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Enforcing Ecosystem Management under the Northwest Forest Plan: The Judicial Role

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ENFORCING ECOSYSTEM MANAGEMENT UNDER THE NORTHWEST FOREST PLAN: THE JUDICIAL ROLE

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INTRODUCTION

In August and September of 1999, Judges Dwyer and Rothstein of the Western District of Washington issued opinions that will have significant ramifications on federal land management agencies in the Pacific Northwest.[1] These two opinions stated that the United States Forest Service ("Forest Service"), Bureau of Land Management ("BLM"), and National Marine Fisheries Service ("NMFS") must follow the Northwest Forest Plan's ("the Plan")[2] survey requirements and aquatic conservation strategy ("ACS") when managing federal lands. President Clinton envisioned the Plan in 1993 as the solution to conflicts on federal land between harvesting timber and protecting

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1. *See* Or. Natural Res. Council Action v. U.S. Forest Serv., 59 F. Supp. 2d 1085 (W.D. Wash. 1999); Pac. Coast Fed'n of Fishermen's Ass'n v. Nat'l Marine Fisheries Serv., 71 F. Supp. 2d 1063 (W.D. Wash. 1999). The requirements at issue in *Oregon Natural* and *Pacific Coast* include integrating watershed analyses into harvest plans, protecting aquatic species, and conducting surveys for species that depend on old-growth habitat.

2. *See generally* U.S. FOREST SERV. & BUREAU OF LAND MGMT., RECORD OF DECISION FOR AMENDMENTS TO FOREST SERV. AND BUREAU OF LAND MGMT. PLANNING DOCUMENTS WITHIN THE RANGE OF THE NORTHERN SPOTTED OWL (1994) [hereinafter RECORD OF DECISION].

old-growth dependent species.[3] Because the agencies did not keep their promise to fully implement the Plan's management strategies, the courts enjoined numerous timber sales until the agencies complied with the requirements of the Northwest Forest Plan.[4] The parties subsequently settled *Oregon Natural Resources Council Action v. U.S. Forest Service* (*"Oregon Natural"*), allowing some timber sales to proceed but suspending others until wildlife surveys are completed and managed in accordance with survey protocols and management standards.[5] Under these two recent decisions, the courts have stepped in and severely limited timber harvesting in forests covered by the Northwest Forest Plan.[6]

Timber harvesting, losses due to fire, insect and disease outbreaks, and other natural events have significantly diminished the amount and the quality of the forests of the Pacific Northwest.[7] This has been especially true in the years since World War II, when harvest levels in federal forests increased a dramatic 800% between 1947 and 1971, because the Forest Service was the principal supplier of the enormous demand for timber.[8] One of the major consequences resulting from the degradation of forests is an unprecedented decline

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3. *Id.* at 3.

4. Or. Natural, 59 F. Supp. 2d at 1097 (enjoining nine timber sales); Pac. Coast, 71 F. Supp. 2d at 1066-67, 1073 (enjoining twenty-four timber sales).

5. Stipulation for Order Dismissing Action: Order Thereon at 3-4, Oregon Natural (No. C98-942).

6. UNITED STATES FOREST SERV. AND BUREAU OF LAND MGMT., U.S. DEP'T OF AGRIC. AND U.S. DEP'T OF INTERIOR, DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT ON MANAGEMENT OF HABITAT FOR LATE-SUCCESSIONAL AND OLD-GROWTH FOREST RELATED SPECIES WITHIN THE RANGE OF THE NORTHERN SPOTTED OWL, S-1 (1993) [hereinafter DSEIS]. The Northwest Forest Plan covers all National Forests and BLM Districts in western Oregon, western Washington, and northwestern California.

7. Jack Ward Thomas, *Foreword*, *in* CREATING A FORESTRY FOR THE 21ST CENTURY: THE SCIENCE OF ECOSYSTEM MANAGEMENT ix, x-xi (Kathryn A. Kohm & Jerry F. Franklin eds., 1997).

8. David W. Crumpacker, *Prospects for Sustainability of Biodiversity Based on Conservation Biology and U.S. Forest Service Approaches to Ecosystem Management*, 40 LANDSCAPE AND URBAN PLANNING 47, 58 (1998). Forest Service timber extraction rose from 1.5 to 11.5 billion board feet per year between 1947 and 1971. *Id.*

in biodiversity.[9] This decline in biodiversity is due to habitat destruction, which is the primary force threatening species with extinction.[10] In the Pacific Northwest alone, habitat loss is the main reason that the northern spotted owl, marbled murrelet, and seventeen species of anadromous fish have been listed as threatened or endangered since 1990.[11] Scientists recognize that they may not know and understand the roles that all species have within the ecosystem;[12] however, this lack of understanding as to the connection between all species and the ecosystem is reason enough to slow the loss of biodiversity.

Even with the desire to reduce the loss of species, there is no definitive answer as to how to protect biodiversity.[13] One seemingly obvious answer is to protect all remaining natural habitats. However, this goal often conflicts with other social needs. For instance, in the

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9. EDWARD O. WILSON, THE DIVERSITY OF LIFE 259 (1992) (describing the threat to biodiversity resulting from cutting of forest and other disasters affecting forests). Biodiversity is "[t]he variety of organisms considered at all levels . . . includ[ing] the variety of ecosystems, which comprise both the communities of organisms within particular habitats and the physical conditions under which they live." *Id.* at 393.

10. *Id.* at 253–54 (categorizing the threats to species and stating that destruction of natural habitat has threatened 73% of species); David S. Wilcove et al., *Quantifying Threats to Imperiled Species in the United States*, 48 BIOSCIENCE 607, 609 (1998).

11. Endangered and Threatened Wildlife and Plants; Determination of Threatened Status of Northern Spotted Owl, 55 Fed. Reg. 26,114 (June 26, 1990); Endangered and Threatened Wildlife and Plants; Determination of threatened status for the Washington, Oregon and California population of the marbled murrelet, 57 Fed. Reg. 45,328 (Oct. 1, 1992); Plaintiff's Memorandum in Support of Motion for Summary Judgment at 19, Oregon Natural (No. C98-942) (citing Federal Register notices for seventeen runs of anadromous fish).

12. David A. Perry & Michael P. Amaranthus, *Disturbance, Recovery, and Stability*, *in* CREATING A FORESTRY FOR THE 21ST CENTURY: THE SCIENCE OF ECOSYSTEM MANAGEMENT 31, 48 (Kathryn A. Kohm & Jerry F. Franklin eds., 1997).

13. *See, e.g.*, WILSON, *supra* note 9, at 311-42 (stating that biodiversity is at high risk and suggesting an agenda that may help preserve species by: (1) Surveying the flora and fauna; (2) Creating biological wealth; (3) Promoting sustainable development; (4) Saving what remains; (5) Restoring wildlands). This approach requires cooperation among professionals that have historically been separated by academics and practice. *Id.*

Pacific Northwest, late-successional and old-growth forests, which support a high diversity of species, are extremely valuable as a source of high-quality timber and employment.[14] A tentative solution to this dilemma comes in the form of "ecosystem management,"[15] which focuses on integrating the biological and human uses of natural resources.[16]

Ecosystem management allows for resource extraction but tries to minimize loss of biodiversity by managing for a multitude of species and analyzing the effects of management activities on a variety of scales, including landscape, watershed, and project levels.[17] It is important for agencies to assess the effects of timber sales at all levels of the ecosystem so that managers can coordinate plans across the landscape, but do not let landscape planning mask adverse effects of individual sales. Ecosystem management is the backbone of the Northwest Forest Plan.[18] This Plan contains measures that protect forest health and sustain diversity while also providing for

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14. *See, e.g.*, Thomas, *supra* note 7, at x.

15. *Ecosystem Management: Hearing Before the Subcomm. on Agricultural Research, Conservation, Forestry, and General Legislation of the Comm. on Agriculture, Nutrition, and Forestry*, 103rd Cong. 3 (1994), *microformed on* CIS No. 95-S161-5 (Cong. Info. Serv.) [hereinafter *Hearing*] (statement of Sen. Larry E. Craig) (stating that "ecosystem management may offer an approach . . . can restore some consistent flow of goods and services to stabilize the local communities, while at the same time restoring, and maintaining ecosystems which support a diversity of plant and animal life").

16. Peter F. Brussard et al., *Ecosystem Management: What is it Really?* 40 LANDSCAPE AND URBAN PLANNING 9, 10 (1998) (citing statement by Jack Ward Thomas).

17. *See* Pac. Coast Fed'n of Fishermen's Ass'n v. Nat'l Marine Fisheries Serv., 71 F. Supp. 2d 1063, 1069 (W.D. Wash. 1999) (citing the Forest Ecosystem Management Assessment Team's ("FEMAT") report which requires implementation at four levels: regional, river basin, watershed and project levels); *see also* William T. Sexton & Robert C. Szaro, *Implementing Ecosystem Management: Using Multiple Boundaries for Organizing Information,* 40 LANDSCAPE AND URBAN PLANNING 167, 169 (1998) (reporting that ecosystem management exercises will use a variety of assessments and analyses with many classification systems).

18. RECORD OF DECISION, *supra* note 2, at 5 ("President Clinton charged us [in developing a strategy for managing these forests] to use an ecosystem approach.").

specified levels of timber harvest.[19] The Northwest Forest Plan was one of the first attempts in this country to implement ecosystem management as a method of managing public land.

Recent injunctions against the Forest Service and BLM indicate that these agencies and the NMFS[20] have failed to completely implement the Northwest Forest Plan.[21] The Forest Service and BLM did not conduct the required wildlife surveys before proceeding with timber sales,[22] and the NMFS did not analyze the effects of the projects on threatened fish, in accordance with the standards of the ACS.[23] In issuing the injunctions, the courts refused to allow the agencies to change the standards of the Plan at their own discretion.[24] Instead, the courts enforced the promises that the agencies had made in the original Plan and declared that compliance with environmental statutes did not necessarily ensure compliance with the Northwest Forest Plan.[25] In *Pacific Coast Federation of Fishermen's Association v. National Marine Fisheries Service* ("*Pacific Coast*") the court found that implementing ecosystem management requires site-specific analysis of timber sale effects in addition to analysis at the watershed level.[26] This decision, in conjunction with the *Oregon Natural* decision, may be critical to the future of federal land

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19. *Id.* at 6-11. The Plan calls for 1.1 billion board feet of timber to be harvested. It also requires setting aside land for wildlife, protecting riparian and aquatic areas, and surveying for species. *Id.* at 24.

20. The Forest Service and BLM must consult with NMFS to determine whether their actions are likely to jeopardize species listed under the Endangered Species Act ("ESA"). Endangered Species Act, 16 U.S.C. §§ 1536(a)(2), (b)(3)(A) (1994). NMFS then writes biological opinions stating whether activities will harm listed species. *Id.*

21. *See, e.g.*, Or. Natural Res. Council Action v. U.S. Forest Serv., 59 F. Supp. 2d 1085 (W.D. Wash. 1999); Pac. Coast, 71 F. Supp. 2d at 1063.

22. *See* Or. Natural, 59 F. Supp. 2d at 1088. The Northwest Forest Plan requires the agencies to do wildlife surveys before they implement any ground-disturbing activities. *See infra* notes 84-86 and accompanying text.

23. Pac. Coast, 71 F. Supp. 2d at 1073. The aquatic conservation strategy is one of the primary components of the Northwest Forest Plan. *See infra* notes 74-83 and accompanying text.

24. *See* Or. Natural, 59 F. Supp. 2d at 1093-94; *see also* Pac. Coast, 71 F. Supp. 2d at 1073.

