

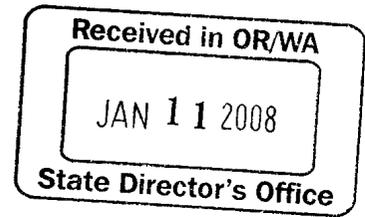
afrc AMERICAN FOREST
RESOURCE COUNCIL

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January 11, 2008

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Ed Shepard, State Director
Bureau of Land Management
P.O. Box 2965
Portland, Oregon 97208

Dear Ed:

Please accept the attached comments on behalf of the members of the American Forest Resource Council. These comments are in reference to the Draft Environmental Impact Statement for the Revision of the Resource Management Plans of the Western Oregon Bureau of Land Management Districts. AFRC represents over 90 forest product businesses and forest landowners in twelve western states and this plan is critically important to our membership.

If you have any questions, please contact me at 503-222-9505.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Partin".

Tom Partin
President

**American Forest Resource Council's
Comments on the Draft Environmental Impact Statement
For the Revision of the Resource Management Plans
Of the Western Oregon Bureau of Land Management Districts
January 11, 2008**

The American Forest Resource Council (AFRC) is pleased to provide these comments on the Draft Environmental Impact Statement for the Revision of the Resource Management Plans of the Western Oregon Bureau of Land Management Districts (WOPR). AFRC represents over 90 forest product businesses and forest landowners in twelve western states. Our mission is to create a favorable operating environment for the forest products industry, ensure a reliable timber supply from public and private lands, and promote sustainable management of forests by improving federal laws, regulations, policies and decisions that determine or influence the management of all lands. Many of our members have their operations in communities adjacent to lands managed by the Bureau of Land Management (BLM), and the management on these lands ultimately dictates not only the viability of their businesses, but also the economic health of the communities.

AFRC commends the BLM for its excellent technical work in documenting the environmental affects of the alternatives. We believe that on the whole, the technical basis for these analyses is sound and based on the best available science. An example of this is the way the impacts to riparian areas and streams are analyzed. We agree with Dr. George Ice that the stream protection for Alternative 2 is adequate and the analysis of the environmental effects is scientifically sound. (See attached comments submitted by Dr. Ice) The major flaws of the WOPR DEIS lie in the design of the alternatives themselves and the underlying assumptions that drove the technical analysis. AFRC believes the alternatives reflect an incorrect understanding of the BLM's legal obligations for the lands subject to the Oregon and California Railroad and Coos Bay Wagon Road Grant Lands Act (O & C Act), 43 U.S.C. § 1181a, particularly in relation to the Endangered Species Act (ESA), 16 U.S.C. §§1531 et seq. As a consequence, the alternatives are unduly limited, and do not present the full range of reasonable alternatives required by the National Environmental Policy Act (NEPA), 42 U.S.C. §§4321 et seq. AFRC believes the BLM should augment its NEPA analysis with an additional alternative based on correct understanding of the O & C Act's obligations.

The fundamental flaws of the DEIS are:

- None of the alternatives analyzed comply with the O&C Act.
- None of the alternatives analyzed comply with the Settlement Agreement AFRC reached with the BLM in 2003.
- The Environmental Consequences of all of the alternatives are incorrect as they assume that the alternative will be fully implemented the year after it is adopted, although budgetary limitations are virtually certain to limit actual timber production to a level far below the projected annual timber harvest for some time.

Our comments are organized in the order of the above flaws. We will first provide a detailed legal analysis of the O&C Act including the impact of the recent Supreme Court decision in *National Association of Home Builders v. Defenders of Wildlife*, 551 U.S. - , 127 S. Ct. 2518 (2007). This presentation will lead into a discussion of how this legal development relates to the terms of the Settlement Agreement. These comments will show why none of the alternatives contained in the DEIS complies with the O&C Act or the Settlement Agreement.

The next section of our comments will describe the faulty assumptions that underlie the basic analysis of all the alternatives and how this leads to erroneous conclusions about the environmental consequences of the alternatives. We will then suggest what changes could be made to remedy all of the fundamental flaws of the DEIS.

A. The Final EIS and plan alternatives should be revised to reflect the full reach of the O & C Act in light of the Supreme Court’s decision in *National Association of Home Builders*.

1. The O & C Act.

Congress enacted the O & C Act in 1937 to place timber marketing from the O & C lands on a long-term sustained yield basis to provide economic stability to local communities and industries:

[O & C lands] classified as timberlands . . . shall be managed . . . for permanent forest production, and the timber thereon shall be sold, cut, and removed in conformity with the principal [*sic*] 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.

The annual productive capacity for such lands shall be determined and declared . . . [but until then] the average annual cut therefore shall not exceed one-half billion feet board measure: Provided, that timber from said lands in an amount not less than one-half billion feet board measure, or not less than the annual sustained yield capacity when the same has been determined and declared, shall be sold annually, or so much thereof as can be sold at reasonable prices on a normal market.

43 U.S.C. § 1181a.

a. *BLM interpretations of the O & C Act.*

From 1937 to 1994, the BLM and its predecessor agencies had always interpreted the O & C Act to mandate timber production from suitable timberland as the dominant use of the O & C timberlands. In 1940, the Chief Forester of the Oregon And California Revested Lands Administration, W.H. Horning, wrote a paper entitled “The O. and C. Lands and Their Management, An Important Advance in Forest Conservation,” describing the three year old O & C Act in these words:

Congress in enacting the legislation of 1937 recognized that the disposal policy previously applied to these lands was unsound, unbusinesslike, and contrary to the public interest. The old policy accordingly was completely reversed and replaced by a plan which requires conservation of the forest resource thorough a logical plan of management. This plan, while providing for prudent use of mature timber, requires that timber-cutting shall be conducted in accordance with the principle of sustained-yield. All the lands best suited for the growing of timber will now be retained in public ownership and kept at work producing crops of timber. Continuous production of timber of commercial quality in the largest possible amount is the goal.

Id. at 5.

In 1980 the official history of the O & C lands cited the O & C Act as requiring the Secretary of Interior "to designate maximum allowable cuts, beginning with half a billion board feet." E. Richardson, *BLM's Billion-Dollar Checkerboard* at 53 (U.S. Government Printing Office 1980). Further, the official history states that the Act "would require the government to offer the full allowable cut every year." *Id. at 55.*

In 1983 the BLM issued a Forest Resources Policy Statement, never rescinded, confirming the longstanding policy:

Lands classified as suitable for timber production shall be managed for timber and wood product production, to the extent possible, under the requirements of law.

In a 1986 legal opinion, after expounding BLM's broad discretion under FLPMA to manage public lands for spotted owls, Gale A. Norton, Associate Solicitor, Division of Conservation and Wildlife, and Constance B. Harriman, Associate Solicitor, Division of Energy and Resources, explained:

The freedom conferred to the Secretary under FLPMA is limited in one important way on certain federally-owned timberlands in western Oregon. There, any decision about managing northern spotted owls must be measured against ***the dominant use of timber production.***

* * * *

Plainly, on lands subject to its provisions, the O&C Act creates a dominant use--the production of timber on a sustained yield basis.

* * * *

In deciding whether to establish a program for managing northern spotted owls on O&C timberlands, the Secretary, then, must decide if it is possible to do so without creating a conflict with ***the dominant use there--timber production*** If a program for managing northern spotted owls conflicts with producing timber on a sustained basis in O&C timberlands,

the O&C Act will preclude the application to that realty. As the O&C Act instructs, on revested or reconveyed realty classified as timberlands in western Oregon, ***timber production is dominant.***

Memorandum from Gale A. Norton, Associate Solicitor, Division of Conservation and Wildlife, U.S. Department of Interior and Constance B. Harriman, Associate Solicitor, Division of Energy and Resources, U.S. Department of Interior to James Cason, Deputy Assistant Secretary for Lands and Mineral Management, October 28, 1986, at 5-6 (emphasis added).

The Department of Justice has advanced the same plain-language dominant use interpretation of the O & C Act on behalf of the BLM in litigation. In *Headwaters, Inc. v. Bureau of Land Management*, 914 F.2d 1174 (9th Cir. 1990), *rehearing denied*, 940 F.2d 435 (9th Cir. 1991), a direct challenge to the BLM's dominant use interpretation of the O & C Act, the Department of Justice wrote:

In this case, the statutory language is unambiguous in directing that timberland be managed for timber production, and that this one use would take precedence over the others. . . .

The second paragraph of 43 U.S.C. 1181a establishes that the primary use of the lands is timber production by requiring the sale of timber in amounts not less than the sustained yield capacity of the lands. . . .

It is evident from the plain meaning of the statutory language that the dominant concern of Congress was timber production. . . .

It is plainly evident from the history of the O & C Act that the O & C Lands are to be managed, first and foremost, to provide a steady supply of timber under the principle of sustained yield, giving a continuing source of revenue.

*Headwaters, Inc. v. Bureau of Land Management, No. 89-35688, Brief for the Federal Appellees at 44-48 (January 1990).*¹

The 1986 interpretation of the O & C Act has not been consistently articulated by the Interior Department. An earlier 1981 Solicitor's opinion (Review of BLM Policy Statement for Multiple Use Management of the Oregon and California Railroad and Coos Bay Wagon Road Revested Lands (O&C Lands)) stated the view that land management statutes enacted after the O & C Act, including the ESA, implicitly amended the O & C Act (except FLPMA where an express exemption for O & C Lands was enacted), page 5, and that "compliance with the

¹ The Interior Board of Land Appeals, which is the authorized representative of the Secretary of the Interior in appeals from the BLM of non-contract matters, has repeatedly held that the O & C Act mandates dominant use of the O & C lands for timber production. See *Appeal of Elaine Mikels*, 44 IBLA 51 (1979); *Appeal of Julie Adams*, 45 IBLA 252 (1980); *Appeal of Oregon Wilderness Coalition*, 45 IBLA 347 (1980); *Appeal of Oregon Wilderness Coalition*, 71 IBLA 67 (1983).

Endangered Species Act can result in direct conflicts with the goals of the O & C Act.” Page 8. Thus, while permanent forest production is the dominant use of the O & C Lands, the opinion asserted that protecting habitat for ESA-listed species is permissible on the O & C Lands and “[a]uthorization to pursue this goal may be found in the Endangered Species Act Amendment of 1978” Page 8.

A 1979 Solicitor’s Opinion expounded the view that “permanent forest production” in the O & C Act includes recreation, and “there is no basis to conclude that recreation is always subordinate to the purposes mentioned in the O & C Act as a matter of law.” Memorandum from Associate Solicitor, Division of Energy and Resources, to Director, Bureau of Land Management (August 27, 1979) at 2.

However, both of these earlier arguably-inconsistent opinions were contradicted by later-decided Ninth Circuit decisions, as well as, by the later-issued 1986 Legal Opinion quoted above.

b. Ninth Circuit interpretations of the O & C Act.

Over a period of two decades the Ninth Circuit endorsed the BLM’s dominant-use interpretation of the O & C Act on five separate occasions. In *Skoko v. Andrus*, 638 F.2d 1154, 1156 (9th Cir.), *cert. denied*, 444 U.S. 927 (1979), the court stated:

In 1937 Congress passed the O & C Sustained Yield (or McNary) Act, 50 Stat. 874, 43 U.S.C. § 1181a, which provided that most of the O & C lands would henceforth be managed for sustained-yield timber production.

