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# History of the Cumulative Effects Analysis Requirement Under NEPA and Its Interpretation in U.S. Forest Service Case Law



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## I
## INTRODUCTION

The National Environmental Policy Act (NEPA) is this nation's overarching articulation of a national policy for environmental protection.[1] NEPA has been characterized as having two primary aims: to force agencies to consider the environmental effects of their actions and to provide a means to involve and inform the public in federal agency decision-making.[2] The primary action-forcing mechanism of NEPA is the requirement that agencies perform environmental impact analyses for major federal actions that may significantly affect the environment.[3] According to this process, before a project is implemented, federal agencies must explore and document alternative approaches to the action and describe the potential environmental effects of each alternative.[4] Agencies are also required to involve the public, both through a scoping process and by inviting comments on their analysis.[5]

Cumulative Effects Analysis (CEA) is a required aspect of environmental impact analysis under NEPA.[6] NEPA regulations, which were originally promulgated by the Council on Environmental Quality (CEQ) in 1978,[7] define a cumulative effect as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable

1 National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321–4347 (2006).

2 *See* Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989) (establishing these as the two primary purposes of the Act).

3 *See* 42 U.S.C. § 4322 (2006) for general requirements of environmental impact analysis under NEPA and implementing regulations and *see* 40 C.F.R. § 1502 (2010) for detailed requirements.

4 *See generally* 40 C.F.R. § 1502 (2010).

5 *See* C.F.R. § 1501.7 (2010) and 40 C.F.R. § 1503 (2010).

6 NEPA regulations define "effects" that must be analyzed in environmental impact statements: "Effects includes ecological . . . aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative" 40 C.F.R. § 1508.8 (2010). 40 C.F.R. § 1508.25(c) directs agencies to consider in their environmental impact analyses three types of impacts: direct, indirect, and cumulative.

7 The NEPA regulations at 40 C.F.R. §§ 1500–1508 (2010) were first issued by CEQ in 1978 and became effective in 1979.

future actions regardless of what agency (Federal or nonfederal) or person undertakes such other actions."[8] CEA is a critical aspect of NEPA analysis in that it requires federal agencies to look beyond the incremental impacts of a single decision, which may be individually insignificant but may cumulatively contribute to significant environmental change.

The legislative history of NEPA's passage indicates that cumulative impacts were always intended to be one of the central aspects of NEPA analysis.[9] Regulations specifically emphasizing cumulative impacts were not written until 1978,[10] but both early case law and guidelines from the CEQ emphasized the need for CEA.[11] Although CEA has been an issue raised in litigation for decades, in recent years environmental plaintiffs have brought an increasing number of complaints regarding CEA against the U.S. Forest Service (USFS) and have met with considerable success in court.[12] In the Ninth Circuit, for example, the USFS has faced and lost more cases on CEA than any other public land agency.[13] The requirement continues to be a controversial issue in National Forest management, and the judiciary is actively involved in defining the parameters of how CEA is implemented.[14]

The purpose of this Article is to provide an overview of the origins of the requirement, explore how it relates to other similar requirements under NEPA, and analyze how it has been interpreted by agencies and courts. The Article begins in Part I with a look at the history of CEA and its place as part of NEPA analysis. I consider CEQ's role in writing NEPA regulations and outlining the general

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8 40 C.F.R. § 1508.7 (2010), 40 C.F. R. § 1508.8 (2010) define cumulative effects and cumulative impacts synonymously and the terms are used interchangeably throughout this article.

9 *See* discussion *infra* at notes 33–40 and accompanying text.

10 *Supra* note 7.

11 *See generally* Terence L. Thatcher, *Understanding Interdependence in the Natural Environment: Some Thoughts on Cumulative Impact Assessment Under the National Environmental Policy Act*, 20 ENVTL. L. 611 (1990). *See* 38 Fed. Reg. 20550 (Aug. 1, 1973). *See* Part II for discussion of early case law.

12 *See* Michael D. Smith, *Cumulative Impact Assessment Under the National Environmental Policy Act: An Analysis of Recent Case Law*, 8 ENVTL. PRAC. 228 (2006) and discussion in Part III.

13 *Id.* at 231.

14 *See* Part III.

requirements of CEA. In Part II, I then discuss some important examples of how the judiciary interpreted the CEA requirement during the first three decades of NEPA implementation. The cases discussed are critical to understanding generally how agencies are required to approach CEA. In this section, I also explain how the requirement is similar but distinguishable from other NEPA concepts such as connected and cumulative actions.[15]

The remainder of the Article is devoted to a review of all cumulative impacts case law from U.S. Circuit Courts involving the USFS over a period of twelve years (1998–2009). During this time the USFS saw a rise in challenges brought against it regarding the adequacy of its CEA.[16] Part III analyzes these cases in detail, looking at the nature of the challenges and holdings by the federal appellate courts. The analysis is divided into sections according to the various types of CEA challenges in order to provide a sense of the major issues raised in court. For example, I consider CEA cases brought with regard to categorical exclusions, quality of scientific data, and scale of analysis. I conclude with a summary of observations regarding the landscape of case law on this complicated and important legal requirement.

## II
## HISTORY OF THE CEA REQUIREMENT

One of the primary intents of NEPA was to alter agency decision-making by forcing agencies to explicitly consider the environmental effects of their actions and explain their choices on the public record. As law professor Bradley Karkkainen explains, "[NEPA] seeks to improve environmental outcomes by forcing comprehensive disclosure of expected consequences of agency actions."[17] However, the Act does not require agencies to choose a more environmentally benign course of action, nor does it specify how agencies should respond to environmental risk. Early Supreme Court interpretations of NEPA made it clear that the Act's requirement were primarily procedural and not substantive in nature.[18] Despite language in

15 *See* 40 C.F.R. § 1508.25(a); *infra* Part II.A.

16 *See* Part III.

17 Bradley C. Karkkainen, *Toward a Smarter NEPA: Monitoring and Managing Government's Environmental Performance*, 102 COLUM. L. REV. 903, 903 (2002).

18 *See* Strycker's Bay Neighborhood Council, Inc. v. Karlen, 444 U.S. 223 (1980); *Methow Valley Citizens Council*, 490 U.S. 332 (1989).

Section 101 of NEPA, which states that the purpose of the Act is to protect the environment, the Court ruled that those statements do not require a particular response from agencies.[19] Agencies are obligated to consider, document, and analyze potential environmental effects but are not required to choose the most environmentally preferable course of action.

NEPA, however, cannot be characterized as having a single intent and, in fact, incorporates a variety of goals. Some of the purposes behind NEPA include: clearer planning procedures, ecosystem-level analysis, exploration of alternatives in project design, increased transparency, judicial oversight, and opportunities for public participation.[20] A thorough analysis of NEPA and its effects is beyond the scope of this project, but it is against this backdrop that we must understand the CEA requirement, as it is a key facet of the synoptic planning requirements of NEPA.

### *A. The Authority of CEQ and Early NEPA Regulations*

The CEA requirement is found in the NEPA regulations promulgated by the Council on Environmental Quality (CEQ) in 1978.[21] These regulations guide agencies in their preparation of environmental impact statements and compliance with Section 102 of the Act.[22] Sections 201–207 of NEPA outline the responsibilities of the CEQ, but nowhere in the act itself does it state that CEQ will interpret NEPA or promulgate regulations.[23] Its responsibilities as outlined in the act are, in part, "to formulate and recommend national policies to promote the improvement of the quality of the environment."[24] CEQ's job is to assist the President is his assessment of the state of the national environment and to generally guide and shape national environmental policy.[25]

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19 42 U.S.C. § 4331 (2006).

20 *See* Paul J. Culhane, *NEPA's Impacts on Federal Agencies, Anticipated and Unanticipated*, 20 ENVTL. L. 681 (1990).

21 *See* 40 C.F.R. §§ 1500–1508 (2010); *supra* notes 7 and 8.

22 42 U.S.C. § 4332 is commonly referred to as Section 102.

23 42 U.S.C. §§ 4341–4347 (2006).

24 42 U.S.C. § 4342 (2006).

25 *See generally* LYNTON K. CALDWELL, THE NATIONAL ENVIRONMENTAL POLICY ACT: AN AGENDA FOR THE FUTURE (1998).

Lynton Caldwell, one of the foremost scholars on NEPA and a principal architect of the Act itself, explains that CEQ was located in the Executive Office of the President in order to assist the president in fulfilling his managerial duties vis-à-vis the federal agencies.[26] Because NEPA was applicable to all federal agencies and its requirements cut across jurisdictional boundaries, CEQ would help to oversee and coordinate federal projects that would affect the environment. CEQ also was to fulfill "an interpretative or quasi-adjudicative function" with regard to NEPA implementation and agency coordination.[27]

The CEQ regulations were written in accordance with these interpretive responsibilities under NEPA. While the legislative history indicates there was concern that agencies would not know how to write environmental impact statements (EIS), no specific provisions were included in NEPA for regulations that would guide agency compliance with Section 102.[28] In 1973, CEQ issued guidelines to assist in the completions of EISs,[29] and eventually, in 1978, as authorized by President Carter through executive order,[30] it issued regulations that provided clear requirements for EISs.[31] Professor Lynton Caldwell explains that these regulations were meant to assist agencies in improving upon some of the "inexperienced fumbling attempts to meet the NEPA mandate" that were not uncommon during the first decade of NEPA compliance.[32]

In summary, although the Act did not originally authorize CEQ to promulgate regulations, it was always assumed to be CEQ's role to interpret aspects of the Act and coordinate activities across federal agencies. Given this coordinating role and the responsibility to promote a national environmental policy, it follows that CEQ was the appropriate body to take on the role of issuing regulations to clarify agency responsibilities under NEPA. The CEA requirement was made into formal administrative law with the writing of these regulations.

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26 *Id.* at 38.

27 *Id.* at 39.

28 *Id.* at 43.

29 38 Fed. Reg. 20550 (Aug. 1, 1973).

30 Exec. Order No. 11,991 (1977).

31 40 C.F.R. §§ 1500–1508 (2010).

32 CALDWELL, *supra* note 25, at 44.

### *B. The CEA Requirement and its Derivation from NEPA*

Because the cumulative effects requirement is so broad, one might ask whether the requirement follows logically from the language of the Act itself. In order to gain perspective on this question, it is useful to step back for a moment and consider some background on NEPA. For a number of reasons, including the emphasis on the need for both a long-term perspective on environmental effects and coordination across federal, state, and private actors, the passage of NEPA was a monumental step in natural resource policy. As Senator Henry Jackson (D-Wash), NEPA's primary sponsor in the Senate, put it, "[NEPA] . . . is in my judgment the most significant and important measure in the area of long-range domestic policymaking that will come before the 91st Congress. Without question, it is the most significant measure in the area of natural resource policy ever considered by the Congress."[33]

Indeed, the sweeping language of the Act gives testament to the grand vision of NEPA. The purpose of NEPA, as stated in the Act is: "To declare a national policy which will encourage productive and enjoyable harmony between man and his environment [and] to promote efforts which will prevent or eliminate damage to the environment and biosphere. . . ."[34] And Section 101 of NEPA states:

> [I]t is the continuing policy of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations, to use all practicable means and measures . . . to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.[35]

In the reports and debates that preceded NEPA's passage, Congress repeatedly emphasized that, in the pursuit of short-term and economic goals, the people of the United States had caused serious harm to the environment.[36] A Senate report from the Committee on Interior and

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33 115 CONG. REC. 19,008, 19,009 (1969).

34 42 U.S.C. § 4321 (2006).

35 42 U.S.C. § 4331 (2006) (commonly referred to as Section 101).

36 *See e.g.*, S. REP. NO. 91-296, at 8–9 (1969); 115 CONG. REC. 19,008 (1969), 115 CONG. REC. 26,569 (1969); H.R. REP. NO. 91-378 (1969). *Id.*

Insular Affairs, which unanimously sponsored and supported NEPA, states:

> S. 1075 is also designed to deal with the long-range implications of the crucial environmental problems which have caused great public concern in recent years. The principle threats to the environment and the Nations' life support system are those that man has himself induced in the pursuit of material wealth, greater productivity, and other important values. These threats . . . were not achieved intentionally. They were the spinoff, the fallout, and the unanticipated consequences which resulted from the pursuit of narrower, more immediate goals.[37]

In this way, the legislative history of NEPA indicates Congress's desire to improve upon the mistakes of the past by looking beyond incremental decision-making by independent government agencies to consider long-term and cumulative effects. As Senator Jackson explained in a 1969 Senate Committee report:

> As a result of [the] failure to formulate a comprehensive national policy, environmental decisionmaking largely continues to proceed as it has in the past. Policy is established by default and inaction. Environmental problems are only dealt with when they reach crisis proportions. . . . Important decisions . . . continue to be made in small but steady increments which perpetuate rather than avoid the recognized mistakes of previous decades.[38]

Part of the intent of NEPA, then, was to force federal agencies to look beyond the immediate effects of their projects and their own jurisdictional boundaries and provide a larger-scale analysis of their contribution to the state of the environment. Debate in the House in particular emphasized the need for coordination across federal agencies and consideration of the activities by state, local, and private entities.[39] Members of the House described the need for in-depth and broad-scale study of the ecological effects of projects over both the long and short term.[40] Such comments focused primarily on the

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37 S. REP. NO. 91-296 (1969). This report is also published in full at: 115 CONG. REC. 19,008 (1969) as part of a Senate floor debate on bill S. 1075.

38 *Id.* at 5.

39 *See, e.g.*, 115 CONG. REC. 26,569, 26,574 (1969) (statement of Rep. Thomas Pelly (R-Wash) in a House debate on NEPA). Pelly stated that current institutions "cannot accomplish the task of coordinating the activities and often conflicting interests of our Federal agencies, State and local governments, and private industry."

40 *See, e.g.*, 115 CONG. REC. 26569, 26584 (1969) (statement of Rep. Robert Leggett (D-CA) in the House debate on NEPA). Leggett explained, "When a Federal project, such as the Peripheral canal project, irreversibly changes the ecology of a vast region there needs to be in depth study of the total environmental effects of such a program." He also

importance of an agency like CEQ, which, once established, guided the agencies to participate in the consideration of long-term effects across jurisdictions.