25. *See* Or. Natural, 59 F. Supp. 2d at 1093; *see also* Pac. Coast, 71 F. Supp. 2d at 1071-73.

26. Pac. Coast, 71 F. Supp. 2d at 1073.

management because the decisions force the agencies to fully comply with their original Plan if they want to continue harvesting timber. In light of these decisions, the agencies must view the Northwest Forest Plan as a means to test whether they can sustain the harvest levels called for in the Plan without jeopardizing biodiversity, not as a hurdle they must clear in being able to harvest timber.

This Note examines the decisions in *Oregon Natural* and *Pacific Coast* and their effects on land management practices in the Pacific Northwest. Section I provides a history of the litigation against the Forest Service and BLM that led to the creation of the Northwest Forest Plan, as well as litigation challenging the Plan. Section II gives an overview of the Plan, discussing how it provides for implementing ecosystem management. This section focuses specifically on the Plan's requirements for aquatic conservation and species viability. Section III examines the decisions in *Oregon Natural* and *Pacific Coast,* analyzing the effects of requiring the agencies to properly implement wildlife surveys and the ACS. If the Forest Service and BLM want to harvest timber, they must not only fulfill the requirements of environmental statutes,[27] but also the more stringent requirements of the Northwest Forest Plan. To do this, the agencies may need to acquire additional resources or reduce the level of harvest expected from these forests.

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27. The Forest Service and BLM must comply with the National Environmental Policy Act ("NEPA"), which requires that impacts of major Federal actions significantly affecting the environment be considered in an environmental impact statement. 42 U.S.C. § 4332(2)(c) (1994 & Supp. III 1997). They must both also comply with the Endangered Species Act, which requires federal agencies to insure that their actions do not jeopardize the existence of a species listed as threatened or endangered, or cause destruction of habitat that is critical for the species. 16 U.S.C. § 1536(a)(2) (1994). In addition, the Forest Service must comply with the National Forest Management Act ("NFMA"), which directs the Forest Service to manage forests in such a way as to provide for diversity of species while meeting overall multiple use objectives. 16 U.S.C. § 1604(g)(3)(B) (1994 & Supp. III 1997). Lastly, the BLM must comply with the Federal Land Policy and Management Act ("FLPMA"), which requires that BLM lands be managed for multiple use and sustained yield, and in a manner that will protect the quality of scientific, scenic, historical, ecological, air, and water resource values. 43 U.S.C.§ 1712(c) (1994 & Supp. III 1997).

I. LEGAL CHALLENGES TO FOREST SERVICE AND BLM MANAGEMENT FOR THE NORTHERN SPOTTED OWL

In the early part of the twentieth century, the Forest Service acted as custodian and protector of the timber on public lands,[28] but after World War II it became a major supplier of timber.[29] The logging industry of the Northwest thrived from the 1950's until the 1980's,[30] when concerns about endangered species arose. As early as 1980, scientists believed that populations of the northern spotted owl were declining.[31] The spotted owl depends on old-growth forest habitat, which has been reduced significantly on both public and private land.[32] Most of the old-growth that remained was on public land,[33] leaving federal agencies with the chore of deciding how to manage federal lands in order to protect the spotted owl's habitat.

Starting in the late 1980's, environmental organizations initiated lawsuits that challenged management decisions made by federal agencies. In 1989, the Seattle Audubon Society claimed that the Forest Service's Regional Guide,[34] which amended land management

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28. GEORGE CAMERON COGGINS & CHARLES F. WILKINSON, FEDERAL PUBLIC LAND AND RESOURCES LAW 468 (1981). Originally, the Creative Act of 1891 authorized the President to reserve any public lands covered with timber. 16 U.S.C. § 471 (repealed 1976). *Id.* The Organic Act of 1897 authorized protective management of the forest reserves. 16 U.S.C. §§ 473-81 (1994) (repealed in part 1976). The Forest Service was formally created in 1905 to manage the forest reserves that were transferred from the Department of Interior to the Department of Agriculture.

29. *See* Crumpacker, *supra* note 8, at 58.

30. Federal timber sale volume from the Pacific Northwest averaged 5.6 billion board feet annually from 1980-89. DSEIS, *supra* note 6, at S-15.

31. Eric D. Forsman et al., *Distribution and Biology of the Spotted Owl in Oregon,* 87 WILDLIFE MONOGRAPHS 1 (1984) (showing declines in populations of spotted owls in Oregon).

32. *Id.* at 16; *see also* Determination of the Threatened Status of Northern Spotted Owl, 55 Fed. Reg. 26,114, 26,116 (June 26, 1990).

33. Determination of the Threatened Status of Northern Spotted Owl, 55 Fed. Reg. 26,114, 26,118 (June 26, 1990) ("Approximately 90% of the roughly 2,000 known breeding pairs of spotted owls have been located on federally managed lands . . . .").

34. *See* Seattle Audubon Soc'y v. Evans, 771 F. Supp. 1081, 1083 (W.D. Wash. 1991) (Seattle Audubon Soc'y I) ("[A] record of decision issued on December 8, 1988, and an accompanying Final Supplement to the Environmental Impact Statement for an Amendment to the Pacific Northwest Regional Guide . . ." were both challenged in this action).

Plans and contained guidelines for managing northern spotted owl habitat, violated the National Environmental Policy Act ("NEPA")[35] and the National Forest Management Act ("NFMA").[36] The Seattle Audubon Society agreed to a stay in the proceedings because the U.S. Fish and Wildlife Service decided to list the northern spotted owl as threatened.[37] Subsequent to the listing, the Forest Service vacated the Regional Guide and declared that it would manage timber activities in a manner consistent with the conservation strategy developed by the Interagency Scientific Committee ("ISC").[38] The Seattle Audubon Society challenged the agency's decision, and the court upheld the challenge on the grounds that the Forest Service did not have any standards and guidelines for spotted owl viability in place, thereby violating NFMA's requirement that agencies maintain viable populations of species.[39] The court ordered the agency to submit, by March 1992, standards and guidelines, together with an environmental impact statement ("EIS"), to ensure the viability of the owl, and enjoined the awarding of any future sales until the agency adopted and put into effect those standards.[40] The Ninth Circuit affirmed the district court's ruling, concluding that

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35. National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321-4370d (1994 & Supp. III 1997).

36. National Forest Management Act of 1976, 16 U.S.C. §§ 1600-1610 (1994 & Supp. III 1997). *See also* Seattle Audubon Soc'y I, 771 F. Supp. at 1083. The Seattle Audubon Society moved for an injunction prohibiting the sale of logging rights until the Forest Service complies with the NFMA). *Id.*

37. Seattle Audubon Soc'y I, 771 F. Supp. at 1084.

38. *Id.* at 1083 ("The Forest Service propose[d] . . . additional sales in owl habitat if they are consistent with the recommendations of the Report of the Interagency Scientific Committee of the Northern Spotted Owl issued in April 1990."); Northern Spotted Owl Habitat Management: Notice of Vacation of Northern Spotted Owl Guidance, 55 Fed. Reg. 40,413 (Oct. 3, 1990).

39. Seattle Audubon Soc'y I, 771 F. Supp. at 1086 (citing Order on Motions Heard (Dec. 5, 1990)). NFMA requires that "fish and wildlife habitats shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area." *Id.* Viable populations must have enough individuals to insure its continued existence and habitat must be provided to support at least a minimum number of reproductive individuals. 36 C.F.R. § 219.19 (1999).

40. Seattle Audubon Soc'y I, 771 F. Supp. at 1096.

the agency's duties under NFMA were distinct from its duties under the Endangered Species Act ("ESA").[41]

Also in March 1992, the Forest Service attempted to comply with both NFMA and NEPA by completing an EIS and record of decision that established guidelines, based on the ISC report, for managing spotted owl habitat.[42] Environmentalists challenged the EIS, claiming a violation of NEPA for failing to assess the consequences that continued logging might have on spotted owls. Environmentalists also cited violations of NFMA for failing to assure the viability of the spotted owl and other old-growth species.[43] The court concluded that the EIS violated NEPA because it did not consider the effects of BLM timber sales on the spotted owl, it did not evaluate a report containing new data on the owl, and it did not explain the risks posed to other species.[44] The court enjoined timber sales in spotted owl habitat until the Forest Service prepared another EIS that addressed these deficiencies.[45]

The Forest Service's actions were not the only actions attacked by environmentalists. In 1987, the Portland Audubon Society challenged the BLM's decision not to issue a supplemental EIS ("SEIS") that would replace EISs written in 1979-1983, claiming that the BLM violated NEPA by not considering new scientific studies concerning habitat requirements and population demographics of the spotted owl.[46] In 1992, following a long delay,[47]

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41. Seattle Audubon Soc'y v. Evans, 952 F.2d 297, 304-05 (9th Cir. 1991).

42. *See* Seattle Audubon Soc'y v. Moseley, 798 F. Supp. 1473, 1476 (W.D. Wash. 1992) (Seattle Audubon Soc'y II), *aff'd sub nom.*, Seattle Audubon Soc'y v. Espy, 998 F.2d 699 (9th Cir. 1993) (discussing the history of these environmental disputes and the adoption of these statements as the "preferred alternative").

43. Seattle Audubon Soc'y II., 798 F. Supp. at 1476.

44. Seattle Audubon Soc'y v. Espy, 998 F.2d at 703-5.

45. *Id.* at 702.

46. Portland Audubon Soc'y v. Lujan, 795 F. Supp. 1489, 1492–93 (D. Or. 1992), *aff'd sub. nom.*, Portland Audubon Soc'y v. Babbitt, 998 F.2d 705 (9th Cir. 1993).

47. A congressional rider in the 1987 appropriations act barred certain environmental challenges to timber sales, including NEPA challenges. This rider declared that actions on Forest Service land and BLM land in areas that contain spotted owls need only comply with the rider and not with other environmental statutes. The rider expired in 1992.

the district court in Oregon declared that the BLM had violated NEPA because it did not complete a SEIS that considered new scientific information on the effects of logging on spotted owl survival.[48] The court enjoined the BLM from issuing any further timber sales until it submitted to the court a SEIS that reexamined the effects of its proposed activities after considering significant new information about the owl's viability and habitat needs.[49]

When the district courts halted logging on a large portion of federal timberland in the Pacific Northwest, the executive branch of the federal government stepped in. President Clinton established the Forest Ecosystem Management Assessment Team ("FEMAT") and directed it to prepare an assessment for the management of federal forests within the spotted owl's range.[50] FEMAT eventually prepared a report that analyzed ten alternatives, varying both in the amount of land allocated to reserves and in the types of activities permitted inside and outside of the reserves.[51] The Forest Service and BLM prepared a joint EIS, using "option nine" from the FEMAT report as the preferred alternative.[52] Option nine was the "middle-ground" of the options, allowing some logging in late-successional reserves but prohibiting harvest in stands older than eighty years and requiring buffers for old-growth dependent species.[53] This option also required some retention of trees on lands outside of the reserves[54] and established an ACS for all the lands.[55] President Clinton endorsed the alternative, and in April 1994, after extensive public comment, the

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See Department of Interior and Related Agencies Appropriations Act, Pub. L. No. 100-446, 102 Stat. 1774 (1988).

48. Portland Audubon Soc'y, 795 F. Supp. at 1507.

49. *Id.* at 1510-11.

50. *See* DSEIS, *supra* note 6, at S-1. After a day-long conference led by President Clinton, FEMAT was assembled to prepare an approach to forest management that will protect the ecosystem. *Id.*

51. *Id.* at S-4.