Id. In *United States v. Weyerhaeuser Co.*, 538 F.2d 1363 (9th Cir.), *cert. denied*, 429 U.S. 929 (1976), the court explained:

In 1937, Congress declared that these lands were to be managed as part of a "sustained yield timber program" for the benefit of dependent communities. In order to protect watersheds and maintain economic stability in the area, long-term federal timber yields were guaranteed by limiting the maximum harvest to the volume of new growth.

Id. at 1364-65 (citation omitted).

In *O’Neal v. United States*, 814 F.2d 1285 (9th Cir. 1987), which involved the issue of whether the O & C Act preempted Oregon’s Recreational Use Statute, the court held:

The provisions of 43 U.S.C. § 1181a make it clear that the primary use of the revested lands is for timber production to be managed in conformity with the provision of sustained yield, and the provision of recreational facilities as a secondary use. No duty is thereby established to provide for recreational use.

Id., 814 F.2d at 1287 (emphasis added).

This decision contradicted and superseded the conclusion in the 1979 Solicitor's Opinion that "there is no basis to conclude that recreation is always subordinate to the purposes mentioned in the O & C Act as a matter of law." The court determined to the contrary that recreation is always subordinate to sustained-yield timber production.

In *Headwaters, Inc. v. BLM*, 893 F.2d 1012, 1013 (9th Cir. 1989), the court stated:

Under the O & C Act, O & C land must be managed for the primary purpose of sustained yield timber production unless such lands are unsuitable for timber production.

In *Headwaters, Inc. v. BLM, Medford Dist.*, 914 F.2d 1174, environmental groups challenged a BLM timber sale on O & C timberland, arguing that the phrase "forest production" used in the O & C Act encompassed not only timber production, but also conservation values such as preserving the habitat of the northern spotted owl. *Headwaters*, 914 F.2d at 1183. The court rejected the *Headwaters* claim:

Headwaters' proposed use--exempting certain timber resources from harvesting to serve as wildlife habitat--is inconsistent with the principle of sustained yield. As the [O & C Act] clearly envisions sustained yield harvesting of O&C Act lands, we conclude that *Headwaters'* construction is untenable. There is no indication that Congress intended "forest" to mean anything beyond an aggregation of timber resources.

Headwaters, 914 F.2d at 1183.

The court then explained that:

It is entirely consistent with these goals to conclude that the O&C Act envisions timber production as a dominate use, and that Congress intended to use "forest production" and "timber production" synonymously. Nowhere does the legislative history suggest that wildlife habitat conservation or conservation of old growth forest is a goal on a par with timber production, indeed that it is a goal of the O&C Act at all.

Id. at 1184. *The O & C timberlands were specifically meant to be a "vast, self-sustaining timber reservoir for the future." Id.*

The Court not only endorsed the interpretation presented to it by the Department of Justice based on the 1986 Solicitor's Opinion, but also squarely rejected the contrary position asserted in the 1981 Solicitor's Opinion that protecting habitat for ESA-listed species can be required even at the expense of sustained-yield timber production.

In *Portland Audubon Society v. Babbitt*, 998 F.2d 705 (9th Cir. 2003), the court held that the O & C Act does not preclude the application of NEPA's procedural duties to the O & C

Lands, or bar injunctive relief under that statute. This decision merely holds that the BLM must comply with both NEPA and the O & C Act, and does not meaningfully alter the *Headwaters* court's interpretation of the O & C Act's substantive provisions.

In *Seattle Audubon Society v. Lyons*, 871 F. Supp. 1291 (W.D. Wash. 1994), the court upheld the Northwest Forest Plan's management scheme for the O & C lands which included late-successional reserves designed for ESA compliance. However, that district court incorrectly pointed to *Headwaters* as authority for allowing reserves on O & C lands, when in fact all the reserves in that case were on public domain lands not subject to the O & C Act, and the court's express ruling was that reserves on O & C lands are impermissible. The *Seattle Audubon* O & C Act ruling, which was not reviewed on appeal, must therefore be discounted as an error and has no bearing on proper interpretation of the O & C Act.

c. *Non-discretionary duties within the O & C Act.*

The controlling judicial and administrative interpretations of the O & C Act establish that the statute contains four non-discretionary mandates:

1. O & C lands classified as timberlands "shall be managed . . . for permanent forest production."
2. "The annual productive capacity for such lands shall be determined and declared."
3. The timber on those lands "shall be sold, cut, and removed in conformity with the principal [*sic*] 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."
4. Timber from those lands "in an amount not less than one-half billion feet board measure, or not less than the annual sustained yield capacity when the same has been determined and declared, shall be sold annually, or so much thereof as can be sold at reasonable prices on a normal market."

2. The Supreme Court's Limitation of ESA § 7 in *National Association of Home Builders*.

In *National Association of Home Builders v. Defenders of Wildlife*, 551 U.S. - , 127 S. Ct. 2518 (2007), the Supreme Court ruled that § 7(a)(2) of the ESA does not apply to federal agency actions taken to implement a non-discretionary mandate imposed by another statute. The Court upheld the Fish and Wildlife Service/National Marine Fisheries Service regulation limiting federal agencies' § 7 duties to actions involving "discretionary Federal involvement or control." 50 C.F.R. §402.03.

The ruling exempts non-discretionary agency actions from all the requirements of §7(a)(2), including not only the consultation requirement but also the substantive duties to avoid jeopardy to endangered or threatened species and adverse modification of critical habitat. A non-

discretionary agency action may proceed even if it is likely to jeopardize the continued existence of an endangered or threatened species or result in the destruction or adverse modification of designated critical habitat.

The *Home Builders* decision involved a challenge to a decision by the Environmental Protection Agency (EPA) approving the transfer of Clean Water Act (CWA) regulatory authority to the State of Arizona. The Supreme Court noted that EPA has a non-discretionary duty to approve a state's request for transfer of CWA regulatory power if EPA finds that nine statutory criteria have been met: "Section 402(b) of the CWA provides, without qualification, that the EPA 'shall approve' a transfer application unless it determines that the State lacks adequate authority to perform the nine functions specified in the section. . . . By its terms, the statutory language is mandatory and the list exclusive; if the nine specified criteria are satisfied, the EPA does not have the discretion to deny a transfer application." 127 S. Ct. at 2531.

The Supreme Court acknowledged, and the Ninth Circuit had determined, that the plain language of §7(a)(2) does not limit its reach to discretionary activities. Under this reading of §7(a)(2), the Ninth Circuit had ruled that EPA's decision to approve the transfer of CWA regulatory authority to the state of Arizona is subject to the jeopardy/adverse modification-avoidance and consultation duties of §7(a)(2) in addition to the nine criteria spelled out in the CWA. The court found that applying §7(a)(2) to the decision had the effect of amending the Clean Water Act by adding a tenth requirement – consultation and avoidance of jeopardy/adverse modification.

The Supreme Court found that this interpretation of §7(a)(2) caused the ESA to implicitly repeal or amend the earlier-enacted CWA, and would have a similar effect wherever else a federal agency operates under a non-discretionary statutory mandate. The Court found that this interpretation of §7(a)(2) conflicts with the Court's historic reluctance to find legislative repeals by implication:

While a later enacted statute (such as the ESA) can sometimes operate to amend or even repeal an earlier statutory provision (such as the CWA), "repeals by implication are not favored" and will not be presumed unless the "intention of the legislature to repeal [is] clear and manifest." *Watt v. Alaska*, 451 U. S. 259, 267 (1981) (internal quotation marks omitted). We will not infer a statutory repeal "unless the later statute "expressly contradict[s] the original act" or unless such a construction "is absolutely necessary . . . in order that [the] words[of the later statute] shall have any meaning at all.'" *Traynor v. Turnage*, 485 U. S. 535, 548 (1988) (quoting *Radzanower v. Touche Ross & Co.*, 426 U. S. 148, 153 (1976), in turn quoting T. Sedgwick, *The Interpretation and Construction of Statutory and Constitutional Law* 98(2d ed. 1874)); see also *Branch v. Smith*, 538 U. S. 254, 273 (2003) ("An implied repeal will only be found where provisions in two statutes are in 'irreconcilable conflict,' or where the latter Act covers the whole subject of the earlier one and 'is clearly intended as a substitute'"); *Posadas v. National City Bank*, 296 U. S. 497, 503 (1936) ("[T]he intention of the legislature to repeal must be clear and manifest"). Outside these limited circumstances, "a statute dealing

with a narrow, precise, and specific subject is not submerged by a later enacted statute covering a more generalized spectrum.” *Radzanower, supra*, at 153.

The Ninth Circuit’s reading of §7(a)(2) would not only abrogate §402(b)’s statutory mandate, but also result in the implicit repeal of many additional otherwise categorical statutory commands. Section 7(a)(2) by its terms applies to “any action authorized, funded, or carried out by” a federal agency—covering, in effect, almost anything that an agency might do. Reading the provision broadly would thus partially override every federal statute mandating agency action by subjecting such action to the further condition that it pose no jeopardy to endangered species. See, e.g., *Platte River Whooping Crane Critical Habitat Maintenance Trust v. FERC*, 962 F. 2d, at 33–34 (considering whether §7(a)(2) overrides the Federal Power Act’s prohibition on amending annual power licenses). While the language of §7(a)(2) does not explicitly repeal any provision of the CWA (or any other statute), reading it for all that it might be worth runs foursquare into our presumption against implied repeals.

127 S. Ct. at 2533.

The Court ruled that the tension between the plain meaning of §7(a)(2) and the court’s established rules against implied statutory repeals had the effect of creating an ambiguity in the statutory words, leading to consideration of the agencies’ interpretation of the statute in their regulations under the deferential rules of *Chevron v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 842-43 (1984).

We must therefore read §7(a)(2) of the ESA against the statutory backdrop of the many mandatory agency directives whose operation it would implicitly abrogate or repeal if it were construed as broadly as the Ninth Circuit did below. When §7(a)(2) is read this way, we are left with a fundamental ambiguity that is not resolved by the statutory text. An agency cannot simultaneously obey the differing mandates set forth in §7(a)(2) of the ESA and §402(b) of the CWA, and consequently the statutory language—read in light of the canon against implied repeals—does not itself provide clear guidance as to which command must give way.

In this situation, it is appropriate to look to the implementing agency’s expert interpretation, which cabins §7(a)(2)’s application to “actions in which there is discretionary Federal involvement or control.” 50 CFR §402.03. This reading harmonizes the statutes by applying §7(a)(2) to guide agencies’ existing discretionary authority, but not reading it to override express statutory mandates.

Pursuant to this regulation, §7(a)(2) would not be read as impliedly repealing nondiscretionary statutory mandates, even when they might result in some agency action. Rather, the ESA’s requirements would come into play only when an action results from the exercise of agency discretion. This interpretation harmonizes the statutes by giving effect to the ESA’s no-jeopardy mandate whenever an agency

has discretion to do so, but not when the agency is forbidden from considering such extrastatutory factors.

127 S. Ct. at 2540-41.

Finding the agencies' interpretation of the statute "reasonable," the court upheld the regulation limiting §7(a)(2) compliance to discretionary actions:

Applying *Chevron*, we defer to the agency's reasonable interpretation of ESA §7(a)(2) as applying only to "actions in which there is discretionary Federal involvement or control." 50 CFR §402.03. Since the transfer of NPDES permitting authority is not discretionary, but rather is mandated once a State has met the criteria set forth in §402(b) of the CWA, it follows that a transfer of NPDES permitting authority does not trigger §7(a)(2)'s consultation and no-jeopardy requirements.

Id. at 2537.

