

**Attachment 6b. Selected Information From “Threshold Determinations
Under the National Environmental Policy”**

- Valerie M. Fogleman. 1987. *Threshold Determinations Under the National Environmental Policy Act*. 15 Boston College Environmental Affairs Law Review. 59. (Fogleman. 1987).*

**By Mike Walker, Chair
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May 12, 2017 Very Draft**

Mike Walker is interested in Valerie Fogleman’s publication entitled, *Threshold Determinations Under the National Environmental Policy Act* (Attachment 6a), as it provides supplemental explanations for the BLM NEPA Handbook (Attachment 10) on “Significance.” Three of 10 “Intensity” significance criteria of CEQ’s definition of Significantly (40 CFR § 1508.27. Significantly" as used in NEPA requires considerations of both context and intensity) were of special interest.

Intensity Criteria 4.	Controversiality of Effect
Intensity Criteria 5.	Uncertain, Unique, or Unknown Risks
Intensity Criteria 7.	Cumulative Effects

Since Fogleman’s threshold determinations article was published in 1987, it will most probably have important new court precedents that could have been included in a post-assessment of its threshold determinations analysis. Nevertheless, Walker finds most of its concepts still relevant and valuable. He especially references the reader to Chapter V. *Criteria for Determining the Significance of an Environmental Effect*. To aid the agencies in identifying those actions which may have significant environmental effects, the CEQ published a list of criteria. These criteria, based on CEQ’s reading of NEPA case law have two divisions – context and intensity both of which must be considered in threshold determinations for “Significant Cumulative Impacts”. In summary, Chapter V is about real world court opinions and precedents on CEQ’s definition of Significantly (40 CFR § 1508.27. Significantly" as used in NEPA requires considerations of both context and intensity). Walker found it coincidental that this Article was written while the author was living in Oregon as a Natural Resources Law Fellow, Northwestern School of Law of Lewis and Clark College with funding for the article provided by the Oregon Department of Land Conservation and Development. The following information was provided about the author, Valerie Fogleman, in the threshold determinations article.

“Visiting Instructor, University of Illinois College of Law. J.D. 1986, B.L.A. 1983 at Texas Tech University. **This Article was written while the author was Natural Resources Law Fellow, Northwestern School of Law of Lewis and Clark College** (emphasis added). Funding for the Article was provided by the Oregon Department of Land Conservation and Development with funds obtained from the National Oceanic and Atmospheric Administration, appropriated under the Coastal Zone Management Act of 1972.”

A quick search of the web by Walker quickly found more information about Fogleman. Her credentials are impressive.

Valerie Fogleman received a Bachelor of Landscape Architecture and an MSc in Environmental Evaluation from Texas Tech University, a Juris Doctor from Texas Tech Law School and an LLM from the University of Illinois. Prior to returning to England in 1992, she was Natural Resources Law Fellow at the Lewis & Clark Law School in Portland, Oregon, a Fellow at the University of Illinois College of Law and in private practice in Corpus Christi, Texas. Valerie's career since 1992 includes being a partner and Head of the Environment Group at Barlow Lyde & Gilbert and a Consultant at Lovells (now Hogan Lovells), both in the City of London. She is currently a Consultant at Stevens & Bolton LLP. She is an Honorary Member of the Royal Institution for Chartered Surveyors, Vice Chair of the City of London Law Society Planning and Environment Committee, a prior Council member of the United Kingdom Environmental Law Association. She is also a member of the Texas State Bar, the American Bar Association and the Association of Insurance and Risk Managers. She is listed as a leading environmental lawyer in Chambers & Partners legal directory, the Legal 500, Legal Experts, The International Who's Who of Environment Lawyers and Guide to the World's Leading Environment Lawyers. Valerie has written three books and over 200 articles on environmental and insurance law and is a well known speaker at conferences on those topics. <http://www.cardiff.ac.uk/people/view/478856-fogleman-valerie>. Viewed May 9, 2017.

This Article reviews the current [1987] state of the law regarding NEPA threshold determinations. Section II discusses the methodology used by agencies to make threshold determinations. Section III examines the types of federal actions requiring threshold determinations. Section IV discusses the nature of the effects to be considered in threshold determinations. **The final Section examines the criteria used by federal agencies to make threshold determinations** (emphasis added). The Article concludes that the refinement of case law on threshold determinations has expanded the range of actions to be considered by federal agencies involved in those determinations. No general threshold level has been defined beyond which it may be concluded that actions significantly affect the environment. Consideration of the **criteria developed by the Council on Environmental Quality (CEQ) and the courts** (emphasis added), however, ensures that most, if not all, areas of environmental concern are addressed in threshold determinations (Fogleman. 1987. p. 60).

The following is the outline for Fogleman's 1987 publication, *Threshold Determinations Under the National Environmental Policy Act*.

- I. INTRODUCTION
- II. METHODOLOGY FOR THRESHOLD DETERMINATIONS
- III. TYPES OF ACTIONS REQUIRING THRESHOLD DETERMINATIONS
 - A. Judicial Tests for Joint Actions
 - B. CEQ Tests
 - 1. Connected Actions
 - 2. Cumulative Actions
 - 3. Similar Actions
 - 4. Unconnected Single Actions
 - C. Actions Affecting the Status Quo

- IV. NATURE OF EFFECTS TO BE CONSIDERED IN THRESHOLD DETERMINATIONS
 - A. Direct Affects
 - B. Indirect Affects

- V. CRITERIA FOR DETERMINING THE SIGNIFICANCE OF AN ENVIRONMENTAL EFFECT
 - A. Context of an Action
 - 1. Local or Regional Effects
 - 2. Short- or Long-Term Effects
 - B. Intensity of an Action
 - 1. Beneficial or Adverse Effects
 - 2. Effect on Public Health and Safety
 - 3. Unique Character of an Effect
 - 4. Controversiality of Effect
 - 5. Uncertain, Unique, or Unknown Risks
 - 6. Precedential Nature of an Effect
 - 7. Cumulative Effects
 - 8. Effects on Historic, Scientific, or Cultural Resources
 - 9. Effect on Endangered Species
 - 10. Compliance with Federal, State, or Local Law
 - C. Measures to Mitigate Adverse Environmental Effects
 - D. Monitoring Programs

- VI. Conclusion

In summary, selected information from *Threshold Determinations Under the National Environmental Policy Act* is in this paper on significance as part of federal agencies NEPA compliance, especially on controversiality of effect; uncertain, unique, or unknown risks; and cumulative effects.

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Selected Information From THRESHOLD DETERMINATIONS UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT

Valerie M. Fogleman*

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1. INTRODUCTION

The National Environmental Policy Act (NEPA) is approaching its twentieth anniversary. NEPA case law evolved slowly during the 1980's as the Act lost much of the notoriety gained during the 1970's when courts ordered unwilling agencies to incorporate NEPA procedures into their decisionmaking processes.¹ Judicial interpretations are occasionally controversial [e.g., *Abolishing the Worst Case Analysis, etc.*, emphasis added]² but, in general, NEPA case law is slowly refining broad concepts laid down in early NEPA opinions.³

One area of NEPA case law that has evolved slowly but steadily involves threshold determinations. The level set for threshold determinations by federal courts and agencies is critical to NEPA's

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The author would like to thank Professors Michael C. Blumm and James L. Huffman of Northwestern School of Law for their aid in writing this Article, and Lenair Mulford for her secretarial and editorial skills.

1 See, e.g., *Scientists' Inst. for Pub. Information v. Atomic Energy Comm'n*, 481 F.2d 1079, 1090 (D.C. Cir. 1973) (fast breeder reactor program could not proceed to technology development stage until AEC complied with NEPA); *Calvert Cliffs' Coordinating Comm'n, Inc. v. Atomic Energy Comm'n*, 449 F.2d 1109, 1117 (D.C. Cir. 1971) (court criticized AEC for its "crabbed interpretation of NEPA").

2 See Brock, *Abolishing the Worst Case Analysis*, 2 NAT. RESOURCES & ENV'T 22, 64-66 (Spring 1986) (criticizing *Southern Ore. Citizens Against Toxic Sprays v. Clark*, 720 F.2d 1475 (9th Cir. 1983), cert. denied, 469 U.S. 1028 (1984)).

3 See, e.g., *Calvert Cliffs' Coordinating Comm'n, Inc. v. Atomic Energy Comm'n*, 449 F.2d 1109, 1118 (D.C. Cir. 1971) (requiring agency compliance with NEPA to the fullest extent possible); *Environmental Defense Fund, Inc. v. Corps of Eng'rs*, 325 F. Supp. 749, 759 (E.D. Ark. 1971) ("[a]t the very least, NEPA is an environmental full disclosure law"), vacated, 342 F. Supp. 1211 (E.D. Ark.), *a/t/d*, 470 F.2d 289 (8th Cir. 1972).

implementation because the Act does not apply to federal actions unless they "significantly [affect] the quality of the human environment (emphasis added) "⁴ If a determination is made that an action does not have significant environmental effects, compliance with NEPA is not required.

This Article reviews the current state of the law regarding NEPA threshold determinations. Section II discusses the methodology used by agencies to make threshold determinations. Section III examines the types of federal actions requiring threshold determinations. Section IV discusses the nature of the effects to be considered in threshold determinations. The final Section examines the criteria used by federal agencies to make threshold determinations. The Article concludes that the refinement of case law on threshold determinations has expanded the range of actions to be considered by federal agencies involved in those determinations. No general threshold level has been defined beyond which it may be concluded that actions significantly affect the environment. Consideration of the criteria developed by the Council on Environmental Quality (CEQ) and the courts, however, ensures that most, if not all, areas of environmental concern are addressed in threshold determinations.

