californicum*), often in large quantities, and some very rare plants like the bright blue Waldo (*Mendocino*) gentian (*Gentiana setigera*) and white and purple large flowered rush-lilies (*Hastingsia bracteosa* s.l.). The Hastingsias are limited to the wetland seeps along the west side of the Illinois Valley, Josephine Creek and around Eight Dollar Mountain; found there and nowhere else on earth. Rare indeed. The botanical riches of the Klamaths brought botanists to collect and study the many new and unusual species of the bioregion. Thomas Jefferson Howell, a self-taught botanist and an Oregon endemic himself, made three major collecting trips to the Illinois Valley in the 1870s. While there he discovered many species new to science that were named by Asa Gray and Sereno Watson at Harvard University. Another,

later botanical visitor was Lilla Leach, who with her husband John explored the region in the decade between 1928 and 1938. On June 14, 1930 Lilla discovered a small pink flowered shrub that turned out to be a new endemic genus, *Kalmiopsis leachiana*, a remarkable discovery.

Another early 20th Century visitor was Alice Eastwood of the California Academy of Sciences who walked from Crescent City to Waldo in the Illinois Valley so as not to miss the manzanita (*Arctostaphylos*) species described by Howell. The stagecoach ran at night.

Charles Vancouver Piper (Washington State University), Louis Henderson (University of Oregon), Elmer Applegate (Stanford University), and Morton Peck (Willamette University) were also attracted to the area. It seems like most of the western professional botanists of the later part of the 20th Century have visited the region, as have seeds men and nurserymen, and wildflower enthusiasts of all types: rock gardeners, photographers, and artists.

Pioneering plant ecologist Robert Whittaker was also attracted to the area. His studies of the vegetation of the Siskiyou brought world-wide attention to the region. Whittaker first pointed out the botanical richness of the area and compared it with the southern Appalachians in floral diversity and species richness. He credited the Klamath-Siskiyou Region as having "central significance" for the floristic origins and diversity of Pacific Northwest floras. Here, past floras found mesic refugia as late Tertiary aridity increased in the far West. Then as a discrete bioregion, it became an evolutionary nursery for the genesis of many endemic species and unique ecosystems. Probably nowhere else in the West is endemism so abundant: endemic Conifers, already mentioned, a host of woody angiosperms and a diverse array of endemic herbs. As mentioned, totals for plant endemism are impressive, and on serpentine alone endemics total 30 species and infraspecific variants!

The Klamath-Siskiyou Bioregion abounds in a diversity of animal life. Much is known about the vertebrate fauna. All major classes of mammalian vertebrates are well represented from insectivores to carnivores to primates, if you believe that Sasquatch walks the Earth. The Siskiyou wild lands are the source of many Sasquatch tales. Other vertebrates, birds, reptiles, amphibians, and fishes figure prominently in most of the region's ecosystems. Most are common and wide-spread. A few like Del Norte salamander (*Plethodon elongates*) and the Siskiyou salamander (*Plethodon stormi*) are endemics. And a few, like the once-bounteous runs of salmon in Klamath Mountain rivers are testimony to the deterioration of the regions once pristine ecosystems.

One of us (ARK) was introduced to the region in 1950. Fresh from the botany of southern California, I was plunged into a whole new flora -- bewildering and fascinating. With the eminent taxonomist, C. Leo Hitchcock, I compiled a synoptic collection of the plant life mostly along the West Fork of the Illinois River and of the country east of Takilma to Bolan Peak. Ever since that introduction to the flora, I have been lured back by the singular diversity of the region. As a newcomer to the flora, just one encounter with the eerie cobra-like pitcher-leaves of *Darlingtonia* was to make me a believer in miracles.

The other of us (FAL) arrived at Southern Oregon College in the fall of 1966 to teach botany and never found a good reason to leave. Every class field trip was an adventure with endless plants to find and study. A visit to the *Darlingtonia* fens, no matter what the season of the year, resulted in always finding something interesting to see. One of the great pleasures of teaching plant systematics and ecology under such circumstances is the look of amazement on students' faces when they see (and smell) the innards of a *Darlingtonia* pitcher, or see real hybrid *Calochortus* with both parents, or when they realize the special value of the rare endemics that they observe. I have felt quite blessed to have had the good fortune to spend most of a career working in one of the great botanical areas of the world. What success I have had with students can be attributed in large measure to the fascinating flora of the Klamaths.