The court also provided two additional insights into its holding:

First, the court acknowledged that EPA in fact has some discretion in determining whether the state has met the nine statutory criteria for transfer. The existence of this discretion was not relevant, the court determined, because the discretion did not relate to protection of endangered species:

While the EPA may exercise some judgment in determining whether a State has demonstrated that it has the authority to carry out §402(b)'s enumerated statutory criteria, the statute clearly does not grant it the discretion to add another entirely separate prerequisite to that list. Nothing in the text of §402(b) authorizes the EPA to consider the protection of threatened or endangered species as an end in itself when evaluating a transfer application.

Id.

Since the agency's discretion did not relate to conservation of species, that existence of that discretion did not transform the action into one with "discretionary involvement or control" under the FWS/NMFS regulation.

Second, the court also acknowledged that EPA has some discretion in the regulatory oversight it gives the state after the transfer of regulatory authority occurs. This post-action discretion also did not make the approval action itself sufficiently discretionary to trigger §7(a)(2) compliance:

But the fact that the EPA may exercise discretionary oversight authority—which may trigger §7(a)(2)’s consultation and no-jeopardy obligations—after the transfer does not mean that the decision authorizing the transfer is itself discretionary.

Id. at 2538 n. 11.

The Court also noted that its decision is consistent with its earlier ruling in *Dept. of Transportation v. Public Citizen*, 541 U.S. 752 (2004) to the effect that a federal agency is not required to conduct NEPA analysis over a non-discretionary statutorily-mandated action over which it has no control. The agency’s inability to change a mandated action based on environmental concerns made it pointless, and therefore, unnecessary, to study those concerns in an environmental document:

[T]he basic principle announced in *Public Citizen*—that an agency cannot be considered the legal “cause” of an action that it has no statutory discretion not to take—supports the reasonableness of the FWS’s interpretation of §7(a)(2) as reaching only discretionary agency actions.

Id. at 2535.

Thus, the sum of the Supreme Court’s decision in *National Association of Home Builders* is that an agency action is not subject to §7(a)(2)’s jeopardy/adverse modification-avoidance and consultation mandates unless the action involves the contemporaneous exercise of discretion that would allow the action to be modified or cancelled based on concern for species conservation.

3. The ESA §9 Take Prohibition Under *National Association of Home Builders*.

National Association of Home Builders did not address the reach of the take prohibition in § 9 of the ESA; the case was strictly limited to §7. However, the court’s approach to the interpretation of §7 carries strong implications for its likely approach to §9.

Like §7, §9 is broad and unlimited on its face: “it is unlawful for any person subject to the jurisdiction of the United States” to take an endangered species or to take a threatened species so protected by regulation. The only stated exceptions are where a state has assumed enforcement power under a cooperative agreement or where a §10 permit or exemption has been issued. Person is defined universally, and specifically includes “any officer, employee, agent, department, or instrumentality of the Federal Government.”

Like §7, §9 does not address the circumstance where a statute mandates the performance of a non-discretionary act by a federal agency but performing the non-discretionary act will result in an unlawful take of an endangered or threatened species. If §9 applies in that circumstance, the effect would be precisely the same as for §7 – to impose an additional statutory condition on a non-discretionary statutory duty imposed by a different statute. The result would be that §9 of the ESA would implicitly repeal or amend other statutes imposing non-

discretionary mandates, in precisely the manner the Supreme Court found unacceptable in §7, creating the same ambiguity in §9 that the Court found in §7.

Yet unlike the case of §7, FWS and NMFS have not adopted a regulation limiting the reach of §9 to discretionary acts. The regulatory language mimics the statutory language that is not so limited. There is no indication FWS and NMFS ever considered whether §9 applies to non-discretionary actions of federal agencies; the issue appears never to have been raised.

Absent any authoritative interpretation of §9 by FWS and NMFS, the Court would have to adopt its own interpretation. There is no legislative history addressing the application of either §7 or §9 to non-discretionary actions of federal agencies. There is no better or worse reason for the Court to apply the plain meaning of §9 than there was for a plain meaning of §7. The Court found the plain meaning of §7 ambiguous not because there was any uncertainty about what the words meant, but because of the undesirable consequences of using the plain meaning and thereby causing implicit repeal or amendment of dozens of other statutes. Exactly the same forces are at work in the interpretation of §9.

An inference that Congress viewed §7 and §9 to have the same scope can be drawn from the 1982 ESA amendments, which required the FWS and NMFS to issue an incidental take statement to any federal agency completing consultation, but provided no mechanism for a federal agency to obtain take protection for a non-discretionary action that does not require consultation.

Congress could not have intended the §10(b) incidental take permit to be an available option to provide take protection for a non-discretionary federal action exempt from consultation. Such a permit can only be issued if the FWS and NMFS finds that if the proposed action occurs “[t]he taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild.” Since this is the same standard as the jeopardy determination from which the action was exempted, it is implausible that Congress intended to require a federal agency to meet the jeopardy standard to obtain take protection for a non-discretionary action that Congress exempted from application of the jeopardy standard in §7. In addition, the §10(b) permit requires the applicant to accept additional conditions imposed by FWS or NMFS, resulting in the same type of implied amendment that the Court found impermissible for §7.

There is no plausible reason Congress would require take protection for discretionary activities but forbid take protection for non-discretionary activities that are exempt from consultation, thus implicitly amending the statutes imposing those non-discretionary duties to impose a take-avoidance duty. The argument against implicit repeal for §9 is every bit as strong as the argument the Court found persuasive for §7.

Indeed the argument against implicit repeal for §9 is even stronger in light of the Court’s finding of no implicit repeal for §7. There is no apparent reason Congress would want a non-discretionary federal action to go forward even if it jeopardizes the continued existence of an endangered or threatened species (as the Court determined in *National Association of Home Builders*) but would want the same action nonetheless to be halted because the take of a single

protected animal, fish or plant may occur. Since the result of jeopardy (potential extinction of the entire protected species) is so much more severe than the loss of a single protected organism, surely if Congress was willing to accept the more severe risk it must necessarily have accepted the less severe risk of a single taking. Thus, the only reasonable interpretation of §9 is that it carries the same implicit exemption for non-discretionary agency actions as §7.

While it is true that Congress enacted certain enumerated exceptions to the scope of §9, which could give rise to an implication that Congress intended no other implied exceptions, it is also true that the FWS and NMFS have adopted other exceptions by regulation going beyond the strict words of the statute. For example, the ESA provides a defense to the criminal take sanctions – but not the civil penalties – where “the defendant committed an act based on a good faith belief that he was acting to protect himself or herself, a member of his or her family, or any other individual from bodily harm, from any endangered or threatened species.” §11(a)(3). FWS and NMFS by regulation expanded this defense to criminal prosecution into a full exemption from all take prohibitions: “any person may take endangered wildlife in defense of his own life or the lives of others.” 50 C.F.R. §17.21(c)(2). The regulations also contain other exemptions not found in the words of the ESA. §17.21(c)(3)-(7). FWS and NMFS have necessarily concluded express exemptions in the ESA do not preclude additional implied exemptions. This conclusion is reinforced by the fact that §7 of the ESA contains an exemption from §9 (when an incidental take statement is issued) that is not even recognized in §9, offering further reasons additional exemptions can be inferred.

Therefore, it seems most likely that §9 would be construed to contain the same implicit limitation to discretionary actions as §7. This implied limitation would have no effect on private citizens or entities; its only application would be to federal agencies, officers, contractors and agents performing a task mandated by a statute enacted by Congress.

4. Performance of non-discretionary duties under the O & C Act is not constrained by the ESA.

The Supreme Court’s ruling in *National Association of Home Builders* limits the ESA’s application to discretionary agency actions, and takes the performance of non-discretionary actions outside ESA reach. This ruling has applicability to the O & C Act. The non-discretionary language of the O & C Act means the BLM “does not have the discretion” to manage O & C lands classified as timberlands for any purpose except permanent forest production; it “does not have the discretion” to fail to determine and declare the annual productive capacity of those timberlands; it “does not have the discretion” to fail to sell, cut and remove the timber from those timberlands in conformity with the principle of sustained yield; and it “does not have the discretion” to sell annually from those timberlands less than one-half billion feet board of timber or their determined annual sustained yield capacity.

The O & C Act specifies the five purposes of the sustained yield management regime it imposed on the BLM:

1. providing a permanent source of timber supply,
2. protecting watersheds,
3. regulating stream flow,
4. contributing to the economic stability of local communities and industries, and
5. providing recreational facilities

None of these five purposes relates to conservation of endangered or threatened species, as the Ninth Circuit ruled in *Headwaters*. Interpreting the ESA to impose on the O & C lands the additional duties in §7 of the ESA – avoiding jeopardy and conserving endangered or threatened species -- would add an additional statutory criterion to the five stated purposes of the mandated sustained yield regime – precisely the outcome the Interior Solicitor and Ninth Circuit have held impermissible, and precisely the outcome the Supreme Court held impermissible in *National Association of Home Builders*. Indeed, applying the ESA’s jeopardy/adverse modification standard to the O & C lands could potentially prevent all timber production from the O & C lands and effectively nullify all of the non-discretionary mandates altogether, if it were determined that any timber production at all would pose a likelihood of jeopardy. This could constitute not merely an amendment, but effective repeal of the O & C Act, an extreme result that should be avoided.

Indeed, the reasoning of the Ninth Circuit in *Headwaters*, 914 F.2d at 1184, finding that the O & C Act precludes consideration of wildlife protection (“Nowhere does the legislative history suggest that wildlife habitat conservation or conservation of old growth forest is a goal on a par with timber production, indeed that it is a goal of the O&C Act at all”) bears a powerful resemblance to the Supreme Court’s reasoning in *National Association of Home Builders*: “Nothing in the text of [CWA] §402(b) authorizes the EPA to consider the protection of threatened or endangered species as an end in itself when evaluating a transfer application.” 127 S. Ct. at 2537. The ESA does not implicitly amend the O & C Act any more than it implicitly amends the CWA regulatory authority transfer statute.

Under *National Association of Home Builders* and the interpretation of the O & C Act by the Ninth Circuit and the Interior Solicitor, §7 of the ESA cannot impose any additional condition on the performance of the non-discretionary duties imposed by the O & C Act. Under the logical extension of *National Association of Home Builders*, §9 of the ESA also cannot impose any additional condition.

a. Application of §7 to BLM discretion within the O & C Act.

As noted above, and as the Ninth Circuit observed in *Audubon*, not every action directed by the O & C Act can be considered non-discretionary. The BLM has broad discretion to use its professional expertise in determining what O & C lands should be classified as timberlands, in determining the annual productive capacity of those timberlands under the principle of sustained yield, and in selecting particular tracts of timber for sale each year to meet the mandated sale

volume of half a billion board feet or their annual productive capacity. While it does not have discretion to decide whether to perform its mandated duties, it has discretion to decide how to perform those duties. Although *Headwaters* precludes the BLM from creating non-harvestable reserves on suitable O & C timberlands, there is some discretion in determining the precise harvesting regime on those lands.

The discretion conferred on the BLM is partially comparable to the discretion EPA enjoyed in *National Association of Home Builders* to determine whether a state has met the nine statutory criteria for transfer of regulatory authority, and to determine thereafter whether the state is properly exercising its regulatory authority. Since none of the BLM's discretion relates to protection of endangered or threatened species, the existence of that discretion does not transform its non-discretionary duties into discretionary actions subject to §7 of the ESA (nor likely §9).

The Supreme Court recognized in *National Association of Home Builders* that §7 may apply to subsequent discretionary actions by EPA that occur after the transfer of regulatory power. It did not address the scope of such later consultations or jeopardy-avoidance duties, which it noted would not in any event bear on the legal validity of the transfer decision.