II. METHODOLOGY FOR THRESHOLD DETERMINATIONS

NEPA requires federal agencies to prepare a detailed statement for "major Federal actions significantly affecting the quality of the human environment" ⁵ Before proceeding with a proposed action, therefore, a federal agency must make a threshold determination whether the action has a potentially significant effect on the environment. If such an effect is indicated; the agency must prepare a detailed statement, known as an Environmental Impact Statement (EIS).⁶ If the agency determines that the effect will be insignificant,

4. 42 U.S.C. § 4332(2)(C) (1982). The Council of Environmental Quality (CEQ) regulations advocate a one-part test for "major Federal actions significantly affecting the quality of the human environment": if a federal action significantly affects the quality of the human environment, it is a major federal action. 40 C.F.R. § 1508.18 (1986). Most courts apply this test. See *Minnesota Pub. Interest Research Group v. Butz*, 498 F.2d 1314, 1321-22 (8th Cir. 1974); *Colorado River Indian Tribes v. Marsh*, 605 F. Supp. 1425, 1430-32 (C.D. Cal. 1985). Even when courts apply a two-pronged test, a decision usually turns on whether an action "significantly affects" the environment. See *City of Alexandria v. Federal Highway Admin.*, 756 F.2d 1014, 1020 n.5 (4th Cir. 1985). See generally Note, *The CEQ Regulations: New Stage in the Evolution of NEPA*, 3 HARV. ENV'T'L L. REV. 347, 359 (1979).

5. 42 U.S.C. § 4332(2)(C) (1982).

6. *Id.* The EIS analyzes (1) the action's significant environmental impacts including any unavoidable adverse effects; (2) alternative actions; (3) the relationship between local short-

it may proceed with its action, usually after explaining and justifying why it has concluded no significant environmental effects exist.

Federal agencies are aided in making threshold determinations by the CEQ, a small agency in the Executive Office of the President. **Under authority derived from NEPA and an Executive Order,⁷ the CEQ issues regulations to aid federal agencies in implementing NEPA.⁸ The regulations, which bind federal agencies and which are accorded substantial deference by the courts,⁹ establish procedures for the entire NEPA process** (emphasis added). Because the CEQ regulations are less detailed for procedures involving threshold determinations than for procedures involving the preparation of EISs, **agencies have more discretion in structuring methodology for threshold determinations. Thus, federal agency regulations implementing NEPA generally supplement the CEQ procedures for making threshold determinations.¹⁰** (emphasis added)

Federal actions can be roughly divided into three groups for NEPA purposes. At one extreme are actions that normally have a significant effect on the environment. If an agency determines that a proposal for action falls into this category, the agency proceeds directly to the EIS process detailed in the CEQ regulations.¹¹ Agencies typically include lists of such actions in their guidelines or regulations implementing NEPA.¹²

At the other extreme are actions that normally do not have a significant effect on the environment, either individually or cumu-

term uses of natural resources and the maintenance and enhancement of the resource's longterm productivity; and (4) any irreversible and irretrievable commitment of resources involved in the action's implementation.

7. 42 U.S.C. § 4342 (1982); **Exec. Order 11,514, 3 C.F.R. 902 (1970), as amended by Exec. Order 11,991, 3 C.F.R. 123 (1978), reprinted at 42 U.S.C. § 4321 app. at 508-10 (1982).**

8. 40 C.F.R. §§ 1500-08 (1986).

9. *Andrus v. Sierra Club*, 442 U.S. 347, 357 (1979). The courts do not necessarily adhere rigidly to the regulations, and often use the regulations in conjunction with judicial precedent. *See, e.g., Thomas v. Peterson*, 752 F.2d 754,758-60 (9th Cir. 1985) (applying CEQ regulations and Ninth Circuit precedents).

10. *See, e.g.,* Federal Highway Administration, Environmental Impact and Related Procedures, 23 C.F.R. § 771.119(b) (1987) (suggesting use of scoping in Environmental Assessment process); Department of the Interior, National Environmental Policy Act; Revising Implementing Procedures, 49 Fed. Reg. 21,437, 21,439 (1984) (same) [hereinafter Revised Procedures]; National Oceanic and Atmospheric Administration, revised NOAA Directive Implementing the National Environmental Policy Act, 49 Fed. Reg. 29,644, 29,649 (1984) [hereinafter Revised NOAA Directive] (same).

11. 40 C.F.R. § 1502 (1986).

12. *See, e.g.,* Corps of Engineers, Policy and Procedures for Implementing NEPA, 33 C.F.R. § 230 (1987); Department of the Interior, Notice of Instructions for the Minerals Management Service, 51 Fed. Reg. 1855, 1856 (1986); Revised NOAA Directive, 49 Fed. Reg. 29,644, 29,651 (1984).

troverly concerning the environmental consequences of the agency's action.³⁰

Between the two extremes of significance and nonsignificance lies a large gray area in which threshold determinations are made on a case-by-case basis. The CEQ regulations require agencies to prepare Environmental Assessments (EAs) to aid decisionmakers in determining whether the threshold of significance has been passed by a proposed action (emphasis added).³¹ As with actions requiring EISs and categorical exclusions, agencies frequently list actions requiring preparation of an EA.³²

An EA is "a concise public document" briefly providing the evidence and analysis necessary to make a threshold determination.³³ The document must include brief discussions of the proposal's necessity, alternative proposals, environmental impacts of the proposed and alternative actions, and a list of agencies and private parties consulted.³⁴ **Environmental agencies and the public must be involved in the preparation of an EA "to the extent practicable . . ."** (emphasis added):³⁵ **The CEQ recommends the use of scoping** (emphasis added) – a pluralistic decisionmaking process used to identify the range of actions, alternatives, and impacts covered in an EIS – to identify alternatives **or potentially significant environmental impacts that may have been overlooked by the agency in preparing an EA** (emphasis added).³⁶

Although the CEQ regulations do not specify the appropriate length for an EA, the CEQ recommends ten to fifteen pages, with

30. *Id.*

31. 40 C.F.R. § 1501.4(b) (1986). **If another agency has already prepared an EA for an action relating to the same project, the agency with the proposed action may adopt the other agency's EA instead of preparing a separate one. However, the adopting agency should independently evaluate the information in the EA, and assume full responsibility for the information's scope and content** (emphasis added). NEP A Regulations, *supra* note 16, at 34,265-66.

32. *See, e.g.*, Corps of Engineers, Policy and Procedures for Implementing NEPA, 33 C.F.R. § 230.7 (1986); Revised NOAA Directives, *supra* note 10, at 29,651.

33. 40 C.F.R. § 1508.9(a) (1986).

34. *Id.* § 1508.9(b).

35. *Id.* § 1501.4(b). For example, in the Ninth Circuit, certain EAs must provide for a 45-day comment period. *Save Our Ecosystems v. Clark*, 747 F.2d 1240, 1244-47 (9th Cir. 1984).

36. Council on Environmental Quality, *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations*, 46 Fed. Reg. 18,026, 18,030 (1981) [hereinafter NEPA Questions]. *See also* 40 C.F.R. § 1501.7 (1986). To facilitate public and agency involvement in the NEPA process, appendices to the CEQ regulations list federal and federal-state agencies with jurisdiction over, or special expertise in, environmental issues. Council on Environmental Quality, *Appendices to Regulations*, 49 Fed. Reg. 49,750 (1984). The appendices also list federal and federal-state agency NEPA contacts, and federal and federal-state agency offices for receiving and commenting on other agencies' environmental documents. *Id.* at 49,750.

background data incorporated by reference.³⁷ **If an agency determines, after it has prepared an EA, that its proposed action will not have a significant effect on the environment, it must prepare a Finding of No Significant Impact (FONSI) setting out the reasons for its determination.³⁸ If certain factors are given greater weight than others in making the determination, the agency must explain the reasons for the background decisions.³⁹ The EA may be attached to the FONSI and incorporated by reference or it may be summarized in the FONSI. Other relevant environmental documents must be noted (emphasis added).**⁴⁰

The FONSI, as well as the EA, must be made available to the public (emphasis added).⁴¹ The CEQ permits agencies to choose the best method of accomplishing this as long as they ensure that all interested or affected parties are notified.⁴² The CEQ recommends mailing notices of the documents' availability to interested national groups as well as publication in the *Federal Register* and national publications for actions with a national scope.⁴³ Notice of availability of EAs and FONSI for regional or site-specific proposals may be provided by publication in local newspapers.⁴⁴ The system is more formal in the Second Circuit, where notice and comment procedures must be followed.⁴⁵

Under certain circumstances the CEQ recommends that FONSI be published thirty days before an agency's final decision not to prepare an EIS. **The CEQ provides five examples: borderline cases where a reasonable argument exists for preparation of an EIS; unusual cases (for example, new types of actions or precedent-setting cases such as minor development in a pristine area); cases involving public or scientific controversy; cases similar to those that normally require preparation of an EIS;⁴⁶ and cases in which an agency has adopted another agency's EA (emphasis added).**⁴⁷

37. NEPA Questions, *supra* note 36, at 18,037.

38. 40 C.F.R. § 1508.9(a)(1) (1986).

39. NEPA Questions, *supra* note 33, at 18,037.

40. 40 C.F.R. § 1508.13 (1986).