The notion of CEA also follows from other language in the Act itself. Under Section 102 of NEPA, agencies must report on "the environmental impact of the proposed action" and "any adverse environmental effects which cannot be avoided should the proposal be implemented."[41] The Act also specifies that the EIS should discuss "the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity."[42] It is implied that the scope of an EIS is meant not only to consider the immediate effects of a project but also how it might impact the environment in the long-term through indirect or cumulative effects with other projects.

The precise terminology of "cumulative impacts" is not found in the legislative hearings that preceded NEPA's passage. However, the cumulative effects requirement represents some of the core goals of NEPA: to consider long-term environmental effects, to look beyond incremental decision-making, and to consider the effects of the actions of multiple actors. When seen in concert with the sweeping environmental goals articulated in the statement of purpose and Section 101 of NEPA, the language in Section 102, and the legislative history of NEPA, CEA is a logical interpretation of the Act itself. Furthermore, the CEA requirement was a codification of NEPA common law that had been established during the 1970s, as is discussed further in Part II; CEQ guidelines also emphasized the importance of cumulative impacts as early as 1973.[43] Therefore, when the CEA requirement was included in the 1978 regulations, it was nothing new or novel.

### *C. What the CEA Requirement Entails*

CEQ regulations require the consideration of three kinds of impacts: direct, which happen at the same place and time as the

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stated, "[t]here is a definite need for a consistent and expert source of review of national policies, environmental problems and trends, both long and short term."

41 42 U.S.C.§ 4332(C)(i)–(ii) (2006).

42 42 U.S.C.§ 4332(C)(iv) (2006).

43 *See generally* Thatcher, *supra* note 11.

project; indirect, which result from the project but occur at a more distant place and/or time; and cumulative.[44] The regulations further recommend that agencies analyze proposed projects that could be considered "cumulative actions" in concert and include analyses of these projects in the same EIS.[45] The message from CEQ is consistent: agencies should analyze the effects of their projects, not only in isolation, but also with a look at their cumulative effects with other activities.

Despite the consistent message as to the importance of CEA, there has been a considerable lack of understanding and compliance with regard to the cumulative impacts requirement. For example, studies conducted in the mid and late nineties indicated that less than half of the environmental assessments (EA) reviewed contained any cumulative impacts analysis.[46] Those that did contain a section on CEA sometimes concluded that there were no cumulative impacts from the proposed actions without providing supporting evidence or analysis.[47] Professor Michael Smith writes, "In the 15-year period following the release of the 1979 version of the CEQ Regulations, cumulative impact analyses were often ignored or given very little attention in many agency NEPA documents, and court cases challenging cumulative impact analyses became increasingly common."[48] He goes on to explain that during the nineties, "[a] general consensus emerged that there was a lack of a clear definition of exactly what a cumulative impact analysis was supposed to cover, along with proper procedures to follow in preparing one."[49]

In response to this confusion, CEQ published a handbook to cumulative effects analysis entitled "Considering Cumulative Effects

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44 40 C.F.R. § 1508.25(c) (2010).

45 40 C.F.R. § 1508.25(a)(2) (2010). The difference between cumulative effects and cumulative actions is explained in more detail in Part II.

46 *See* Lance N. McCold & Jeremy Holman, *Cumulative Impacts in Environmental Assessments: How Well Are They Assessed,* 17 ENVTL. PROF'L. 1 (1995); R.K. Burris & Larry W. Canter, *Cumulative Impacts Are Not Properly Addressed in Environmental Assessments,* 17 ENVTL. IMPACT ASSESSMENT REV. 5 (1997). Both of these studies evaluated environmental assessments or EAs, which are a type of environmental impact assessment done under NEPA for projects that will not have significant environmental impacts. *See* 36 C.F.R. § 1502.3. If projects will have significant environmental impacts, the more detailed environmental impact statement is required. *Id*.

47 *See* Burris & Canter, *supra* note 46, at 16.

48 *See* Smith, *supra* note 12, at 229.

49 *Id.*

Under the National Environmental Policy Act" in 1997.[50] This handbook does not have the force of law but is often referred to as the primary guide for federal agencies in their preparation of cumulative impacts analyses. CEQ emphasizes that CEA is a crucial aspect of environmental impact analysis and one that has only become more important over time. The handbook elaborates on this point and states:

> Evidence is increasing that the most devastating environmental effects may result not from the direct effects of particular actions, but from the combination of individually minor effects of multiple actions over time. . . . The fact that the human environment continues to change in unintended and unwanted ways in spite of improved federal decisionmaking resulting from the implementation of NEPA is largely attributable to this incremental (cumulative) impact.[51]

In these statements the CEQ handbook echoes the concerns of Congress in enacting NEPA and emphasizes the continued importance of CEA analysis for meaningful NEPA compliance. The most difficult aspect of CEA, the handbook goes on to explain, is defining the scope of the analysis. If it is too large, the CEA analysis will become unwieldy; if it is too small, the analysis will miss important considerations.[52] The CEQ handbook discusses the importance of considering each resource in turn at the appropriate scale and focusing on effects that are "meaningful" (defined by whether the effects are of interest to affected parties).[53] It also acknowledges that effects will almost always have to be considered beyond political and administrative boundaries.[54] Clearly, the NEPA practitioner has her hands full; she has to figure out what effects are meaningful and worthy of analysis, what is the relevant scale of analysis for each resource (and the scale might be different for every resource), and facilitate the completion of an analysis that will require

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50 COUNCIL ON ENVTL. QUALITY, CONSIDERING CUMULATIVE EFFECTS UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT (1997), *available at* ceq.hss.doe.gov/nepa/ccenepa/ccenepa.htm.

51 *Id.*at 1.

52 *Id.* at v.

53 *Id.* at 11.

54 *Id.* at 12.

data and information from numerous sources, potentially across many jurisdictional boundaries.

One thing about CEA is clear: it poses a challenging task. The CEQ handbook provides an list of activities that would have to be considered for a CEA for a Bureau of Land Management (BLM) mining project, and no fewer than twenty-six public projects involving four agencies and twelve environmental issues are listed as relevant.[55] If this degree of analysis is required to fulfill obligations under NEPA, we might assume that this sort of big-picture analysis would be handled or assisted by a programmatic EIS.[56] However, this is not always the case, because CEA is often reserved for the project-level analysis when the nature of actual activities is more clearly defined.[57]

CEQ offers some consolation to the NEPA practitioner, explaining that she should "focus on important cumulative issues, recognizing that a better decision, rather than a perfect cumulative effects analysis, is the goal."[58] In other words, an important question is whether additional analysis will inform the alternatives analysis and help the decision-maker with the decision at hand. A CEA is not necessarily about providing a perfect analysis for each resource. Also, it is critical to recognize that NEPA imposes no requirement to generate new information, although reasonable attempts should be made to acquire important information; the nature and importance of information gaps must also be explained.[59] However, if the information needed for a cumulative effects analysis is not available, planners do not have to design scientific models or conduct new research.

Despite the publication of the CEQ handbook, there still exists considerable confusion as to how to conduct a cumulative impacts analysis.[60] One study reports that in a recent survey of NEPA

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55 *Id.* at 28.

56 By a "programmatic EIS" I mean one that would cover multiple projects or actions. This sort of EIS might accompany a regional planning effort, such as a BLM resource management plan or USFS forest plan. Other programmatic EISs include those that would accompany a forest-wide travel management plan or a region-wide species management strategy.

57 *See generally* Lance N. McCold & James W. Saulsbury, *Including Past and Present Impacts in Cumulative Impact Assessments*, 20 ENVTL. MGMT. 767 (1996).

58 *See* COUNCIL ON ENVTL. QUALITY, *supra* note 50, at vii.

59 *See* 40 C.F.R. § 1502.22 (2012) (explaining what is required of agencies in cases of incomplete or unavailable information).

60 *See* Smith, *supra* note 12, at 229.

practitioners, cumulative impacts analysis was identified as one of the most critical areas where more training is necessary.[61] Several authors have indicated that CEA case law sends mixed signals and that the courts do not always enforce all aspects of the CEA requirement, although this is to be expected to some extent given that courts make decisions based on the specific facts of particular cases.[62] At this point we can turn to the case law to get a sense of how the requirement has been interpreted by the courts.

## III
## AN OVERVIEW OF EARLY CEA AND CEA-RELEVANT CASE LAW

Cumulative effects analysis has been an aspect of NEPA implementation since the early 1970s, and federal courts have required that agencies perform CEA since as early as 1975.[63] This section considers important examples of CEA case law from the 1970s through the early 1990s and also explores how the courts have ruled on related requirements under NEPA.

### *A. Cumulative Actions, Connected Actions, and Cumulative Effects*

In the years after NEPA's passage, common law played a significant role in fleshing out the requirements of the Act. In 1976, in one of the most important, early NEPA cases, Supreme Court Justice Marshall wrote, "[T]his vaguely worded statute seems designed to serve as no more than a catalyst for development of a 'common law' of NEPA. [T]he courts . . . have created such a 'common law.' Indeed, that development is the source of NEPA's success."[64] When CEQ promulgated formal NEPA regulations in 1978, those regulations generally reflected the trends from NEPA common law up until that point.[65] Therefore, it is useful to look at early NEPA case

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61 *Id.* at 229 (citing Robert Smythe & Caroline Isber, *NEPA in the Agencies: A Critique of Current Practices*, 5 ENVTL. PRAC. 290 (2003)).

62 *See* Thatcher, *supra* note 11; CALDWELL, *supra* note 25; Laura Hartt, *Recent Case, Pacific Coast Federation of Fisherman's Associations v. NMFS: A Case Study on Successes and Failures in Challenging Logging Activities with Adverse Cumulative Effects on Fish and Wildlife*, 32 ENVTL. L. 671 (2002).

63 *See* Natural Res. Def. Council, *infra* note 68 and accompanying text.

64 Kleppe v. Sierra Club, 427 U.S. 390, 421 (1976) (Marshall, J., concurring in part and dissenting in part).

65 *See generally* Thatcher, *supra* note 11.

law, which provides the foundation for how the CEA requirement has been interpreted.

There are a number of requirements under NEPA that force agencies to consider environmental effects from multiple projects in concert. One of these, of course, is the CEA requirement. However, cumulative actions[66] and connected actions[67] requirements also demand an evaluation of effects beyond the level of a single project. In many cases, even today, courts deal with the question of which of these requirements is triggered. Is the issue at hand one of connected or cumulative actions, in which case a single programmatic EIS is required? Or is this a case requiring analysis of cumulative effects of multiple projects, for which a programmatic EIS is not necessarily required? These regulatory requirements are closely related and get at the same underlying goal of inter-project analysis. For this reason, and because some of the relevant legal standards are applicable across these different requirements, a brief review of the case law on all three issues is necessary.

The first cumulative effects case heard by a federal appellate court was *Natural Resource Defense Council v. Callaway*,[68] which involved an Army Corps of Engineers (Corps) proposal to dump waste off the coast of Connecticut.[69] The Corps conducted its EIS as if its project could be analyzed in isolation, despite the existence of several other pending proposals for projects by other entities, both private and public, that would dump waste at or near the same site. The court required that the Navy and the Corps consider the impact of the proposal when seen in concert with similar proposals and actions by other parties.[70] In essence, the court required a cumulative effects analysis. The decision was based in large part on the legislative history of NEPA and "pushed NEPA law in a new but logical direction."[71] The requirements set forth by the court are now accepted as basic CEA practice by today's standards. At the time, however, the

66 40 C.F.R. § 1508.25(a)(2) (2012). Cumulative actions are those that "when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement." *Id.*

67 40 C.F.R. § 1508.25(a)(1) (2012). Connected actions are actions that "are closely related and therefore should be discussed in the same impact statement." *Id.*

68 524 F.2d 79 (2nd Cir. 1975).

69 *Id.* at 82.

70 *Id.* at 89–90.

71 Thatcher, *supra* note 11, at 614.

decision sent an important message that CEA must be included in environmental impact analyses.

A year later, an important and still oft-cited NEPA case, *Kleppe v. Sierra Club*,[72] was decided; it dealt with the question of cumulative actions.[73] At issue in this case was a decision by the U.S. Department of the Interior not to prepare a programmatic EIS for coal-related projects in the Northern Great Plains region.[74] The plaintiffs contended that the projects should have been considered cumulative actions, which are described in the regulations as actions that "when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement."[75] However, the U.S. government argued that the other projects had not been formally proposed and were not part of a single, comprehensive coal-development strategy. The U.S. Supreme Court sided with the government, ruling that agencies are only required to prepare a programmatic EIS when multiple proposals are pending review for the same region and could be considered cumulative actions.[76] Importantly, according to the decision in *Kleppe*, these actions must have ripened into actual proposals for a programmatic EIS to be required.[77] Additionally, the agency is entitled to deference in deciding how the region is defined, what projects are included in a programmatic EIS,[78] and when the EIS is undertaken.[79]

While *Kleppe* speaks to the analysis of cumulative actions under NEPA, it does not specifically address the analysis of cumulative effects. Again, these are two different concepts in the CEQ regulations, although they clearly share the goals of inter-project and regional analysis. We can understand this distinction more clearly by looking at the Sierra Club's claims in *Kleppe*. The Sierra Club was

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72 427 U.S. 390 (1976).

73 *See generally id.*

74 *Id.*

75 40 C.F.R. § 1508.25(a)(2) (2012).

76 *Kleppe*, 427 U.S. at 414–15.

77 *Id.* at 401. *See also id*. at 415 (Marshall, J., dissenting) (discussing how this decision limits the impact of NEPA). By not requiring work on an EIS before a formal proposal is made, argued Marshall, the Court seriously limited the effects of NEPA, which was meant to inform agencies in the course of developing a proposal. *Id.* at 421.

78 *Id.* at 414.

79 *Id.* at n.26.

interested in forcing the agencies to conduct a region-wide analysis of the effects of coal development in the region. Legally, there were two ways the Sierra Club could have approached this problem. The Sierra Club's approach was to challenge the decision not to prepare a programmatic EIS. Because the Court decided that only actual proposals must be considered in a programmatic EIS, and there was no pending proposal for a regional coal-leasing program, the Sierra Club lost the argument for a programmatic EIS.

Another tactic would have been to challenge the adequacy of the cumulative effects analysis in a single EIS. The Court explained this in *Kleppe*, writing that the Sierra Club's claims could have been understood as "an attack on the sufficiency of the impact statements already prepared . . . on the coal-related projects that [the agencies] have approved. . . ."[80] However, the Court goes on to explain that it cannot consider the adequacy of any EIS as "the case was not brought as a challenge to a particular impact statement. . . ."[81] Thus, this case did not directly address cumulative impacts analysis in a single EIS but, instead, addressed the issue of cumulative actions.