The paradigm of this issue is an individual timber sale project developed by the BLM to fulfill its mandate under the O & C Act to sell the required annual quantity of timber. BLM cannot choose whether to meet the sale mandate, but has broad discretion to determine where the mandated timber sales will occur, and under what management prescriptions.

Yet the BLM's exercise of discretion in planning these individual projects differs from the EPA's post-transfer discretionary oversight of state regulatory conduct in this basic manner: while the EPA's discretionary post-transfer oversight, with potential ESA constraints, could not frustrate the achievement of its non-discretionary transfer duty, the BLM's O & C Act non-discretionary duties not only require the adoption of plans to meet the required goals, but also require it to implement individual projects to achieve those non-discretionary goals.

Thus, under the O & C Act, implementing individual projects is a necessary element of the BLM's non-discretionary duties – indeed; it is the only means to perform those duties. As a consequence, while the ESA may require the BLM to engage in consultation on individual projects, the substantive jeopardy/adverse modification avoidance duties of the ESA cannot apply to those individual projects in such a manner as to frustrate the achievement of the O & C Act's non-discretionary goals. While such a limit on the jeopardy/adverse modification avoidance duty for an action undergoing consultation is not found in current §7 practice, *National Association of Home Builders* nonetheless commands this result.

While proper application of *National Association of Home Builders* limits the scope of the BLM's §7 duties for its individual projects, and correspondingly limits the power of the consulting agencies, these limitations should in practice be narrow. The consultation requirement of §7 should in many cases apply without any departure from prior practice.

1. One variance would result if delays in the issuance of biological opinions will prevent the BLM from meeting its annual sale quantity duty. A circumstance could arise where BLM would be obligated, and empowered, to implement a project before obtaining a biological opinion in order to fulfill its non-discretionary sale duty for the year. During the consultation process FWS/NMFS could nonetheless work with BLM to the extent possible to develop project modifications that could reduce or avoid adverse impacts on listed species. This timing constraint on consultation can be minimized by prompt consultative action on the part of FWS and NMFS.
2. A “no jeopardy” biological opinion at the conclusion of consultation would result in BLM implementing the project, as would otherwise be expected.
3. The principal impact on consultation procedures may occur only in a subset of those rare instances where FWS or NMFS issues a “jeopardy” biological opinion on a proposed BLM project. When jeopardy is found, FWS/NMFS is obligated to offer “those reasonable and prudent alternatives which [it] believes would not violate subsection (a)(2) and can be taken by the Federal agency or applicant in implementing the agency action.” §7(b)(3). If FWS/NMFS offers BLM a reasonable and prudent alternative that BLM determines will allow it to fulfill its non-discretionary duties without jeopardizing listed species or adversely modifying critical habitat, BLM would be required to accept the alternative and terminate the original project, as for any other agency project.

However, in the extremely rare case where FWS/NMFS makes a jeopardy/adverse modification finding and is unable to offer a reasonable and prudent alternative, BLM would nonetheless be empowered (indeed required) to proceed with the project in order to fulfill its non-discretionary duties. This result contrasts to other cases, where Endangered Species Committee review and approval is required before the action agency could proceed with such a project.

Similarly, BLM may consult with FWS and NMFS on its Western Oregon Plan Revisions, but the FWS/NMFS consultative powers in these plan-level consultations would be limited in the same manner described for individual projects. A jeopardy finding with an RPA that complies with the O & C Act would have to be accepted by BLM, but should there be a jeopardy finding without an RPA, meaning there is an irreconcilable conflict between the O & C Act’s non-discretionary mandates and the requirements of §7, the ESA would have to give way to the O & C Act.

4. Application of §9 to BLM actions under the O & C Act.

The application of §9 of the ESA to BLM projects implementing non-discretionary O & C Act duties would also depart from the general practice. As noted above, the interpretative construct of *National Association of Home Builders* should apply equally to §9’s taking prohibitions, which may not be applied to impliedly repeal or amend other statutes and thus

frustrate a non-discretionary agency action. Thus, BLM staff, contractors and agents would not face §9 sanctions for actions implementing a non-discretionary duty.

In the case of a non-discretionary duty being implemented by a “discretionary” project that undergoes consultation, as discussed above, the same limitations for §9 would apply as for §7 but with certain additional facets.

1. In the rare case where the BLM determines that it is required to proceed with a project before obtaining a biological opinion in order to meet a non-discretionary duty, that determination would also have the effect of exempting the project from §9.
2. If a BLM timber sale project undergoes consultation that produces a “no jeopardy” biological opinion, FWS/NMFS would normally issue an incidental take statement under §7(b)(4) accompanied by reasonable and prudent measures to minimize take, and terms and conditions. Yet for the reason stated above §9 would not apply to the non-discretionary action any more than §7. BLM staff, contractors and agents implementing that action would already be exempt from §9, and would not require the take protection that would result from such a project-level incidental take statement. Even so, FWS/NMFS would nonetheless issue such a take statement along with the biological opinion, as the ESA requires, and the measures and conditions would be included, as the ESA requires. But the measures and conditions are only a prerequisite to the take protection in the take statement, and in this case the take protection in the take statement would not be needed since §9 would not apply the project in the first place. Thus, BLM and its contractors could consider the measures and conditions as conservation recommendations, but would not be required to follow them to remain immune from take prohibitions.
3. If FWS/NMFS issues a jeopardy opinion and a reasonable and prudent alternative that BLM accepts, the result is the same as with a “no jeopardy” biological opinion discussed above – compliance with reasonable and prudent measures and terms and conditions is permissible but not required since §9 does not in any event apply to the project.
4. If FWS/NMFS issues a jeopardy opinion and finds that no reasonable and prudent alternative exists, and BLM determines to proceed with the project to meet its non-discretionary duties, §9 would not apply to the project.

AFRC recognizes that the full implications of the *National Association of Home Builders* have not yet emerged. Nonetheless, the BLM’s obligation to fulfill its O & C Act duties to the maximum extent possible requires the BLM to determine the extent to which the ESA limits the O & C Act in light of the *Home Builders* decision. The BLM must determine how §7 and §9 of the ESA can be applied harmoniously with the O & C Act to the greatest extent possible consistent with the *Home Builders* decision. The Final EIS and final plan alternatives should be

revised to reflect the full reach of the O & C Act in light of *National Association of Home Builders*.

B. The DEIS Alternatives do not satisfy the requirements of the Settlement Agreement.

The BLM's Settlement Agreement with AFRC requires the plan revisions to meet the following requirement: "All plan revisions shall be consistent with the O & C Act as interpreted by the 9th Circuit Court of Appeals." Settlement Agreement, Section 3.5. Thus, all plan revisions must completely fulfill the BLM's O & C Act non-discretionary duties as described above.

None of the DEIS alternatives meets this standard. Only 48 percent of the total suitable timberlands are available for sustained yield management in Alternative 2. As the Ninth Circuit determined in *Headwaters*, these wildlife habitat reserves on suitable O & C timberlands are not "consistent with the O & C Act as interpreted by the 9th Circuit Court of Appeals." This Alternative also fails to satisfy the Settlement Agreement requirement for at least one alternative to contain no reserves except as required to avoid jeopardy to threatened or endangered species; the Alternative is designed not only to avoid jeopardy to the northern spotted owl but also to aid in its recovery. The No Action Alternative suffers these same legal infirmities.

Alternative 3 does not have designated reserves on suitable O & C timberlands, but its proposed 300 year rotation does not result in the annual offering for sale of the determined and declared annual productive capacity of those lands, which would be determined by a far shorter (e.g., 40-60 year) rotation period depending on location. The BLM has determined that with no reserves the O & C timberlands are capable of producing 1.2 billion board feet per year of timber on a sustained-yield basis. Any sale program below the annual productive capacity, including Alternative 3, thus fails to comply with the O & C Act's non-discretionary requirement that "the annual sustained yield capacity when the same has been determined and declared, shall be sold annually."

Thus, none of the three displayed alternatives fully complies with the non-discretionary duties of the O & C Act as interpreted by the 9th Circuit Court of Appeals, and none satisfies Section 3.5 of the AFRC Settlement Agreement.

BLM should develop a new alternative for the next 10-15 years based on Alternative 3 with a shorter rotation period. Over the next 10-15 years, the effects of this new alternative should be equal to or less than the effects of the current alternatives, since the new alternative should also more accurately reflect the time that the BLM will need to ramp up its sale program to a higher level if it receives appropriations sufficient to do so, which will inevitably produce a lower initial-decade average timber sale level than for the instantaneous full-funding and full-implementation that Alternatives 2 and 3 assume. Because the effects of the new alternative should fall within the range of effects already displayed for the existing alternatives, BLM should not need to publish a new DEIS, but may display the new alternative and its expected effects in the Final EIS without altering its current schedule.

C. The Environmental Consequences of all of the alternatives are overstated as they assume that the alternatives will be fully implemented the year after the Plan is adopted.

All of the environmental and social consequences displayed in the DEIS make the assumption that the plan will be fully implemented at the beginning of the fiscal year immediately following the adoption of the plan. This assumption creates an analysis that grossly overstates all of the environmental and social consequences. AFRC believes that this assumption is incorrect and a more realistic implementation schedule needs to be set. In order for the BLM to meet higher timber outputs the budget for the agency will have to significantly increase and the forest management administrative support system needs to be greatly expanded. Both of these will require time.

If the timber outputs were to increase from the current levels to those envisioned by Alternative 2, the BLM would have to significantly increase their workforce. This workforce would include forestry professionals and administrative support positions. Expanding the forestry professional staff will not be easy. Most of the new hires will have to come right out of college. There are very few experienced forestry professionals within the private sector that would consider these jobs and the pool of these professionals within the Forest Service and BLM has declined significantly and is aging. These new hires will require extensive training and experience to be able to take on their new duties. This will take many years to accomplish.

The implementation of higher timber yield alternatives will require higher budgets. AFRC believes that the DEIS underestimates the amount of money that will be needed and is overly optimistic about receiving this funding from Congress.

The BLM will face several budgetary realities as it seeks to implement any new management plan for the O&C grant lands. In the short-term, it is highly unlikely that the agency will receive adequate Congressional appropriations to generate the initial levels of harvest envisioned by alternatives considered in the DEIS. There is ample evidence to suggest that the funding increases necessary to increase harvests would take several years to materialize.

The BLM's budget for the O&C timber management programs has remained relatively static over the past decade. In fact, between Fiscal Year 1997 and Fiscal Year 2007 the O&C timber management budget increased by approximately 7 percent. This modest increase is barely sufficient to cover inflation, annual salary and cost of living increases. Meanwhile, the Agency's annual volume of timber offered has remained unchanged from the levels of the late-1990s, or decreased due to judicial decisions (FY97 volume of 211 mmbf compared to FY07 volume of 216 mmbf). The BLM has been unable to realize increases in timber volume offered despite their recent efforts to focus additional harvest activity on forest thinning projects.

These budgetary constraints have been felt by the entire Department of the Interior, of which the BLM is a part, and the US Forest Service. Between 2000 and 2007, the overall budget for the Department of Interior fell by 16 percent in real terms. Due to the explosion in wildfire suppression costs and limits on non-defense domestic spending increases, funding for all non-fire programs at the Forest Service have actually decreased by 35 percent over the same time period

when adjusted for inflation. While future Congresses could look more favorably on funding the BLM, the level of funds available for environment and natural resource programs is likely to remain flat due to anticipated increases in mandatory outlays (Medicare, Social Security, etc).