52. *Id.* at S-1. For a comparison of the options with regard to specific objectives, *see* RECORD OF DECISION, *supra* note 2, at 20-25.

53. RECORD OF DECISION, *supra* note 2, at 26 (stating that Alternate 9 is the best alternative to maintain old-growth forest while providing human use).

54. *See id.* at C-41 (describing green tree and snag retention).

55. *See id.* at B-9-B-11 for an overall description of the ACS and its objectives.

Forest Service and BLM adopted the record of decision ("ROD"),[56] which became known as the Northwest Forest Plan.

Environmental and industry groups quickly challenged the Northwest Forest Plan for procedural and substantive violations.[57] The district court upheld the validity of the Northwest Forest Plan and decided that: (1) it complied with NEPA because it reasonably discussed the environmental consequences of a range of alternatives,[58] and (2) it complied with NFMA's viability requirements because it provided an 80% likelihood of viable populations of all but three vertebrate species.[59] Judge Dwyer noted that the Plan provided for the highest level of timber harvest that would still satisfy the requirements of the statutes and declared that "any more logging sales than the Plan contemplates would probably violate the laws."[60] He also stated that each major part of the Plan must be implemented.[61] The Ninth Circuit affirmed Judge Dwyer's ruling, agreeing that the Forest Service analyzed a range of alternatives and complied with NFMA's viability requirements.[62]

The challenges to Forest Service and BLM management plans abated after the courts upheld the Northwest Forest Plan. The agencies finally had a legally acceptable management plan for the forests within the range of the spotted owl, which allowed them to proceed with timber harvesting. The Plan was the first ever to encompass an entire region rather than an individual forest and also to combine directives for two agencies.[63] In addition, the Plan was

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56. *See generally* RECORD OF DECISION, *supra* note 2.

57. *See* Seattle Audubon Soc'y v. Lyons, 871 F. Supp. 1291 (W.D. Wash. 1994) (Seattle Audubon Soc'y III), *aff'd sub nom.*, Seattle Audubon Soc'y v. Moseley, 80 F.3d 1401 (9th Cir. 1996).

58. Seattle Audubon Soc'y III, 871 F. Supp. at 1319.

59. *Id.* at 1316. The three species that will not have an 80% viability likelihood are salamanders that exist almost exclusively on nonfederal land or inhabit an area of only several acres. *Id.*

60. *Id.* at 1300.

61. *Id.* at 1324 ("For example, a failure to monitor adequately, which is a major part of the Plan, results in a call for reconsideration.").

62. Seattle Audubon Soc'y v. Moseley, 80 F.3d at 1404.

63. RECORD OF DECISION, *supra* note 2, at 1. The Forest Service and BLM are currently working together on an ecosystem management plan for eastern Oregon and Washington. *See Interior Columbia Basin Ecosystem Management Plan, Joint Hearing Before the Subcomm. on Forests and Public Land Management of the Senate Comm. on Energy and Natural Res. and the Subcomm. on Forests and Forest Health of the House*

the first to rely on findings from an independent scientific team as its core principles; the findings by FEMAT were the backbone of the Plan and were intended to lead the agencies to successful management.

II. THE NORTHWEST FOREST PLAN AND ECOSYSTEM MANAGEMENT

The Northwest Forest Plan calls for an ecosystem management approach to managing federal forests within the range of the northern spotted owl.[64] The Plan attempts to "respond to multiple needs, the two primary reasons being the need for forest habitat and the need for forest products,"[65] through a system of land allocations, an ACS, requirements to survey a variety of species, and a monitoring program.[66] The first part of the Plan assigns all 24.4 million acres of federal land covered by the Plan to one of seven land allocations.[67] Five of these seven categories are various types of reserves, with either no timber harvest allowed or harvesting that would enhance late-successional or old-growth forest characteristics.[68] The Plan allocates 18.8 million acres to these five designations, 78 percent of the total lands covered by the Plan.[69] By setting up a system of reserves, the Plan establishes a landscape-level approach to help protect and restore biodiversity. One of the

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Comm. on Res. 105th Cong. 64 (1997), *microformed on* CIS No. 97-H651-45 (Cong. Info. Serv.) (statement of Sen. Larry E. Craig). The two agencies are combining efforts again, in the Interior Columbia Basin, conducting sub-basin reviews from 1998-2000 and implementing project level actions in 2001. *Id.*

64. RECORD OF DECISION, *supra* note 2, at 5.

65. *Id.* at 25.

66. *See generally* RECORD OF DECISION, *supra* note 2 (setting forth the common management approach which is a monitoring program).

67. The seven land allocations are congressionally reserved areas, late-successional reserves, adaptive management areas, managed late-successional areas, administratively withdrawn areas, riparian reserves, and matrix land. *Id.* at A-4.

68. *Id.* at C-8 (Congressional reserves), C-11 (late-successional reserves), C-26 (managed late-successional reserves), C-29 (administratively withdrawn areas), C-31 (riparian reserves).

69. *Id.* at A-4-A-5 (identifying in thousand acres, 7,321 Congressionally reserved areas, 7,431 late-successional reserves, 1,522 adaptive management areas, 102 managed late-successional areas, 1,477 administratively withdrawn areas, 2,628 riparian reserves, and 3,975 matrix lands).

goals of ecosystem management is to have managers incorporate into their analyses a holistic view of natural systems covering large areas, rather than solely focusing on individual parts of the forest.[70] The Plan assigns the remaining 5.5 million acres to the two land allocations that allow for timber harvest.[71] This land will provide most of the 1.1 billion board feet of timber that the agencies can harvest annually.[72] By managing for timber harvest and protection of species, the Plan attempts to fulfill the ecosystem management goal of integrating the human and biological dimensions of natural resource management to achieve sustainability of all resources.[73]

The second component of the Plan, the ACS, is designed to restore and maintain the health of aquatic ecosystems and applies to all of the Forest Service and BLM administrated lands.[74] Managers must conduct Planning for this strategy at four spatial scales: region (Pacific Northwest), river basin, watershed, and individual site.[75] While the FEMAT report stated that the most comprehensive analyses are conducted at the watershed level, the report stressed that

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70. *See Hearing*, *supra* note 15, at 5 (statement by Jack Ward Thomas) (stating that we should be managing on a landscape scale, not timber stand by timber stand). *See also* Robert C. Szaro et al., *The Emergence of Ecosystem Management as a Tool for Meeting People's Needs and Sustaining Ecosystems*, 40 LANDSCAPE AND URBAN PLANNING 1-3 (1998) (describing how the inadequacy of the traditional resource management paradigm, which primarily focused on site-based management strategies, to deal with multiple scales and larger areas helped give rise to concept of ecosystem management).

71. The two allocations that allow harvest are the adaptive management areas and matrix land. RECORD OF DECISION, *supra* note 2, at A-4.

72. *Id.* at 24. *See also* Memorandum in Support of Defendant's Motion for Summary Judgment and Opposition to Plaintiff's Motion for Summary Judgment at 39, Oregon Natural Res. Council Action v. U.S. Forest Serv., 59 F. Supp. 2d 1085 (W.D. Wash. 1999) (C98-942) (citing Forest Service Region 5 and Region 6 and BLM figures). In 1998, the agencies lowered the probable sale quantity to 811 million board feet per year. *Id.*

73. *See, e.g.*, Brussard, *supra* note 16, at 10 ("[O]ur definition of ecosystem management is [] managing areas at various scales in such a way that ecosystem services and biological resources are preserved while appropriate human uses and options for livelihood are sustained.").

74. RECORD OF DECISION, *supra* note 2, at B-9, B-11. Each of the components of the ACS, applies to all seven of the land allocations.

75. *See supra* note 17.

"information collected at the finer scales provides early warning of likely future problems at the broader scales."[76] Ecosystem management emphasizes the importance of assessing effects of projects at various scales, from the landscape level down to the specific site level.[77] This helps agencies manage for the complexity of the ecosystem, and therefore helps to protect species.

The ACS requires the agencies to restore or maintain healthy aquatic ecosystems by restricting timber harvests in riparian areas[78] and important watersheds to those that provide benefits to the aquatic ecosystem, and by requiring managers to conduct watershed analyses and watershed restoration projects.[79] When doing watershed analyses, managers must consider both the short-term and long-term effects of timber sales and other projects. In the short-term, agencies need to assure against losses of diversity and ecological processes;[80] in the long-term, they must achieve restoration and appropriate conditions at the landscape scale.[81] This type of analysis aims to protect and restore biodiversity, which is a critical factor in sustaining the health and productivity of ecosystems.[82] By assessing the short-term effects of projects, managers can determine whether

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76. *Id.* at V-I-3.

77. Brussard, *supra* note 16, at 17.

78. A riparian area is "land along streams and unstable and potentially unstable areas where special standards and judgments direct land use." RECORD OF DECISION, *supra* note 2, at B-12.

79. *Id.* at B-13-B-30 (describing the ACS, and the importance of watershed analysis).

80. *See infra* note 83 and accompanying text.

81. RECORD OF DECISION, *supra* note 2, at 3-4 (stating that the Standards and Guidelines adopted "will provide for a steady supply of timber sales and nontimber resources that can be sustained over the long term without degrading the health of the forest or other environmental resources.").

82. Susan C. Loeb et al., *The Role of Fish, Wildlife, and Plant Research in Ecosystem Management*, 40 LANDSCAPE AND URBAN PLANNING 131, 132 (1998) (finding biodiversity as a factor in sustaining the productivity of ecosystems). *See also* Bruce G. Marcot, *Biodiversity of Old Forests of the West: A Lesson from our Elders, in* CREATING A FORESTRY FOR THE 21ST CENTURY: THE SCIENCE OF ECOSYSTEM MANAGEMENT 87, 97 (Kathryn A. Kohm & Jerry F. Franklin eds., 1997) (describing lessons learned by studying "neglected" life forms).

that project will imperil a localized population of a species, possibly threatening the existence of that species.[83]

The third aspect of the Northwest Forest Plan requires agencies to conduct surveys for hundreds of species.[84] Ecosystem management requires a thorough understanding of the environment and its complexity. To preserve species, thereby preserving biodiversity, managers must improve their understanding of the relationships among organisms and between organisms and their environment.[85] Surveys are the primary method of increasing knowledge about the ecosystem and the relation of species to their environment. Surveys provide baseline information about where species exist and what type of habitat they require, allowing managers to plan projects, like timber sales or herbicide spraying, while protecting species, a key element of ecosystem management.[86]

The Plan's survey requirements cover 414 species, each of which falls into one of four survey categories.[87] "Category one" surveys do not require field surveys, but require that project planners use the

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83. *See* Pac. Coast Fed'n of Fishermen's Ass'n v. Nat'l Marine Fisheries Serv., 71 F. Supp. 2d 1063, 1070 (W.D. Wash. 1999) (finding that assessments must occur immediately after a sale of timber, rather than relying on tree regrowth, in order to mitigate the adverse impacts of logging).

84. *See* RECORD OF DECISION, *supra* note 2, at C-4-C-6 for a description of the surveys. *See also id.* at Table C-3 (listing all of the species that are protected through survey and manage standards and guidelines).

85. WILLIAM WEEKS, BEYOND THE ARK 39 (1997) (finding that understanding is an ongoing process).

86. Ecosystem management calls for protecting not only well known species but also small and inconspicuous life forms, which play key ecological roles. Marcot, *supra* note 82, at 89 (comparing small, inconspicuous life forms with more visible Plants, both of which have key ecological functions); *see also* CENTER FOR CONSERVATION RES. AND TECH., RESOURCE MANAGER'S TECHNICAL REVIEW: ADVANCED TECHNOLOGIES FOR THE CONSERVATION OF BIODIVERSITY, HABITATS, AND ECOSYSTEMS 8 (1998) ("[T]he process in [ecosystem] management planning begins with a thorough inventory and description of the natural system's flora and fauna.").