In other words, cumulative effects analysis requires the consideration of the effects of multiple projects in concert in an individual EIS, even if a single programmatic EIS is not required for those actions.[82] CEA is also not limited to proposed actions, as are requirements to analyze cumulative actions together, but may include other reasonably foreseeable actions. In summary, because a court has limited power to require a cumulative impacts analysis in the shape of a programmatic EIS, cumulative impacts analysis in a single EIS is one place where agencies can be legally required to look at the broad-scale impacts of their actions in concert with foreseeable future actions that have not yet ripened into formal proposals.

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80 *Id.* at 408.

81 *Id.*

82 Thatcher, *supra* note 11, at 624–25 (quoting Oregon Natural Res. Council v. Marsh, 832 F.2d 1489, 1497 (9th Cir. 1987) as clarification).

> The "cumulative impact" regulation requires the Corps to evaluate "the incremental impact of the action when added to other past, present, and reasonably foreseeable actions." 40 C.F.R. § 1508.7. Although the CEQ guidelines require that "cumulative actions" be considered together in a single EIS, 40 C.F.R. § 1508.25(a)(2), and "cumulative actions" consist only of "proposed actions," this does not negate the requirement of 40 C.F.R. § 1508.7 that the Corps consider cumulative impacts of the proposed actions which supplement or aggravate the impacts of past, present, and reasonably foreseeable actions.

*Id.*

The decision in *Kleppe* left open the question of to what extent an agency could go forward with several projects that might be part of a larger set of cumulative actions. In *Connor v. Burford*, the court dealt with precisely this issue.[83] In that case the court required the BLM and USFS to prepare an EIS on oil and gas leases in the Flathead and Gallatin National Forests. All of the leases were approved at the same time, although the lessees had not yet developed site-specific proposals. The court reasoned that the agencies could not approve some leases and prepare an EIS later because the agencies might miss the point where cumulative impacts became significant.[84] Although the Supreme Court stated that courts would defer to an agency's discretion in deciding the timing of a cumulative actions EIS, the court in this case found that the agency's failure to undertake such an analysis prior to any action was unjustifiable. This case illustrates the difficulty in understanding, in terms of legal requirements, exactly when a planned action might be considered a formal proposal and at what point the cumulative actions requirement might be triggered. There is no hard and fast rule as to when a programmatic EIS is required, and courts will rule differently on this matter depending on the specifics of the case at hand.

Also related to CEA is the idea of connected actions. When multiple projects are connected, an agency must analyze the cumulative effects of those projects in a single EIS, even if not all of the connected actions have ripened into obvious proposals.[85] The Ninth Circuit's ruling in *Thomas v. Peterson* is a classic example of a case of connected actions. [86] In this case, the USFS prepared an EA on a road that would be used for timber harvest. The agency analyzed the effects of the road in isolation, concluding that it would have no significant impact, and did not include the effects of the planned timber sale in the EA. The court ruled that the agency could not analyze the effects of a road built for timber sale without also

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83 Conner v. Burford, 848 F.2d 1441 (9th Cir. 1988).

84 *Id.* at 1451.

85 Connected actions are defined in CEQ regulations as actions which "(i) [a]utomatically trigger other actions which may require environmental impact statements[;] (ii) [c]annot or will not proceed unless other actions are taken previously or simultaneously[;] (iii) [a]re interdependent parts of a larger action and depend on the larger action for their justification." 40 C.F.R. § 1508.25(a)(1)(i)–(iii) (2010).

86 753 F.2d 754 (9th Cir. 1985).

considering the effects of the timber sale at the same time, since the actions were clearly connected.[87] Courts generally use the "independent utility" test to determine whether separate actions should be consider connected.[88] If a single action does not necessarily trigger another and has a utility apart from another action, a court will not consider the two actions connected.[89] The analysis of connected actions is another way courts can require the analysis of cumulative effects of multiple but interdependent projects.

### *B. CEA-Specific Case Law in the 1980s and Early 1990s*

In the decades after NEPA's passage, the appellate courts decided a number of cases that established CEA as a clearly enforceable requirement in NEPA analyses. Recall that in 1975 the Second Circuit made clear that CEA was a binding requirement in *Natural Resources Defense Council v. Callaway*.[90] A Fifth Circuit decision, *Fritiofson v. Alexander*, dealt with an Army Corps of Engineers' EA for the approval of a permit to fill a portion of a wetland on Galveston Island in Texas.[91] The loss of the wetland from the permit area alone was not considered biologically significant, but when seen in concert with foreseeable broader scale development on the island, it implicated more significant effects. The court held that the Corps must analyze the cumulative effects of its actions in concert with reasonably foreseeable future actions involving wetland development, even when future actions had not ripened into specific proposals.[92]

Other appellate court cases sent a similar message to the agencies regarding the CEA requirement. In *LaFlamme v. FERC*, the Ninth Circuit required that the Federal Energy Regulatory Commission assess the cumulative impacts of all proposed and existing projects in a watershed and ruled that it was insufficient to consider the effects of single projects in isolation.[93] In an early challenge to the geographic scale of a CEA, the D.C. Circuit ruled in *National Resources Defense Council v. Hodel* that Interior was required to consider cumulative impacts to migratory whale and fish species resulting from multiple

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87 *Id.* at 759.

88 *Id.* at 759–60.

89 *See, e.g.*, Native Ecosystem Council v. Dombeck, 304 F.3d 886 (9th Cir. 2002).

90 524 F.2d. 79 (2nd Cir. 1975).

91 772 F.2d 1225 (5th Cir. 1985).

92 *Id.* at 1246.

93 852 F.2d 389, 402 (9th Cir. 1988).

off-shore oil and gas projects in both the Pacific and Alaskan regions.[94] Cases such as these, involving effects to a target resource (such as a specific species) or effects to a distinct geographic area, have generally been more compelling to reviewing courts than more general "bigger is worse" claims in terms of cumulative effects challenges.[95]

In *City of Tenakee Springs v. Clough*, which dealt with a timber sale contract in the Tongass National Forest, the court addressed several aspects of the CEA requirement.[96] First, it held that the agency was required to analyze cumulative effects of the current proposed sales in concert with reasonably foreseeable future sales (in this case these sales had already been announced by the agency through published notices of intent).[97] The agency also could not disaggregate its analysis area-by-area to avoid considering cumulative impacts.[98]

In response to the court's clear requirement of a CEA, the USFS explained that it had already analyzed cumulative impacts in its 1979 land management plan.[99] The court found this argument disingenuous for several reasons.[100] The agency then tried to argue that it would perform a CEA in the upcoming revision of the forest plan.[101] However, the court held that NEPA clearly requires an analysis of effects *before* a planned action is undertaken.[102] Therefore, the agency could not wait to conduct its CEA in an upcoming plan revision. The court concluded that the lack of CEA in the EIS under review could not be justified without consideration of other current and foreseeable projects, nor could the CEA in the forest plan EIS substitute for analysis at the project level.[103]

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94 865 F.2d 288, 298–99 (D.C. Cir. 1988).

95 *See generally* Thatcher, *supra* note 11.

96 915 F.2d 1308 (9th Cir. 1990).

97 *Id.* at 1312.

98 *Id*.

99 *Id.* at 1313.

100 *Id*. For one, the agency was required to analyze cumulative impacts on subsistence users, in accordance with the Alaska National Interest Lands Conservation Act of 1980, which was passed *after* the forest plan was completed. Secondly, the court found the forest plan EIS to be quite general with no site-specific analysis of the timber harvesting projects at issue. *Id*. at 1309, 1313.

101 *Id.* at 1313.

102 *Id.*

103 *Id*. at 1313–14.

The agency's arguments in *Tenakee Springs* are a good example of what several authors have referred to as a "shell-game," by which an agency justifies a lack of NEPA analysis in one document by suggesting that it will be or has been done in another NEPA document.[104] For example, in justifying the absence of CEA in a project-level EIS, an agency might claim that it has either already analyzed cumulative impacts at the plan level or that it will do so in an upcoming plan. Alternatively, an agency might defend a lack of cumulative effects analysis in a programmatic EIS by explaining that it will conduct the CEA at the project level. But when pushed at the project level, the USFS may claim that certain types of analyses are beyond the scope of project level analyses. As we will see, an agency does have some leeway to decide the appropriate timing of a CEA. However, courts have not been blindly deferential in this area and generally require some sort of CEA at both the programmatic and project levels.[105]

An important Ninth Circuit case from the early 1990s that dealt with the CEA issue at the plan level was *Resources Limited, Inc. v. Robertson*, in which the plaintiffs challenged the Flathead Forest Plan EIS.[106] The plaintiffs argued that the agency should have analyzed the effects of nonfederal actions as part of the plan's CEA, but the agency responded that it did not need to analyze nonfederal actions because such actions are out of the agency's control. The court made it clear that any EIS, including those for forest plans, must include a CEA, and that to exclude nonfederal actions from a CEA is contrary to the plain meaning of NEPA regulations.[107] However, the court also acknowledged that not all aspects of a CEA must occur at the programmatic level.[108] It held in this case that the agency did not have to analyze nonfederal cumulative impacts "on the condition that the Forest Service must analyze such impacts, including possible synergistic effects from implementation of the Plan as a whole, before specific sales."[109] Given the facts of this case, the court decided that

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104 *See generally* Joseph M. Feller, *'Til the Cows Come Home: The Fatal Flaw in the Clinton Administration's Public Lands Grazing Policy*, 25 ENVTL. L. 703 (1995); Martin Nie, *Governing the Tongass: National Forest Conflict and Political Decision Making*, 36 ENVTL. L. 385 (2006).

105 *See infra* notes 106–10 and accompanying text, along with analysis in Part III.

106 35 F.3d 1300 (1993).

107 *Id.* at 1306.

108 *Id.*

109 *Id.*

the best time to analyze cumulative impacts of activities on nonfederal lands would be at the project level. Nonetheless, this case is sometimes cited in reference to the requirement for CEA in a forest plan EIS.[110]

Based on the first two decades of CEA case law, by the early 1990s the CEA requirement under NEPA had been established as a legally enforceable requirement.[111] It had been established that agencies were required to analyze similar actions in close proximity, foreseeable future actions, and in some cases even nonfederal actions outside of their control.[112] Agencies were advised to be particularly careful not to improperly segment connected actions or ignore similar actions in the same region that are under the agency's control.[113]

### *C. Recent CEA-Case Law in the Ninth Circuit*

A review of Ninth Circuit CEA case law from 1995 to 2004 found that the number of cases involving federal agencies and CEA challenges has been on the rise in recent years.[114] In Michael Smith's 2006 article on CEA case law in the Ninth Circuit, he found that the majority of these cases involved the USFS, which lost sixty-nine percent of the published cases decided by the Ninth Circuit over a ten-year period.[115] Smith explained that the most common challenge to CEAs—and the most common reason agencies lost in court—was an inadequate analysis of past, present and reasonably foreseeable future projects; agencies also lost a number of cases because their CEAs lacked supporting data or rationale.[116]

Despite the agencies' losing record, however, Smith concluded that courts do not expect the impossible:

> [I]n nearly all cases [the agencies] are not losing these court cases because their cumulative impact analyses are not perfect, but rather because they either have *no cumulative impact analysis at all in*

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110 *See, e.g.*, Natural Res. Def. Council v. U.S. Forest Serv., 421 F.3d 797 (9th Cir. 2005).

111 *See generally* Albert I. Herson & Kenneth M. Bogdan, *Cumulative Impact Analysis Under NEPA: Recent Legal Developments*, 13 ENVTL. PROF'L 100 (1991).

112 *Id.* at 106.

113 *Id.*

114 *See* Smith, *supra* note 12, at 230.

115 *Id.* at 231.

116 *Id.* at 228.

> *their NEPA document; they leave out obvious or critically important other past, present, and especially reasonably foreseeable future projects in their analysis area, or the analysis consists solely of undocumented assertions/conclusions of no impacts without any supporting analysis or rationale to back up that claim.*[117]

Agencies must document other relevant projects in their CEAs; support their claims with data and reasoned analysis; make a good faith attempt to comply with NEPA, but also know that the court does not expect perfection; and be careful not to tier to non-NEPA documents or programmatic EISs with no site-specific information.[118] Smith concludes that there is little evidence that the court is pushing the requirements of NEPA in new directions or requiring more than was intended by Congress and CEQ, although he suggests that *Lands Council v. Powell*, a case from 2004 discussed in further detail below, may be an exception.[119]

One issue to consider is whether CEA challenges have been on the rise in the Ninth Circuit because the court has become relatively more sympathetic to plaintiffs on this issue over the years. There is some indication that the court in the CEA cases from 1998 was relatively more favorable toward plaintiffs challenging timber sales. In her analysis of Ninth Circuit case law involving timber sales in the 1990s, Susan Jane Brown wrote that the court, in *Neighbors of Cuddy Mountain v. United States Forest Service* (hereinafter *Neighbors I*),[120] *Idaho Sporting Congress v. Thomas*,[121] and *Blue Mountains Biodiversity Project v. Blackwood* (hereinafter *Blue Mountains*),[122] engaged in particularly factual and meaningful review of the basis of USFS decisions.[123] In cases prior to 1998, Brown explained, the Ninth Circuit failed in a number of cases to closely examine the details of agency decisions and essentially denied plaintiffs any meaningful judicial review of the issues raised; the court's more careful review in *Neighbors I* and *Blue Mountains*, she argued, "represent[s] the proper

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117 *Id.* at 238 (emphasis in original).

118 *Id.* at 238–39.

119 *Id.* at 239.

120 137 F.3d 1372 (9th Cir. 1998).

121 137 F.3d 1146 (9th Cir. 1998).

122 161 F.3d 1208 (9th Cir. 1998).

123 Susan Jane M. Brown, *Striking the Balance: The Tale of Eight Ninth Circuit Timber Sales Cases*, 29 ENVTL. L. 639 (1999).

application of the arbitrary and capricious standard."[124] She argued that in *Neighbors I* and *Idaho Sporting Congress v. Thomas*, "[T]he court did not unquestioningly resort to deference to agency decision making, but instead looked at the facts alleged to support the Forest Service's conclusions. This is factually informed judicial decision making, which properly balances the agency's hard look burden and discretion with the prerequisites of the law."[125] In Brown's view these cases represented something of a judicial course correction away from cases in previous years where the Ninth Circuit had been overly deferential.