41. *Id.* § 1501.4(e)(1).

42. NEPA Questions, *supra* note 36, at 18,037.

43. *Id.*

44. *Id.*

45. See *Hanly v. Kleindienst*, 471 F.2d 823, 836 (2d Cir. 1972), *cert. denied*, 412 U.S. 908 (1973). See generally *City of West Chicago v. NRC*, 701 F.2d 632, 648 n.15 (7th Cir. 1983) (commenting on Second Circuit's procedures for publishing FONSI).

46. **40 C.F.R. § 1501.4(e)(2) (1986); NEPA Questions**, *supra* note 36, at 18,037.

47. NEPA Regulations, *supra* note 16, at 34,266.

If an agency determines on the basis of an EA that its proposed action may significantly affect the environment, the agency must prepare an EIS.⁴⁸ The EIS must address all potentially significant environmental effects, including short-term and long-term impacts.⁴⁹ If adverse effects, alternatives, and public comments regarding those effects and alternatives are adequately considered, however, the agency has complied with NEPA and may proceed with its action (emphasis added).⁵⁰

EAs and FONSI's are, of course, subject to judicial scrutiny. Courts review EAs and FONSI's to ensure that adequate consideration has been given to all potential environmental effects of a proposed action.⁵¹ **If a substantial environmental concern is raised, the agency must address it in the EA and show why it will not be significant (emphasis added).⁵²** Likewise, all potential environmental effects must be addressed in FONSI's.⁵³

Consideration of environmental factors must be documented in the administrative record in existence at the time the determination of no significant impact is made. **The detailed analysis necessary in an EIS is not required in an EA, but the EA must not be conclusory or perfunctory (emphasis added).⁵⁴ Rather, the agency must show that sufficient information has been generated by its investigation and data gathering processes on which to base a determination that its action will not have a significant environmental effect.⁵⁵ A court may go outside an agency's record to see if the research or analysis adequately supports the agency's conclusions (emphasis added).⁵⁶ If convincing documentation supports a reasoned elaboration of why an action will not have significant effects, then it will be upheld.⁵⁷ **In other words, the agency must show****

48. 40 C.F.R. § 1508.9(a)(1) (1986).

49. *Sierra Club v. Morton*, 510 F.2d 813, 820-21 (5th Cir. 1975).

50. See, e.g., *California v. Watt*, 712 F.2d 584,609 (D.C. Cir. 1983) (Department of Interior adequately addressed Oregon's and Washington's concerns on environmental effects of five year offshore oil and gas leasing program in a supplemental EIS); *Pack v. Corps of Eng'rs*, 428 F. Supp. 460, 466 (M.D. Fla. 1977) (Corps adequately considered fisherman's loss of shrimp caused by dredge and fill activities).

51. *Foundation on Economic Trends v. Heckler*, 756 F.2d 143, 153 (D.C. Cir. 1985).

52. *Id.*

53. *Citizen Advocates for Responsible Expansion, Inc. v. Dole*, 770 F.2d 423, 435 (5th Cir. 1985).

54. *Id.* at 434; *Sierra Club v. Mason*, 351 F. Supp. 419, 426 (D. Conn. 1972).

55. *American Pub. Transit Ass'n v. Goldschmidt*, 485 F. Supp. 811, 835 (D. D.C. 1980); *Get Oil Out, Inc. v. Andrus*, 468 F. Supp. 82, 86 (C.D. Cal. 1979); *McDowell v. Schlesinger*, 404 F. Supp. 221, 250 (W.D. Mo. 1975).

56. See *Headwaters, Inc. v. BLM*, 665 F. Supp. 873, 876 (D. Or. 1987).

57. *Town of Orangetown v. Gorsuch*, 718 F.2d 29, 35 (2d Cir. 1983), *cert. denied*, 465 U.S. 1099 (1984).

that it has taken a **"hard look" at environmental concerns raised by its proposed action,**⁵⁸ **identified relevant environmental concerns, and made a convincing argument that the impact of each concern will be insignificant** (emphasis added).⁵⁹

If an agency's threshold determination is challenged, a critical factor in judicial review is the degree to which other agencies and the public participated in the determination (emphasis added). For example, courts accord greater weight to an agency's determination of nonsignificance if the agency held public hearings,⁶⁰ or if environmental agencies did not consider the action's effects to be potentially significant.⁶¹ **Lack of public comments on a proposal, however, does not demonstrate that a proposed action is unlikely to have significant environmental effects** (emphasis added).⁶² **If an agency ignores negative comments made by the public and other agencies, especially agencies with environmental expertise, the agency's determination is unlikely to survive judicial review.**⁶³ **Although the comments are not determinative,**⁶⁴ **agencies must show that they were considered** (emphasis added). If the comments are adequately considered, the agency does not violate NEPA by rejecting them.⁶⁵

Courts generally uphold EAs and FONSI's unless a challenger can show one of the following: (1) the proposed action may have a significant environmental effect;⁶⁶ (2) an environmental factor may be significantly degraded;⁶⁷ or (3) an environmental concern has been raised but not adequately addressed.⁶⁸ Inadequate consideration of

58. *Fritiofson v. Alexander*, 772 F.2d 1225, 1238 (5th Cir. 1985); *McDowell v. Schlesinger*, 404 F. Supp. 221, 250 (W.D. Mo. 1975).

59 *Maryland-Nat'l Capital Park & Planning Comm'n v. United States Postal Serv.*, 487 F.2d 1029, 1040 (D.C. Cir. 1973).

60. *See River Road Alliance, Inc. v. Corps of Eng'rs*, 764 F.2d 445, 451 (7th Cir. 1985), *cert. denied*, 106 S. Ct. 1283 (1986).

61 *See Rucker v. Willis*, 484 F.2d 158, 162 (4th Cir. 1973); *Quinones Lopez v. Coco Lagoon Dev. Corp.*, 562 F. Supp. 188, 192 (D.P.R. 1983).

62. *See Mahelona v. Hawaiian Elec. Co.*, 418 F. Supp. 1328, 1333 (D. Haw. 1976).

63. *See Thomas v. Peterson*, 753 F.2d 754, 759 (9th Cir. 1985); *Sierra Club v. Corps of Eng'rs*, 701 F.2d 1011, 1030 (2d Cir. 1983).

64. *See Save the Bay, Inc. v. Corps of Eng'rs*, 610 F.2d 322, 325 (5th Cir. 1980), *cert. denied*, 449 U.S. 900 (1980).

65. *See Hart & Miller Islands Area Env'tl Group, Inc. v. Corps of Eng'rs*, 505 F. Supp. 732, 758 (D. Md. 1980).

66. *Kentucky ex rel. Beshear v. Alexander*, 655 F.2d 714, 720 (6th Cir. 1981); *City of Davis v. Coleman*, 521 F.2d 661,673 (9th Cir. 1975); *Dardar v. LaFourche Realty Co.*, 639 F. Supp. 1525, 1530 (E.D. La. 1986).

67. *See Save Our Ten Acres v. Kreger*, 472 F.2d 463, 467 (5th Cir. 1973).

68. *See Fritiofson v. Alexander*, 772 F.2d 1225, 1238 (5th Cir. 1985); *Foundation on Economic Trends v. Heckler*, 756 F.2d 143, 154 (D.C. Cir. 1985).

environmental effects may be shown by proving that the agency relied on materially false or inaccurate information, that its conclusions ignored the differing views of other expert agencies,⁶⁹ or that it merely concluded that an environmental effect was insignificant without assessing the effect (emphasis added).⁷⁰

If an agency's scope of inquiry into the potential environmental effects of a proposed action is adequate, courts examine the agency's determination of nonsignificance⁷¹ according to fairly deferential standards of review. The standard varies between the different circuits. Some circuits apply the **arbitrary and capricious standard** (emphasis added),⁷² while others apply the more searching **reasonableness standard** (emphasis added).⁷³ Even within a circuit, the application of a test can result in inconsistencies.⁷⁴ The result is a state of general confusion that three justices of the Supreme Court have indicated they would like to address.⁷⁵

III. TYPES OF ACTIONS REQUIRING THRESHOLD DETERMINATIONS

- A. Judicial Tests for Joint Actions
- B. CEQ Tests
 - 1. Connected Actions
 - 2. Cumulative Actions
 - 3. Similar Actions
 - 4. Unconnected Single Actions
- C. Actions Affecting the Status Quo

A determination of whether a proposed action and its environmental effects are to be considered alone or in conjunction with other actions and effects is critical to a threshold determination of whether an EIS must be written. An unconnected action may impact temporarily only on a small section of an identified natural resource. If the action is one of many agency actions in the same area, however, the environmental effects may be synergistic (emphasis added).

69. See *Sierra Club v. Corps of Eng'rs*, 701 F.2d 1011, 1030 (2d Cir. 1983) (adequacy of EIS).

70. See *Foundation on Economic Trends*, 756 F.2d at 153; *Southern Ore. Citizens Against Toxic Sprays, Inc. v. Clark*, 720 F.2d 1475, 1479 (9th Cir. 1983), cert. denied, 469 U.S. 1028 (1984); see also *Get Oil Out, Inc. v. Andrus*, 468 F. Supp. 82, 886 (C.D. Cal. 1979) (Geological Survey's conclusions that environmental effects of constructing offshore oil platforms were insignificant were inadequate without basis for conclusions).

71. **An agency's determination of whether an action may have significant environmental effects is a factual issue** (emphasis added). See *Fritiofson*, 772 F.2d at 1248.