In light of this, there is very little evidence to suggest the BLM will be successful in immediately securing the level of funding needed to meet the timber harvest levels envisioned. The Agency may be able to realize some greater efficiency, but its unit costs have remained relatively unchanged in recent years. As a result, the agency should consider what is actually likely in its plan revision and required environmental analysis.

The impacts of the BLM's erroneous assumption that the new plan will be fully implemented starting in 2009 are significant. Every single environmental consequence in the DEIS is overstated dramatically. The amount of suitable spotted owl and marbled murrelet habitat on BLM lands will be much greater than depicted in that fewer acres will be cut and more habitat will be grown. The amount of money the counties will receive is grossly overestimated as is the negative impact on sensitive species. Everything from increased sedimentation to decreased back country recreation is exaggerated. The DEIS is overly pessimistic on the amount of old growth forest that will exist over time and overly optimistic on the economic health of our rural communities.

D. AFRC's recommendations for correcting the deficiencies in the DEIS.

1. The purpose and need statement for the proposed action should be revised to properly reflect the O & C Act's reach in light of *National Association of Home Builders*.

Currently the stated purpose and need for the proposed plan revisions includes compliance with Endangered Species Act duties that, in light of *Home Builders*, do not apply to non-discretionary O & C Act mandates:

The purpose and need for this proposed action is to manage the BLM-administered lands for permanent forest production in conformity with the principles of sustained yield, consistent with the O&C Act. The plans will also comply with all other applicable laws including, but not limited to, the Endangered Species Act, the Clean Water Act, and, to the extent that it is not in conflict with the O&C Act, the Federal Land Policy and Management Act. In accord with the Endangered Species Act, the plans will use the BLM's authorities for managing the lands it administers in the planning area to conserve habitat needed from these lands for the survival and recovery of species listed as threatened or endangered under the Endangered Species Act.

DEIS Chapter 1 at 3-4 (underlining added, footnotes omitted).

To aid in achieving the "survival and recovery" of the northern spotted owl and other federally-listed species, the preferred alternative withdraws 52 percent of the suitable timberland for purposes other than timber production – in direct conflict with the Ninth Circuit's *Headwaters* decision and the 1986 Legal Opinion.

The purpose and need should be revised to clarify that the Endangered Species Act does not give the BLM the authority to diminish sustained yield timber management of suitable O & C timberlands to conserve habitat for the survival or recovery of threatened or endangered species, and to clarify that the plan revisions do not have any impairment of sustained yield timber management for habitat conservation as part of their purpose or need.

This revision in the purpose and need will not necessitate republication of a new draft EIS with new alternatives or require a new round of public comments because it would only “enhance” the current purpose and need rather than establish a new purpose and need. *City of Carmel-By-The-Sea v. U.S. Dept. of Transp.*, 123 F.3d 1142, 1156 (9th Cir. 1997). Revising a statement of purpose and need based on public comments is appropriate. *Id.* The first above-quoted sentence of the draft purpose and need statement accurately describes a legally valid purpose and need; the required revision can be achieved by deleting the second and third sentences of the paragraph, or by adding a clarifying sentence confirming the pre-eminence of the O & C Act over other conflicting statutory provisions. Either of these revisions would not require new alternatives beyond the alternative AFRC is proposing below in these comments, which can be presented in the Final EIS without extensive additional analysis.

2. The timberland base and harvest levels must change to be consistent with the O&C Act.

The O&C Act requires that O&C Lands “which have heretofore or may hereafter been classified as timberlands, and power site lands valuable for timber, shall be managed . . . for permanent forest production, and the timber thereon shall be sold, cut, and removed in conformity with the principal of sustained yield” 43 USC §1181a.

In order for the BLM to comply with these mandatory actions, the selected alternative must calculate and propose to sell what can be sustained, forever, on all lands classified as timberlands. This is the land base identified in the Maximum Harvest Reference Analysis. All lands should be included in the sustained yield calculation except; TPCC Non Suitable Woodlands, TPCC Suitable Woodland (low site and non commercial species), Wild and Scenic Rivers, existing recreation sites, Congressionally Reserved lands, and the National Monument. Based on the calculations presented in the DEIS, the long term sustained yield of these lands is about 1.2 billion board feet per year. Since this is the sustained yield on the O&C timberlands, the O&C mandates that this is the volume that shall be offered each year.

3. The time horizon of the impacts analysis to determine the Environmental Consequences associated with the Alternatives must be consistent with the real life of the Plan of between 15-20 years.

The DEIS assumes that this plan will be in effect for 100 years. All of the environmental consequences associated with the plan are based on a 100 year time horizon. In reality, no plan adopted by the BLM will be implemented longer than 15-20 years before it is amended or totally redone. For the BLM’s sister agency, the U.S. Forest Service, this is mandated by law. Because of the intertwining of the two agencies’ lands, a change in the management of Forest Service lands will likely influence the decision to revisit the plan associated with BLM lands. The current BLM Land Management Plans were adopted in 1995 and the current revision was

initiated in 2005. A new plan is expected to be implemented in 2010, fifteen years after the current plan was adopted.

All of these factors argue that the true lifespan of this plan will be no longer than 20 years. AFRC recommends that the Final EIS explicitly state that the plan will be in effect for no longer than 20 years. At the end of 20 years, if a new plan is not completed, then the harvest levels would drop to 500 mmbf per year until a new plan is adopted as mandated by the O&C Act.

The Final EIS should clearly display the true environmental consequences of this plan by limiting the time horizon to 20 years. As stated before, the DEIS grossly overestimates the social and environmental impacts of the plan because it displays these impacts as if the plan will be implemented for 100 years. The only exception to this would be in the calculation of the long term sustained yield which has to be run for 200-400 years to ensure that over cutting is not occurring during the lifetime of this plan.

NEPA and the CEQ regulations support this approach. The “effects of the action” and cumulative effects that must be addressed in an EIS are limited to those that are “reasonably foreseeable.” 40 C.F.R. §§1508.7, 1508.8. Effects that are remote and speculative should not be included in environmental analysis. *Ground Zero Center for Non-Violent Action v. U.S. Dept. of Navy*, 383 F.3d 1082, 1089 (9th Cir. 2004). In particular, effects hypothesized to result from future agency management plans that will be adopted after the end of the current plan period are remote and speculative and should not be included in an EIS. *Headwaters v. BLM, Medford District*, 914 F.2d at 1182 (BLM not required to consider possible actions that may occur after end of current five year plan); *Great Basin Mine Watch v. Hankins*, 456 F.3d 955,969 (9th Cir. 2006) (subsequent plans for multi-stage agency action need not be considered in EIS for initial stage plan).

All effects resulting from implementation of an alternative for the expected 20 year duration of the plan should be evaluated, including indirect effects that may occur later in time after the 20 year period ends. The BLM should **not**, however, consider effects from agency actions that may or may not occur after the end of the current planning period.

4. The budget assumptions must be changed to reflect the true cost of implementation.

The DEIS shows that full implementation of Alternative 2 could be accomplished with a 60 percent increase in the BLM’s budget. The total budget needed is estimated at \$246 million so the increase would amount to \$147.6 million. There is no documentation in the DEIS that shows how the BLM determined this budget, therefore it is impossible to validate.

One aspect of the plan, however, could be crosschecked. This is the budget needed to implement the proposed increased timber harvest. On Page 549, the DEIS states, “(F)or this analysis, budget requirements for non timber resource programs and the state office—about 78 percent of the 2006 fiscal year budget—were held constant between alternatives.” Using this data, the inferred cost of preparing timber sales in 2006 is \$156/mbf. (Table 1)

Table 1. Comparison of Implied and Actual Timber Budget (Alternative 2)

	BLM	78%	Inferred	Sale	Inferred	Actual	Actual
Year	Total	Non	Timber	Target	Cost	Timber	Cost
	Budget	Timber	Budget		Per	Budget	Per
	(\$1,000)	(\$1,000)	(\$1,000)	(mmbf)	mbf	(\$1,000)	mbf
2006	154.2	120.3	33.9	218	156	51.5	236
Future	245.6	120.3	125.3	767	163	184.1	240

Data received from the BLM shows that the actual budget for the Forest Management activities in 2006 was \$51.5 million not \$33.9 million. Therefore, the actual cost of preparing timber sales in that year was \$236/mbf not the \$156/mbf that is implied in the analysis. (Table 1)

The DEIS projection of the budget needed to fully implement Alternative 2 is \$245.6 million of which \$125.3 million would go to support the timber program. This implies a \$163/mbf cost. The real amount needed for the timber program is \$184.1 million if we use the actual cost of \$240 mbf. The 60 percent increase in the BLM's budget of \$246 million (\$147.6 million) would not be enough to cover the true increase in cost for the timber sale program (\$184.1 million).

From conversations with State Office employees, it is our understanding that a figure of \$240/mbf is being used for future planning. We will assume a cost of \$240/mbf since this is the figure being used internally and is also the amount used to prepare the 2006 and 2007 timber sale programs. AFRC also believes this is a more realistic figure to use in the future since no adjustments are being made to account for inflation and cost-of-living increases.

5. The implementation schedule for the Alternatives must be changed to reflect the realities of receiving adequate budgets and personnel to implement them.

The DEIS makes two assumptions regarding the implementation of the new plan. For all of the social and environmental consequences, it assumes full implementation the year following its adoption. Elsewhere, it states that the timber program will take two years to fully implement but this does not appear to figure into any effects analysis.

For Alternative 2, the DEIS assumes the BLM will receive enough funding to sell 767 mmbf by either the first or third year of the plan. This equates to an increase of 551 mmbf over the 2007 level and an increase in the Forest Management Budget of \$132.2 million assuming a cost of \$240/mbf. AFRC believes that this implementation schedule is unrealistic. The immediate full implementation assumed in the environmental consequences section would require a 255 percent increase in the Forest Management line items in just one year. The three year implementation scheduled mentioned, but not used in the DEIS, would increase the Forest Management line items by 85 percent the first year, 45 percent the second and 32 percent the third if we assume a proportional increase in volume sold the first three years. (Table 2)

Table 2. Alt 2. DEIS BLM Forest Management Budget Increase

Year	BLM Timber Budget (\$1,000)	% Annual Increase	Timber Sale Target (mmbf)	Actual Cost Per MBF
2006	51,539		218	236
2007	51,786	0%	216	240
1	96,000	85%	400	240
2	139,920	46%	583	240
3	184,080	32%	767	240
1	184,080	255%	767	240

It is highly unlikely that Congress will fund such high yearly increases. This was discussed earlier. Looking historically, during the first 14 years of the Northwest Forest Plan, 1994-2007, the Forest Management Budget for the BLM saw an average annual increase of one percent. (Table 3) Given the historic funding levels and the tight budgetary constraints the President and Congress have put into place, it is extremely unlikely that the BLM will receive a 255 percent increase in their current funding level in just three years, let alone one year.

Table 3. Historic O&C Forest Management Budget

Year	BLM Timber Budget (\$1,000)	% Annual Increase	Average Annual Increase
1994	43,004		
1995	43,777	2%	
1996	45,754	5%	
1997	48,331	6%	
1998	47,918	-1%	
1999	47,220	-1%	
2000	47,263	0%	
2001	48,113	2%	
2002	48,594	1%	
2003	48,603	0%	
2004	49,579	2%	
2005	48,367	-2%	
2006	51,539	7%	
2007	51,786	0%	1%

AFRC believes that Congress will be more likely to fund a ramping up of the BLM budget than a sudden 255 percent increase. We also know that the BLM will need time to increase personnel and support systems to handle the increase. The Final EIS should display a realistic phasing in of the plan and the associated environmental consequences of doing so. This phasing in, however, must be done in such a way as to not violate the O&C Act. The O&C Act states:

That timber from said lands in an amount not less than one-half billion feet board measure, or not less than the annual sustained yield capacity when the same has been determined and declared, shall be sold annually, or so much thereof as can be sold at reasonable prices on a normal market.