As discussed earlier, prior to 1998 the Ninth Circuit had established the CEA as an enforceable requirement of NEPA. However, as Brown argues, the 1998 decisions signaled that the level of scrutiny applied to agency decisions might be significantly ratcheted up in the future. Considering that all three of those cases dealt with CEA challenges and that the analysis was ruled inadequate in all cases, setting important precedent in terms of CEA standards, it is possible that the Ninth Circuit post-1998 became a more favorable environment for plaintiffs bringing CEA challenges against the USFS.

## IV
## CEA CASE LAW FROM 1998 TO 2009 INVOLVING THE USFS: SIX KEY ISSUES

This analysis considers CEA case law for a twelve-year period (1998–2009), with a specific focus on USFS case law and a look at all federal appellate courts. Circuit court cases were chosen to limit the scope of the analysis and because appeals court cases "usually end up being the final word on most NEPA issues."[126] The Supreme Court hears very few NEPA cases, leaving the circuit courts to flesh out the details of NEPA compliance.[127] This review focuses on the Forest Service because it is the agency that faces the most challenges on its CEAs.[128]

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124 *Id.* at 681.

125 *Id.* at 661.

126 Smith, *supra* note 12, at 229.

127 *Id.*

128 *Id.* at 231.

Cases were identified for the years 1998 to 2009 by searching both Lexis-Nexis and WestLaw for cases containing the phrases "cumulative impacts" or "cumulative effects" and in which the USFS was a primary defendant.[129] Only published opinions and those involving CEA challenges under NEPA were included in the sample. The search yielded twenty-two cases for the twelve-year period, with nineteen in the Ninth Circuit, three in the Tenth Circuit, and no published opinions on CEAs from any other circuit court. The three Tenth Circuit cases are from 2006 and 2007 only. In the Ninth Circuit, cases were identified in all years except 2001 and 2002, and there was no discernable trend in the number of cases involving CEA and the USFS over the analysis period. The agency faced anywhere from zero to three challenges per year, with an average of one and a half cases per year over the ten-year period. Tables 1 and 2, included at the end of this article, provide an overview of the cases analyzed by year along with the court's decision on the CEA challenge.

In the CEA cases identified in the Ninth Circuit, the USFS lost thirteen of the nineteen challenges brought with regard to the adequacy of a CEA, giving the agency a thirty-two percent success rate. The USFS won all of the challenges in the Tenth Circuit. The most common challenge, and the most common reason the agency lost, was a failure to include in the CEA an adequate analysis of relevant past, present, and/or reasonably foreseeable future projects in the area.[130] In other words, the agency often lost CEA challenges because of a failure to adequately analyze the effects of past projects, other concurrent projects that the court ruled should have been part of the CEA, or cumulative impacts in light of proposed or foreseeable future projects.

Rather than cover in detail all twenty-two cases analyzed in this study, this section considers cases in sections according to the major types of CEA challenges. This approach allows for a broad look at the lessons to be taken from recent CEA case law involving the USFS. In the following sections, I discuss the primary CEA issues that have been raised in court in order to provide an overview of the types of

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129 One case with the words "cumulative effects" in the decision was excluded from the sample: in *Colo. Envtl. Coal. v. Dombeck*, 185 F.3d 1162 (10th Cir. 1999), CEA was not a primary challenge raised in this case but instead just one of numerous complaints about the general inadequacy of the EIS.

130 Of the nineteen cases on CEA in the Ninth Circuit, eleven involved challenges on this issue. *See* discussion *infra* at Part III.B. and Table 1. The agency lost eight of those eleven cases. *Id.*

CEA challenges and a sense of how the courts have ruled on these topics. Two of the most common challenges raised involve the lack of supporting detail or decision rationale in a CEA and the failure to sufficiently analyze the effects of other past, present, or reasonably foreseeable actions as part of a CEA. Other issues discussed herein include: problems with the science behind a CEA; challenges to the chosen scale of analysis; the issue of tiering CEA to another document or postponing it until a later analysis;[131] and CEAs for projects that are implemented under a Categorical Exclusion (CatEx) under NEPA. The primary goals of the analysis are to provide insight into the different types of CEA complaints that plaintiffs have raised in court and to look at the factors that contribute to whether a CEA is deemed adequate. The details of all cases are covered in Tables 1 and 2.

### *A. Issue 1: Lack of Detail or Clear Rationale*

The first Ninth Circuit case included in this analysis serves as a useful jumping off point for considering CEA challenges. In *Neighbors I*, the plaintiffs challenged the EIS for a timber sale in the Payette National Forest in Idaho.[132] They charged that the USFS' analysis of cumulative effects on old-growth habitat lacked detail, and, in particular, failed to analyze in any detail three other reasonably foreseeable sales slated to occur in the same roadless area known as Cuddy Mountain.[133] In exploring the potential effects of this sale and others on old-growth habitat and dependent species, the CEA included statements such as: "There is some risk that the remaining mature and old growth forests on Cuddy Mountain may not be adequate in size, if isolated from adjacent suitable habitat, to maintain the dependent species."[134] The EIS also stated that monitoring should

131 *See* 40 C.F.R. 1502.20 (discussing tiering, a process whereby agencies may reference in NEPA documents analysis that has already been conducted in a former NEPA document). Tiering is often used for project-level NEPA analysis when the project is done as part of a broader program and policy, for which a broader programmatic NEPA analysis was previously conducted. *Id.*

132 137 F.3d 1372 (9th Cir. 1998) [hereinafter *Neighbors I*].

133 *Id.* at 1378.

134 *Id.* at 1379 (citing the USFS's 1994 Grade/Dukes EIS).

be done in order to have the information necessary to assess cumulative impacts on old-growth dependent species.[135]

As for the other proposed sales in the area, the agency included no detail about the amount of old-growth that would be cut in each of the proposed sales or whether any of the sales would impact the same home ranges of pileated woodpeckers, an old-growth management indicator species (so designated by the USFS). The court explained, "The sole reference to future sales stated, 'Future timber sales over the next several years would propose to treat additional old-growth habitat.'"[136] This statement suffers from a common shortcoming in many of the CEAs that are deemed inadequate: it describes actions, in this case in very general terms, rather than analyzing effects to a particular resource, such as old-growth dependent species and their habitat. In other words, the agency discloses the fact that additional old-growth habitat will be treated, but does not then translate that in terms of how it will actually affect wildlife populations.

As a whole, the CEA lacked any quantified or detailed information, without which, the court explained, "[N]either the courts nor the public, in reviewing the Forest Service's decisions, can be assured that the Forest Service provided the hard look that it is required to provide."[137] Both NEPA and National Forest Management Act (NFMA) planning regulations in effect at the time, according to the court, required more detailed information about effects on habitat resulting from multiple projects in the same area.[138] All of the projects had been formally proposed and thus were "reasonably foreseeable."[139] The projects would take place in the same roadless area and all had the potential to affect old-growth habitat in that area. Therefore, the agency was required to analyze the combined effects from these sales with quantified and detailed information and to justify its conclusions about cumulative effects.[140] The Ninth Circuit concluded by stating, "General statements about 'possible' effects and 'some risk' do not constitute a 'hard look' absent a justification regarding why more definitive information could not be provided."[141]

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135 *Id.* at 1379.

136 *Id.* at 1379 (citing the USFS's 1994 Grade/Dukes EIS).

137 *Id.* at 1379.

138 *Neighbors I*, 137 F.3d at 1379.

139 *Id.* at 1380.

140 *Id.* at 1379.

141 *Id.* at 1380 (internal citations omitted).

This statement is cited repeatedly by the court in many of the CEA cases that followed *Neighbors I*.[142] As for the agency's intention to monitor in order to facilitate a more complete CEA in the future, the court ruled that the agency could not defer a CEA to a later date as NEPA requires such analysis before a project takes place; even if monitoring information is limited, a CEA must be completed in the NEPA analysis.[143]

As in *Neighbors I*, a number of cases have involved complaints that a CEA is too general, lacks analysis of effects, or lacks a transparent rationale for its conclusions. For example, in *Muckleshoot Indian Tribe v. United States Forest Service* (hereinafter *Muckleshoot*), a case involving the EIS for the Huckleberry Land Exchange, the Ninth Circuit also found the CEA to be far too general.[144] It observed that the EIS contained twelve sections on cumulative effects but that "these sections merely provide very broad and general statements devoid of specific, reasoned conclusions."[145] Again, the agency's CEA described activities but failed to analyze effects. The CEA for several alternatives described the amount of land to be exchanged and made predictions about whether it would be subject to commercial harvest. However, the CEA lacked any analysis of the potential effects of those activities on resources, except to say that the lands the USFS received in the land exchange would be expected to develop greater species diversity over time.[146]

The court was dissatisfied with the lack of analysis of the possible effects of increased harvesting on lands transferred out of federal ownership and reiterated that a CEA must include enough detail to assist decision-makers and the public in assessing how cumulative impacts might differ across alternatives and how those impacts might be mitigated.[147] The analysis was also deemed "far too general and one-sided" in that it considered only possible beneficial effects, which

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142 *See, e.g.*, Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208, 1213 (9th Cir. 1998); Muckleshoot Indian Tribe v. U.S. Forest Serv., 177 F.3d 800, 810 (9th Cir. 1999).

143 *Neighbors I*, 137 F.3d at 1380.

144 *Muckleshoot*, 177 F.3d at 802–03.

145 *Id.* at 811.

146 *Id.* at 810–11.

147 *Id.* at 811.

were contingent upon future funding and action by the agency, on the lands transferred to the USFS.[148]

The same issue arose again in a slightly different form in *Oregon Natural Resources Council Fund v. Goodman*, a case in which the plaintiffs challenged the EIS for the proposed expansion of the Mt. Ashland Ski Area in the Rogue River National Forest.[149] In this case the agency failed to discuss cumulative impacts on the Pacific fisher, a wildlife species, from the project in conjunction with two other future projects. The agency argued that it did not have to provide such an analysis because the predicted impacts of the ski area expansion were modest. But the court made it clear that such conclusory statements, based on expert opinion but without any explanation of the underlying rationale, will not receive deference from a reviewing court.[150]

In summary, the Ninth Circuit has established the following: a CEA must include detailed information; a clear analysis of effects on resources, not just a description of actions; and an explanation of the rationale behind the conclusions in a CEA. In cases where the agency clearly analyzes effects, the court has upheld its decisions. In some cases, plaintiffs expressed discontent with the outcome of a CEA but failed to highlight enough deficiencies in the analysis to convince the court that the CEA was inadequate. For example, in *Cold Mountain v. Garber*, the plaintiffs were dissatisfied with the agency's conclusions that helicopter hazing associated with a bison herding facility in the Gallatin National Forest would not significantly affect bald eagle survival.[151] However, the court found that the USFS engaged in a sufficient CEA based on the information available to them at the time and secured an incidental take statement from the U.S. Fish and Wildlife Service based upon its CEA with regard to bald eagles.[152] Likewise, in *Environmental Protection Information Center v. United States Forest Service*, plaintiffs argued that a watershed model used to analyze cumulative impacts overlooked significant effects.[153] However, the plaintiffs failed to highlight a specific deficiency with the model. The court found that the agency analyzed effects on both a

148 *Id.*

149 505 F.3d 884 (9th Cir. 2007).

150 *Id.* at 893.

151 375 F.3d 994 (9th Cir. 2004).

152 *Or. Natural Res. Council Fund*, 505 F.3d at 893.

153 451 F.3d 1005 (9th Cir. 2006).

project and watershed level and that the model provided a sufficient amount of detail to meet NEPA requirements.[154]

One case from the Tenth Circuit also dealt with the issue of whether a CEA included sufficient detail. In *Utah Environmental Congress v. Richmond*, the plaintiffs argued that the CEA in an EIS failed to meaningfully or realistically analyze effects of the project on water quality and fish populations.[155] However, the agency pointed to several models it had used to analyze cumulative effects and emphasized that NEPA does not prohibit the approval of projects with negative effects, as long as the effects are disclosed. The court agreed, stating that the plaintiffs seemed to disagree with the agency's decision rather than there being any real deficiency in the CEA.[156]

### *B. Issue 2: Analysis of Past, Present and Reasonably Foreseeable Future Effects*

Another common CEA challenge, and one that also was an issue in *Neighbors I*, is whether the agency adequately included and analyzed other past, present, and reasonably foreseeable future projects in its analysis. This was the most common complaint in recent CEA cases and the most frequent reason the USFS' CEAs were ruled inadequate. Between the years 1998 and 2009, twelve of the twenty-two cases reviewed involved this issue, and the agency lost eight of those twelve cases for failure to comply with this aspect of the CEA requirement. Recall, for example, that in *Neighbors I*, the agency provided some general information about predicted cumulative effects of all proposed timber sales in the roadless area, but no specific information about individual sales or combined effects on old-growth habitat and old-growth species. In this instance, the court ruled that the agency must provide specific information about effects from individual proposed sales in its CEA.[157]

A primary reason the agency lost in *Blue Mountains Biodiversity Project v. Blackwood* was also due to the failure to analyze other proposed sales as part of the CEA in an EA prepared for the Big

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154 *Id.* at 1014.

155 483 F.3d 1127 (10th Cir. 2007).

156 *Id.* at 1140.

157 Neighbors of Cuddy Mountain v. U.S. Forest Serv., 137 F.3d 1372, 1379 (9th Cir. 1998).

Tower salvage timber sale.[158] In this case, the agency had proposed five timber sales at the same time and as part of a coordinated fire recovery strategy in a single watershed. However, nowhere in the Big Tower EA did the agency analyze the cumulative effects from these coordinated actions. The court ruled that not only was a CEA required for all the projects, but that the cumulative actions requirement (as discussed in *Kleppe*) was triggered.[159] Therefore, the agency was required to prepare a single EIS to examine the effects of all five projects that had been formally proposed as part of a single recovery strategy.