72. See *Hanly v. Kleindienst*, 471 F.2d 823, 829 (2d Cir. 1972), cert. denied, 412 U.S. 908 (1973); *First Nat'l Bank of Chicago v. Richardson*, 484 F.2d 1369, 1373 (7th Cir. 1973); *Maryland-Nat'l Capital Park & Planning Comm'n v. U.S. Postal Serv.*, 487 F.2d 1029, 1035 (D.C. Cir. 1973).

73. See *Save Our Ten Acres v. Kreger*, 472 F.2d 463, 465 (5th Cir. 1973); *Minnesota Pub. Interest Research Group v. Butz*, 498 F.2d 1314, 1320 (8th Cir. 1974); *Wyoming Outdoor Coordinating Council v. Butz*, 484 F.2d 1244, 1249 (10th Cir. 1973).

74. See Comment, *Shall We Be Arbitrary or Reasonable: Standards of Review for Agency Threshold Determinations Under NEPA*, 19 AKRON L. REV. 685, 691-92 (1986).

75. *Gee v. Boyd*, 471 U.S. 1058, 1060 (1985) (White, J., joined by Brennan & Marshall, JJ., dissenting from denial of certiorari). See also *River Road Alliance, Inc. v. Corps of Eng'rs*, 106 S. Ct. 1283, 1284 (1986) (White, J., dissenting from denial of certiorari) (reiterating desire to resolve scope of inquiry issue).

IV. NATURE OF EFFECTS TO BE CONSIDERED IN THRESHOLD DETERMINATIONS

- A. Direct Affects
- B. Indirect Affects

The CEQ regulations require EISs to consider direct and indirect effects.¹⁵⁸ The effects may be ecological, aesthetic, cultural, economic, social, health-related, or historic resources. They may be beneficial as well as detrimental.¹⁵⁹ **Direct and indirect effects may also be cumulative. The difference in considering direct and indirect effects and in considering cumulative impacts is that a cumulative impacts analysis requires consideration of the effects of other actions** (emphasis added). Consideration of the direct and indirect effects of an action is limited to the proposed action.¹⁶⁰ Because a threshold determination focuses on identifying whether environmental effects are significant, not whether they are direct or indirect, categorization of actions under direct or indirect effects in an EA or EIS is not mandatory, although consideration of them is.¹⁶¹

159. *Id.* § 1508.8.

160. *Fritiofson v. Alexander*, 772 F.2d 1225, 1246 (5th Cir. 1985). *See supra* text accompanying notes 116-42 (cumulative actions) and *supra* text accompanying notes 116-142 (cumulative needs).

161. *See Trout Unlimited v. Morton*, 509 F.2d 1276, 1283 (9th Cir. 1974).

V. CRITERIA FOR DETERMINING THE SIGNIFICANCE OF AN ENVIRONMENTAL EFFECT

Because NEPA requires conclusions to be based on evidence and analysis, however, challengers to an agency's determination of nonsignificance may not simply conclude that an effect may be significant. Whether a court specifies the criteria it uses or not, if all potentially significant consequences have been considered, the threshold determination is a question of fact, not law. To aid the agencies in identifying those actions which may have significant environmental effects, the CEQ published a list of criteria. These criteria, based on CEQ's reading of the case law minus marginal decisions, have two divisions – context and intensity both of which must be considered in threshold determinations. Intensity itself has 10 criteria of significance considerations.

This page, Page 82A, is a separate page as the original does not have the following outline.

Outline

- A. Context of an Action
 - 1. Local or Regional Effects
 - 2. Short- or Long-Term Effects
- B. Intensity of an Action
 - 1. Beneficial or Adverse Effects
 - 2. Effect on Public Health and Safety
 - 3. Unique Character of an Effect
 - 4. Controversiality of Effect
 - 5. Uncertain, Unique, or Unknown Risks
 - 6. Precedential Nature of an Effect
 - 7. Cumulative Effects
 - 8. Effects on Historic, Scientific, or Cultural Resources
 - 9. Effect on Endangered Species
 - 10. Compliance with Federal, State, or Local Law
- C. Measures to Mitigate Adverse Environmental Effects
- D. Monitoring Programs

The next page, Page 82B, is the real page 82 or the original.

V. CRITERIA FOR DETERMINING THE SIGNIFICANCE OF AN ENVIRONMENTAL EFFECT

"Significance" is an amorphous term neither defined in NEPA nor its legislative history (emphasis added).¹⁸⁷ The CEQ has recommended applying the term in order to avoid unanticipated environmental effects.¹⁸⁸ Professor McGarity, meanwhile, advocates that **a determination of significance should be related to the need for information concerning the action's environmental effects** (emphasis added).¹⁸⁹ One court defined the term as "[a]ny action that substantially affects, beneficially or detrimentally, the depth or course of streams, plant life, wildlife habitats, fish and wildlife, and the soil and air" as well as "actions having an important or meaningful effect, direct or indirect, upon a broad range of aspects of the human environment"¹⁹⁰ Other courts do not attempt a definition but merely state that an action is significant.¹⁹¹ **Because NEPA requires conclusions to be based on evidence and analysis, however, challengers to an agency's determination of nonsignificance may not simply conclude that an effect may be significant** (emphasis added).¹⁹² Whether a court specifies the criteria it uses or not, if all potentially significant consequences have been considered, **the threshold determination is a question of fact, not law** (emphasis added).¹⁹³ Cases, therefore, tend to be determined on an ad hoc basis.

To aid the agencies in identifying those actions which may have significant environmental effects, **the CEQ published a list of crite-**

187. See *Hanly v. Kleindienst*, 471 F.2d 823, 830 (2d Cir. 1972), cert. denied, 412 U.S. 908 (1973); Council on Environmental Quality, *Environmental Quality: Third Annual Report* 231 (1972).

188. Council on Environmental Quality, *Environmental Quality: Third Annual Report* 231 (1972).

189. McGarity, *supra* note 147, at 848; accord *Citizens Against 2, 4-D v. Watt*, 527 F. Supp. 465, 468 (W.D. Okla. 1981); *Joseph v. Adams*, 467 F. Supp. 141, 154 (E.D. Mich. 1978).

190. *Natural Resources Defense Council, Inc. v. Grant*, 341 F. Supp. 356, 367 (E.D.N.C. 1972). See also *Gifford-Hill & Co. v. FTC*, 389 F. Supp. 167, 174 (D.D.C. 1974) (interpreting "significantly affecting" as "having a reasonably substantial relationship to the quality of the environment" - emphasis added), *id.*, 523 F.2d 730 (D.C. Cir. 1975).

191. See, e.g., *Louisiana Wildlife Fed'n v. York*, 761 F.2d 1044, 1053 (5th Cir. 1985) ("we have no doubt that the potential effect of the [action] is 'significant'"); *City of West Chicago v. NRC*, 701 F.2d 632, 650 (7th Cir. 1983) (action "clearly will have a significant impact on the environment"); *City of Davis v. Coleman*, 621 F.2d 661, 674-75 (9th Cir. 1975) ("it is obvious that constructing [a highway in an undeveloped area] will have a substantial impact on a number of environmental factors").

192. See *Township of Lower Alloways Creek v. Public Servo Elec. & Gas Co.*, 687 F.2d 732, 747 (3d Cir. 1982).

193. *Fritiofson v. Alexander*, 772 F.2d 1225, 1248 (5th Cir. 1985); *Town of Orangetown V. Gorsuch* 718 F.2d 29, 35 (2d Cir. 1983), cert. denied, 465 U.S. 1099 (1984); *Vine Street Concerned Citizens, Inc. V. Dole*, 630 F. Supp. 24, 28 (E.D. Pa 1985).

ria.¹⁹⁴ **These criteria, based on CEQ's reading of the case law minus marginal decisions,¹⁹⁵ have two divisions – context and intensity both of which must be considered in threshold determinations** (emphasis added).¹⁹⁶

A. Context of an Action

Agencies determine the context of an action by analyzing it in relation to its setting-local, regional, and/or national-and the interests it affects. The context of an action is also influenced by the short- and long-term nature of its effects.¹⁹⁷

1. Local or Regional Effects

A project's locale plays a critical role in determining whether an environmental effect is significant. Locale is determined by the geography of an area and the nature of an action.¹⁹⁸ For example, if an action will destroy habitat, the significance of the loss will not be determined in relation to the extent of the habitat in general. Instead, the locale for a site-specific action is the area directly affected by the action plus its immediate surroundings.¹⁹⁹

The condition of the site where the activity will take place is also relevant. If an area is damaged by past government actions, but has the potential to reestablish itself, a determination of significance is not qualified by the current state of the environment.²⁰⁰ Alternatively, if the agency's action will stabilize the area's environment by relieving pressure on organisms such as animals or plants, the action may be considered nonsignificant.²⁰¹ If the action's environmental effects will be mitigated because of natural conditions occurring at the same time, the action's effect may be insignificant. For example, the effect of road salt entering streams may be offset by the high water flows of spring runoff.²⁰²

If a project affects a natural resource that is prevalent over a large area without clearly identifiable boundaries, the locale of the

194. **40 C.F.R. § 1508.27** (1986).

195. See Note, *The CEQ Regulations: New Stage in the Evolution of NEPA*, 3 HARV. ENVTL. L. REV. 347, 362 (1979).

196. **40 C.F.R. § 1508.27** (1986).

197. *Id.* § 1508.27(a).