87. The four survey categories are: (1) manage known sites, (2) survey prior to ground-disturbing activities, (3) extensive surveys, and (4) general regional surveys. RECORD OF DECISION, *supra* note 2, at C-4-C-6, Table C-3.

information about known species sites when designing activities to ensure protection for that species.[88]

The "category two" surveys require field surveys of project areas before any ground-disturbing activity occurs.[89] The Plan requires that the agencies conduct surveys for several species of salamanders and the red tree vole before any ground-disturbing activities are implemented by the agency in 1997 or thereafter.[90] Surveys for other category two species must occur prior to ground-disturbing activities that are implemented in 1999 or thereafter.[91] Managers must direct these surveys to the likely range and habitat of the species.[92] If no survey protocol exists for these species, managers must develop a protocol in time to implement surveys before the deadlines.[93] When surveyors locate "category two" species, the agencies must develop management standards to manage the species' habitat at those sites.[94]

"Category three" and "category four" surveys extend over broader landscapes and are not connected to specific planning activities. Category three surveys must identify high priority sites for species that are difficult to survey, and therefore the surveys will occur when environmental conditions allow for proper identification.[95] "Category four" surveys are purely for the informational needs of managers.[96] The objective is to acquire additional information and determine necessary levels of protection for poorly known species, such as arthropods, lichens, and some fungi and bryophytes.[97] The surveys in

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88. *Id.* at C-4-C-5.

89. *Id.* at C-5.

90. *Id.* The Plan separates amphibians and the red tree vole from other species because the agencies have more information about vertebrate species and can develop protocols and implement surveys more quickly for them than for the lesser known invertebrate species. *Id.*

91. *Id.* The Plan allows the agencies four full fiscal years to develop and apply survey protocols for the invertebrate species.

92. RECORD OF DECISION, *supra* note 2, at C-5 (explaining that with most species, the survey would start at watershed analyses).

93. *Id.* The deadline is prior to ground-disrupting activities in fiscal year 1999.

94. *Id.*

95. *Id.* at C-5-C-6. In addition, surveys will be done according to the most efficient schedule. *Id.* at C-5.

96. *Id.* at C-6.

97. *Id.*

these categories do not have to occur prior to ground-disturbing activities.[98]

The fourth component of the Northwest Forest Plan incorporates the strategy of adaptive management through the use of monitoring and evaluation. The Plan calls for agencies to monitor their actions, providing feedback to land managers who will evaluate the findings and determine whether to change their plans or actions, based on the evaluations.[99] This accomplishes the ecosystem management goal of adjusting to new information by giving managers the flexibility to revise plans in order to move toward desired objectives or conditions.[100]

These four components of the Northwest Forest Plan attempt to implement an ecosystem management approach to managing federal lands. But, as Judge Dwyer stated in *Seattle Audubon Society v. Lyons*,[101] the agencies must fulfill all of the requirements of the Northwest Forest Plan to ensure that they comply with the law.[102] The Plan allows managers time to develop the necessary protocols and strategies. The agencies, however, have neglected to complete the required surveys and comply with the ACS, which has led to more lawsuits challenging their failure to act.

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98. U.S. FOREST SERV. & BUREAU OF LAND MGMT., DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT FOR AMENDMENT TO THE SURVEY AND MANAGE, PROTECTION BUFFER, AND OTHER MITIGATION MEASURES STANDARDS AND GUIDELINES xxii (Dec. 1999) [hereinafter DSEIS II]. In Dec. 1999, the Forest Service and BLM issued a draft EIS that amends the survey requirements. The preferred alternative proposes to: (1) remove 64 species from the list, (2) discard the original four survey categories and assign species to six new survey categories based on rarity and the level of information known about the species, and ease of locating sites, and (3) allow for species to change categories or be added to or removed from the list when new information emerges. *Id.*

99. RECORD OF DECISION, *supra* note 2, at E-2.

100. *Id.* at E-1 ("Monitoring results will provide managers with the information to determine whether a goal has been met, and whether to continue or to modify the management direction.").

101. 871 F. Supp. 1291 (W.D. Wash. 1994), *aff'd sub nom.*, Seattle Audubon Soc'y v. Moseley, 80 F.3d 1401 (9th Cir. 1996).

102. Seattle Audubon Soc'y v. Lyons, 871 F. Supp. at 1325 (finding that each major part of this Plan must be implemented).

III. THE IMPLICATIONS OF *OREGON NATURAL RESOURCES COUNCIL ACTION V. U.S. FOREST SERVICE* AND *PACIFIC COAST FEDERATION OF FISHERMAN'S ASSOCIATION V. NATIONAL MARINE FISHERIES SERVICE*

The Forest Service and BLM began developing management plans after Congress passed NFMA and FLPMA. These statutes and their implementing regulations require that the Forest Service and BLM "develop, maintain, and [as] appropriate, revise 'land and resource management plans' for their respective lands."[103] Although the statutes did not mandate the development of the Northwest Forest Plan, this Plan has amended other statutorily mandated plans with additional land allocations, standards and guidelines.[104] Courts have upheld challenges to agency actions when the actions do not comply with the management plans.[105] Courts have been willing to enforce the provisions of forest and district plans because NFMA and FLPMA require that agency actions be consistent with these management plans.[106] Therefore, the Northwest Forest Plan is now the current land management plan of the agencies where it applies.

The controversies in *Oregon Natural Resources Council Action v. U.S. Forest Service*[107] and *Pacific Coast Federation of Fisherman's Association v. National Marine Fisheries Service*[108] centered on the Northwest Forest Plan, a planning document covering an entire

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103. 16 U.S.C. § 1604(a) (1994); 36 C.F.R. § 219.1(a) (1999); *see also* Federal Land Policy and Management Act of 1976, 43 U.S.C. § 1712(a) (1994); 43 C.F.R. § 1610.1 (1998).

104. RECORD OF DECISION, *supra* note 2, at 11–12 (coordinating the Plan with other agencies, the BLM, and the Forest Service).

105. *See e.g.*, Sierra Club v. Martin, 168 F.3d 1, 5 (11th Cir. 1999) (finding that the U.S. Forest Service violated NFMA when it approved sales without doing inventories of threatened, endangered, and sensitive species as required by a forest plan); Neighbors of Cuddy Mountain v. United States, 137 F.3d 1372, 1382 (9th Cir. 1998) (finding that the Forest Service violated NFMA by failing to ensure that timber sale impact on old-growth habitat was consistent with forest plan).

106. 16 U.S.C. § 1604(i) (1994) ("Resource plans and permits, contracts, and other instruments for the use and occupancy of National Forest lands shall be consistent with the land management plans."); 43 U.S.C. § 1732(a) (1994) ("The Secretary shall manage the public lands . . . in accordance with the land use plans developed by him.").

107. Or. Natural Res. Council Action v. U.S. Forest Serv., 59 F. Supp. 2d 1085 (W.D. Wash. 1999).

108. Pac. Coast Fed'n of Fishermen's Ass'n v. Nat'l Marine Fisheries Serv., 71 F. Supp. 2d 1063 (W.D. Wash. 1999).

ecological region,[109] unlike most land management plans which cover a single forest or district within a single agency.[110] In *Oregon Natural* and *Pacific Coast*, the courts refused to defer to the agencies' interpretations of the requirements of the Plan and enjoined numerous timber sales due to violations of the Plan. The court decisions may be critical to future management practices because they will force agencies to carry out all of the requirements of the Northwest Forest Plan's ecosystem management strategy. The decisions make clear that agencies cannot rely on complying only with environmental statutes because the Northwest Forest Plan imposes new substantive requirements that agencies must fulfill in addition to the statutory requirements already in place. If the agencies want to continue to harvest timber, they must find a way to abide by the Plan.

A. Oregon Natural Resources Council Action v. U.S. Forest Service

On August 2, 1999, the U.S. district court in western Washington imposed a preliminary injunction on nine U.S. Forest Service and BLM timber sales covered by the Northwest Forest Plan.[111] Environmental groups, led by the Oregon Natural Resources Council ("ONRC"), claimed that the agencies had violated NFMA, FLPMA, and NEPA by not conducting the required surveys for rare species before approving the nine sales and by not considering new information about water quality and salmon in an SEIS.[112] The court denied plaintiff's NEPA claim but upheld the NFMA and FLPMA claim.[113] Because the agencies had not acted consistently with the land management Plan, they violated the statutes.[114] With this

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109. RECORD OF DECISION, *supra* note 2, at 1.

110. *See e.g.* U.S. FOREST SERV., MT. HOOD NATIONAL FOREST LAND AND RESOURCE MANAGEMENT PLAN (1990); BUREAU OF LAND MGMT., SALEM DISTRICT LAND AND RESOURCE MANAGEMENT PLAN (1995).

111. Or. Natural Res. Council Action v. U.S. Forest Serv., 59 F. Supp. 2d 1085, 1097 (W.D. Wash. 1999).

112. Plaintiff's Memorandum in Support of Motion for Summary Judgment at 1-2, Oregon Natural (No. C98-942) (claiming the agencies violated NFMA and FLPMA by failing to comply with the Plan's survey requirements and failing to comply with NEPA by not preparing an SEIS).

113. Or. Natural, 59 F. Supp. 2d at 1096-97.

114. *Id.*

holding, the court determined that the provisions of the Northwest Forest Plan are judicially enforceable.

1. Violation of Category Two Survey Requirements

Oregon Natural Resources Council challenged the U.S. Forest Service and BLM memoranda that were issued after the adoption of the Northwest Forest Plan and designed to clarify which sales needed "category two" surveys. ONRC claimed that the memoranda were unlawful because they excused the agencies from fulfilling the survey requirements of the Plan.[115] The Northwest Forest Plan called for the agencies to conduct "category two" surveys for certain species prior to ground-disturbing activities that would be implemented in 1999 or later.[116] However, in the memoranda, the agencies stated that "implemented" was equal to the issuance of a NEPA decision,[117] which effectively exempted all sales that had environmental assessments ("EA") or EISs signed prior to 1999, even if the ground-disturbing activities would occur in 1999.[118] ONRC argued that the plain language of the Plan required surveys before "ground disturbing activities," not before "NEPA decisions."[119] They further argued that the agencies' memoranda effectively amended the survey requirements of the Northwest Forest Plan without following the required procedures for such amendments under NFMA and FLPMA,[120] and as a result, violated those statutes by not managing their lands in accordance with the Plan.[121]

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115. Plaintiff's Memorandum in Support of Motion for Summary Judgment at 1-2, 5-6, Oregon Natural (No. C98-942) (claiming that the defendants violated NFMA and FLPMA because they amended the record of decision by exempting timber sales from the survey requirements).

116. RECORD OF DECISION, *supra* note 2, at C-5. The Plan delayed the survey deadline until 1999 so that the agencies would have time to develop survey protocols for the species. *Id.*

117. Memorandum in Support of Defendant's Motion for Summary Judgment and Opposition to Plaintiff's Motion for Summary Judgment at 14, Oregon Natural (No. C98-942). This is the equivalent of either an EIS or an EA and a Finding of no Significant Impact.

118. Plaintiff's Memorandum in Support of Motion for Summary Judgment at 6, Oregon Natural (No. C98-942).

119. *Id.* at 6-7.