The court declined to require the same, however, in *Earth Island Institute v. United States Forest Service*, in which the plaintiffs charged that the agency should have prepared a single EIS for two salvage projects on neighboring National Forests, both of which had been planned in response to a single fire.[160] In this case, the facts that the projects would take place in two separate forests, proceed on separate time schedules, and be supervised by different personnel led the court to accept the agency's decision to analyze the projects in separate NEPA documents.[161] Nonetheless, the court ruled the CEA inadequate because it failed to analyze the cumulative impacts of the project on a spotted owl activity area in the neighboring forest.[162]

In *Muckleshoot*, the court made it clear that the USFS had to analyze the combined effects of the proposed land exchange with the effects of timber harvest on lands exchanged in previous years and the potential effects of another proposed future land exchange in the same area.[163] The agency argued that the future land exchange was too speculative, but the court noted that the exchange had already been announced in a press release and that a proposal for the exchange had been drafted a full year prior to the issuance of the EIS for the Huckleberry exchange.[164] However, in *Environmental Protection Information Center v. United States Forest Service* the court accepted the agency's position that it need not include in its CEA an analysis of

158 161 F.3d 1208, 1215 (9th Cir. 1998).

159 *Id.* at 1215.

160 351 F.3d 1291 (9th Cir. 2003).

161 *Id.* a 1306.

162 *Id.* at 1308.

163 Muckleshoot Indian Tribe v. U.S. Forest Serv., 177 F.3d 800, 810–12 (9th Cir. 1999).

164 *Id.* at 812.

a reasonably foreseeable future project.[165] In that case, the details of the future project, known as the Meteor sale, were deemed too speculative at the time the EA was prepared to allow for a useful CEA; furthermore, the agency briefly addressed the cumulative impacts expected from the Meteor sale in its response to public comments on this issue.[166]

Other cases involved distinct circumstances with regard to the issue of other past, present, or reasonably foreseeable future actions in the CEA area. For instance, in *Selkirk Conservation Alliance v. Forsgren*, which involved an EIS regarding the granting of an easement to Stimson Lumber to access its lands via National Forest land, the court dealt with the question of whether the agency should have analyzed future sales as part of its CEA.[167] Because of predicted effects on grizzly bears, the agency and Stimson spent several years developing a Conservation Agreement that would guide Stimson's activities for all current and future projects in the area. The court reasoned that a CEA need not analyze specific future projects in this case where the CEA analyzed instead the effects of the Conservation Agreement as a whole; the court did note throughout its opinion, however, that the decision hinged upon the expected enforcement of the agreement.[168]

The issue of analyzing past projects and the extent of the detail required in such analyses has become a matter of significant debate over the last several years. This issue was central to *Lands Council v. Powell* (hereinafter *Lands Council*), which involved a challenge to the Final EIS (FEIS) for the Iron Honey project in the Idaho Panhandle National Forest (IPNF).[169] The issue of cumulative impacts from past projects was particularly important in this case. The project was a watershed restoration project that included logging in an area where nearly 40,000 acres had been harvested since the 1960s. In the project area, all but two of fourteen watersheds were considered by the USFS to be either not functioning or functioning at risk.[170] Given this history of heavy management in the Iron Honey project area, plaintiffs were

165 Envtl. Prot. Info. Ctr. v. U.S. Forest Serv., 451 F.3d 1005 (9th Cir. 2006).

166 *Id.* at 1014.

167 336 F.3d 944 (9th Cir. 2003).

168 *Id.* at 962.

169 379 F.3d 738, *superseded by* 395 F.3d 1019 (9th Cir. 2005).

170 *Id.* at 1025.

particularly interested in the cumulative impacts of past management actions and also wanted to know how the proposed actions would serve to improve conditions, whereas previous timber sales had degraded resource conditions.[171]

In its assessment of this matter, the court wrote: "The [FEIS] generally describes the past timber harvests . . . and asserts that timber harvests have contributed to the environmental problems in the Project area. But there is no catalog of past projects and no discussion of how those projects (and differences between the projects) have harmed the environment."[172] The court made it clear in its decision that it already had been established as a general rule under NEPA that a CEA must include, at a minimum, a catalog or list of other past, present, and future projects and information on the environmental effects of these projects; therefore, the vague discussion in the Iron Honey FEIS of prior harvests and their general effects was deemed unsatisfactory, particularly given the facts of the case.[173]

In *Lands Council* the court held that such a cataloging of projects and project effects was necessary for a CEA and also emphasized the role of such cataloging in informing an alternatives analysis. In fact, the latter point seemed to be the court's primary problem with the agency's failure to describe in detail past projects and project effects. The court explained that a detailed accounting of past projects and their effects would help both the agency and the public analyze the potential effects of the proposed project.[174] The court also noted that the information requested would not be difficult or particularly cumbersome for the agency to generate.[175]

The issue was raised again in *Natural Resources Defense Council v. United States Forest Service* (hereinafter *NRDC*), in which the Natural Resources Defense Council challenged the adequacy of the EIS for the 1997 Tongass National Forest Plan.[176] The court ruled the EIS inadequate for a number of reasons, one of which was the failure to analyze the cumulative effects resulting from logging on

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171 *Id.* at 1027.

172 *Id*. A catalog of past actions is generally understood to be similar to a list. Sometimes past action catalogs include the names and dates of various activities. Catalogs of timber sales often include the name and date of the sale along with some information on the number of acres treated and the method used.

173 *Id.* at 1028.

174 *Id*. at 1027–28.

175 *Lands Council*, 395 F.3d at 1028, n.6.

176 *See generally* 421 F.3d 797 (9th Cir. 2005).

nonfederal timberlands.[177] In its decision, the court reiterated its holding from *Lands Council*, emphasizing that a CEA requires, at minimum, a cataloging of relevant past, present, and reasonably foreseeable future actions along with a discussion of the environmental effects of those actions.[178] The court again cited this aspect of *Lands Council* as a binding requirement in *Oregon Natural Resources Council Fund v. Goodman*.[179]

Analysis of past actions appeared somewhat complicated after these decisions. Was the agency required to list all past actions and the effects of individual past actions? The answer was not entirely clear, nor was it entirely apparent whether the Ninth Circuit was mandating a particular methodological approach. In 2005, in response to the decision in *Lands Council*, CEQ issued a memorandum entitled "Guidance on the Consideration of Past Actions in Cumulative Effects Analysis."[180] In this document, which still guides CEA practice, CEQ explained that the NEPA regulations do not specifically require agencies to catalog all relevant past actions. The CEQ memo emphasized that agencies have significant discretion to decide whether such a cataloging is necessary and asserted that, "[g]enerally, agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions."[181] NEPA decision makers were reminded to limit the information in a NEPA document to what is useful and relevant to decision makers and the public.

There may be cause for concern with CEQ's approach. One legal observer explained,

> When relevant prior actions are lumped into the environmental baseline and considered in the aggregate, the lessons of such actions are effectively removed from the decision making process. Such aggregation may also lead to a false sense of security, in which

177 *Id.* at 816.

178 *See id.* at 815.

179 505 F.3d 884, 892 (9th Cir. 2007).

180 Memorandum from James Connaughton Chariman of the Council on Envtl. Quality to Heads of Federal Agencies (June 24, 2005), *available at* ceq.hsss.doc.gov/NEPA /regs/guidance_on_CE.pdf.

181 *Id.* at 2.

> prior degradation is taken for granted because it is considered part of the environmental baseline.[182]

If this baseline is not compared to anything in the past, it can be difficult to determine cumulative impacts. However, the Ninth Circuit subsequently explained how this guidance can be understood within the context of holdings by the court and determined that CEQ's memo should be afforded deference.[183] In *League of Wilderness Defenders v. United States Forest Service*, the court explained that *Lands Council*

> merely reaffirms the general rule that 'NEPA requires adequate cataloguing of relevant past projects in the area.' An aggregated [CEA] that includes the relevant past-timber-sale inputs comports with this standard, and also furthers NEPA's purpose of 'concentrat[ing] on the issues that are truly significant to the action in question.'[184]

In this same case, however, the court found that the agency had failed to provide adequate information on the effects from past actions, which it described only very generally, to meet its obligation to take a hard look at cumulative impacts.[185]

### *C. Issue 3: Challenges to the Science Used in CEA*

Several cases analyzed for this research involved challenges to the quality of the science used in support of a CEA. For example, another key issue in the *Lands Council* decision dealt with the complaint that the data used to analyze cumulative effects on the availability of westslope cutthroat trout habitat were outdated; the court agreed with the plaintiffs, noting that the agency had not collected trout habitat data for thirteen years.[186] Current information on trout habitat was necessary, in the court's opinion, for understanding the cumulative effects of the proposed and past timber harvests on both trout habitat

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182 John C. Grothaus, *Questionable Authority: A Recent CEQ Guidance Memorandum*, 37 ENVTL. L. 885, 888 (2007).

183 *See* League of Wilderness Defenders v. U.S. Forest Serv., 549 F.3d 1211, 1218 (9th Cir. 2008) (citing Auer v. Robbins, 519 U.S. 452 (1997)) (granting deference to an agency's interpretation of its own regulations and noting that such interpretation was controlling unless it was plainly inconsistent with the regulation in question).

184 *Id.* at 1218 (internal citations omitted). The court further noted that based on its decision in Lands Council v. McNair, 549 F.3d at 128–19 (9th Cir. 2008) (en banc) that it is not their position to impose on agencies particular methodologies for meeting legal obligations.

185 *Id*.

186 *Lands Council v. Powell*, 395 F.3d 1019, 1031 (9th Cir. 2005).

and populations. Rather than include up-to-date data in its EIS, the court stated, the agency used "stale" habitat data to predict effects on the species; this was deemed unacceptable as a basis for the conclusions in the agency's CEA.[187] The court noted that it does not require all data to be immediate, but that in this case the data were "too outdated to carry the weight assigned to [them]."[188]

The scientific quality of models has also been raised in court with regard to CEAs. This issue came up in *Lands Council*, in which the court found several problems with the scientific methodologies used by the USFS to estimate effects. For instance, the Lands Council argued that a Water and Sediment Yields model had a number of shortcomings, a point that the agency conceded to the court. Because these shortcomings were not discussed in the EIS, the court ruled that, given its heavy reliance on the model in the EIS and failure to disclose all of the relevant problems with the model, the agency had not satisfied NEPA.[189]

Issues about the quality of the science underlying CEA models have come up in other cases. In *Environmental Protection Information Center v. United States Forest Service*, plaintiffs challenged the use of a cumulative watershed effects model but, according to the court, failed to point out any obvious faults with the model.[190] The court ruled that it had no reason to question the USFS' methodology in this case and that the model was sufficiently detailed and quantified to satisfy NEPA requirements.[191]

In *Oregon Natural Resources Council v. Goodman*, the plaintiffs challenged the use of a Water Erosion Prediction model and claimed it had several shortcomings.[192] The court ruled that NEPA does not require that the best scientific methodology be used, only that the agency adequately disclose the shortcomings and assumptions in predictive models.[193] The agency did so in its EIS, and the court ruled in its favor. The plaintiffs also challenged the use of an Equivalent

187 *Id.*

188 *Id.*

189 *Id.* at 1032.

190 *See generally* 451 F.3d 1005 (9th Cir. 2006).

191 *Id.* at 1014.

192 505 F.3d 884 (9th Cir. 2007).

193 *Id.* at 897.

Roadless Area model to measure cumulative impacts, but again the court found no reason to question the agency's methodology.[194] According to the court, the USFS had adequately disclosed the nature of the model, which included enough detailed and quantified information to satisfy NEPA requirements. In summary, agency models can be imperfect and have a number of shortcomings, but in order to satisfy NEPA, the agency must disclose those limitations in its EISs.

### *D. Issue 4: Problems with the Scale Chosen for a CEA*

An important aspect of a CEA is the scale chosen for the analysis. Courts have required that both the temporal and geographic scales of the analysis be explicitly stated and justified as part of a CEA. Generally, as long as the agency provides a reasonable explanation for its choice and does not contradict statements or choices about scale that have been made in other federal environmental analyses, courts have upheld agency decisions.

In *Native Ecosystems Council v. Dombeck* (hereinafter *NEC*), plaintiffs complained that the agency failed to analyze the cumulative effects of several amendments to road density standards for a number of timber sales planned in the Gallatin National Forest.[195] The court first asked whether the agency should have prepared a programmatic EIS for the road density standard amendments that accompanied the timber sales because these actions might be considered either connected or cumulative actions.[196] It found that the compendium of amendments could not be considered connected actions because they had independent utility.[197] Whether the timber sales might be considered cumulative actions was a closer call, but the court emphasized that the challenge was brought with regard to whether the plan amendments, not the timber sales, were cumulative actions.[198] It found that the amendments had not been developed as part of a comprehensive plan and could not be considered cumulative actions.[199]

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194 *Id.*

195 304 F.3d 886, 891 (9th Cir. 2002) [hereinafter *NEC*].

196 *Id.* at 982.

197 *Id.* at 894.

198 *Id.* at 895.

199 *Id.*

Next, the court turned to the question of whether the road density standard amendments required a CEA in the particular EA at issue in this case.[200] On this point, the court ruled in favor of the plaintiffs; the court stated, "[t]he importance of ensuring that EAs consider the additive effect of many incremental environmental encroachments is clear."[201] In the decision, the court noted that federal agencies prepare 45,000 EAs a year as compared to about 450 EISs.[202] Thus, it explained, EAs must consider cumulative impacts; otherwise, the cumulative effects of many smaller actions might be missed.[203] Especially in the case of timber sales, the court explained, the cumulative impacts of individually minor effects would be easy to underestimate and must be considered in the CEA in an EA.[204]

With regard to the road density amendments for multiple timber sales planned in the Gallatin National Forest, the court held that these must be analyzed together as part of a CEA.[205] The agency argued that this was not necessary because the various timber sales and road density standard amendments were widely dispersed throughout the forest.[206] However, the court disagreed with the agency about the appropriate scale of analysis.[207] It explained:

> The national forest was the geographic unit within which the Forest Service chose to set forth binding road density standards in the Forest Plan. . . . Unless the cumulative impacts of these amendments are subject to analysis *even though distantly spaced throughout the Forest*, the Forest Service will be free to amend road density standards throughout the forest piecemeal, without ever having to evaluate the amendments' cumulative environmental impacts.[208]

In this case, because the USFS had a forest-wide road density standard, it was required by the court to conduct a CEA for road

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200 *Id.* at 895–96.

201 *NEC*, 304 F.3d at 896.

202 *Id.*

203 *Id.*

204 *Id.*

205 *Id.* at 897.

206 *Id.*

207 *NEC*, 304 F.3d at 892.

208 *Id.* (emphasis in original).

density standard amendments on a forest-wide scale.[209] In other words, the agency could not choose a scale for its CEA analysis in this EA that conflicted with the choice of scale for a resource in its forest plan.