198. See *Sierra Club v. Marsh*, 769 F.2d 868, 881 (5th Cir. 1985).

199. *Id.*

200. *Louisiana v. Lee*, 758 F.2d 1981, 1086 (5th Cir. 1985), *cen. denied sub nom. Dravo Basic Materials Co. v. Louisiana*, 106 S. Ct. 1259 (1986).

201. *American Horse Protection Ass'n v. Frizzell*, 403 F. Supp. 1206, 1219 (D. Nev. 1975).

202. See *Mont Vernon Preservation Soc'y v. Climents*, 415 F. Supp. 141, 148 (D.N.H. 1976).

action may be less critical. For example, a court determined that the adverse impact of a Corps of Engineers' dredging program on benthic organisms was insignificant because of the vast area inhabited by the organisms which would not be affected and the lack of any threatened or endangered species in the affected area.²⁰³

Although local opposition to a project will not make an insignificant effect become significant,²⁰⁴ the project's effect on a local community may trigger the EIS process if challengers to the action can show that the community and its inhabitants may be harmed (emphasis added).²⁰⁵ The harm may include a deterioration in the quality of life caused by a construction project,²⁰⁶ a substantial decrease in a community's tax base,²⁰⁷ or a change in the character of one of the community's neighborhoods.²⁰⁸ The effect need not be significant when viewed in the context of the agency's entire action as long as it is shown to be significant to the community.²⁰⁹

2. Short- or Long-Term Effects

The fact that an agency's temporary action has short-term effects is insufficient, standing alone, to make those effects insignificant.²¹⁰ If the action continues a long trend of environmental deterioration, the action's environmental significance is not lessened because of that deterioration.²¹¹ Thus, a discussion of temporary effects in an EIS has been adjudged adequate when environmental effects were shown to be similar to those occurring in nature, and when displaced organic communities were shown to have the potential to repopulate within a short period with only minimal long-term damage.²¹² The temporary effects on the scenic qualities of a river caused by oper-

203. *Louisiana ex rei. Guste v. Lee*, 635 F. Supp. 1107, 1121-22 (E.D. La. 1986).

204. *See Mont Vernon*, 415 F. Supp. at 148. *See infra* text accompanying notes 241-50 (**controversiality factor** - emphasis added).

205. *See Mont Vernon*, 415 F. Supp. at 147-49. Effects of Highway reconstruction project through community were not significant because plaintiffs did not show harm to town's economy or ambiance. *Id.* at 149.

206. *See Hanly v. Mitchell*, 460 F.2d 640, 647 (2d Cir.), *cert. denied*, 409 U.S. 990 (1972) (proposed jail construction).

207. *Township of Springfield v. Lewis*, 702 F.2d 426, 449 (3d Cir. 1983).

208. *Goose Hollow Foothills League v. Romney*, 334 F. Supp. 877, 879-80 (D. Or. 1971).

209. *Township of Springfield*, 702 F.2d at 449 n.48. *See also Smith v. City of Cookeville*, 381 F. Supp. 100, III (M.D. Tenn. 1974) (assessing significance in context of size of affected area and life styles of its inhabitants).

210. *See Louisiana ex rel. Guste v. Lee*, 635 F. Supp. 1107, 1121 (E.D. La. 1986).

211. *See Louisiana v. Lee*, 758 F.2d 1091, 1086 (5th Cir. 1985), *cert. denied sub. nom. Dravo Basic Materials Co. v. Louisiana*, 106 S. Ct. 1259 (1986).

212. *Pack v. Corps of Eng'rs*, 428 F. Supp. 460, 466 (M.D. Fla. 1977).

ating a barge fleeting facility were also adjudged insignificant when the facility's eventual removal was shown not to damage the river's scenic qualities.²¹³

B. Intensity of an Action

An action's significance is measured by its intensity as well as its context. The intensity of an action is the severity of its impact (emphasis added).²¹⁴ **The CEQ lists ten criteria for determining whether an action's potential environmental effects are severe enough to be significant** (emphasis added). In evaluating intensity agencies should consider the action's: (1) beneficial or adverse effects; (2) effect on public health and safety; (3) effect on a unique geographical area; **(4) controversial effects on the human environment; (5) uncertain, unique, or unknown risks; (6) precedential effects; (7) cumulative effects** (emphasis added); (8) effect on historic, scientific, or cultural resources; (9) effect on endangered species; and (10) compliance with federal, state, or local law.²¹⁵ **The criteria provide a framework for making threshold determinations** (emphasis added) which is widely used by federal agencies. The fact that an environmental effect may be classified under one or more of the criteria does not mean that it is necessarily significant,²¹⁶ but courts may use the criteria as examples of factors requiring consideration in a threshold determination.²¹⁷

Some agencies publish further guidance on defining when an action is significant. For example, **the National Oceanic and Atmospheric Administration includes the following additional criteria for fishery management plans and amendments** (emphasis added):

- (1) The proposed action may be reasonably expected (emphasis added) to jeopardize the long-term productive capability of any stocks that may be affected by the action.
- (2) The proposed action may be reasonably expected (emphasis added) to allow substantial damage to the ocean and coastal habitats.
- (4) The proposed action may be reasonably expected (emphasis added) to affect adversely an endangered or threatened species or a marine mammal population.

213. See *River Road Alliance, Inc. v. Corps of Eng'rs*, 764 F.2d 445, 451 (7th Cir. 1985), *cert. denied*, 106 S. Ct. 1283 (1986).

214. **40 C.F.R. § 1508.27(b)** (1986).

215. *Id.*

216. See *Puna Speaks v. Hodel*, 562 F. Supp. 82, 85 (D. Haw. 1983).

217. See *Found. on Economic Trends V. Weinberger*, 610 F. Supp. 829, 841 (D.D.C. 1985).

(5) The proposed action may be reasonably expected (emphasis added) to result in cumulative adverse effects that could have a substantial effect on the target resource species or any related stocks that may be affected.²¹⁸

The Department of Interior expands the criteria involving an area's unique character to require consideration of wilderness areas, sole or principal drinking water aquifers, and ecologically significant areas, in addition to the areas detailed by the CEQ (emphasis added).²¹⁹ The Minerals Management Service of the Department of the Interior requires consideration of the effects of activities described in a development plan, including the probable construction of new onshore processing, storage, treatment, or transportation facilities resulting from offshore development and its effect on the marine, coastal, and human environment. In addition, adverse effects with a greater magnitude, duration, or nature from those previously analyzed must be considered.²²⁰

1. Beneficial or Adverse Effects

Recognizing that environmental impacts may be simultaneously beneficial and adverse, the CEQ regulations require consideration of both effects in threshold determinations even if an agency believes the effect is more beneficial than adverse.²²¹ The focus of the determination is on whether either effect may be significant. Beneficial economic effects of an action cannot be balanced against adverse environmental effects at the threshold determination stage.²²² If a beneficial effect may be significant, it must be discussed in an EIS.²²³

2. Effect on Public Health and Safety

The CEQ regulations require consideration of the degree to which a proposed action affects the public health or safety.²²⁴ **Public health was identified in NEPA's legislative history as a primary reason for**

218. Revised *NOAA Directives*, *supra* note 10, at 29,656.

219. Revised Procedures, *supra* note 10, at 21,439. See 40 C.F.R. § 1508.27(b)(3) (1986) (discussed *infra* in text accompanying note 234).

220. 30 C.F.R. § 250.34-4(c) (1986).

221. **40 C.F.R. § 1508.27(b)(1)** (emphasis added) (1986). See also *Hiram Clarke Civic Club v. Lynn*, 476 F.2d 421,427 (5th Cir. 1973) (NEPA mandates consideration of all potential environmental effects); *Goose Hollow Foothill League v. Romney*, 334 F. Supp. 877, 879 (D. Or. 1971) (**agency must consider all significant effects, beneficial as well as adverse** (emphasis added)).

222. *Sierra Club v. Marsh*, 769 F.2d 868, 880 (1st Cir. 1985).

223. *Environmental Defense Fund v. Marsh*, 651 F.2d 983, 993 (5th Cir. 1981). 224 40 C.F.R. § 1508.27(b)(2) (1986).

NEPA's enactment,²²⁵ and has been referred to as the most important subject covered by the Act (emphasis added).²²⁶ Although physical health is definitely within NEPA's ambit, it is unclear whether psychological health is also included. The problem lies not with a distinction between physical and psychological health, but with the causal chain between a physical effect on the environment and its effect on psychological health. For example, the Supreme Court ruled that the causal chain between restarting a nuclear reactor at Three Mile Island and the effect on residents' psychological health posed by the risk of an accident was too attenuated to be covered by NEPA.²²⁷ Similarly, the effect on residents' psychological health of constructing a jailor low-income housing in a neighborhood is too attenuated to be within the scope of NEPA.²²⁸

While NEPA may not cover psychological health, it does include beneficial psychological effects. The quality of life is within NEPA's scope,²²⁹ as is the public's awareness that a resource exists.²³⁰ Aesthetic values are also included.²³¹ Because of their subjective nature, aesthetic effects do not require preparation of statistical analyses.²³² Aesthetic effects rarely trigger the duty to prepare an EIS unless combined with other potentially significant effects.²³³

3. Unique Character of an Effect

In making a **threshold determination** (emphasis added), the CEQ regulations require consideration of a geographic area's unique characteristics.²³⁴ **Unique**

225. 115 Congo Rec. 19,009 (1969) (statement of Sen. Jackson) ("*What is involved is a congressional declaration that we do not intend, as a government or as a people, to initiate actions which endanger the continued existence or the health of mankind An environmental policy is a policy for people. Its primary concern is with man and his future.*").