To determine the annual sale quantity sold, one must look at the average over a ten year period to allow for fluctuations due to lumber market changes and other unforeseen events. The ramping up of the implementation of the plan should, therefore, not result in any less than an average annual sale level of 500 mmbf over the course of a decade. If we assume the long term sustained yield of 1.2 billion board feet and that a ramp up must produce an annual harvest level of at least 500 mmbf over the course of a decade, the slowest ramping up schedule would be as shown in Table 4.

Table 4. Implementation Schedule

Year	Volume Sold (mmbf)	Average Annual Harvest (mmbf)
1	250	
2	288	
3	331	
4	380	
5	437	337
6	503	
7	578	
8	665	
9	765	
10	879	508
11	923	
12	970	
13	1018	
14	1069	
15	1122	679
16	1179	
17	1200	
18	1200	
19	1200	
20	1200	808

To obtain a 500 mmbf annual sale level in the first decade, a 15 percent annual increase in the budget would be needed. After this time, a slower 5 percent annual increase can be employed until full implementation is reached. (Table 5)

Table 5. Ramp Up Forest Management Budget

Year	Volume Sold (mmbf)	Average Annual Harvest (mmbf)	BLM Timber Budget (\$1,000)	Annual Percent Budget Increase
1	250		60,000	16%
2	288		69,000	15%
3	331		79,350	15%
4	380		91,253	15%
5	437	337	104,940	15%
6	503		120,681	15%
7	578		138,784	15%
8	665		159,601	15%
9	765		183,541	15%
10	879	508	211,073	15%
11	923		221,626	5%
12	970		232,708	5%
13	1018		244,343	5%
14	1069		256,560	5%
15	1122	679	269,388	5%
16	1179		282,857	5%
17	1200		288,000	2%
18	1200		288,000	0%
19	1200		288,000	0%
20	1200	808	288,000	0%

6. The estimated payments to counties need to reflect this more realistic implementation schedule.

The O&C Act was passed to ensure that the counties in western Oregon would receive adequate compensation for having these lands remain in public ownership and unavailable for private ownership and inclusion in the counties tax base. The requirement for these lands to be managed under the principles of sustained yield and the designation of timber production as the dominate use of these lands ensure that this compensation would last in perpetuity. The extreme financial impact of the illegal adoption of the Northwest Forest Plan on O&C lands was temporarily mitigated by the passage of the Secure Rural Schools and Community Self Determination Act which paid counties from federal tax dollars instead of timber receipts. The provisions of this Act have subsequently expired and the funds for county payments must again come from the harvest of timber.

The DEIS falsely assumes that full implementation of a new plan will occur in the fiscal year after the plan is adopted. We have shown that this will not happen and have proposed a more realistic ramping up schedule. Even though the volumes associated with the ramping up will meet the requirements of the O&C Act, they will not be enough to adequately compensate the counties. It is imperative, that Congress reinstate the supplemental funding of the Secure Rural Schools and Community Self Determination Act, while the BLM is ramping up their timber sale program. This supplemental funding would ramp down over the first nine years of the new plan while the timber sale volumes ramp up. The correlation between these two is shown in Table 6.

Table 6. Payments to Counties

		County	Safety Net	Total
Year	Volume	Payments	Payments	County
	Sold		Needed	Payments
	mmbf	(\$1,000)	(\$1,000)	(\$1,000)
1	250	35,000	77,000	112,000
2	288	40,250	71,750	112,000
3	331	46,288	65,713	112,000
4	380	53,231	58,769	112,000
5	437	61,215	50,785	112,000
6	503	70,398	41,602	112,000
7	578	80,957	31,043	112,000
8	665	93,101	18,899	112,000
9	765	107,066	4,934	112,000
10	879	123,126	0	123,126
11	923	129,282	0	129,282
12	970	135,746	0	135,746
13	1018	142,533	0	142,533
14	1069	149,660	0	149,660
15	1122	157,143	0	157,143
16	1179	165,000	0	165,000
17	1200	168,000	0	168,000
18	1200	168,000	0	168,000
19	1200	168,000	0	168,000
20	1200	168,000	0	168,000

7. The Environmental Consequences of a revised Alternative will lie within the range of alternatives presented in the DEIS precluding the need for a new DEIS.

The Environmental Consequences of implementing the first 20 years of this proposed management strategy will be very close to what the BLM has analyzed for Alternative 2. Table 7 shows the harvest volumes associated with the two alternatives. The new proposed alternative harvests less on an average annual basis than Alternative 2 until the 19th year of the plan. Since

the plan will probably be in effect for only 15 years, the environmental consequences of the new plan will be less than Alternative 2.

Table 7. Harvest Volume; Alt 2 vs. New Alt

	Alt 2.	Average	New	Average
Year	Volume	Annual	Volume	Annual
	Sold	Harvest	Sold	Harvest
	mmbf	mmbf	mmbf	mmbf
1	767		250	
2	767		288	
3	767		331	
4	767		380	
5	767	767	437	337
6	767		503	
7	767		578	
8	767		665	
9	767		765	
10	767	767	879	508
11	767		923	
12	767		970	
13	767		1,018	
14	767		1,069	
15	767	767	1,122	679
16	767		1,179	
17	767		1,200	
18	767		1,200	
19	767		1,200	
20	767	767	1,200	808

The Environmental Consequences associated with timber harvest are in direct relationship with the acres treated. Table 149 of the DEIS shows the estimated number of acres treated for the first ten years of the plan. (Note: the acres in Table 149 are off by a factor of 10) The Environmental Consequences are determined by the number of acres treated. Table 8 shows a comparison of the number of acres treated under Alternative 2 and an estimate of acres treated in the ramp up alternative. To calculate the number of acres for the ramp up alternative, the average volume per acre for the ASQ lands was used. Table 8 clearly shows that the average annual number of acres treated for the ramp up alternative is lower than Alternative 2 for the first 20 years of the plan. Since the environmental consequences are directly related to the number of acres treated, we can also say that the environmental impacts of the ramp up alternative are less than those for Alternative 2 for the first 20 years.

Table 8. Acres Treated in Alternative 2 vs. the Ramp Up Alternative

Year	Regen Volume (mmbf)	Regen Acres	Average Annual Regen Acres	Thinning Volume (mmbf)	Thinning Acres	Average Annual Thinning Acres	Total Acres	Average Annual Total Acres	Total Volume Sold (mmbf)
Alt.2	683	14,340	14,340	84	7,670	7,670	22,010	22,010	767
Ramp up									
1	235	4,932		15	1,488		6,421		250
2	270	5,672		17	1,712		7,384		288
3	311	6,523		20	1,968		8,491		331
4	357	7,502		23	2,264		9,765		380
5	411	8,627	6651	26	2,603	2007	11,230	8658	437
6	472	9,921		30	2,994		12,914		503
7	543	11,409		35	3,443		14,851		578
8	625	13,120		40	3,959		17,079		665
9	718	15,088		46	4,553		19,641		765
10	826	17,351	10015	53	5,236	3022	22,587	13036	879
11	868	18,219		56	5,497		23,716		923
12	911	19,130		59	5,772		24,902		970
13	957	20,087		62	6,061		26,147		1018
14	1,004	21,091		65	6,364		27,455		1069
15	1,055	22,145	13388	68	6,682	4040	28,828	17427	1122
16	1,107	23,253		71	7,016		30,269		1179
17	1,127	23,675		73	7,144		30,819		1200
18	1,127	23,675		73	7,144		30,819		1200
19	1,127	23,675		73	7,144		30,819		1200
20	1,127	23,675	15939	73	7,144	4809	30,819	20748	1200

8. The Final DEIS must limit the effects analysis and Environmental Consequences associated with these to the 20 year life of the plan and clearly display the changes from the current state and the options that remain available for the next planning effort.

The DEIS displays the effects of the Alternatives as if the plan were to be implemented for 100 years. Since it is unrealistic to think the plan will be in effect for that timeframe, we have recommended placing a 20 year limit on its implementation. All of the Environmental Consequences of the Alternatives should therefore be limited to the 20 year life of the plan. When this is done, it is very easy to determine how the Alternatives are impacting the ability to change management direction after the 20 year life of the plan. We can easily see if the Alternatives are creating a situation that is foreclosing options for future direction.

When we look at Alternative 2 in this light, we see that there will be very little impact to issues associated with key environmental concerns. This would also hold true for the Ramp Up

Alternative as we have shown that the environmental consequences between these alternatives are virtually equal within the 20 year time horizon. Table 9 shows the impacts of Alternative 2 and the Ramp Up Alternative on key issues of concern.

For the Northern Spotted Owl, at the end of the plan's life, 20 years, the amount of suitable spotted owl habitat will be greater than exists today. All of the options for changing management direction in 20 years will therefore still be available. This will allow 20 years for research to take place so that we can learn more about the impacts the barred owl is having on the spotted owl. There are some that believe the barred owl will totally replace the spotted owl within this timeframe. By implementing either of these Alternatives, the BLM will not have impacted their ability to make changes in 20 years.

The same is true for mature and structurally complex forests. After 20 years, the combination of these two forest types will have increased. While the structurally complex forest component shows a slight decline, there is more than enough of an increase in mature forests to compensate for this as much of the mature forests will quickly develop into structurally complex forest.

For marbled murrelets, the most important forests (Zone 1) show an 8 percent decline in suitable habitat. This decline in habitat will **not** be reflected in a similar drop in marbled murrelet numbers. The latest population estimates for the Oregon population is between 6,500 and 12,500 individuals or a theoretical maximum of between 3,250 and 6,250 pairs. Since the marbled murrelet only uses the forest as nest sites, if every theoretical pair of marbled murrelet nested in a given year they could only use between 3,250 and 6,250 nest trees. After 20 years, there will be 226,000 acres of suitable habitat on BLM land alone which equates to a minimum of 226,000 nest sites for the perhaps 6,250 pairs of marbled murrelets to choose from. It is easy to deduce that there will be no foreclosing of future options for the marbled murrelet after 20 years.

Fish habitat will also improve over the next 20 years. The only data in the DEIS for the first 20 years of the plan is for the Smith River Chinook and the Smith River Steelhead. These areas will see 15 and 20 percent increases in the productivity index for these two stocks. There will be no change in the amount of Bald Eagle habitat during the 20 years of the plan leaving all future options open.