*NEC* also involved a challenge brought under the Endangered Species Act, and the court's decision on that point also dealt with a CEA issue.[210] Although this was not a CEA challenge under NEPA, the holding is relevant for understanding how the Ninth Circuit views the issue of the appropriate scale of analysis for cumulative environmental impacts. In the USFS's biological assessment of the project's impacts on grizzly bears, the agency chose a cumulative effects area that failed to analyze the effects on grizzly bears in light of a nearby sheep grazing allotment less than two miles away from the project area.[211] The agency provided no explanation for its choice of scale for the CEA in the biological assessment and no justification for why the grazing allotment had been left out of the analysis area.[212] The court ruled the choice arbitrary, particularly given that another EIS had acknowledged the significant impact of the grazing allotment on grizzly bears and that the timber sale at issue in this case would clearly affect grizzly habitat.[213]

Two lessons should be taken from this. First, the agency has to provide reasonable justification for its choice of the size of a cumulative effects analysis area. Second, if the choice appears arbitrary in light of other NEPA analyses or agency documents, a court is far less likely to defer to an agency's decision without adequate justification.

The issue of the scale of a CEA for wildlife was raised again in *Idaho Sporting Congress, Inc. v. Rittenhouse* (hereinafter *Rittenhouse*), a challenge to several timber sales in the Boise National Forest.[214] In this case, the agency again got into trouble for making choices and conclusions in an EIS that conflicted with statements in another USFS report. The 1996 Monitoring Report for the Boise National Forest stated, with regard to several species that use old-growth habitat, "Forest Plan direction is inadequate to provide for

209 *Id.*

210 *Id.* at 900–03.

211 *Id.* at 901–02.

212 *NEC*, 304 F.3d at 902.

213 *Id.*

214 305 F.3d 957, 960(9th Cir. 2002) [hereinafter *Rittenhouse*].

habitat needs, because the habitat needs of these species *must be addressed at a landscape scale.*"[215] However, the EIS at issue in this case analyzed cumulative impacts to several species using their home range as the scale of analysis.[216] The court held that the agency must prepare a new or supplemental EIS that was consistent with the conclusions of its own scientists in the monitoring report.[217] Absent a clear rationale for choosing a smaller scale of analysis that contradicted conclusions from its own documents, the choice of the scale for the CEA was deemed arbitrary and capricious.[218]

In several other cases, however, the agency's choices with regard to the scale of a CEA were upheld. For instance, in *Neighbors of Cuddy Mountain v. Alexander*, a case that revisited the EIS for the same sale challenged in *Neighbors I*, the agency's choice of scale for the CEA was deemed appropriate.[219] In this case the agency conducted an extensive CEA but chose to analyze the effects of the sale only for the west side of the Payette National Forest.[220] The plaintiffs argued that the CEA area should have included the east side of the forest, but the court found that the agency made a reasoned decision and explicitly justified its choice in the EIS.[221] The court therefore deferred to the agency's choice of the appropriate scale of analysis.

Both the geographic and temporal scope of the CEA in the Stimson Project EIS were challenged in *Selkirk Conservation Alliance v. Forsgren* (hereinafter *Selkirk*).[222] Recall that this case involved an EIS analyzing the effects of granting the Stimson Lumber Company an easement to access private inholdings in the Colville National Forest.[223] Plaintiffs claimed that the CEA should have included a proposed Stimson project on the neighboring Idaho Panhandle National Forest.[224] However, the agency explicitly considered

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215 *Id.* at 973 (citing the 1996 Monitoring Report).

216 *See id.* at 973–74.

217 *Id.* at 974.

218 *Id.*

219 303 F.3d 1059, 1071 (9th Cir. 2002).

220 *Id.*

221 *Id.*

222 336 F.3d 944, 948 (9th Cir. 2003) [hereinafter *Selkirk*].

223 *Id.*

224 *Id.* at 951, 958.

including this project in its CEA and decided not to based on an analysis of the relevant watersheds, wildlife activity areas, viewsheds, and transportation systems.[225] Furthermore, an agency biologist expressed concern that including the nearby project could make environmental effects appear less significant.[226] In light of the reasoned justification for its choice, the court upheld the agency's determination of the appropriate geographic scale of the CEA.[227]

In *Selkirk*, the plaintiffs also challenged the fact that the agency only analyzed cumulative effects for a three-year period into the future.[228] The USFS chose this short time frame despite the fact that the Conservation Agreement established with Stimson ran for five years.[229] Furthermore, a USFS wildlife biologist had originally chosen a ten-year time frame for the cumulative effects analysis.[230] The Stimson Lumber Company advanced the only argument before the court in defense of this choice; it explained that the USFS chose this short time period because of the uncertainty of the regulatory environment surrounding the Conservation Agreement.[231] Three years was the longest time frame in which the agency could be sure which rules from both the state and the USFS would govern Stimson's activities.[232] However, the court noted that the agency certainly could have made a decent guess at what Stimson's activities would be in years four and five, despite some uncertainties as to future regulations.[233] Nonetheless, although the court agreed that a longer time frame would have been preferable, it did not find the choice of the three-year time period arbitrary.[234] It reasoned that the agency had some information available for a longer time period but had the most information available for the three-year period.[235] Again, provisions in the Conservation Agreement stating that it would be revised in light

225 *Id.* at 958–59.

226 *Id.* at 959.

227 *Id.* at 960.

228 *Selkirk*, 336 F.3d at 961.

229 *Id.*

230 *Id.* at 962.

231 *Id.*

232 *Id.*

233 *Id.*

234 *Selkirk*, 336 F.3d at 962.

235 *Id.*

of new information were critical to the court's decision to uphold the less-than-ideal time frame for the CEA.[236]

### *E. Issue 5: Postponing a CEA or Tiering to Another Environmental Analysis*

Another recurrent issue in a number of the CEA cases reviewed involved situations where the agency postponed a CEA or tiered a CEA to another document. This issue is closely related to the shell-game, discussed earlier in the context of *Tenakee Springs*.[237] In that case, the USFS first tried to argue that it had analyzed cumulative impacts in its forest plan and then, when the court found the forest plan analysis insufficient, argued that it would analyze cumulative impacts in its upcoming forest plan revision. The notion of the shell-game refers to just this type of scenario wherein one is directed to various stages of planning in search of an environmental analysis that, in the end, does not appear to have happened at all.

This issue also arose in *Muckleshoot*, in which the agency argued that it had analyzed cumulative impacts in the forest plan, to which the Huckleberry EIS had been tiered.[238] The court noted first that an agency cannot tier to a non-NEPA document such as a forest plan (the Huckleberry EIS tiered to the forest plan, not the EIS for the forest plan).[239] Secondly, the court found that nothing in the forest plan examined the specific effects of this land exchange, which was still too speculative at that time to be adequately evaluated, nor did it analyze the effects of logging on lands exchanged in previous years.[240] The court concluded, "[i]f we were to adopt the Forest Service's approach, the cumulative impacts of lands exchanges would escape environmental review."[241]

The issue of postponing a CEA was central in *High Sierra Hikers Association v. Blackwell*, in which the plaintiffs argued that the USFS must complete an EIS to analyze the cumulative effects of issuing

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236 *Id.* at 963.

237 915 F.2d 1308 (9th Cir. 1990). *See supra* notes 96–104 and accompanying text.

238 *See Muckleshoot*, *supra* note 163.

239 *Id.* at 810.

240 *Id.*

241 *Id.* at 810–11.

multiyear permits to private outfitters in two wilderness areas.[242] In this case the district court ruled against the agency, finding that the issuance of such permits was likely to contribute to significant cumulative effects, triggering the requirement for an EIS.[243] The agency agreed that such an EIS was required but explained that it would prepare the EIS once it decided how to move forward with its wilderness management plans. The Ninth Circuit upheld the district court's decision to provide plaintiffs with injunctive relief, stating that NEPA requires an analysis of effects prior to agency activities and that such analysis could not be postponed.[244]

The court also dealt with the issue of postponing CEA in *NRDC*, which dealt with the failure of the agency to analyze cumulative effects of timber harvest on private lands in its 1997 Tongass forest plan.[245] The Forest Service argued that the plan was only a guidance document and that specific cumulative impacts would be analyzed at the project level when the details of specific activities were more concrete.[246] Here the court referred to its decision in 1993 in *Resources Ltd. v. Robertson*, in which it established that a forest plan EIS requires a CEA.[247] However, in *Resources Ltd. v. Robertson* the court allowed the agency to defer consideration of effects resulting from actions on nonfederal lands until project-level analyses. In *NRDC*, the court decided otherwise, holding that the forest plan must include a CEA cataloging and analyzing the impacts of high-volume timber harvest on private lands.[248]

There are several factors that likely led the court to judge that in this case such a CEA must be done at the plan level. Over five percent of the forest in southeast Alaska is owned by nonfederal entities, and those lands had been heavily logged.[249] The forest plan called for high levels of logging on adjacent and nearby lands with serious implications for old-growth habitat and species. The court reasoned:

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242 High Sierra Hiker Ass'n v. Blackwell, 381 F.3d 886, *superseded by* 390 F.3d 630 (9th Cir. 2004).

243 High Sierra Hike Ass'n v. Powell, 150 F. Supp. 2d 1023 (N.D. Ca. 2001).

244 *High Sierra Hikers Ass'n*, 390 F.3d at 644–45.

245 Natural Res. Def. Council v. U.S. Forest Serv., 421 F.3d 797 (9th Cir. 2005).

246 *Id.* at 799–800.

247 *See supra* notes 106–10 and accompanying text.

248 *Natural Res. Def. Council*, 421 F.3d at 816.

249 *Id.* at 815.

> At least in the particular circumstances of this case, the cumulative impacts on wildlife viability from continued "highgrading" by non-federal entities, as well as by the Forest Service . . . ought to be considered in a single, programmatic EIS. . . . A cumulative effects analysis in a programmatic EIS is necessary here for the Forest Service and public to make a rational evaluation of this proposed federal action balancing the competing goals of timber harvest, environmental preservation, and recreational use in the Tongass.[250]

In other words, given the potential role of the CEA at the plan level to inform multiple-use decisions in the plan, the court opined that in this case a CEA for nonfederal actions should occur at the programmatic level.

Although the court provided a rationale for its decision in the case of the Tongass forest plan revision, the direction from the courts on this issue is somewhat muddled. There is no clear answer as to whether the court will require a CEA that looks at activities on private lands in a forest plan EIS. The decision as to what resources require an in-depth CEA at a plan/programmatic level will depend on the circumstances of the case and likely on the panel that hears the case.

### *F. Issue 6: Cumulative Effects of Categorically Excluded Projects*

A final and critical issue that arises in case law from both the Ninth and Tenth Circuits is the issue of cumulative impacts as a result of projects done under a categorical exclusion (CatEx).[251] Categorical exclusion categories define types of projects that can essentially be expedited through the NEPA process. These categories are supposed to identify types of projects that will not have significant effects, including significant cumulative effects, on the environment; for such projects no EA or EIS is required. Instead, managers are required to

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250 *Id.* at 816.

251 The categorical exclusion provision is found at 40 C.F.R. § 1508.4 (2010) and reads:

> "Categorical exclusion" means a category of actions which do not individually or cumulatively have a significant effect on the human environment and which have been found to have no such effect in procedures adopted by a Federal agency in implementation of these regulations (§ 1507.3) and for which, therefore, neither an environmental assessment nor an environmental impact statement is required. An agency may decide in its procedures or otherwise, to prepare environmental assessments for the reasons stated in § 1508.9 even though it is not required to do so. Any procedures under this section shall provide for extraordinary circumstances in which a normally excluded action may have a significant environmental effect.

do some scoping and issue a decision memo detailing the nature of the project and why it fits into a particular CatEx category.[252]

Prior to 2003, the USFS had one CatEx category for vegetation management projects; as part of the Bush administration's Healthy Forests Initiative (HFI) of 2002, the USFS expanded its use of CatExes and in 2003 created four new CatEx categories for vegetation management projects.[253] The Government Accountability Office (GAO) explains, "[l]ittle is known about the Forest Service's use of these categorical exclusions because, prior to 2005, the agency did not maintain nationwide data on their use."[254] However, the GAO's study of the use of vegetation management CatExes between 2003 and 2005 found that nearly seventy-five percent of such projects are now completed under a CatEx, accounting for almost half of the acreage treated by the USFS.[255]

In terms of CEAs, plaintiffs have brought both facial and applied challenges to CatEx categories and projects. A recent case from the Ninth Circuit dealing with this issue is *Sierra Club v. Bosworth*.[256] At issue in this case was the Fuels CatEx category, or CatEx category 10, created in 2003, which allowed for categorical exclusion of all fuels reduction projects up to 1000 acres and prescribed burn projects up to 4500 acres across the entire National Forest system.[257] The plaintiffs argued that the agency should have prepared an EIS before promulgating the category, establishing that the category would not have significant cumulative impacts as a result of the implementation of numerous categorically excluded projects under the Fuels CatEx.

Some additional background is necessary to understand this case. CEQ regulations regarding CatExes state that agencies may "identify categories of actions which do not individually or cumulatively have a significant effect on the human environment."[258] Additionally, agency procedures are supposed to provide information on "extraordinary

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252 There are also USFS CatEx categories for activities that do not require a decision memo. These include activities such as routine building maintenance or the issuance of administrative procedures. *See* GOVERNMENT ACCOUNTABILITY OFFICE, USE OF CATEGORICAL EXCLUSIONS FOR VEGETATION MANAGEMENT PROJECTS, CALENDAR YEARS 2003 THROUGH 2005 (2006), at n.8.

253 *Id.* at 1.

254 *Id.* at 1–2.

255 *Id.* at 3.

256 510 F.3d 1016 (9th Cir. 2007).

257 *Id.* at 1019.