120. NFMA and FLPMA both require revisions of land and resource management plans to be made in accordance with certain procedures for public involvement. 16 U.S.C. § 1604(d) (1994); 36 C.F.R.

The agencies defended their memoranda by arguing that the court should defer to the agencies' interpretation of the Plan's language. They claimed that the language "implemented in 1999 or later" was ambiguous and therefore the court should give deference to the agencies' interpretation of that language.[122]

In answering the agencies, the court reiterated the need to comply with the Northwest Forest Plan due to the marginal state of wildlife species in federal forests.[123] Judge Dwyer highlighted the importance of monitoring and cited to his previous opinion, where he stated that if monitoring was not done, the Plan would have to be reconsidered.[124] In rejecting the agencies' memoranda that excused survey requirements for all sales that had NEPA decisions by 1999, the court stated that "[t]he record shows that Forest Service and BLM managers uniformly relied on these memoranda in deciding not to require category two surveys before approving the nine timber sales challenged here, even though ground-disturbing activities have yet to begin on any of those sales."[125] The court determined that the agencies, in relying on their own memoranda excusing them from conducting surveys, were acting in opposition to the plain language of the Northwest Forest Plan and their actions were therefore arbitrary.[126] The court found that the agencies' memoranda, which

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§ 219.10(f) (1999); 43 U.S.C. § 1712(a), (f) (1994); 43 C.F.R. § 1610.5-5 (1999).

121. Plaintiff's Memorandum in Support of Motion for Summary Judgment at 3, Oregon Natural (No. C98-942).

122. Memorandum in Support of Defendant's Motion for Summary Judgment and Opposition to Plaintiff's Motion for Summary Judgment at 16, 18-19, Oregon Natural (No. C98-942) (finding that the term "implementing" is ambiguous in its description as a deadline for an action and that an agency should get deference if a term is ambiguous). *See also* Chevron U.S.A., Inc. v. Natural Res. Defense Council, Inc., 467 U.S. 837, 865 (1984) (holding that agency should get deference if the meaning of a term in a regulation is ambiguous); Thomas Jefferson Univ. v. Shalala, 512 U.S. 504, 512 (1994) (stating that a court should not defer to an agency interpretation that contradicts the plain language of a statute).

123. Or. Natural Res. Council Action v. U.S. Forest Serv., 59 F. Supp. 2d 1085, 1091 (W.D. Wash. 1999).

124. *Id.* (citing Seattle Audubon Soc'y v. Lyons, 871 F. Supp. 1291, 1321, 1324 (W.D. Wash. 1994)).

125. *Id.* at 1092.

126. *Id.* at 1093. The court did not consider the language of the Plan concerning the survey requirements to be ambiguous and

equated a NEPA decision with the implementation of ground-disturbing activities, exempted numerous timber sales from the survey requirements[127] and therefore created an incentive to rush NEPA decisions in order to be able to avoid doing surveys. Judge Dwyer noted that the agencies signed EISs for four of the nine sales challenged in this case in the last month before the survey requirements would begin to apply under the defendants' memoranda, thereby allowing the sales to proceed without conducting the surveys.[128]

In its opinion, the court emphasized that the purpose of the survey requirements and the intent of the Northwest Forest Plan is to protect species by locating them before logging occurs and that "exemptions from the survey requirements would undermine the management strategy on which the [Plan] depends."[129] To best protect species, the Plan requires site-specific analysis before the agencies award timber sales.[130] The court acknowledged that the Plan amends agency planning documents: "[t]his record of decision . . . amend[ed] various Forest Service and BLM planning documents; timber sales offered subsequent to the effective date of the Record of Decision must be consistent with these planning documents."[131] With that statement, the court emphasized the enforceability of the Plan by equating the Northwest Forest Plan with NFMA and FLPMA mandated plans with which agencies must act consistently. This opinion concluded that the agencies' action exempting category two surveys by equating a "NEPA decision" with "implementing" ground-disturbing activities was unlawful because the Plan's survey requirements were "clear, plain, and unmistakable" and the agencies violated NFMA and FLPMA by not abiding by the requirements in the Plan.[132]

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consequently it gave no deference to the agencies' interpretation of that language. *Id.* at 1094.

127. Or. Natural, 59 F. Supp. 2d at 1093. Any sale that had an EA or EIS signed before the 1999 deadline would not need surveys done, even if actual ground-disturbing activities occurred after the deadline.

128. *Id.* Other sales that plaintiff did not challenge in this suit had EAs signed in that last month as well.

129. *Id.*

130. *Id.*; RECORD OF DECISION, *supra* note 2, at 13.

131. Or. Natural, 59 F. Supp. 2d at 1093 (citing RECORD OF DECISION, *supra* note 2, at 13).

132. *Id.* at 1094.

2. Violation of Red Tree Vole Survey Requirements

The environmentalists of ONRC also challenged the agencies' survey protocol for the red tree vole, which is a category two mammal that is a primary source of food for the spotted owl.[133] They claimed that the survey protocol at issue violated the Northwest Forest Plan by failing to take into account the impact on this species in accordance with the Plan.[134] The Plan required surveys for red tree voles "within their known or suspected ranges and within the habitat types or vegetation communities associated with the species."[135] However, the survey protocol issued by the agencies after the adoption of the Plan excluded almost 90% of the range and habitat of the red tree vole from survey requirements,[136] stating that surveys were not required in areas that were too isolated for red tree voles to disperse, or in areas where habitat for red tree voles was plentiful.[137] In reaction to this claim, ONRC alleged that the exemption of surveys for red tree voles was contrary to the language in the Northwest Forest Plan.[138] The agencies then countered by claiming that the court should defer to their own experts' survey protocol for red tree voles.[139]

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133. RECORD OF DECISION, *supra* note 2, at C-5 (placing the red tree vole in category two). *See also* DSEIS II, *supra* note 98, at xxxvii (reporting that the red tree vole is a large percentage of the northern spotted owl's total diet).

134. Plaintiff's Memorandum in Support of Motion for Summary Judgment at 10, Oregon Natural (No. C98-942) (stating that the survey protocols provide "significant violations of the record of decision").

135. RECORD OF DECISION, *supra* note 2, at C-5. This survey also applies to a variety of salamander species. *Id.*

136. Plaintiff's Memorandum in Support of Motion for Summary Judgment at 11, Oregon Natural (No. C98-942).

137. Memorandum in Support of Defendant's Motion for Summary Judgment and Opposition to Plaintiff's Motion for Summary Judgment at 22, Oregon Natural (No. C98-942) (citing BLM and Forest Service guidance memorandum which state that surveys are not required where there is a "sufficient threshold of red tree vole habitat").

138. Plaintiff's Memorandum in Support of Motion for Summary Judgment at 11, Oregon Natural (No. C98-942) (finding that the spirit and letter of the record of decision have been violated).

139. Memorandum in Support of Defendant's Motion for Summary Judgment and Opposition to Plaintiff's Motion for Summary Judgment at 24, Oregon Natural (No. C98-942) ("In issuing this protocol,

The court determined that the agencies' protocol for red tree vole surveys was unlawful because it did not abide by the requirements set forth in the Northwest Forest Plan.[140] The court noted that while the Plan allowed for the agencies' discretion to conduct surveys at a scale appropriate for the species, "it [did] not allow the agencies to forgo surveys altogether, or to exempt broad areas from the [survey] requirements."[141] Instead, the Plan requires the agencies to conduct surveys within the species' known or suspected ranges and habitats before ground-disturbing activity could occur.[142] However, the agencies' protocol did just the opposite of this: it determined the likely locations of the voles by identifying their ranges and habitats, and then exempted these areas from surveys.[143] The court stated that, "[t]he Plan's requirement that surveys be conducted cannot be dropped simply by the issuance of [a protocol] concluding that 'field surveys are not needed.'"[144] Because the language in the Plan was clear as to when and where surveys were required, the court gave no deference to the agencies' protocol. The court declared the protocol unlawful because by conflicting with the Plan's survey protocol requirements, it violated the NFMA and FLPMA mandates which required that agency actions be consistent with land use plans.[145] The agencies could only change the survey procedures by properly amending the Northwest Forest Plan first.

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the agencies are entitled to rely on the expertise of agency biologists to describe the proper scope and focus of the survey effort.").

140. Or. Natural, 59 F. Supp. 2d at 1094-95.

141. *Id.* at 1095 (citing RECORD OF DECISION, *supra* note 2, at C-5). Surveys could begin at the watershed level to identify likely locations of species. Once identified, these locations would be thoroughly searched. RECORD OF DECISION, *supra* note 2, at C-5.

142. RECORD OF DECISION, *supra* note 2, at C-5.

143. Or. Natural, 59 F. Supp. 2d at 1095.

144. *Id.*

145. *See id.* at 1094-95; National Forest Management Act of 1976, 16 U.S.C. § 1604(i) (1994); Federal Land Policy and Management Act of 1976, 43 U.S.C. § 1732(a) (1994).

3. No NEPA Violation for Failure to Prepare a Supplemental EIS

The environmentalists' final claim is that the agencies violated NEPA, due to the their failure to prepare an SEIS.[146] The SEIS should have contained new information about declines in water quality and fish populations[147] and any changed circumstances, which may have resulted from the 1995 salvage logging rider that led to the agencies' harvesting of higher than expected levels of old-growth reserves.[148] The agencies countered this claim by alleging that NEPA and the Northwest Forest Plan allowed for responses to new information at a site-specific level, rather than at the regional level.[149] The agencies also asserted that there was no need for an SEIS because much of the information ONRC referred to was not, in fact, new information.[150]

The court considered whether the agencies' failure to prepare an SEIS violated the Administrative Procedure Act,[151] noting that a decision not to prepare an SEIS is discretionary, entitled to deference, and cannot be overturned unless it was arbitrary and

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146. NEPA requires that agencies prepare a supplemental EIS if there is significant new information about environmental concerns that are related to the proposed action. 40 C.F.R. § 1502.9(c)(1)(ii) (1999).

147. Since the adoption of the Plan, the states of Oregon and Washington listed over 1000 water bodies as water quality limited under section 303(d) of the Clean Water Act and NMFS listed 17 "evolutionarily significant units" of anadromous salmonids as threatened or endangered under the ESA. *See* Plaintiff's Memorandum in Support of Motion for Summary Judgment at 18, 20 Oregon Natural (No. C98-942).

148. *Id.* at 18-19. The salvage rider exempted timber sales from complying with the Northwest Forest Plan under a congressional directive. Recissions Act of 1995, Pub. L. No. 104-19, § 2001, 109 Stat. 240 (1995). *See also* Michael Axline, *Forest Health and the Politics of Expediency*, 26 ENVTL. L. 613, 613-14 (1996) (describing the salvage rider); *Legislative History of the Timber and Salvage Amendments Enacted in 104th Congress: A Small Victory for Timber Communities in the Pacific Northwest*, 26 ENVTL. L. 641 (1996) (describing the salvage rider).

149. Memorandum in Support of Defendant's Motion for Summary Judgment and Opposition to Plaintiff's Motion for Summary Judgment at 27, Oregon Natural (No. C98-942) (claiming that they focused on three levels: watershed, project and forest (or BLM district) levels).

150. *Id.* at 26 (further stating that the information was not new but was addressed, in any event).