Table 9. Impacts of Alt. 2 and Ramp Up Alt. On Key Issues of Concern

	Current Acres	2026 Acres	% Change	% Remaining
SO Suitable Habitat	1,086,000	1,103,000	+2%	102%
Mature Forest	593,000	681,000	+15%	115%
Structurally Complex Forest	549,000	483,000	-12%	88%
Mature & S.C. Forest	1,142,000	1,164,000	+2%	102%
MM Suitable Habitat Zone 1	245,000	226,000	-8%	92%
SR Chinook Productivity Index	40	46	+15%	115%
SR Steelhead Productivity Index	40	48	+20%	120%
Bald Eagle Suitable Habitat	827,000	827,000	0%	100%

9. The selected Alternative must do more to address the dwindling big game herds on federal lands in western Oregon.

Most black-tailed deer and Roosevelt elk populations on federal forestlands in western Oregon have either dropped sharply, or will soon, without changes in federal forest management. These drops in population are directly tied to declining habitat caused by the virtual end of federal forest management following the implementation of the Northwest Forest Plan in 1994. Big game species in western Oregon such as black-tailed deer and Roosevelt elk are generally considered early successional species. This means the majority of the forage that elk depend on for nutrition are found in early seral landscapes. Alternative 2 will do a good job of providing a good mix of both quality and quantity foraging opportunities in the harvest land base. However, 52 percent of land base will still be excluded from sustained yield harvest in this alternative and thus will provide few foraging opportunities for big game and other early seral dependent species. During the review of the WOPR, several significant issues were identified by AFRC regarding the analysis of deer and elk. These issues included:

1. For both black-tailed deer and Roosevelt elk the importance of thermal cover is emphasized, with summer thermal cover being the significant issue on the Coos Bay District.
2. Open road densities are used to measure relative disturbance to deer and elk, instead of providing escapement or hiding cover.
3. Thermal cover and road densities appear to be the primary focus in lieu of improving forage conditions.

On October 19, 2007, AFRC staff, along with the Rocky Mountain Elk Foundation and Oregon Hunters Association, met with the BLM's Wildlife IDT Planner in Salem to discuss these issues. Notes were taken by BLM at the meeting and entered into the public record. AFRC recommended that the following changes be made in the analysis:

1. In regards to thermal cover, it is not a significant issue in western Oregon. Recent research has shown that it has no effect on animal productivity (Cook et al). More emphasis needs to be placed on forage analysis, discussion of both quality and quantity. Forage is extremely important to big game productivity and survival.
2. Review road density standards used in analysis, 1.5 mi/sq mi, it was taken from an eastside study on mule deer and Rocky Mountain elk and inferring that it is applicable to black-tailed deer and Roosevelt elk may not be appropriate.
3. A better approach to deal with animal disturbance is to provide adequate hiding cover. Hiding cover is defined by Thomas et al. (1991:38) as vegetation capable of hiding 90 percent of a standing deer or elk at distance equal to or less than 200 feet (61m).

Finally, as noted above, our understanding of big game habitat relationships has evolved over the last decade but unfortunately the existing big game habitat models have not been updated. This effort is likely to take a couple of years and is dependent on funding to complete the work. Once these models have been updated, we would expect that they would be used in project level analysis under the new resource plans.

10. The affects of the Alternatives on climate change and carbon sequestration need to be included in the Environmental Consequences.

Climate change is having a noticeable impact on forests in the West by creating longer hotter dryer summers; encouraging a faster rate of growth; and exacerbating the susceptibility of forests to catastrophic wildfire and insect and disease infestation. Currently 10 percent of our nation's emissions are offset by U.S. forests. Forests play an important and largely undervalued role in combating climate change and the BLM and other land management agencies, as stewards of our public lands, need to recognize this.

Trees are mainly composed of carbon and can serve as permanent "stores" of carbon in forests and long-lived wood products. Generally speaking, younger trees absorb vast amounts of carbon quickly. As trees age, the rate at which they absorb carbon decreases. Once a tree dies, it slowly releases carbon through decomposition. Over their life-spans forests are carbon neutral, but may store carbon for longer periods of time in long-lived wood products.

As catastrophic wildfires burn, carbon contained in trees and buildings is rapidly released in the air. Though moderate to low intensity wildfires can be healthy and part of natural ecosystems, in the past decade we've seen a massive increase of hot and devastating wildfires. In both 2007 and 2006 roughly ten million acres burned and cost \$1.5 billion to fight. This is an upward trend that, according to all indications, will continue. This trend also promises more

Green House Gases (GHGs) will be released into the atmosphere, including highly toxic carbon monoxide. Last year, in the State of Oregon alone, catastrophic wildfires resulted in at least 3.8 million tons of CO₂ spewed into the air (not including the emissions from fire suppression operations or decay of dead trees and woody debris). This is the equivalent of 776,000 vehicles on the road for one year.

Landscape-level hazardous fuels treatments are needed to remove excess fuels and improve forest health and wildlife habitat. This allows remaining trees and seedlings to become healthier and more vibrant enabling them to absorb more carbon. Post-fire projects may also be needed to remove some merchantable materials, speed reforestation and prevent devastating reburns; all, in turn, sequestering more carbon. Beyond this, the trees and woody debris removed from forests can be used for wood products or biomass fuel/energy production. This added value can pay for itself and also acts as a net carbon sink by absorbing GHGs.

For these reasons, the Agency needs to consider the impact of climate change and how proposed projects and project alternatives could help forests cope with climate change by minimizing or mitigating the insect and disease infestation and catastrophic wildfire (thereby reducing emissions from catastrophic wildfire, protecting habitat and watersheds from destruction, and protecting communities in the Wildland Urban Interface). We also recommend agencies track the amount of biological carbon emissions from catastrophic wildfires and subsequent decay of dead trees, as well as, the carbon potentially stored in wood products.

11. The effects of the Alternatives on adjacent ownerships needs to be included in the Environmental Consequences and the final plans must minimize the negative impacts on these other ownerships.

By the very nature of the BLM's ownership pattern in western Oregon, the final resource plans will have impacts on the management options, costs and values of adjacent ownerships. Access to adjacent ownerships must not be compromised by the final plans and if an alternative's proposed standards or guidelines could potentially impact access, it must be fully displayed and considered in the Final EIS. The issue of access includes the use, maintenance and enhancement of existing roads for forest management activities, as well as, fire prevention and suppression activities. It must also include the ability to develop additional road access as needed for forest and fire related management activities. Finally, the access issue includes the opportunity for the public to benefit from the social and environmental opportunities associated with these lands, especially camping, hiking, horseback riding, hunting and fishing.

E. Summary

AFRC commends the BLM for its excellent technical work in documenting the environmental effects of the alternatives, although additional or revised environmental analyses are needed regarding climate change, carbon sequestration, access and big game species. The major flaws of the WOPR DEIS lie in the design of the alternatives themselves and the underlying assumptions that drove the technical analysis. AFRC believes the alternatives reflect an incorrect understanding of the BLM's legal obligations for the lands subject to the Oregon and California Railroad and Coos Bay Wagon Road Grant Lands Act particularly in relation to

the Endangered Species Act. As a consequence, the alternatives are unduly limited, and do not present the full range of reasonable alternatives required by the National Environmental Policy Act.

AFRC believes that a new Alternative can be developed that meets the mandates of the O&C Act and lies within current the range of alternatives, by proposing to offer the full long term sustained yield of 1.2 billion board feet using a realistic implementation schedule and limiting the analysis to the true lifespan of the plan, 15-20 years. Given a more realistic timeframe for implementation, the new Alternative should provide a template for Congress to reauthorize the Secure Rural Schools and Community Self Determination Act which ramps down payments, as receipts from the implementation of the new plan ramp up payments from timber receipts.



NATIONAL COUNCIL FOR AIR AND STREAM IMPROVEMENT, INC.
West Coast Regional Center
Mailing address: PO Box 458, Corvallis OR 97339
Street address: 720 SW Fourth Street, Corvallis OR 97333
Phone: (541)752-8801 Fax: (541)752-8806

George Ice, PhD
Principal Scientist
GIce@wcrc-ncasi.org

October 19, 2007

USDI Bureau of Land Management
Western Oregon Plan Revisions
PO Box 2965
Portland, Oregon 97208

Dear BLM Staff:

I read with interest the sections of your *Draft Environmental Impact Statement for the Revision of the Resource Management Plans of the Western Oregon Bureau of Land Management Districts* dealing with fish and hydrology. As a Professional Hydrologist registered with the American Institute of Hydrology and a Certified Forester with the Society of American Foresters, and with a Ph.D. in forest hydrology from Oregon State University, these topics are of keen interest to me. I want to commend the hydrology and fisheries staff members for the overall high quality of the review and assessment represented by this extensive document. I am in general agreement with the impact statement findings. The following comments represent additional thoughts and suggestions to enhance this document.

While I agree with the premise that wood is an important factor in fish habitat, there was a lack of discussion about other factors such as food supply. Wildlife biologists are recognizing that food is as important or more important than habitat in wildlife success. There is evidence that this is true for fish as well. The eruption of Mt. St. Helens created hot, sediment choked streams that might have been expected to be unproductive for fish, but those exposed channels resulted in high instream primary production rates and ultimately food for fish. Bisson et al. (1988) found productivity high for salmon stocked in part of the region impacted by the eruption even though stream temperatures were at levels that were considered either detrimental or lethal. Wilzbach et al. (2005) studied salmonid productivity in streams in northern California and found that opening streams enhanced fish productivity. A meta-analysis reported at the headwater conference in Vancouver, British Columbia, earlier this year (Mellina and Hinch 2007) found that fish density and biomass increased but large wood decreased where harvesting occurred close to streams without buffers. Reductions in fish were noted where wood was cleaned out of the stream. Finally, a study sponsored by the Coastal Oregon Productivity Enhancement (COPE) Project (Connolly and Hall 1994) found that the highest productivities for cutthroat trout occurred where there was a combination of hardwood overstory adjacent to streams and large wood in the channels. These results point to a dual control on fish productivity from both wood (for structure and cover) and food (as enhanced by increased light).

Recent discussions with Canadian scientists and fisheries policy experts point to an interest in active management within riparian areas to create a mosaic of conditions that reflect natural disturbance patterns. Dr. Brian Naylor with the Ontario Ministry of Natural Resources reported to me that,

We're also in the process of rewriting our riparian direction. In the past, some clearcutting was permitted around some types of water, but it was rarely conducted (the conditions required to permit harvesting were generally too difficult to meet). Our new direction is actually trying to encourage the creation of a mosaic of early and later successional forest adjacent to water.

Dr. Naylor went on to note that,

The basic tenet underlying our new guidelines is also emulation of natural disturbances. There was a lot of public opposition when we first introduced this concept to the management of 'upland' forests in our Natural Disturbance Pattern Emulation Guide in 2001. We foresee that there will be even more 'interest' when we introduce the concept into riparian areas in our revised guides.

The overall conclusion from this discussion is that large wood can be beneficial to fish populations, but it should be balanced with some disturbance near the stream to increase light and primary production to create "hot spots."

In the list of major factors affecting fish I didn't see fishing pressure (both ocean and stream). I'm reminded of a turn of the century (19th to 20th) report that described the need for a reduction in daily trout limit from 128 to 64 a day. Buchal (1998) did an excellent job of describing the impact of fishing pressure on Columbia Basin salmon runs. One suggestion has been that roads create risk to salmon and trout populations because they provide access for legal and illegal take of fish. I know that my former colleague, Dr. Walt Megahan, indicated a reluctance to conduct trout studies near his Idaho research watersheds because one effective fisherman could compromise the results.

One component of large wood that I did not see was the role of stream size in determining functional wood (Bilby and Bisson 1998; Bisson et al. 1987). For small streams, in particular, there may be opportunities for small diameter and length wood to provide important functions.

Agencies are often forced to make creative assessments using combinations of models and assumptions. I would like to see a plan to test the performance of your models and assumptions. For example, there is a large difference in the percent of watersheds that have received instream habitat projects (Eugene 25%; Klamath Falls 0%). With this large difference, are there trend data for fish to show that the instream habitat work is accomplishing its goals?

I was pleased to see the thoughtful discussion about sediment impacts, and particularly the timing of when sediment loads are occurring. Timing is often not accounted for in assessments. The Evans Creek example is fascinating and may reflect conditions such as those described earlier in Bisson et al. (1988), where food supply overcame less favourable habitat. The

conditions that cause Evans Creek to remain productive for salmon despite high sediment loads need to be identified.