258 40 C.F.R. § 1508.4 (2010).

circumstances in which a normally excluded action may have a significant environmental effect," in which case an EA or EIS would be required.[259] Importantly, as the court noted in *Sierra Club v. Bosworth*, just before the creation of this category, the USFS changed its direction on "extraordinary circumstances."[260] Beginning in 2007, various resource conditions, such as the presence of highly erosive soils, roadless areas, or areas with threatened or endangered species, that before had *automatically* triggered the extraordinary circumstances condition and required the completion of an EA or EIS, now only required *consideration* of whether the provision is triggered and an EA or EIS is required.[261] In other words, managers can now use their judgment in deciding whether the potential effects on these resource conditions require more analysis than would be done for a CatEx. This increased discretion gives cause for concern that CatEx projects might have significant effects that are overlooked. In this case, the U.S. Fish and Wildlife Service, for example, raised concerns about the flexibility in the definition of extraordinary circumstances and the fact that such flexibility might lead to adverse impacts on streams and fish habitat.[262]

In its decision regarding the Fuels CatEx, the court stated that an EIS is not required as part of the process of creating a CatEx category, but that a CatEx category can only be created if the agency determines that the category includes projects that will not have significant cumulative effects.[263] Therefore, even though an EIS is not required, a CEA is still required as part of the process of creating a CatEx category, and the court found numerous reasons why the agency's CEA, or lack thereof, was inadequate. The agency conceded that it never conducted a CEA for the category as a whole but argued that CEAs would be conducted at the project level. The court found

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259 40 C.F.R. § 1508.4 (2010). The extraordinary circumstances issue is addressed in the USFS handbook in Ch. 30. The handbook lists resources conditions, such as the presence of endangered species, wilderness and roadless areas, wetlands, and other factors that "should be considered in determining whether extraordinary circumstances related to a proposed action warrant further analysis and documentation in an EA or an EIS…" (section 30.4).

260 510 F.3d at 1020–22.

261 *Id.* at 1020–21.

262 *Id.* at 1033.

263 *Id.* at 1026.

this argument to be in direct contradiction to the intent of a CatEx category, which should be made for a group of projects that together would not have significant cumulative impacts.[264] In essence, a CatEx category should relieve decision makers of the need to determine in every case whether cumulative effects are likely, except in cases of extraordinary circumstances. A CEA for the category was particularly important in this case, according to the court, given the nationwide scope of the category and its potential to affect over a million acres per year.[265] As the court explained, "if assessing the cumulative impacts of the Fuels CatEx as a whole is impractical, then use of the categorical exclusion mechanism was improper."[266]

Further problems with the agency's analysis regarding the potential effects of the Fuels CatEx hark back to criticisms from the court from other CEA cases. For example, the USFS conducted a data call as part of the process of creating the Fuels CatEx to consider approximately 2500 previous fuels reduction projects and their effects. The report summarizing the results of the data call included many sections entitled cumulative effects, but the court found that these sections lacked detail or provided little support for summary conclusions of no significant cumulative impacts.[267] The court wrote, "[t]he Forest Service does not reveal its methodology or offer any quantified results supporting its conclusory statements that there are no cumulative impacts—it argues only that through the exercise of its expertise it determined that there was no such impact. This is insufficient."[268] Moreover, the agency made the same mistake it did in *Muckleshoot* of emphasizing solely the potential beneficial effects of projects without conducting a broader analysis of overall environmental effects.[269]

Projects in the data call also sometimes included mitigation measures to minimize effects, but, as the court noted, CatEx projects

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264 *Id.* at 1027.

265 *Id.* at 1028.

266 *Bosworth*, 510 F.3d at 1028.

267 *Id.* at 1029. Numerous projects in the data call were found to have had potentially significant effects on wildlife, soils, and water quality but the report concluded these effects were either localized, temporary, or of minor significance. Some of the projects analyzed as part of the data call *did* have significant cumulative impacts, but the report on the data call does not give any information as to what types of projects might lead to significant effects.

268 *Id.* at 1028.

269 *Id.* at 1029 (citing *Muckleshoot*, 177 F.3d 800).

do not require mitigation measures.[270] Therefore, the category was deemed to lack the specificity needed to justify its use. The CatEx "fail[ed] to identify the maximum diameter of species of trees that are permitted to be logged", specified "no limit on the proximity of different projects under the Fuels [CatEx], nor any cap on the number of projects in a particular watershed, ecosystem, or endangered species habitat area," and lacked restrictions on thinning and road densities.[271] For these reasons, the court issued a nationwide injunction on the Fuels CatEx for the lack of CEA or any other detailed analysis of potential effects.

Two cases in the Tenth Circuit also centered around the CatEx issue. The first case, *Colorado Wild v. United States Forest Service*, involved a facial and applied challenge to CatEx category 13, which is for small-scale timber projects and replaces a former CatEx category that was similar in scope.[272] As part of developing the new CatEx category 13, the USFS undertook several levels of analysis.[273] For one, it considered all of the projects that had been conducted under the former CatEx category in 1998, prior to the creation of the new category.[274] It also selected 154 previous timber projects that either: (1) had been approved under the former CatEx category, (2) had been approved after an EA or EIS was completed but which could have fit within the definitions of the former CatEx, or (3) were small in scope.[275] Importantly, none of the projects selected had predicted significant effects.[276] USFS teams also conducted post-implementation monitoring to verify that no significant effects had occurred for those projects.[277] Based on this review, the USFS created three new CatEx categories.[278] Category 12 allows for live timber harvests less than seventy acres in size, category 13 allows for salvage harvests less than 250 acres in size, and category 14 allows for

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270 *Id.*

271 *Id.* at 1032–33.

272 435 F.3d 1204 (10th Cir. 2006).

273 *Id*. at 1210.

274 *Id*.

275 *Id.*

276 *Id*.

277 *Id*. at 1211.

278 *Colo. Wild*, 435 F.3d at 1211.

harvest of insect-infested or diseased trees on sites less than 250 acres in size.[279]

In *Colorado Wild v. United States Forest Service*, the plaintiffs challenged the creation of category 13 for its failure to adequately consider cumulative impacts.[280] Specifically, the plaintiffs challenged the methodology used to create the category.[281] The size limit of 250 acres was chosen because it was just below the average for all salvage projects reviewed by the USFS during its process of creating the new CatEx categories.[282] The plaintiffs explained that the median size of such projects was fifty acres, but that the average size was skewed because of the presence of several very large projects, including one of 9000 acres, in the pre-selected sample.[283] Essentially, the environmental groups took issue with the fact that the USFS found a few large projects that had no predicted significant impacts and included these in a selected sample of projects.[284] Indeed, the USFS process was biased. Either it should have removed the statistical outliers from its sample or undertaken the analysis based on a random sampling method. However, the court did not find that the plaintiffs had met their burden of showing that the large projects in the sample were unusual or ought to have been excluded from the analysis.[285]

Compounding the USFS' inadequate analysis, according to the plaintiffs, was the fact that the CatEx category allowed for a half-mile of temporary road construction under the new CatExes.[286] To come up with this limit, the USFS noted that thirty-five of the projects it selected included an average of one-half mile of temporary road, even though 119 of the projects it selected had no road construction at all.[287] In determining the amount of road to be constructed the USFS did not take the average road length across all projects. Instead, it first removed all projects with no roads from its sample and then took an average for the remaining projects.[288] This approach was inconsistent

279 *Id*.

280 *Id*. at 1219.

281 *Id*.

282 *Id*.

283 *Id*. at 1214.

284 *Colo. Wild*, 435 F.3d at 1214.

285 *Id.* at 1214–16.

286 *Id.* at 1216 (wherein begins the discussion on road length).

287 *Id.*

288 *Id*.

with its process for setting an acreage limit, and, consequently, there appeared to be limited objectivity in the USFS' process for determining what types of salvage projects ought to be categorically excluded.[289] Nonetheless, the court in this case deferred to the USFS' methodology.[290] Noting its "admittedly lay perspective" on these statistical issues, the court refused to substitute its judgment for the agency's.[291] In general, the level of review as to the nature of the agency's approach to analyzing CEAs before making a CatEx category appeared somewhat more relaxed in this Tenth Circuit case than what was undertaken by the Ninth Circuit.

As for CEAs, the environmental groups in this case contended that, particularly given the deficiencies in how this CatEx category was created, its use might lead to significant cumulative impacts.[292] Recall that actions under CatEx categories must not lead to significant cumulative impacts.[293] The court's response was that agencies are required to conduct scoping even on CatEx projects. In this process, the court reasoned, project managers determine whether significant effects might result from a project, which would then trigger the need for more detailed environmental review.[294] This provision, according to the court, provides a safety net for cases when a project or multiple projects in the same area might have significant cumulative effects.[295] The plaintiffs also expressed concern that the agency might break up bigger projects into smaller ones that fit under this CatEx category.[296] Despite the fact that they cite numerous cases in which the agency was found to do just this, the court stated that it had no choice but to trust that the agency would observe the law in its application of this CatEx.[297]

Another Tenth Circuit case from 2006, involved an applied challenge to a project in the Fishlake National Forest. In *Utah Environmental Congress v. Bosworth*, plaintiffs argued that the Seven

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289 *Id*.

290 *Colo. Wild*, 435 F.3d at 1216.

291 *Id.*

292 *Id*. at 1220.

293 *See* 40 C.F.R. § 1508.4 (2012).

294 *Colo. Wild*, 435 F.3d at 1221.

295 *Id*.

296 *Id*. at 1220.

297 *Id.* at 1221–22.

Mile Project, approved under CatEx category 14, failed to include an adequate CEA.[298] The plaintiffs charged that the agency failed to conduct a CEA for indicator species or create a large enough cumulative effects boundary. The court reasoned that requiring a CEA for a project approved under a CatEx category would render the whole notion of CatExes useless.[299] The court also noted that a CEA should already have been conducted when the category was promulgated but did not review whether this was the case, as the category as a whole was not challenged by the plaintiffs.[300]

The court further explained that the only reason a CEA might be required in this case would be if extraordinary circumstances were present and wrote:

> We agree that it may be conceptually possible for a large number of small projects to collectively create conditions that could significantly affect the environment. But the regulation itself contains a provision to address that concern, namely the extraordinary circumstances exception. And the extraordinary circumstances safety-valve is more than capable of addressing specific harms allegedly created by specific projects. . . .[301]

All in all this seems to place a considerable burden on the extraordinary circumstances provision, which is somewhat worrisome given the flexibility the agency now has significant discretion to determine if such circumstances exist and warrant preparation of an EA or EIS. The plaintiffs also noted that the decision memo for the Seven Mile project acknowledged potential effects to several sensitive species and, therefore, the extraordinary circumstances provision should have been triggered. However, the court found that such effects were not predicted to be significant and therefore did not require further analysis.[302] Extraordinary circumstances, according to the USFS handbook, only exist when there may be a potentially significant effect.[303]

It would be fair if, at this point, the reader is thoroughly confused. Is it not easy to imagine multiple projects with individually less-than-

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298 443 F.3d 732 (10th Cir. 2006).

299 *Id.* at 740.

300 *Id.* at 741.

301 *Id.*

302 *Id.* at 742.

303 FOREST SERVICE HANDBOOK, ch. 30 § 30.3, *available at* wwww.fs.fed.us /recreation/programs/ohv/chap30.pdf. 3.

significant effects to sensitive species that would be cumulatively significant? When and how would this situation be detected? And is an EA not the proper document for determining whether effects to a particular resource are or are not significant? Is this an appropriate determination to make for a categorically excluded project, for which a CEA is not even conducted?

Given this maze of requirements regarding the nature of cumulative impacts and CatEx categories, one cannot envy the positions of the public or agency staff members, who must wade through this complicated decision-making framework. Agency personnel are left to sort through these court decisions and figure out whether they must consider cumulative effects as part of scoping or considering extraordinary circumstances, or whether the heavy lifting for CEA was adequately handled during the creation of the category. If some sort of CEA has to occur for CatEx projects, it is unclear what form this analysis should take given that courts have said a CatEx project does not require a CEA. The current situation may be the inevitable result of the improper creation of CatEx categories that include projects that may have cumulatively significant impacts. As noted earlier, the number of projects completed by the USFS under a CatEx category has been significant in recent years, and the definitions of these categories appear to push the boundaries as to the types of projects that can be approved without more detailed environmental analysis.

In summary, it is clear that the agency has the responsibility of ensuring that projects that fall under CatEx will not have significant cumulative impacts, but it is less clear that the agency is meeting its obligations in this area. As the court explained in *Utah Environmental Congress v. Bosworth*:

> [R]elatively little analysis is required of the Forest Service once it determines that a project fits within the four corners of a categorical exclusion. This is because the Forest Service previously did the heavy lifting when it created the categorical exclusion—it conducted an extensive environmental analysis and determined that any project approved under a categorical exclusion would not produce a significant or cumulative effect on the environment in the absence of extraordinary circumstances.[304]

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304 443 F.3d at 750.

This is the ideally how CatEx categories are meant to work; the problem is that it is unclear whether the agency really has done this heavy lifting for some of the current CatEx categories. The Ninth Circuit found that, at least for one category, the agency had not met its responsibilities in this area. It seems the Tenth Circuit has deemed that as long as a CatEx category stands, scoping, the illegality of segmenting projects, and the extraordinary circumstances provision are adequate for preventing cumulative impacts.

At present, USFS staff determine whether cumulative impacts will occur during scoping and consideration of extraordinary circumstances. This type of analysis is what an EA or EIS is for, however, and is why CatEx categories are supposed to include only activities which have already been determined not to have an individually or cumulatively significant impact. The key question is whether the Tenth Circuit's position on this matter and the USFS' use of CatExes for projects that may have significant cumulative impacts are unsatisfactory and skirt the requirements of NEPA and CEA. Undoubtedly, the current legal and administrative decision-making frameworks, as a result of this direction from the courts and questionable use of CatExes by the agency, may be serious impediments to effectively conducting CEA, especially for CatEx projects.

## V
## CONCLUSION

When it comes to the more straightforward aspects of CEA, the Ninth Circuit has established relatively clear standards for how the analysis must be presented in NEPA documents. For example, the agency cannot fail to include other relevant projects in its analysis. Some sort of catalog of past projects much be provided, and reasonably foreseeable future projects must also be included in the CEA as long as the details of those projects are known with any specificity. Adequate empirical support and an explanation of the rationale behind conclusions must be provided in a CEA. The analysis cannot be postponed to a forthcoming NEPA document, nor can it tier to either a non-NEPA document or a programmatic document that does not include analysis specific enough to be relevant for the decision at hand. Data cannot be obviously outdated, particularly if the data plays a big role in supporting a CEA. The scale of the analysis must be explicitly stated, and the choice of both temporal and geographic scale of a CEA must be justified with some degree of

clear reasoning. In general, claims of professional expertise alone will not survive judicial review.