It was inevitable that a global view of outstanding bioregions would single out the Klamath-Siskiyou Province as meriting the highest rank. A World Wildlife Fund study recently ranked the Klamath-Siskiyou Bioregion as one of the three top conifer biomes in the world. This worthy recognition comes hard up against the reality of attaining a good measure of preservation for the region. Complex ownerships -- private and public -- as well as continuity of ecosystems across state boundaries, and long-standing preoccupation with extraction of its resources, all present immense challenges for conservationists. This was a key component of the First Conference Siskiyou Ecology: finding ways to begin the protection of one of North America's most amazingly rich and complex bioregions.

Ironically, the very feature that helps make the region a botanical Eldorado, its mineral riches, also creates a major conservation conflict. The first Europeans flooded into the area in the 1850s in a never-ending quest for gold. Gold is still sought today, but so are nickel, chromium and cobalt. Humans want to mine the

*minerals for profit and the minerals are where the rare endemic wildflowers grow. How to deal with this conflict is one of the many environmental dilemmas of our times.*

*To many people the biological significance of the region and its beauty outweigh any short-term destructive, consumptive benefits that might be derived from mineral or timber extraction. The biologically significant portions of the area should be set aside as preserves or parks and managed for their biological values. If destroyed, the region will never recover and these wonders of creation will be lost forever.*

**We request that the Oregon portion of the area called The California Floristic Province be administratively withdrawn from the WOPR.**

*“The one process now going on that will take millions of years to correct is the loss of genetic and species diversity by the destruction of natural habitats. This is the folly our descendants are least likely to forgive us.” E. O. Wilson*

Speciation and Biodiversity internet interview with Edward O. Wilson

ActionBioscience.org: *With extinction happening globally, where should we focus conservation efforts?*

Wilson: *On the hot spots, such as tropical forests. Hot spots are the habitats that are most endangered and have the largest number of species found nowhere else but in them. These include the forests of Hawaii and Madagascar and the rich scrub lands of southwestern Australia and southern Africa. Tropical wildernesses, such as the Amazon and the Congo, have the last of the great frontier forests able to support a mega fauna, i.e., large mammals and birds. The preservation of these places is critical. ActionBioscience.org: In your new book Future of Life you deflate the myth that environmental policy is hostile to economic growth. Can you elaborate?*

Wilson: *The living resources of the world -- ecosystems and its species -- are still largely unexplored, much less studied for the benefits they might hold for humans, for example, new pharmaceuticals or water purification. Some ecologists and economists have estimated that the total value of these natural ecosystems, that's the total amount of services they provide to humanity, is in the vicinity of 30 trillion dollars a year. That's more than the total of the gross national products of all nations combined. And it's free!*

*To save and make fuller use of them in a non-obtrusive way is economically valuable to us. To destroy them is to force humanity into an artificial world in which we have to personally manage our water systems, our food supply, and our atmosphere by prosthetic devices day by day instead of relying on powerful organisms to do the work for us. Do we want to turn Earth literally into a spaceship that requires constant tinkering?*

**Your current WOPR EIS and proposed alternatives are unacceptable. You are managing these lands for all Americans, and future generations deserve a living legacy.** You have a mandate. I am including the following insert on the current rate of species extinction and request that it be included in the analysis of the WOPR. You may wish to read it, as you are making history and you should know what kind and how important your decisions are. Keep in mind that the historical rate of extinction, between mass extinctions is one species every 6 years.

## The Sixth Extinction By Niles Eldredge

*"About 30,000 species go extinct annually.*

*There is little doubt left in the minds of professional biologists that Earth is currently faced with a mounting loss of species that threatens to rival the five great mass extinctions of the geological past. As long ago as 1993, Harvard biologist E.O. Wilson estimated that Earth is currently losing something on the order of 30,000 species per year -- which breaks down to the even more daunting statistic of some three species per hour. Some biologists have begun to feel that this biodiversity crisis -- this "Sixth Extinction" -- is even more severe, and more imminent, than Wilson had supposed.*

*Can conservation measures stop the Sixth Extinction?*

*The world's ecosystems have been plunged into chaos, with some conservation biologists thinking that no system, not even the vast oceans, remains untouched by human presence. Conservation measures, sustainable development, and, ultimately, stabilization of human population numbers and consumption patterns seem to offer some hope that the Sixth Extinction will not develop to the extent of the third global extinction, some 245 mya, when 90% of the world's species were lost.*