151. 5 U.S.C. § 706(1) (1994).

capricious.[152] Under this standard of review, the court decided that the decision not to issue an SEIS did not constitute a violation of NEPA because ONRC did not cite any new information that could not presently be addressed using the adaptive management approach in the Plan.[153] The court stated that information regarding declines in water quality and fish populations did not relate to new data, but rather to new legal status under the Clean Water Act and Endangered Species Act, and therefore those changes did not, by themselves, require an SEIS.[154] The court also discounted the results from the salvage rider because the Plan and EIS contemplated as much as 100 to 170 million board feet of timber to come from old-growth reserves, and the amounts salvaged did not exceed that.[155] Finally, the court concluded that an SEIS was not warranted,[156] because the mechanisms of the Plan allowed managers to respond to any new information that did arise.[157]

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152. Or. Natural Res. Council Action v. U.S. Forest Serv., 59 F. Supp. 2d 1085, 1095 (citing Marsh v. Or. Natural Res. Council, 490 U.S. 360, 377-78 (1989)).

153. Or. Natural, 59 F. Supp. 2d at 1096.

154. *Id.* The Council on Environmental Quality regulations only state that agencies shall prepare SEISs if there are significant new circumstances or information relevant to environmental concerns that bear on the proposed action or its impacts. 40 C.F.R. § 1502.9(c)(1)(ii) (1999). However, other courts have determined that the listing of species does not in itself warrant a supplemental EIS. *See* Forest Conservation Council v. Espy, 835 F. Supp. 1202, 1215-16 (D. Idaho 1993), *aff'd*, 42 F.3d 1399 (9th Cir. 1994) (noting that the listing of chinook salmon as threatened did not provide new information or change the conditions or the habitat of the salmon because change in legal status did not change the biological status); Swanson v. U.S. Forest Serv., 87 F.3d 339, 344 (9th Cir. 1996) (finding that the listing of chinook salmon was not a significant new circumstance warranting an SEIS because determination about impact of timber sale on salmon was not premised on salmon's non-threatened status).

155. Or. Natural, 59 F. Supp. 2d at 1096; RECORD OF DECISION, *supra* note 2, at C-13 to C-16 (discussing the guidelines for the salvage of dead trees).

156. Or. Natural, 59 F. Supp. 2d at 1096.

157. *Id.* (stating that the record of decision anticipated that new information would arise, so it provided mechanisms to enable decision makers to respond to the information).

4. The Injunction and Settlement

Because the U.S. Forest Service and BLM's failure to implement the Plan's survey requirements was found to be unlawful, the court granted summary judgment for ONRC, issuing a preliminary injunction against all nine sales until a hearing for injunctive relief occurred.[158] Subsequent to the preliminary injunction, the Forest Service and BLM put on hold dozens of additional timber sales because, as in the case of the nine disputed sales, the agencies did not conduct any surveys for those sales.[159] Thus, the court's order effectively prevented the agencies from offering any new timber sales on lands covered by the Northwest Forest Plan until the agencies conducted the required surveys.

On November 18, 1999, before the *Oregon Natural* court issued its final injunctive relief, the parties reached a settlement.[160] The settlement allowed the Forest Service and BLM to remove nine of the seventy-seven species from the "category two" survey requirements because current surveys showed that the species were more abundant than previously thought.[161] The parties agreed that the agencies would conduct surveys before proceeding with logging of thirty-nine current sales,[162] but the plaintiffs agreed to waive any claims against any other sales that the agencies had already awarded.[163] The settlement prohibited the agencies from awarding any new sales until surveys have been conducted in the sale areas.[164] Therefore, while allowing the agencies to escape the survey requirements for some sales that they had already awarded, the settlement committed the agencies to conduct surveys for many

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158. *Id.* at 1096-97.

159. Hal Bernton & Osker Spicer, *Agencies Place Hold on Sales of NW Timber*, OREGONIAN, Aug. 12, 1999, at D1 (reporting that federal land agencies have decided to stop advertising all new timber sales to avoid any new legal problems after Judge Dwyer's decision).

160. *See* Stipulation for Order Dismissing Action: Order Thereon, Oregon Natural (No. C98-942).

161. *Id.* at 3. *See id.*, Exhibit C for a listing of the species.

162. Stipulation for Order Dismissing Action: Order Thereon at 3, Oregon Natural (No. C98-942).

163. *Id.* at 5.

164. *Id.* at 2-3.

current sales and all future sales unless they properly amend the Northwest Forest Plan.[165]

5. Lessons from *Oregon Natural*

Because the Northwest Forest Plan amended agency land management plans required by NFMA and FLPMA, the agencies must comply with NFMA and FLPMA's procedures for any amendments to the plan itself.[166] These statutes require that the agencies notify the public of any amendment to a land management Plan, comply with NEPA by issuing an EA or EIS for the amendment, allow the public to make written or verbal comments about the amendment, and address those comments before issuing the final version.[167] In its decision, the *Oregon Natural* court made it clear that until the Northwest Forest Plan is properly amended, it is binding on agencies and the agencies must adhere to its standards.

In developing the Northwest Forest Plan, the Forest Service and BLM promised to incorporate ecosystem management into their management practices. The agencies set standards and guidelines that attempted to move management away from the current site-specific approaches toward an overall ecosystem approach. However, the survey requirements of the Plan proved to be too resource intensive at a time when the Forest Service was undergoing budget and staff cuts.[168] The *Oregon Natural* decision made clear

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165. *Id.* at 4.

166. RECORD OF DECISION, *supra* note 2, at 13; Or. Natural, 59 F. Supp. 2d at 1093.

167. 16 U.S.C. § 1604(f)(4) (1994); 36 C.F.R. § 219.10(f) (1999); 43 U.S.C. § 1712(a), (f) (1994); 43 C.F.R. § 1610.5-5 (1999). NFMA and FLPMA regulations distinguish between amendments that would cause a significant change in the Plan and those that would not. If there would not be a significant change, NFMA requires public notification of the amendment and completion of NEPA procedures, which includes opportunity for public comment. If there would be a significant change in the Plan, the regulations additionally require approval by the Regional Forester or State Director of the BLM and opportunity for public appeal of an approval. *See also* 36 C.F.R. § 219.10(a)-(f) (1999); 43 C.F.R. §§ 1610.5-5, 5-1, 5-2 (1999).

168. Between 1992 and 1999, the Forest Service work force decreased by 23%. U.S. FOREST SERV., U.S. DEP'T OF AGRIC., OVERVIEW OF THE FOREST SERVICE WORKFORCE, *available at* http://www.fs.fed.us/people/employ/wf_planning/CHAPTER_TWO.htm (last visited Apr. 5,

that, despite the financial burden, the agencies must comply with the promises they made in the Plan. In short, the agencies must find a way to fulfill the survey requirements if they want to harvest timber. This can be accomplished with more funding for personnel or by reducing the amount of timber harvest and thereby the amount of surveys needed.

Enforcing the survey provisions of the Northwest Forest Plan is important because it protects species and their habitats. The court explained that the category two surveys are "designed to identify and locate species; if they are not done before logging starts, plants and animals listed in the [Plan] will face a potentially fatal loss of protection."[169] This loss of protection could lead to the extirpation of that species from the habitat and hence a loss of diversity. Protecting biodiversity is one of the clear goals of ecosystem management,[170] and one of the directives of the Clinton Administration.[171] The court's order in *Oregon Natural* forces the agencies to comply with the survey requirements of the Northwest Forest Plan unless the agencies properly amend the Plan according to NFMA and FLPMA. As a result of this order, the agencies must conduct the surveys before harvesting timber, and must manage any discovered sites, thereby protecting species and implementing ecosystem management.

B. Pacific Coast Federation of Fisherman's Association v. National Marine Fisheries Service

One and one-half months after *Oregon Natural*, another judge in the western district of Washington sided with environmental groups. The plaintiffs in *Pacific Coast*[172] challenged four biological opinions

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2001). *See also* Kathryn A. Kohm & Jerry F. Franklin, *Institutions in Transition, in* CREATING A FORESTRY FOR THE 21ST CENTURY: THE SCIENCE OF ECOSYSTEM MANAGEMENT 357, 359 (Kathryn A. Kohm & Jerry F. Franklin eds., 1997) (discussing the lack of resources for ecosystem management research).

169. Or. Natural, 59 F. Supp. 2d at 1093.

170. *See* R. Edward Grumbine, *What is Ecosystem Management?*, 8 CONSERVATION BIOLOGY 27, 31 (1994) (reporting that the aim is to reduce the biodiversity crisis).

171. RECORD OF DECISION, *supra* note 2, at 3 ("[W]e need to protect the long term health of our wildlife and our waterways.").

172. 71 F. Supp. 2d 1063 (W.D. Wash. 1999).

of the NMFS, covering twenty-four Forest Service timber sales in the Umpqua River Basin of southwest Oregon. An injunction was granted, stopping all of the sales because the NMFS did not comply with the requirements of the Northwest Forest Plan in determining that the twenty-four timber sales would not jeopardize any threatened or endangered fish species.[173] Like the *Oregon Natural* court, the *Pacific Coast* court required compliance with all requirements of the Northwest Forest Plan.

The Endangered Species Act requires agencies to consult with the NMFS to insure that any action authorized, funded, or carried out by the agency is not likely to jeopardize listed salmon or result in the destruction or degradation of its critical habitat.[174] The NMFS uses biological opinions to evaluate and decide whether federal actions will harm fish listed as threatened or endangered under the ESA.[175] The Forest Service consulted with the NMFS regarding the effects of proposed timber sales on the threatened coastal coho salmon and the endangered Umpqua River cutthroat trout, concluding, in four biological opinions, that none of the sales were likely to jeopardize any fish species.[176]

1. Failure to Analyze Project Effects at Each Site

A coalition of commercial fishing and environmental groups challenged the NMFS biological opinions for not complying with the aquatic conservation strategy of the Northwest Forest Plan. The Pacific Coast Federation of Fisherman's Association ("PCFFA") argued that the NMFS made jeopardy determinations based only on whether a project degraded conditions of an entire watershed,[177]

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173. *Id. at* 1073; *see also Judge Halts 24 Timber Sales in the Umpqua River Basin*, OREGONIAN, Oct. 1, 1999, at C11.

174. 16 U.S.C. § 1536 (a)(2) (1994).

175. *Id.* § 1536(b)(3)(A).

176. Federal Defendant's Memorandum in Support of Cross Motion for Summary Judgment and Opposition to Plaintiff's Motion for Summary Judgment at 1, Pac. Coast Fed'n of Fishermen's Ass'n v. Nat'l Marine Fisheries Serv., 71 F. Supp. 2d 1063 (W.D. Wash. 1999) (No. C99-67R). The four biological opinions evaluated the effects of 23 timber sales in dispute in this action.

177. A watershed encompasses the area of land that drains water and sediment to a common outlet of a stream channel. THOMAS DUNNE & LUNA B. LEOPOLD, WATER IN ENVIRONMENTAL PLANNING 495 (1978).

without considering effects on individual project sites,[178] which is a danger to ecosystem management. By analyzing only whether a timber sale would degrade conditions of the watershed, the NMFS discounted the individual effects of the sale, ignoring degradation of specific sites that might be important for fish survival.[179] The challengers argued that the NMFS must assess whether each project is consistent with the ACS objectives, not just whether the entire watershed met the ACS standards.[180] PCFFA stated that NMFS had no scientific rationale for looking solely at the watershed scale when assessing compliance with the ACS objectives.[181]

NMFS countered with an appeal to agency deference, claiming that the Northwest Forest Plan made clear that the watershed scale was the appropriate scale when assessing consistency with the ACS objectives.[182] The agency interpreted the Plan's statement that the ACS "was developed to restore and maintain the ecological health of watersheds . . . and restore habitat over broad landscapes" to define the proper scale at which to analyze projects.[183] NMFS insisted that the Northwest Forest Plan's language indicated that an individual project's consistency with the ACS is demonstrated at the watershed scale,[184] and that the court should give this interpretation substantial deference.[185]

The court refused to defer to the NMFS's interpretation that agency actions must comply with the ACS only at the watershed scale, stating that the Northwest Forest Plan required evaluation of ecological health at the watershed scale because it was no longer appropriate to evaluate ecosystem degradation solely on a project by

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178. Memorandum in Support of Plaintiff's Motion for Summary Judgment at 11, Pacific Coast (No. C99-67R) (stating that by focusing on a large landscape, NMFS equates failure to meet ACS objectives with jeopardy, rather than looking at each individual factor).