226. *Citizens Against Toxic Sprays, Inc. v. Bergland*, 428 F. Supp. 908, 927 (D. Or. 1971).

227. *Metropolitan Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 775 (1983).

228. [*d.* at 776-77.

229. *Hanly v. Kleindienst*, 471 F.2d 823, 827 (2d Cir. 1972), *eert. denied*, 412 U.S. 908 (1973). *See also Highland Cooperative v. City of Lansing*, 492 F. Supp. 1372, 1379 (W.D. Mich. 1980) (highway construction would potentially affect quality of life of community).

230. *Minnesota Pub. Information Research Group v. Butz*, 498 F.2d 1314, 1322 n.27 (8th Cir. 1974).

231. *See Maryland-Nat'l Capital Park & Planning Comm'n. v. United States Postal Serv.*, 487 F.2d 1029, 1038 (D.C. Cir. 1973). *See also Mahelona v. Hawaiian Elec. Co.*, 418 F. Supp. 1328, 1334 (D. Haw. 1976) (recognizing "undeniably significant aesthetic consequences" of constructing a 7-10 foot high wall, 150 feet out to sea for a discharge facility).

232. *City of New Haven v. Chandler*, 446 F. Supp. 925, 930 (D. Conn. 1978).

233. *River Road Alliance, Inc. v. Corps of Eng'rs*, 764 F.2d 445, 451 (7th Cir. 1985), *em. denied* 106 S. Ct. 1283 (1985).

234. **40 C.F.R. § 1508.27(b)(30)** (emphasis added) (1986).

characteristics include the area's proximity to historic or cultural resources, prime farmlands, park lands, wild and scenic rivers, wetlands, or ecologically critical areas (emphasis added).²³⁵ For example, an EA and FONSI were declared inadequate because they did not consider the environmental and social effects of an expanded highway project in Dallas, Texas.²³⁶ The expanded highway's increased proximity to a popular city park and several historic properties would have affected the area's use because of the highway's visual, aesthetic and noise effects.²³⁷

Any effect on an area's unique characteristics, however, will not trigger an agency's duty to prepare an EIS. The effect must significantly affect the unique characteristic.²³⁸ If the action continues an existing use, the effect may be nonsignificant. For example, when the major change between old and new roads through parkland is only increased traffic capacity, the proposed road construction may not necessarily have a significant effect on the parkland.²³⁹ Although an action's effect upon an area's unique character may trigger an EIS, an effect may be significant even though no unique characteristics exist. For example, if an area's pollution problems are so severe that another pollution source would "represent the straw that breaks the back of the environmental camel" the effect may be significant.²⁴⁰

4. Controversiality of an Effect

In making threshold determinations, agencies should consider the degree to which the environmental effects of their proposed actions may be controversial (emphasis added).²⁴¹ The term "controversial" applies to the environmental effects, nature, and size of a proposed action, not to the proposed action itself.²⁴² **Thus, if opposition to a proposed action exists but the nature of its effects is not disputed, one court has**

235. *Id.*

236. *Citizen Advocates for Responsible Expansion, Inc. v. Dole*, 770 F.2d 423, 435--36 (5th Cir. 1985).

237. *Id.*

238. *See Town of Orange town v. Gorsuch*, 718 F.2d 29,36--37 (2d Cir. 1983) (effect on wetlands of expansion of sewage treatment system was not significant), *eert. denied*, 465 U.S. 1099 (1984).

239 *See Falls Road Impact Comm. v. Dole*, 581 F. Supp. 678, 696 (E.D. Wis.), *a/I'd*, 737 F.2d 1476 (7th Cir. 1984).

240. *Hanly v. Kleindienst*, 471 F.2d 823,831 (2d Cir. 1972), *eert. denied*, 412 U.S. 908 (1973).

241. **40 C.F.R. § 1508.27(b)(4)** (emphasis added) (1986).

242. *Hanly*, 471 F.2d at 830; *see also* Revised NOAA Directive, *supra* note 10, at 29,647 (**controversial does not refer to the propriety of a proposed action** (emphasis added)).

ruled that the CEQ regulations do not require the opposition to be a factor in determining the effects' significance (emphasis added).²⁴³ Individual agencies, however, may recommend factoring local opposition to a project into a decision to prepare an EIS. For example, NOAA recommends considering the controversial nature of an action in a threshold determination (emphasis added).²⁴⁴ Controversiality is partially determined by consideration of socioeconomic factors.²⁴⁵

The controversiality criteria is useful in triggering an EIS in marginal cases where the duty to prepare an EIS is unclear (emphasis added).²⁴⁶ To trigger the regulation, however, opponents of a projected action must provide evidence showing the existence of a scientific controversy about the action's environmental effects (emphasis added); mere speculation is insufficient to make an action's effects controversial.²⁴⁷ Such evidence can consist of disagreements with a nonsignificance determination by other agencies and knowledgeable members of the public.²⁴⁸ If a court finds controversy over the effects of an action, the potential uncertainty of the effects triggers the CEQ regulation on uncertain, unique, or unknown risks (emphasis added).²⁴⁹ If opposition to a project does not occur, an agency may not conclude that the action lacks significance; lack of opposition is not necessarily lack of significance.²⁵⁰

5. Uncertain, Unique, or Unknown Risks

The CEQ regulations require agencies to consider the degree to which the possible environmental effects of their actions are highly uncertain or involve unique or unknown risks (emphasis added).²⁵¹ The procedures to be followed if information is incomplete or unavailable after a decision has been made to prepare an EIS have been subject to dispute

243. See *Bosco v. Beck*, 475 F. Supp. 1029, 1038 (D.N.J. 1979), *aff'd*, 614 F.2d 769 (3d Cir. 1980), *cert. denied*, 449 U.S. 822 (1980).

244. Revised NOAA Directive, *supra* note 10, at 29,656.

245. *Id.*

246. Lynch, *The 1973 CEQ Guidelines: Cautious Updating of the Environmental Impact Statement Process*, 11 CAL. W.L. REV. 297, 312 n.83 (1975).

247. See *Town of Orangetown v. Gorsuch*, 718 F.2d 29, 39 (2d Cir. 1983), *cert. denied*, 465 U.S. 1099 (1974).

248. See *Foundation for N. Am. Wild Sheep V. United States Dep't of Agric.*, 681 F.2d 1172, 1182 (9th Cir. 1982).

249. See *Jones V. Gordon*, 621 F. Supp. 7, 12 (D. Alaska 1985), *aff'd in part and rev'd in nonpertinent part*, 792 F.2d 821 (9th Cir. 1986). See 40 C.F.R. § 1508.27(b)(4) (emphasis added) (1986) (discussed *infra* in text accompanying notes 251-89).

250. See *Mahelona V. Hawaiian Elec. Co.*, 418 F. Supp. 1328, 1333 (D. Haw. 1976).

251. 40 C.F.R. § 1508.27(b)(5) (emphasis added)(1986).

during the past few years. **The dispute has also raised questions of whether a worst case analysis must be prepared in an EA** (emphasis added).

The CEQ regulations formerly mandated preparation of a worst case analysis when **scientific uncertainty existed** (emphasis added).²⁵² If scientific uncertainty or gaps in relevant information were discovered by an agency when it was "evaluating significant adverse effects on the human environment" the uncertainty and/or gaps had to be disclosed.²⁵³ If the relevant unavailable information was "essential to a reasoned choice among alternatives and . . . the overall costs of obtaining it [were] not exorbitant," the information had to be included in the EIS.²⁵⁴

If the costs were exorbitant, or if important information was unavailable because it was beyond the state-of-the-art, the agency was to **"weigh the need for the action against the risk and severity of possible adverse impacts were the action to proceed in the face of uncertainty."**(emphasis added)²⁵⁵ A decision to proceed obligated the agency to include a worst case analysis in the EIS, together with an indication of the probability of the adverse impacts occurring.²⁵⁶ **In essence, the worst case analysis regulation addressed agency actions with the potential for low probability but catastrophic environmental consequences, where important information regarding such consequences was unknown or conflicting.** If an agency's actions involved a leap into the unknown, the worst environmental consequences of that leap had to be analyzed.²⁵⁷

The CEQ withdrew the worst case analysis regulation in 1986.²⁵⁸ **The new regulation requires that, if unavailable information is "essential to a reasoned choice among alternatives and . . . the overall costs of obtaining it are not exorbitant," the information must be included in the EIS** (emphasis added).²⁵⁹ **This requirement, which was contained in the old regulation, has not been changed** (emphasis added). The new regulation also provides that if the costs of obtaining the information are exorbitant, or if important information is unavailable

252. 40 C.F.R. § 1502.22 (emphasis added) (1985) (superseded).

253. *Id.*

254. *Id.* § 1502.22(a) (emphasis added).

255. *Id.* § 1502.22(b) (emphasis added).

256. *Id.*

257. See Yost, *Don't Gut Worst Case Analysis*, 13 *Env'tl. L. Rep.* (Env'tl. L. Inst.) 10,394, 10,394 (1983).

258. See Council on Environmental Quality, National Environmental Policy Act Regulations; Incomplete or Unavailable Information, 51 *Fed. Reg.* 15,618 (1986) [**hereinafter NEPA Regulations-Incomplete Information** (emphasis added)].