*Though it is true that life, so incredibly resilient, has always recovered (though after long lags) after major extinction spasms, it is only after whatever has caused the extinction event has dissipated. That cause, in the case of the Sixth Extinction, is ourselves -- Homo sapiens. This means we can continue on the path to our own extinction, or, preferably, we modify our behavior toward the global ecosystem of which we are still very much a part. The latter must happen before the Sixth Extinction can be declared over, and life can once again rebound."*

Paleontologist Dr. Niles Eldredge is the Curator-in-Chief of the permanent exhibition "Hall of Biodiversity" at the American Museum of Natural History and adjunct professor at the City University of New York. He has devoted his career to examining evolutionary theory through the fossil record, publishing his views in more than 160 scientific articles, reviews, and books. *Life in the Balance: Humanity and the Biodiversity Crisis* is his most recent book.

### **Deer Creek Valley Association requests the BLM maintain Northwest Forest Plan Protections on Oregon BLM Lands**

The three WOPR action alternatives would convert much of the old growth forest reserves and streamside buffers established under the Northwest Forest Plan (NWFP) into regulated tree farms and off-highway vehicle areas which would severely degrade neighborhood environments and economic stability. We believe that the WOPR No-Action Alternative (which is the NWFP) should be selected as the preferred alternative. In addition it appears that the No Action Alternative is not correctly represented in the

WOPR. On page 4 it states that the allowable sale quantity (ASQ) under the NWFP is 211 mmbf but that only 40% to 70% was offered for sale. Even with that reduced logging rate under NWFP the endangered and threatened species populations and habitats are still declining in quantity and quality. Therefore, the sustainable logging rate may be an ASQ that is less than the actual level under the NWFP. If any of the three action alternatives of the WOPR were to be approved, many changes to the NWFP would be required that would reduce logging on the non O&C lands. This could result in an endless feedback loop of government reports and lawsuits. BLM should focus on working within the legal constraints of the NWFP and the WOPR should be abandoned.

Sincerely,

*Mary Camp*

Mary Camp,  
President, Deer Creek Valley Association

CC:

Tim Reuwsaat Medford District Office 3040 Biddle Road Medford, OR 97504	Senator Gordon Smith 121 SW Salmon St. #1250, Portland, OR 97204 Email: <a href="http://www.gsmith.senate.gov">www.gsmith.senate.gov</a>	Senator Ron Wyden 1220 SW Third Ave. #585 Portland, OR 97204 Email: <a href="http://www.wyden.senate.gov">www.wyden.senate.gov</a>
Rep. Peter DeFazio 405 E Eighth Ave. #2030 Eugene, OR 97401 Email: <a href="http://www.defazio.house.gov">www.defazio.house.gov</a>	Governor Ted Kulongoski State Capitol, Room 250 Salem, OR 97310	Board of County Commissioners Josephine County Courthouse 500 NW Sixth Street, Dept. 6 Grants Pass, OR 97526

Enclosures:

7Photos:

Spotted owl adjacent to CHU OR-72, in Camp Forest where the NSA has been practiced for 40 years

Orville Camp Taking photo of the owl, Sept 9, 2007

Lower portion of Thompson Creek Overlook Trail in CHU OR-72

A little farther down the trail with Dick Prather and community members

Camp Forest tour with Dick Prather and community members, May 21, 2006

Typical education tour at Camp Forest, which continued into CHU OR-72, 2005

Orville Camp constructing forest road for private forestland owner, Fall 2007

Map of California Floristic Province

Northwest Ecosystem Survey Team red tree vole nest documentation from CHU OR-72 (in area and nearby)

August 7, 2006; September 22, 2006; January 4, 2008

Petitions (24)

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Natural Selection Alternative by Orville Camp For the Medford District BLM South Deer Landscape Management Project, submitted by Deer Creek Valley Natural Resource Conservation Association

Other resources: South Deer Landscape Management Project EA (EA#OR110-05-10) comments of Rich Nawa, Bill Grey, Dennis Odion, and the Protest of the South Deer Timber Sale and Associated South Deer Landscape Management Project Environmental Assessment (EA-OR110-05-10) and Decision Record/Finding of No Significant Impact (FONSI) by James Brown of Cascade Resource Advocacy Group.