179. *Id.* at 16.

180. *Id.* at 12-13. PCFFA suggests that NMFS's actions run counter to "the best science." *Id.* at 12.

181. *Id.* at 14.

182. Federal Defendant's Memorandum in Support of Cross Motion for Summary Judgment and Opposition to Plaintiff's Motion for Summary Judgment at 12, Pacific Coast (No. C99-67R).

183. *Id.* (citing RECORD OF DECISION, *supra* note 2, at B-9).

184. *Id.* at 10.

185. *Id.* at 16 ("The court should defer to the agency's reasonable interpretation of its own Plan . . . so long as the disturbance is consistent with the ACS.").

project basis.[186] However, in the court's opinion, this requirement did not excuse NMFS from evaluating ecosystem degradation at the project level, in addition to the watershed level.[187] The court recognized that the FEMAT report, which is the scientific underpinning of the ACS, stressed that the strategy must be implemented at the regional, riverbasin, watershed, and site scales. Therefore, the court concluded that "not only must the ACS objectives be met at the watershed scale, each *project* must also be consistent with ACS objectives."[188] Because it could find no legitimate reason to shift the analysis of timber sale effects away from a multi-scale analysis to a broad watershed analysis, the court found the that NMFS's approach was arbitrary.[189]

2. Failure to Analyze Short-term Effects

PCFFA's second argument claimed that NMFS's jeopardy analysis was arbitrary and capricious because it ignored the short-term effects of timber sales and relied on tree regeneration in previous sale areas as mitigation for the current sales.[190] In the biological opinions, the NMFS determined that habitat degradation was inconsequential over a ten-year horizon because natural tree growth from previous clearcuts would mitigate any adverse impacts of current logging.[191] The NMFS claimed that the Northwest Forest Plan focused on the long-term health of forests, and that adverse short-term effects may still be consistent with the ACS.[192] The challengers disagreed, claiming that, by looking ten years ahead, the

186. Pac. Coast Fed'n of Fishermen's Ass'n v. Nat'l Marine Fisheries Serv., 71 F. Supp. 2d 1063, 1069-70 (W.D. Wash. 1999); RECORD OF DECISION, *supra* note 2, at B-9.

187. Pac. Coast, 71 F. Supp. 2d at 1069.

188. *Id.*

189. *Id.* at 1070.

190. Memorandum in Support of Plaintiff's Motion for Summary Judgment at 18, Pacific Coast (No. C99-67R).

191. Pac. Coast, 71 F. Supp. 2d at 1070.

192. Federal Defendant's Memorandum In Support of Cross Motion for Summary Judgment and in Opposition to Plaintiff's Motion for Summary Judgment at 19, Pacific Coast (No. C99-67R).

agency avoided considering short-term effects that could be crucial to survival of the listed fish.[193]

The court declared the NMFS's approach unlawful because its jeopardy analysis did not comply with the ACS because of its failure to properly assess the short-term effects of the timber sales on watersheds.[194] The court stated that NMFS "failed to adequately explain its assumption that passive restoration will adequately mitigate the adverse impacts of logging."[195] By basing the no-jeopardy decision on the fact that more trees are predicted to regenerate over ten years than will be cut for sales, the NMFS could find that no sale would ever result in jeopardy to listed fish. The court also determined that NMFS's failure to analyze the effects of logging immediately after it occurred did not ensure compliance with the ACS standard of maintaining the healthy conditions of aquatic systems.[196] The court found the NMFS was arbitrary and capricious because there was no rational explanation for its reliance on tree regrowth as passive restoration to mitigate for the logging.[197]

3. Failure to Incorporate Watershed Analysis Recommendations or Comply with Riparian Reserve Standards

The challengers also argued that the biological opinions did not ensure that Forest Service timber sale Plans incorporated the findings and recommendations of the watershed analyses or complied with the riparian reserve standards.[198] The Northwest Forest Plan directed the agencies to use the results of watershed analyses[199] to determine whether projects are consistent with the

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193. Memorandum in Support of Plaintiff's Motion for Summary Judgment at 19, Pacific Coast (No. C99-67R) (stating that the next few generations are crucial to the survival of the species).

194. Pac. Coast, 71 F. Supp. 2d at 1070.

195. *Id.*

196. *Id.*

197. *Id.*

198. Memorandum in Support of Plaintiff's Motion for Summary Judgment at 27, Pacific Coast (No. C99-67R) (describing the incomplete biological opinions that were prepared by the agencies).

199. Watershed analysis is conducted by an interdisciplinary team of experts who prepare a report that identifies watershed conditions, important watershed processes, effects of land-use activities, distribution of species, and likely future conditions of the watershed. RECORD OF DECISION, *supra* note 2, at B-20-B-24 (discussing in detail the uses and

ACS objectives.[200] The Plan also prohibited logging in riparian reserves, except for salvage logging or thinning for the purpose of attaining ACS objectives.[201] PCFFA cited several sales that did not follow recommendations of the watershed analysis and that also did not meet ACS objectives for riparian reserves.[202] For instance, the watershed analysis recommended riparian restoration activities for several sales, but the sale plans included harvest of the riparian areas.[203] Other clear-cut sales that NMFS had approved occurred in areas the watershed analysis marked as "most important" for fisheries, and which should only undergo limited activities such as thinning of trees, culvert replacement, or road maintenance.[204]

The NMFS contended that it sufficiently incorporated the watershed analysis recommendations and the requirements for riparian reserves into its ACS analysis, arguing that the Northwest Forest Plan did not require that the timber sales comply with the watershed analysis as long as they did not jeopardize the fish.[205] The agency also claimed that the thinning and salvage harvests proposed for riparian reserves would hasten the desired conditions of the riparian reserves by enhancing the growth of remaining trees.[206]

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processes behind watershed analysis). *See also* Brent Foster, *The Failure of Watershed Analysis Under the Northwest Forest Plan: A Case Study of the Gifford Pinchot National Forest,* 5 HASTINGS W.-N.W. J. ENVTL. L. & POL'Y 337, 342 (1999) (stating that watershed analysis should provide information for the agencies to use to meet ACS objectives).

200. RECORD OF DECISION, *supra* note 2, at B-21 (setting forth uses of watershed analyses and their results).

201. *Id.* at C-32 (describing the situations where timber management might call for logging in order to meet ACS objectives, such as to attain desired vegetation characteristics).

202. Memorandum in Support of Plaintiff's Motion for Summary Judgment at 25-28, Pacific Coast (No. C99-67R).

203. *Id.* at 25-26 (referring to Little River Watershed Analysis, Little River DEMO timber sale, and E-Mile timber sale).

204. *Id.* at 26-27 (referring to Myrtle Creek Watershed Analysis and Upper South Myrtle timber sales).

205. Defendant's Memorandum in Support of Cross Motion for Summary Judgment and in Opposition to Plaintiff's Motion for Summary Judgment at 24, 26, 29, Pacific Coast (No. C99-67R) (claiming that there is no evidence that the projects will jeopardize the continued existence of listed species and project specific jeopardy analysis is required under the ESA).

206. *Id.* at 29.

According to the NMFS, these interpretations and analyses were reasonable under the Northwest Forest Plan.

The court disagreed with the NMFS's reasoning, determining that the agency did not sufficiently incorporate the recommendations from the watershed analyses into its own analysis of the ACS.[207] Judge Rothstein observed that NMFS failed to "discuss[] . . . the watershed analyses descriptions of the desired future conditions or incorporation of the watershed analyses recommendations to attain those conditions."[208] As a result, the NMFS disregarded the directive of the Northwest Forest Plan, which states that agencies use the results of watershed analysis to determine whether a project is consistent with the ACS objectives.[209] The court required the NMFS to consider the watershed analyses' recommendations in its ACS analysis, regardless of whether the proposed harvests would jeopardize the existence of any listed fish.[210] Incorporating the watershed recommendations was an additional requirement beyond the no-jeopardy finding, and the NMFS's failure to do so was arbitrary and capricious because the watershed analysis represented the best available science describing how to attain the ACS objectives.[211]

The court concluded that the NMFS violated the Northwest Forest Plan by permitting harvest activity that did not meet the ACS objectives in riparian reserves, stating that the NMFS offered no

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207. Pac. Coast Fed'n of Fishermen's Ass'n v. Nat'l Marine Fisheries Serv., 71 F. Supp. 2d 1063, 1072 (W.D. Wash. 1999). The Northwest Forest Plan stated that the information from watershed analyses will contribute to decision making at all levels and that project-specific NEPA planning will use the information acquired from watershed analysis. RECORD OF DECISION, *supra* note 2, at B-21. The Plan also stated that the analysis should enable watershed planning that achieves aquatic conservation strategy objectives. *Id.* at B-12.

208. Pac. Coast, 71 F. Supp. 2d at 1072.

209. *Id.* at 1071-2; RECORD OF DECISION, *supra* note 2, at B-10 (finding that NMFS, in its ACS analysis, did not sufficiently incorporate watershed recommendations).

210. The court did not even address NMFS's argument that a no-jeopardy finding is sufficient to satisfy the requirements of the ACS, except to suggest that NMFS's statement was conclusory and circular. Pac. Coast, 71 F. Supp. 2d at 1071.

211. *Id.* at 1073. The Endangered Species Act requires agencies to use the best available scientific information when doing biological opinions. 16 U.S.C. § 1536(a)(2) (1994).

evidence that the proposed harvests would have an aquatic benefit.[212] Judge Rothstein explained that, "at a minimum, NMFS must require some relation between the benefits used to justify projects in riparian reserves and an aquatic function."[213] The NMFS acted arbitrarily and capriciously because it had permitted violations of the ACS riparian reserve standards without producing evidence that the proposed action would attain the ACS objectives.[214] The court concluded that "NMFS's approach is not rationally calculated to achieve the goals of the ACS" because it failed to evaluate effects at the project level and in the short-term, to incorporate watershed recommendations, and to use the best scientific information available.[215] Because the NMFS's biological opinions "run counter to the evidence before it," the court halted the twenty-four timber sales until NMFS reassessed the effects of the sales.[216]

4. Lessons from *Pacific Coast*

The *Pacific Coast* court confirmed that federal agencies must adhere to the standards of the Northwest Forest Plan, which amended statutorily required land use plans, when managing Forest Service and BLM lands that are covered by the Plan.[217] In addition, the court would not allow the NMFS to avoid its responsibility under the Plan even though the agency complied with the ESA. Most

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212. Pac. Coast, 71 F. Supp. 2d at 1073. The Plan listed nine ACS objectives that included maintaining and restoring (1) the diversity and complexity of watershed features, (2) the physical integrity of the aquatic system, (3) water quality necessary to support healthy riparian ecosystems, (4) historic sediment regimes, (5) plant communities that provide thermal regulation and woody debris, and prevent surface erosion and bank instability, and (6) habitat to support populations of native plant, invertebrate, and vertebrate riparian-dependent species. RECORD OF DECISION, *supra* note 2, at B-11.