259. 40 C.F.R. § 1502.22(a) (emphasis added) (1986).

because it is beyond the state-of-the-art, **the agency must: disclose the fact that information is incomplete or unavailable; state the relevance of such information; summarize "credible scientific evidence" relevant to an evaluation of reasonably foreseeable significant adverse impacts; and evaluate the impacts by the use of "theoretical approaches or research methods generally accepted in the scientific community."**²⁶⁰ "Reasonably foreseeable" (emphasis added) is defined to include environmental effects of low probability but catastrophic consequences if an analysis of such effects "is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason."²⁶¹

It is not yet clear what the practical difference will be between the new regulation and the old regulation (emphasis added). Arguably, the analysis mandated by the old regulation will continue to be required in order for federal agencies to comply with NEPA case law.²⁶² **For example, scientific uncertainty²⁶³ and significant scientific risks²⁶⁴ must be disclosed and weighed in a decision to proceed with an action.²⁶⁵ A good faith effort to describe reasonably foreseeable environmental impacts must be made even if it requires speculation.²⁶⁶ If significant environmental effects are the subject of scientific conflict, an EIS must disclose the uncertainty by including "responsible opposing views."²⁶⁷ Courts generally defer to an agency's decision about which scientific opinion the agency chooses²⁶⁸ unless the agency's discussion of scientific data is cursory and conclusive.²⁶⁹** (emphasis added)

260. *Id.* § 1502.22(b) (emphasis added).

261. *Id.*

262. The Ninth Circuit considers that the old regulation codified prior case law (emphasis added). *Oregon Natural Resources Council v. Marsh*, 820 F.2d 1051, 1058 n.8 (9th Cir. 1987). Therefore, continued compliance with the requirements of the withdrawn regulation is required in at least the Ninth Circuit (emphasis added).

263. *See Scientists' Inst. for Pub. Information, Inc. v. Atomic Energy Comm'n*, 481 F.2d 1079, 1092 (D.C. Cir. 1973); *See Save the Niobrara River Ass'n v. Andrus*, 483 F. Supp. 844, 852 (D. Neb. 1979).

264. *Baltimore Gas & Elec. Co. v. Natural Resources Defense Council, Inc.*, 462 U.S. 87, 100 (1983).

265. *Alaska v. Andrus*, 580 F.2d 465, 473 (D.C. Cir. 1978), *vacated on other grounds, sub nom. Western Oil & Gas Ass'n v. Alaska*, 439 U.S. 922 (1978). *See Enos v. Marsh*, 769 F.2d 1363, 1373 (9th Cir. 1985).

266. *Scientists Inst. for Pub. Information, Inc. v. Atomic Energy Comm'n*, 481 F.2d at 1092.

267. *Committee for Nuclear Responsibility, Inc. v. Seaborg*, 463 F.2d 783, 787 (D.C. Cir. 1971).

268. *Baltimore Gas & Elec. Co.*, 462 U.S. at 103; *Webb v. Gorsuch*, 699 F.2d 157, 160 (4th Cir. 1983).

269. *Association Concerned About Tomorrow, Inc. v. Dole*, 610 F. Supp. 1101, 1111 (N.D. Tex. 1985) (emphasis added).

[New 1986 [40 CFR § 1502.22 Incomplete or unavailable information. When an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an environmental impact statement and there is incomplete or unavailable information, **the agency shall always make clear that such information is lacking** (emphasis added).]

(a) If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement.

(b) If the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known, the agency shall include within the environmental impact statement:

(1) A statement that such information is incomplete or unavailable; (2) a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment; (3) a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment, and (4) the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community. For the purposes of this section, "reasonably foreseeable" includes impacts which have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.

(c) The amended regulation will be applicable to all environmental impact statements for which a Notice of Intent (40 CFR 1508.22) is published in the Federal Register on or after May 27, 1986. For environmental impact statements in progress, agencies may choose to comply with the requirements of either the original or amended regulation.

[51 FR 15625, Apr. 25, 1986]

The new CEQ regulation is directly opposed to a Ninth Circuit ruling that worst case analyses are required in EAs.²⁷⁰ The EAs at issue in the Ninth Circuit cases, however, were not the type used to make traditional threshold determinations. Instead, the EAs were used for individual actions in a comprehensive program. After NEPA procedures had been followed for the broad program, EAs were prepared for individual actions within that program (emphasis added).²⁷¹ Thus, if the environmental concerns at issue had been adequately considered in the comprehensive EIS, the EAs could have "tiered" to that EIS, eliminating the necessity for further consideration of the concerns.²⁷² In effect, the EAs were functional equivalents of EISs.

If courts extend the Ninth Circuit rule of requiring worst case analysis in EAs (emphasis added) that are the functional equivalent of EISs to EAs used in threshold determinations, the new CEQ regulation could affect threshold determinations involving uncertainty. Arguably, however, NEPA's full disclosure mandate²⁷³ means that compliance with the more stringent provisions of the old regulation would still be required (emphasis added).²⁷⁴

Some courts have established a framework for considering scientific uncertainty in threshold determinations (emphasis added). These courts weigh the probability of an adverse environmental effect or a risk against its

270. 40 C.F.R. § 1502.22 (emphasis added) (1986). See NEPA Regulations-Incomplete Information, *supra* note 258, at 15,625. The superseded regulation did not mention that worst case analyses were required in EAs (emphasis added).

271. *Southern Ore. Citizens Against Toxic Sprays, Inc. v. Clark*, 720 F.2d 1475, 1480-81 (9th Cir. 1983), *cert. denied*, 469 U.S. 1028 (1984) (EAs were prepared for annual spraying; EIS had been prepared for 10-year spraying program (emphasis added)); *National Wildlife Fed'n v. United States Forest Serv.*, 643 F. Supp. 653, 653 (D. Or. 1984) (amended judgment), *vacated in part and appeal dismissed*, 801 F.2d 360 (9th Cir. 1986) (EAs were prepared for timber sales; court ordered EIS prepared for area's timber sale program (emphasis added)).

272. 40 C.F.R. § 1508.28 (1986); see *Texas v. United States Forest Serv.*, 654 F. Supp. 289, 298 (S.D. Tex. 1986).

273. See *Columbia Basin Land Protection Ass'n v. Schlesinger*, 643 F.2d 585, 594 (9th Cir. 1981); *Silva v. Lynn*, 482 F.2d 1282, 1285 (1st Cir. 1973).

274. Under the new regulation, federal agencies could conceivably exclude from consideration scientific evidence they believed to be incredible. See 40 C.F.R. § 1502.22 (emphasis added) (1986) (analysis must be "supported by credible scientific evidence"). However, although courts traditionally defer to agency expertise on determinations involving evidence at the cutting edge of science, they require agencies to have adequately considered the scientific evidence in dispute (emphasis added). *Foundation for Economic Trends v. Heckler*, 756 F.2d 143, 153-54 (D.C. Cir. 1985); see *Reserve Mining Co. v. Environmental Protection Agency*, 514 F.2d 492, 519-20 (8th Cir. 1975) (deferring to agency decision involving evidence at the "frontiers of scientific knowledge"). Thus, agencies that do not consider scientific evidence because they believe it to be incredible may be faced with a court making the credibility determination for them (emphasis added). See *Save Our Ecosystems v. Watt*, 13 Env'tl. L.R. (Env'tl. L. Inst.) 20,887, 20,888 (1983), *a/l'd in part and rev'd in part sub nom. Save Our Ecosystems v. Clark*, 747 F.2d 1240 (9th Cir. 1984).

severity. **Under this analysis, if scientific uncertainty exists regarding whether a risk has significant environmental effects, the determination of whether the risk itself is significant may turn upon its probability** (emphasis added). In *New York v. United States Department of Transportation*, the Second Circuit upheld the Department of Transportation's decision not to prepare an EIS for transporting radioactive materials by highway through urban areas.²⁷⁵ The agency concluded, and the court agreed, that the certain consequences of the action were insignificant.²⁷⁶ The court stated that agencies must consider possible environmental effects of their actions, but because the effects involved scientific uncertainty, it deferred to the agency's determination that the risk of accidentally releasing radioactive materials in an urban area was too remote to require an EIS.²⁷⁷ **Because the issue involved a threshold decision, the court stated that it was precluded from imposing its choice of risk analysis on the agency** (emphasis added).²⁷⁸ **The agency could select its own methodology for risk assessment as long as it was justified in light of current scientific opinion** (emphasis added).²⁷⁹ The District of Columbia Circuit had adopted a similar test. The court requires agencies to determine the sum of all reasonably foreseeable effects which can be feasibly determined.²⁸⁰ The probability of the effects occurring is then discounted from the determination, to calculate whether the effects are significant.²⁸¹ **The detail accompanying consideration of each effect is based on the remoteness of the effect and the severity of its potential environmental effects** (emphasis added).²⁸² Although an agency may not be obligated to prepare an EIS if significant environmental effects would only occur in the event of a remote risk, **the agency must fully discuss the basis for its determination of nonsignificance in the EA. Failure to address environmental concerns because of their speculative nature,²⁸³ or because they are unknown,²⁸⁴ is inadequate because a potential environmental effect cannot be determined to be nonsignificant unless it is**

275. 715 F.2d 732, 746 (2d Cir. 1983), *appeal dismissed and cert. denied*, 465 U.S. 1055 (1984).

276. *Id.* at 752.

277. *Id.* at 746 n.14, 752.

278. *Id.* at 751.