One note is that on page 372 you cite a study that found that 67% of sediment came from forest roads. This is based on a 1982 paper. Similarly, roads as a source of landslides and sediment are discussed later. Recent landslide surveys such as Robison et al. (1999) indicate that road sources have declined. This issue gets to some later comments that some of the major sediment benefits to BLM watersheds may come from remediation of existing roads. A recent audit of forest practices on both private and public lands in Montana found that more than 60% of active management sites experienced reduced sediment inputs to streams (Rogers 2006). This was largely a result of upgrading roads to existing water protection standards. This was a reduction in sediment, not minimization of new sediment contributions. At a recent workshop on road surfacing, Keith Mills, a geotechnical engineer with Oregon Department of Forestry (ODF), reported that past surveys found that 57 to 75% of the ODF road network drained to streams (hydrologic connectivity), but surveys of new or upgraded roads find that this rate is reduced to 15 to 34%. Based on visits to BLM lands, similar activities are occurring on your road systems as we better understand how to reduced sediment delivery to streams.

I was please to see that the draft EIS cites the draft General Technical Report being developed by Dr. Gordon Grant and colleagues to address impacts of forest management on peak flows. That draft report summarizes our understanding of the mechanisms and consequences of forest management on peak flows. Grant et al. (in review) report that most streams in this region are not susceptible to channel impacts from changes in peak flow that we expect from typical forest management activities. I have had a chance to review the report, and mostly agree with both its conclusions and your application of those conclusions to your lands. Your finding that a very limited number of basins are susceptible to channel damage from changes in peak flows is consistent with the Grant et al. report. Where there is a potential problem, management can be modified to address the concern. For example, the potential for channel movement might be an issue and a channel migration zone could be defined and protected.

One caution I want to raise to you is the reliance on the Washington Watershed Analysis road model. This is probably one of the most practical and applicable models that can be used and I believe it provides a reasonable picture of what "relative" impacts an overall road project may have. However, site-specific tests indicate that the model may not accurately predict specific problem road segments or may be an order of magnitude off in its estimates of sediment runoff. The National Council for Air and Stream Improvement, Inc. (NCASI) is currently supporting a cooperative project to test road models. The work is being conducted by Kathy Dubé with GeoDynamics. Preliminary results show problems with all road models used to estimate sediment runoff. A recent paper by Sugden and Woods (2007) found that the road erosion model the Washington model is based on severely overestimated sediment losses from roads in Montana. Despite our significant investment in road erosion models, it now appears that field inventories to identify problem road segments may be the most effective erosion control management approach.

On page 380 the draft EIS discusses findings by Swift about travel distances for sediment. This includes how fire affects travel distance (increases travel distance due to reduced surface

roughness). However, it does not include work by Swift on roads where slash was used to increase roughness and reduce travel distance. Another useful, but difficult to obtain, summary of travel distance research is a paper by Woods et al. (2006). I would be happy to provide a copy if you cannot locate it. It has a nice summary of travel distances measured in other studies and discusses the finding that a majority of sediment deposition occurs in the first half of the sediment plume.

Page 382 includes a discussion about road management to reduce erosion. I again refer to Sugden and Woods (2007) and their finding that increased sediment losses resulted after grading. I have termed this phenomenon the Goldilocks Factor. If you don't grade frequently enough you can develop severe rutting and gullyng that results in increased sediment losses, as the road prism no longer operates as designed. If you grade too frequently you continue to disturb the road and increase sediment losses. Grading needs to be conducted at a frequency that is "just right."

On page 391 there is an attempt to correlate watershed conditions with the level of activities. One of the principles the NCASI watershed program believes in is that *how* management occurs is just as important as *how much*. I agree that watersheds are on an improving trend because of a combination of factors, not the least of which is an improving understanding of how to avoid significant impacts from forestry activities. There have been substantial changes in the forest practices on both BLM watersheds and the lands outside BLM management. Through a series of watershed studies at Hinkle Creek, the Alsea, and the Trask, the Watersheds Research Cooperative is attempting to assess the effectiveness of contemporary forest practice on private lands (<http://watershedsresearch.org>). The work at the Alsea will be particularly interesting (<http://ncasi.org/programs/areas/forestry/alsea/default.aspx>) because it will allow us to compare contemporary impacts with historic impacts. It will also test the value of adding wood (at the end of the study). We hope that BLM can explore opportunities to increase its support and cooperation with these projects.

The focus on instream restoration efforts in high intrinsic potential streams for salmon is a reasonable approach. NCASI is working with Dr. Kelly Burnett to explore how we can test salmon population trends for different management regimes using intrinsic potential to compare sites of similar quality for fish.

One of the highlighted issues related to fine sediment delivery (page 741) under Alternative 2 is approximately 400 acres of regeneration timber harvest along intermittent streams. This should not create a problem if an equipment exclusion zone or similar management controls are used to avoid direct disturbance to the intermittent channel. Again, we hope to test the effects of different management approaches at Needle Branch under the Alsea Watershed Study Revisited by monitoring runoff and water quality below a non-fish-bearing reach (no streamside management area required under the Oregon Forest Practices Act) and a fish-bearing reach (streamside management zone required). Work from across the country indicates that sediment loads in intermittent streams can be minimized by not directly disturbing the channels. The result from Hinkle Creek (non-fish-bearing reaches requiring no streamside management zone) will also be important to your assessment.

A recent thesis by Cody Hale (Hale 2007) from Oregon State University on the Alsea Watershed Study Revisited also demonstrated the recuperative potential of watersheds in western Oregon (from extreme practices in the 1960s). The only water quality parameter that appears to be outside the 95% confidence limits established for the treatment and control watersheds for this study (beginning in 1959) is nitrate-nitrogen. This nutrient is probably elevated in Needle Branch due to the increase in alder in the riparian area. A number of posters at the Society of American Foresters National Convention in Portland, Oregon, next week will address forest watersheds in general as well as results from the Alsea Watershed and other Watersheds Research Cooperative studies.

Another issue related to Alternatives 2 and 3 is use of primary and secondary shade zones and the potential to increase stream temperature in the Coquille Forest. Use of primary and secondary shade zones provide an opportunity to optimize for a high degree of shade protection but still provide some additional management opportunities. As discussed earlier, many forest ecologists and watershed specialists are now looking at some active management in riparian areas to create a favourable mosaic of conditions. It is likely that a 1°F increase in temperature per mile (modeled) would never be experienced due to mixing with hyporheic water and cooling in features such as sediment wedges.

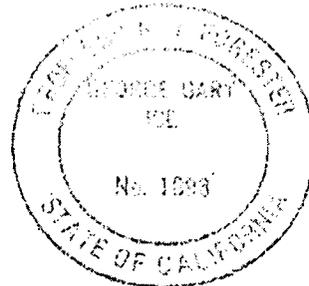
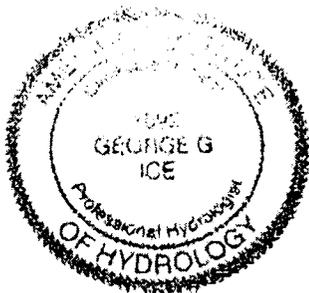
CONCLUSION

BLM is presented with the very difficult task of comparing the environmental impact of management alternatives. Above are some considerations for modifications to the draft EIS. Notwithstanding these comments, I find the hydrology, water quality, and fisheries assessments to be reasonable and thoroughly conducted. I agree with the overall conclusion that all four alternatives have similar outcomes for large wood recruitment and fish abundance. There may be management opportunities to create a mosaic of riparian conditions that could enhance fish productivity further. Sediment loads are also likely to experience little increase under the different alternatives, and treatment of existing road problems provides the greatest opportunities for reduced sediment loads. The key for fish and water quality is to provide management immediately adjacent to stream channels. Riparian functions diminish as management moves away from the stream. Increases in water temperatures for the Coquille Forest are unlikely if harvest blocks are discontinuous and staggered in time. The recent and ongoing review of the effects of forest management on peak flows is reassuring and points to a very limited number of sensitive watersheds. Ongoing improvements on BLM lands are matched by improved practices on private lands in these jointly managed watersheds. We encourage BLM to become more actively involved in the Watersheds Research Cooperative to test alternative management practices and their consequences on the hydrology, water quality, and biology of forest streams.

Yours,



Dr. George Ice, P.H., C.F.
Principal Scientist



REFERENCES

- Bilby, R.E. and Bisson, P.A. 1998. Function and distribution of large woody debris. 324-326 in *River Ecology and Management*. Naiman, R.J. and Bilby, R.E. [eds.]. New York: Springer.
- Bisson, P.A., Bilby, R.E., Bryant, M.D., Dolloff, D.A., Grette, G.B., House, R.A., Murphy, M.L., Koski, K.V., and Sedell, J.R. 1987. Large wood debris in forested streams in the Pacific Northwest: Past, present, and future. 143-190 in *Streamside Management Forest and Fisheries Interactions*. Salo, E.O. and Cundy, T.W. [eds.]. Contribution 57. Seattle, WA: University of Washington Institute of Forest Resources.
- Bisson, P.A., Nielsen, J.L., and Ward, J.W. 1988. Summer production of coho salmon stocked in Mount St. Helens streams 3-6 years after the 1980 eruption. *Transactions of the American Fisheries Society* 117:322-335.
- Buchal, J.L. 1998. *The great salmon hoax: An eyewitness account of the collapse of science and law and the triumph of politics in salmon recovery*. Astoria, OR: Iconclast Publishing Company.
- Connolly, P.J. and Hall, J.D. 1994. Status of resident coastal cutthroat trout populations in maturing second-growth basins of the Oregon Coast Range. *COPE Report* 7(2&3):10-13.
- Grant, G.E., Lewis, S., Swanson, F., and McDonnell, J. In review. *Effects of forest practices on peak flows and consequent channel response in western Oregon: A state-of-science report*. Corvallis, OR: USDA Forest Service Pacific Northwest Research Station.
- Hale, V.C. 2007. *A physical and chemical characterization of stream water draining three Oregon Coastal Range watersheds*. M.S. thesis. Corvallis, OR: Oregon State University.
- Mellina, E. and Hinch, S.G. 2007. A meta-analysis of stream habitat, and salmonid density and biomass response to clear-cut logging: The influence of stream cleaning. Abstract (page 37) in Conference Program for *Riparian Management in Headwater Catchments: Translating Science into Management*. Vancouver, BC: University of British Columbia.
- Robison E.G., Mills, K.A., Paul, J., Dent, L., and Skaugset, A. 1999. *Oregon Department of Forestry storm impacts and landslides of 1996: Final report*. Forest Practices Technical Report 4. Salem, OR: Oregon Department of Forestry.
- Rogers, D. 2006. *Montana forestry best management practices monitoring: 2006 forestry BMP audit report*. Missoula, MT: Montana Department of Natural Resources and Conservations, Forestry Division.
- Sugden, B.D. and Woods, S.W. 2007. Sediment production from forest roads in western Montana. *Journal of the American Water Resources Association* 43(1):193-206.
- Wilzbach, M.A., Harvey, B.C., White, J.L., and Nakamoto, R.J. 2005. Effects of riparian canopy opening and salmon carcass addition on the abundance and growth of resident salmonids. *Canadian Journal of Fisheries and Aquatic Sciences* 62:58-67.
- Woods, S.W., Sugden, B., and Parker, B. 2006. Sediment travel distances below drivable dips in western Montana. In *Proceeding of the 2006 Council of Forest Engineering Conference*.