213. Pac. Coast, 71 F. Supp. 2d, at 1073. The standards and guidelines for riparian reserves prohibit or regulate activities in riparian reserves that retard or prevent attainment of the ACS objectives. RECORD OF DECISION, *supra* note 2, at C-31.

214. Pac. Coast, 71 F. Supp. 2d at 1073.

215. *Id.*

216. *Id.*; Memorandum in Support of Plaintiff's Motion for Summary Judgment at 29, Pacific Coast (No. C99-67R); *Judge Halts 24 Timber Sales in the Umpqua River Basin*, *supra* note 173, at C11.

217. *See supra* notes 103-106 and accompanying text.

importantly, the *Pacific Coast* decision may have broader applicability than *Oregon Natural* because it enforced the use of watershed analysis results and directed that ecosystem management include site-specific analysis.

The issue of one environmental statute satisfying the requirements of another also arose in *Seattle Audubon Society v. Evans*,[218] where the Forest Service claimed that once the U.S. Fish and Wildlife Service listed the spotted owl as threatened, the Forest Service did not have to comply with the NFMA regulations' requirements of maintaining viable populations of all species because there was no longer a viable population of the owl.[219] The *Seattle Audubon Society* court rejected this argument and required the agency to comply with both statutes, concluding that Congress intended the Forest Service to both maintain viable populations of all species and avoid jeopardy to listed species.[220] The court explained that NFMA imposes duties distinct from the ESA duty to save listed species from extinction; and there is nothing in NFMA that suggests it does not apply to listed species.[221] Finally, the court declared that "an agency cannot exempt itself from duties plainly imposed by law; it cannot decide that only one of two statutes governs its activities when the laws themselves, and the implementing regulations, clearly show that both apply."[222] Thus, agencies must comply with the duties under both statutes.

The *Pacific Coast* court applied this reasoning to the Northwest Forest Plan, requiring compliance with both the ESA and the Plan, while rejecting the NMFS's conclusion that a no-jeopardy finding under the ESA nullified the requirement to incorporate recommendations of the watershed analyses.[223] The Plan required agencies to use the results of watershed analysis to determine

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218. *See also* Seattle Audubon Soc'y v. Evans, 771 F. Supp. 1081, 1083 (W.D. Wash. 1991).

219. Seattle Audubon Soc'y v. Robertson, Order on Motions for Summary Judgment and for Dismissal, 1991 WL 180099, at *3 (claiming that the Forest Service is relieved of its duties under NFMA once a species is listed).

220. *Id.* at *6-*7.

221. *Id.*

222. *Id.* at *7.

223. Pac. Coast Fed'n of Fishermen's Ass'n v. Nat'l Marine Fisheries Serv., 71 F. Supp. 2d 1063, 1071-72 (W.D. Wash. 1999).

whether timber sales were consistent with the ACS.[224] Therefore, even if the proposed sale would not result in jeopardy, the NMFS must consider the watershed analyses results in its biological opinions. Compliance with environmental statutes does not guarantee that agencies may proceed with their timber sales; they must also comply with all of the requirements of the Northwest Forest Plan.

The most important aspect of the *Pacific Coast* decision is its potential significance beyond the enforceability of the Northwest Forest Plan. The court has set a precedent for enforcing the use of watershed analyses and defining the scope of ecosystem management analyses. While the court did not mandate the implementation of watershed analyses recommendations, it did mandate the incorporation of the recommendations into the NMFS's biological opinions.[225] The agencies cannot ignore the results of watershed analyses, but rather must use those results to determine whether timber sales are consistent with the ACS objectives.[226]

The court also concluded that ecosystem management must include an analysis of the site-specific and short-term effects of timber sales.[227] Enforcement of this standard is important because it will alleviate the problem of masking degradation at individual sites, in the name of ecosystem management.[228] If degradation is only measured at a broad landscape level, adverse effects at individual sites will be tolerable until they grow enough to be measured at the landscape level. *Pacific Coast* means that agencies must now consider the effects of timber sales at the individual sites and also consider their short-term effects; they can no longer rely on tree regeneration in other parts of the watershed to mitigate the adverse effects of projects.[229] The *Pacific Coast* court noted that "[b]y

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224. RECORD OF DECISION, *supra* note 2, at B-10.

225. Pac. Coast, 71 F. Supp. 2d at 1072, 1073.

226. *Id.* at 1069.

227. *See id.* at 1069-70. The Northwest Forest Plan states "that timber sales must undergo appropriate site-specific analysis." RECORD OF DECISION, *supra* note 2, at 13.

228. *See generally* Oliver A. Houck, *Are Humans Part of Ecosystems?,* 28 ENVTL. L. 1 (1998) (explaining that ecosystem management should be based on individual species' needs, not human needs, because otherwise the scope of ecosystem management is too broad and leaves the ecosystem "up for grabs").

229. Pac. Coast, 71 F. Supp. 2d at 1070.

employing a long term/watershed approach in making jeopardy determinations, [the] NMFS has virtually guaranteed that no timber sale will ever be found to jeopardize the continued existence of the Oregon coastal coho or Umpqua River cutthroat trout."[230] Now, the NMFS must assess degradation on a much smaller scale, which will provide greater protection for aquatic species and their habitat. By determining that ecosystem management requires decision-making based on analysis of site-specific effects, this case sets a precedent for all agencies applying ecosystem management.

CONCLUSION

Forest management practices have been at the center of sustained controversy in the Pacific Northwest for two decades. Environmentalists' challenges to federal agency actions eventually led to the adoption of the Northwest Forest Plan in 1994.[231] This Plan incorporated an ecosystem management approach, requiring land managers to both protect biodiversity and provide a sustainable level of timber.[232] Most importantly, the Plan amended previous NFMA and FLPMA required land management plans of the agencies, thereby making the Northwest Forest Plan subject to the requirements of those statutes.

In 1999, environmental groups sued the Forest Service, BLM, and NMFS for not following the requirements of the Northwest Forest Plan.[233] The *Oregon Natural* and *Pacific Coast* courts upheld these challenges because the agencies had not fully complied with the survey requirements or the ACS.[234] Both courts concluded that because the Northwest Forest Plan amended other legally

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230. *Id.* at 1073.

231. Portland Audubon Soc'y v. Lujan, 795 F. Supp. 1489, 1492-96 (D. Or. 1992); *See also* Seattle Audubon Soc'y v. Evans, 771 F. Supp. 1081, 1083 (W.D. Wash. 1991), discussed *supra* notes 34-49.

232. *See Hearing*, *supra* note 15, at 3 (statement by Senator Craig).

233. Or. Natural Res. Council Action v. U.S. Forest Serv., 59 F. Supp. 2d 1085 (W.D. Wash. 1999); Pac. Coast Fed'n of Fishermen's Ass'n v. Nat'l Marine Fisheries Serv., 71 F. Supp. 2d 1063, 1073 (W.D. Wash. 1999).

234. Or. Natural, 59 F. Supp. 2d at 1097; Pac. Coast, 71 F. Supp. 2d at 1073.

enforceable plans, it was judicially enforceable.[235] Any changes to the Plan must comply with the procedures required by NFMA and FLPMA for amendments to land management plans. The *Pacific Coast* court went beyond just determining that the Plan was enforceable. It mandated the use of watershed analyses and concluded that ecosystem management requires the analysis of site-specific effects of timber sales.[236] The *Pacific Coast* court also clarified that compliance with the ESA does not ensure compliance with the Northwest Forest Plan: agencies must satisfy the requirements of both.[237] Both of these cases resulted in injunctions of numerous timber sales,[238] although a few of these sales were excused from the injunction in the subsequent settlement of the *Oregon Natural* case.[239]

These decisions have important implications for land managers. If agencies wish to award any timber sales in the future, they must fully abide by the requirements of the Northwest Forest Plan. This will entail conducting surveys for hundreds of species and analyzing effects of projects at individual sites over long-term and short-term time frames. An amendment to the Plan that followed the procedures required by NFMA or FLPMA could alleviate some of the survey burdens.[240] However, because any amendment cannot decrease protection for species without violating NFMA,[241] the agencies will have to conduct many of the surveys. Consequently, the Forest

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235. Or. Natural, 59 F. Supp. 2d at 1097; Pac. Coast, 71 F. Supp. 2d at 1073.

236. Pac. Coast, 71 F. Supp. 2d at 1071-72.

237. *Id.* at 1071, 1073.

238. Or. Natural, 59 F. Supp. 2d at 1097; Stipulation for Order Dismissing Action: Order Thereon at 2-3, Or. Natural (No. C98-942); Pac. Coast, 71 F. Supp. 2d at 1073; *Judge Halts 24 Timber Sales in the Umpqua River Basin, supra* note 173, at C11.

239. Stipulation for Order Dismissing Action: Order Thereon at 3, Oregon Natural (No. C98-942). *See* Exhibit A for a listing of the suspended sales.

240. The agencies have issued a draft supplemental EIS that eliminated sixty-four species from the survey requirements and reduced the number of species that need surveys before ground-disturbing activity occurs. DSEIS, *supra* note 98, at xx.

241. When the Northwest Forest Plan was originally challenged, Judge Dwyer stated that anything less protective would not have complied with NFMA's population viability requirements. Seattle Audubon Soc'y v. Lyons, 871 F. Supp. 1291, 1300 (W.D. Wash. 1994).

Service and BLM must decide how to accomplish all of the requirements of the Plan, which may require additional funding and personnel. The agencies may need to convince Congress and the Secretaries of Agriculture and Interior that they need additional resources, since the lack of these resources is the primary factor limiting the ability of the agencies to perform their tasks.[242]

An additional step the agencies may need to take is to reduce the level of timber expected to come off the forests. The Northwest Forest Plan called for an annual harvest of 1.1 billion board feet of timber per year, but already that number has dropped to 811 million board feet.[243] The harvest may need to drop further to protect forest health as required by the Northwest Forest Plan.[244] Even if the agencies acquire the resources needed to conduct wildlife surveys, the level of timber harvest expected in the Plan may conflict with Plan's goal of protecting species.

The agencies' attempts to implement ecosystem management have not yet proved successful. They have not accomplished the twin goals of protecting biodiversity while harvesting stipulated amounts of timber because they have not conducted the required surveys or complied with the ACS, which are judicially enforceable. Whether the proper implementation of the Northwest Forest Plan can achieve those goals remains to be seen. Irrespective of the Northwest Forest Plan, agencies now realize that ecosystem management in general is about more than just broad landscape planning and compensating for adverse effects in one area by mitigating elsewhere; it is also about

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242. *See* Kohm & Franklin, *Institutions of Transition, in* CREATING A FORESTRY FOR THE 21ST CENTURY: THE SCIENCE OF ECOSYSTEM MANAGEMENT 357, 359 (Kathryn A. Kohm & Jerry F. Franklin eds., 1997) (stating that "a central question facing natural resource institutions is how to secure adequate and stable sources of funds to carry out the research monitoring and stewardship activities necessary to the practice of ecosystem management.").

243. Memorandum in Support of Defendant's Motion for Summary Judgment and Opposition to Plaintiff's Motion for Summary Judgment at 39, Oregon Natural (No. C98-942) (citing figures from Forest Service Regions 5 and 6 and BLM).

244. Forest Supervisors realize the difficulty of fulfilling the conservation goals of the Plan while harvesting the specified level of timber. Seven of twelve national forests covered by the Plan have asked the regional office to reduce their annual timber target because they cannot cut the required amount of timber while meeting the Plan's conservation standards. Foster, *supra* note 199, at 346-47.

protecting each species at each individual site. This conclusion may be the most important lesson from these two cases.