279. *Id.*

280. *Potomac Alliance v. Nuclear Regulatory Comm'n*, 682 F.2d 1030, 1037 (D.C. Cir. 1982); *see also Carolina Envtl. Study Group v. United States*, 510 F.2d 796, 799 (D.C. Cir 1975) (**recommending that probabilities be considered as well as consequences** (emphasis added)).

281. *Potomac Alliance*, 682 F.2d at 1037 n. 36.

282. *Id.*

283. *American Pub. Transit Ass'n v. Goldschmidt*, 485 F. Supp. 811, 833 (D. D.C. 1980).

284. *Foundation on Economic Trends v. Heckler*, 756 F.2d 143, 155 (D.C. Cir. 1985).

known. The EA must discuss relevant data (emphasis added).²⁸⁵ If an assessment cannot predict reliable results unless inventories are conducted in the areas where the action is scheduled, the inventories must be completed before the threshold determination is made (emphasis added).²⁸⁶ In a decision regarding an EIS, however, a lengthy study of biological effects was not required when an agency determined that the physical effects of its action were minor.²⁸⁷ The court determined that the agency had adequately identified the scientific uncertainty inherent in its decision as well as describing potential biological problems resulting from the physical effects.²⁸⁸ If an agency decided to conduct a test to evaluate the environmental effects of a contemplated action, the potential significance of the test's effects would have to be considered under NEPA. In a test involving the use of an airstrip, a court determined that the environmental effects were insignificant because the experts concluded that no long-range effects on health would occur if the test ended when stated, the length of the test was reasonable to fulfill its purposes, and actual testing was more accurate than computer modeling.²⁸⁹

6. Precedential Nature of an Effect

The effects of actions which may establish a precedent for future actions with significant effects or which represent "a decision in principle about a future consideration" must be evaluated in determining an effect's intensity.²⁹⁰ This type of effect can occur when construction of a facility—such as a port—ensures that an area will continue to be developed in lieu of other areas.²⁹¹ Similarly, continued investment in a project makes it increasingly difficult for decisionmakers to order the project stopped—as in offshore oil and gas leasing programs.²⁹² EISs may be required for further stages of the

285. *Foundation for N. Am. Wild Sheep v. United States Dep't of Agric.*, 681 F.2d 1172,1178 (9th Cir. 1982).

286. *Jones v. Gordon*, 621 F. Supp. 7, 12 (D. Alaska 1985), *a/I'd in part and rev'd in nonpertinent part*, 792 F.2d 821 (9th Cir. 1986). *See also Save the Niobrara River Ass'n v. Andrus*, 483 F. Supp. 844, 860-61 (D. Neb. 1979) (requiring inclusion in EIS of inventory of wildlife and wildlife habitat in area affected by proposed dam (emphasis added)).

287. *Izaak Walton League of Am. v. Marsh*, 655 F.2d 346, 375-76 (D.C. Cir.), *cert. denied sub nom. Atchison, T. & S.F. R.R. v. Marsh*, 454 U.S. 1092 (1981).

288. *Id.*

289. *City of Irving v. FAA*, 539 F. Supp. 17, 29~1 (N.D. Tex. 1981).

290. **40 C.F.R. § 1508.27(b)(6)** (emphasis added) (1986).

291. *See Sierra Club v. Marsh*, 769 F.2d 868, 879 (1st Cir. 1985).

292. *See Massachusetts v. Watt*, 716 F.2d 946, 952-53 (1st Cir. 1983).

project, but the commitment of resources stimulates further stages being agreed to by the decisionmaker.²⁹³

7. Cumulative Effects

When agencies make a threshold determination, they must consider whether the proposed "action is related to other actions with individually insignificant but cumulatively significant impacts,"(emphasis added)²⁹⁴ that is, whether the environmental effects of the action under consideration will be significant when the effects are considered together with the environmental effects of other actions. If the agency determines that a cumulatively significant impact on the environment **can be reasonably anticipated** (emphasis added), significance exists.²⁹⁵ Similarly, if the sum of the cumulative effects plus the project's direct effects may result in a significant environmental impact, significance exists.²⁹⁶

The CEQ's definition of cumulative effects is considerably broader than its definition of cumulative actions (emphasis added). Cumulative actions include only related actions proposed by the federal agency proposing the action under consideration.²⁹⁷ The CEQ's definition of cumulative effects, however, includes incremental impacts of proposed agency action on the environment **"when added to other past, present, and reasonably foreseeable future actions regardless of" the agency or person conducting the action** (emphasis added).²⁹⁸ Although cumulative impacts may be individually minor, they are considered significant when conducted collectively over a period of time.²⁹⁹

In making a cumulative effects determination, an agency need not engage in the detailed analysis required in an EIS.³⁰⁰ **Instead, its EA must identify** (emphasis added): (1) the area affected by the proposed project; (2) impacts anticipated in the area by the proposed project; (3) other past, proposed, and reasonably foreseeable actions affecting the area; (4) actual and anticipated impacts caused by other actions; and (5) the overall impact that would probably result from the cumulation of the individual impacts.³⁰¹

293. *Sierra Club*, 769 F.2d at 879.

294. **40 C.F.R. § 1508.27(b)(7)** (emphasis added) (1986).

295. *Id.*

296. *Hanly v. Kleindienst*, 471 F.2d 823, 830-31 (2d Cir. 1972), *cert. denied*, 412 U.S. 908 (1973).

297. **40 C.F.R. § 1508.25(a)** (emphasis added) (1986). See *supra* notes 116-42 and accompanying text for discussion of cumulative actions.

298. **40 C.F.R. § 1508.25(a)** (emphasis added) (1986).

299. **40 C.F.R. § 1508.7** (emphasis added) (1986).

300. *Fritiofson V. Alexander*, 772 F.2d 1225, 1245 n.15 (5th Cir. 1985).

301. *Id.* at 1245.

The size of the area to be considered may be determined by factors such as the character of the landscape, identified ecosystems within the area, proposals to expand the proposed project or to conduct other projects in the same area, and the type of pollution problems caused by other actions in relation to those caused by the proposed action.³⁰² Cumulative effects may be identified, not only by reviewing direct effects such as the loss of a population of organisms due to an agency's action but also the effect on other populations caused by the loss of the directly affected organisms. For example, the loss of benthic organisms caused by shell dredging affects organisms such as shrimp, crab, and bottom-feeding fish which feed on the benthos.³⁰³

The inclusion of other actions in a cumulative effects analysis is not determined by the public or private nature of those actions, or whether the parties conducting them are subject to NEPA (emphasis added).³⁰⁴ For example, in conducting a cumulative effects analysis for one area of a national forest, a **court required the Forest Service to consider the forestry activities of other federal and state agencies as well as private parties because the activities impacted on fish habitat in the area** (emphasis added).³⁰⁵ Similarly, the **Navy was required to consider the actions of other federal agencies and private parties** (emphasis added) involving an ocean dump used by the Navy to dispose of materials dredged during enlargement of a river channel.³⁰⁶ **An agency need not consider the potential environmental effects of actions that it determines are not reasonably foreseeable, however, as long as its determination is not arbitrary or capricious** (emphasis added).³⁰⁷

Not only is the interrelatedness between various parties unimportant in a cumulative effects analysis, but so is the interrelatedness between the actions. **As long as an action contributes to a cumulative effect on an identified natural resource, it need not be connected to any other action considered in that analysis** (emphasis added).³⁰⁸ The cumulative

302. *Id.* at 1246-47; *National Wildlife Fed'n v. United States Forest Serv.*, 592 F. Supp. 931, 942. (D. Or. 1984), *order vacated in part and appeal dismissed*, 801 F.2d 360 (9th Cir. 1986). *See also North Slope Borough v. Andrus*, 642 F.2d 589, 600-01 (D.C. Cir. 1980) (EIS analyzed cumulative impacts of other energy development projects in Alaska's North Slope area).

303. *Louisiana ex rel. Guste v. Lee*, 635 F. Supp. 1107, 1122 n.34 (E.D. La. 1986).

304. *See National Wildlife Fed'n*, 592 F. Supp. at 942.

305. *Id.*

306. *Natural Resources Defense Council, Inc. v. Callaway*, 524 F.2d 79, 87 (2d Cir. 1975).

307. *See North Carolina V. Hudson*, 665 F. Supp. 428, 439-40 (E.D.N.C. 1987).

308. *Cf. Northwest Indian Cemetary Protective Ass'n v. Peterson*, 795 F.2d 688, 696 (9th Cir. 1986) (on rehearing) *cert. granted sub nom., Lyng v. Northwest Indian Cemetary Protective Ass'n*, 107 S. Ct. 1971 (1987) (although the environmental effects of road construction

impact establishes the relationship between the disparate actions.³⁰⁹

If a threshold determination identifies cumulatively significant effects involving the proposed action, the effects must be analyzed in an EIS.³¹⁰ **One court held that such an analysis must include a list of projects with cumulative or related impacts, a concise summary of the listed projects' anticipated environmental impacts (incorporating additional information on impacts by reference where appropriate), and an analysis of the cumulative or combined effects of the listed projects (emphasis added).**³¹¹

and timber sales must be considered together because they are cumulative, the court does not discuss whether projects need to be connected).

309. See *Natural Resources Defense Council*, 524 F.2d at 89, n.9.

310. *National Wildlife Fed'n*, 592 F. Supp. at 942.

311. *Akers v. Resor*, 443 F. Supp. 1355, 1360 (W.D. Tenn. 1978).

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