The case law is less consistent in terms of the aspects of CEA that are more complicated and confusing. For instance, some of the most challenging aspects of implementing the CEA requirement involve the questions of how exactly to capture impacts from many past actions and whether CEA is most appropriately tackled at the programmatic or project level. Indeed, it is in these areas that judicial decisions are not always consistent and vary according to the specific facts of the case. For instance, it is not entirely clear to what extent the agency must disclose the effects of individual past projects as opposed to relying upon a portrait of current conditions as an indicator of cumulative impacts. Requirements for CEA in programmatic NEPA analyses also vary from case to case. For example, it is unclear to what extent a CEA must be included in forest plan EISs. There is also no bright line rule as to when a reviewing court will deem necessary a programmatic document for reviewing cumulative actions. Finally, the issue of providing a CEA for CatEx categories and projects is also messy and turns on the issue of how and when to provide a look at the cumulative impacts of many smaller or less impactful actions.

## APPENDIX

TABLE 1. Ninth Circuit CEA Cases: Primary Challenges and Holdings

| Ninth Circuit Cases | CEA-related challenges | Court decision |
|---|---|---|
| *Neighbors of Cuddy Mountain v. USFS*, 137 F.3d 1372 (1998) | A challenge to Grade/Dukes timber sale EIS on the Payette National Forest, Idaho. Plaintiffs contended the CEA was too general and lacked detailed analysis of effects of this and other proposed sales on old-growth habitat. | CEA inadequate<br>1) The court deemed the discussion of cumulative impacts too general; it failed to meet "the hard look" standard. A CEA must include detailed and quantified information.<br>2) A CEA with specific discussion of other reasonably foreseeable future sales must be included.<br>3) A CEA cannot be postponed until after a decision when more data is available; NEPA requires analysis before the action is taken. |
| *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146 (1998) | A challenge to Miners Creek and West Camas Creek timber sale EAs on the Targhee National Forest, Idaho. Plaintiffs argued the USFS should have supplemented the EA for the earlier of the two sales to account for cumulative impacts from the more recently proposed sale. They also argued the USFS should have prepared an EIS for both sales to address cumulative impacts. | CEA inadequate<br>1) The court ruled that an EIS is required for the sales in order to address controversy and uncertainty over possible effects on water quality and fisheries.<br>2) Cumulative impacts were addressed in the latter of the two EAs. If the court were not requiring an EIS, there would be no need to supplement the earlier EA so that it includes the same information as the latter EA.<br>3) The court implies that the CEA in the latter EA is inadequate; they say it is "sparse" and inadequacies can be addressed in forthcoming EIS. |

| Ninth Circuit Cases | CEA-related challenges | Court decision |
|---|---|---|
| *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208 (1998) | A challenge to the EA for Big Tower salvage timber sale on the Umatilla National Forest, Oregon. The EA failed to mention or analyze effects from other proposed sales in the area. | CEA inadequate<br>1) The USFS failed to mention three of the four other sales in the EA. All five sales were proposed at the same time as part of a coordinated fire recovery strategy. The court ruled these all should have been analyzed in a single EIS (the cumulative actions requirement was triggered).<br>2) The effects analysis for this sale is deemed inadequate and unjustified in its conclusions. The analysis lacks specificity, and the agency's assertions of no significant impacts from this sale are unsupported and inconsistent with statements in other documents, such as the forest plan. In a case where the effects analysis is insufficient, the CEA also must be inadequate. |
| *Muckleshoot Indian Tribe v. USFS*, 177 F.3d 800 (1999) | A challenge to the EIS for Huckleberry Land Exchange in Mt. Baker-Snoqualmie National Forest, Washington for failure to analyze cumulative effects of logging on lands that were part of an earlier exchange, other USFS lands, and lands to be exchanged in the foreseeable future. | CEA inadequate<br>1) The agency argued that the CEA was done in the Forest Plan and also points to another non-NEPA report. The court ruled that the agency cannot tier a project-level EIS to a forest plan or any other non-NEPA document. Furthermore, neither the forest plan nor its accompanying EIS |

| Ninth Circuit Cases | CEA-related challenges | Court decision |
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| | | provided an analysis of the cumulative impacts resulting from this land exchange.<br>2) The agency failed to analyze cumulative effects of logging on lands proposed for exchange and only discuss speculative benefits that would result on lands it received. The analysis is deemed too general and one-sided.<br>3) A future land exchange should have been included in CEA. Its inclusion would not have been speculative, as the land exchange had been announced prior to the completion of the Huckleberry EIS. |
| *Neighbors of Cuddy Mountain v. Alexander*, 303 F.3d 1059 (2002) | Another challenge to the EIS for the Grande-Dukes sale claiming the scale of the CEA was too small. | CEA adequate<br>1) The court found that the agency provided substantial analysis and adequate justification for its choice of geographic scale in its CEA.<br>2) Plaintiffs used the National Forest Management Act to address a cumulative effects issue. Plaintiffs argued that the agency failed to monitor and protect old-growth in violation of its forest plan's forest-wide old-growth standard. The court ruled that even if the old-growth standard was being met in the project area, the cumulative effects of loss of old-growth habitat forest-wide were |

| Ninth Circuit Cases | CEA-related challenges | Court decision |
|---|---|---|
| | | relevant for compliance with the plan and with NFMA. Therefore, project approval in this case required consideration of forest-wide effects. |
| *Native Ecosystems Council v. Dombeck*, 304 F.3d 886 (2002) | A challenge to the Darroch-Eagle timber sale EA on the Gallatin National Forest, Montana. Plaintiffs contended the USFS should have issued a comprehensive EIS to analyze all road density standard amendments in concert and that the USFS failed in its EA to analyze cumulative impacts of amendments to road density standards at a forest-wide scale. | CEA inadequate<br>1) The court held that the compendium of road density plan amendments were not connected or cumulative actions, and a single EIS was not required.<br>2) The court also held that EAs must include a CEA or tier to an EIS, and other road density standard plan amendments must be considered in this EA as part of CEA.<br>3) The National Forest is the scale for the road density standards in the plan and therefore should have been the scale used for the CEA. |
| *Idaho Sporting Congress Inc., v. Rittenhouse*, 305 F.3d 957 (2002) | A challenge to two timber sales on the Boise National Forest, Idaho, arguing that the scale of analysis for cumulative impacts on old-growth dependent species was too small. | CEA inadequate<br>The USFS' own monitoring report stated that some species require viability analysis at the landscape level. The agency analyzed CEA at a smaller scale and did not justify why it did so. The agency's own documentation made the CEA in the EIS arbitrary, particularly where the choice lacked any justification. |

| Ninth Circuit Cases | CEA-related challenges | Court decision |
|---|---|---|
| *Selkirk Conservation Alliance v. Forsgren*, 336 F.3d 944 (2003) | A challenge to EIS for granting an easement to Stimson (a private timber corporation) to access its lands on the Colville National Forest, Washington. Plaintiffs argued the geographic scale of analysis was too small and that the agency failed to analyze effects of future projects in area. They also argued the temporal scale of the CEA was too short. | CEA adequate<br>1) The court held that the agency provided a reasoned justification for its choice not to include Idaho Panhandle National Forest areas in the CEA for grizzly bears.<br>2) The court stated that the agency did not need to consider the effects of specific sales in the EIS because this would duplicate its assessment of the adequacy of the Conservation Agreement, which was the basis of and was analyzed in the EIS.<br>3) The short time frame chosen for the CEA was considered by the court to be a very close issue. It concluded, however, that while the time frame did not appear to be the best choice, there was justification for it and it could not be deemed arbitrary and capricious. |
| *Earth Island Inst. v. U.S. Forest Serv*., 351 F.3d 1291 (2003) | A challenge to salvage logging EIS on Eldorado National Forest, California. Plaintiffs challenged that the agency should have prepared an EIS for projects in both Tahoe and Eldorado National Forests because they were both similar and planned in response to the Star Fire. They argued the scale of analysis was too small and that the Eldorado EIS did not adequately | CEA inadequate<br>1) The two projects were not necessarily cumulative actions. A single EIS might have made sense but was not required because the projects were not clearly part of a single broader proposal. "Similar" actions may be analyzed in a single EIS, but this is not required.<br>2) The CEA failed to analyze how actions on the Eldorado would affect a "protected |

| Ninth Circuit Cases | CEA-related challenges | Court decision |
|---|---|---|
| | consider cumulative impacts resulting from actions on the Tahoe National Forest, which was also affected by the fire and was planning a nearby sale of a similar nature. | activity center" for California spotted owls in the Tahoe National Forest. The area under question in the Eldorado was acknowledged as relevant habitat for the Tahoe protected activity center prior to this EIS. The Eldorado National Forest erroneously concluded that the Tahoe National Forest would delist this PAC. The court held that the agency should have foreseen that such delisting would not occur and should have analyzed cumulative impacts on the owl. |
| *Cold Mountain v. Garber*, 375 F.3d 884 (2004) | A challenge to an EA for a bison herding facility on the Gallatin National Forest, Montana that the agency failed to adequately analyze cumulative impacts and should have prepared an EIS. | CEA adequate<br>The court held that the agency clearly analyzed cumulative effects and justified its decision not to prepare an EIS. Plaintiffs failed to highlight a deficiency in the NEPA process. |
| *Lands Council v. Powell*, 379 F.3d 738 (2004), amended at 395 F.3d 1019 (2005) | A challenge to the Iron Honey timber harvest/watershed management project on the Idaho Panhandle National Forest, Idaho. Plaintiffs challenged the lack of specificity and detail in analysis of prior timber harvests in area and failure to include foreseeable future projects in analysis. They also argued the data used for CEA for Westslope Cutthroat Trout were | CEA inadequate<br>1) The EIS failed to provide discussion of the effects from individual past harvests and offered only a vague discussion of overall environmental effects. A cataloging of past projects with detailed information on effects is the minimum necessary for a CEA; it is also crucial for a useful alternatives analysis.<br>2) Only proposed or |

| Ninth Circuit Cases | CEA-related challenges | Court decision |
|---|---|---|
| | outdated and unreliable, rendering the CEA inadequate. | scoped future projects must be included in a CEA. The analysis was deemed adequate on the issue of future projects.<br>3) Trout habitat data was nearly fifteen years old and was deemed too stale to suffice for a CEA. |
| *High Sierra Hikers Ass'n v. Blackwell*, 381 F.3d 886 (2004), amended at 390 F.3d 630 (2004) | Plaintiffs contended that the USFS needs to complete an EIS to assess the cumulative impacts of issuing multi-year special use permits to outfitters in two wilderness areas on the Inyo and Sierra National Forests, California. | CEA inadequate<br>The court ruled that an EIS with a CEA was necessary. The agency acknowledged a CEA had not been done and said that it would comply with NEPA when it issued future permit renewals. The court responded that NEPA analysis is required prior to agency actions. |
| *NRDC v. U.S. Forest Serv.*, 421 F.3d 797 (2005) | Plaintiffs challenged the CEA in the EIS for the forest plan for the Tongass National Forest, Alaska, arguing the EIS failed to examine CEA with regard to past and reasonably foreseeable future nonfederal logging on adjacent lands. | CEA in EIS ruled inadequate<br>1) Over five percent of the forest is owned by nonfederal entities and these areas had been heavily developed. The court ruled that the agency must consider the cumulative impacts of this logging and do so in the plan because the CEA could significantly affect how the agency plans to protect other resources.<br>2) The court made it clear that a plan level EIS always must include a CEA (citing *Resources Ltd. v. Robertson*, 35 F.3d 1300 (1993)). In that case the court allowed the agency to defer analysis of the |

| Ninth Circuit Cases | CEA-related challenges | Court decision |
|---|---|---|
| | | effects of actions on private land until the project level. In this case the court decides that the plan was the appropriate time to analyze activities on private lands.<br>3) The court cited *Lands Council v. Powell* and reiterated that a cataloging of past, present, and reasonably foreseeable actions and an analysis of their environmental effects is required at a minimum for a CEA. |
| *Envtl. Prot. Info. Ctr. v. U.S. Forest Serv.*, 451 F.3d 1005 (2006) | A challenge to a timber sale EA on the Klamath National Forest, California, arguing that an EIS should have been prepared because of possible significant effects. Plaintiffs also argued the CEA for water quality was flawed and the CEA was inadequate because of failure to included a reasonably foreseeable future sale. | CEA adequate<br>1) The court found that the agency analyzed cumulative impacts to the watershed using a model that analyzed effects on the project and watershed scales and included past, present, and foreseeable future impacts. The plaintiffs did not challenge the validity of the model. The court concluded that the CEA was sufficiently detailed and quantified to meet NEPA requirements.<br>2) The parameters of the future sale were not developed enough to allow for a useful CEA. The agency did not act arbitrarily in choosing to exclude it. Even if the agency made an error of judgment in excluding the sale from the CEA, it remedied this by providing some |

| Ninth Circuit Cases | CEA-related challenges | Court decision |
|---|---|---|
| | | discussion of cumulative impacts in its response to public comments. |
| *Oregon Natural Res. Council Fund v. Goodman*, 505 F.3d 884 (2007) | A challenge to EIS for expansion of Mt. Ashland Ski Area, Rogue River National Forest, Oregon, that the agency failed to include two future projects in the CEA for the pacific fisher. Plaintiffs also argued the agency erred in its use of a watershed impact model to assess cumulative impacts. | CEA inadequate<br>1) The agency failed to provide any specific analysis of potential cumulative impacts on fisher resulting from this and two other scheduled future projects. The EIS concluded there would be no significant impacts on the fisher but failed to justify these statements with any supporting information. Furthermore, the agency could not justify this conclusion with the explanation that a CEA was not necessary because the anticipated effects of the ski area would be small. The agency must put effects in context in light of the broader landscape—this is precisely what a CEA is for.<br>2) Agency's watershed model was sufficiently quantified and detailed to satisfy NEPA's CEA requirement. |
| *Sierra Club v. Bosworth*, 510 F.3d 1016 (2007) | A challenge to CatEx category 10, the "Fuels Catex." Plaintiffs argued the agency failed to establish that promulgation of the CatEx category would have no significant cumulative impacts. | Promulgation of CatEx category without a CEA in violation of NEPA<br>1) A CEA is not required as part of an EA or EIS for the creation of a CatEx category, but is required nonetheless as part of the process.<br>2) The USFS conceded that no CEA was performed before |

| Ninth Circuit Cases | CEA-related challenges | Court decision |
|---|---|---|
| | | promulgation of the category. The court held that the USFS must ensure that the category would not have significant cumulative impacts. If this was not possible, then it should not have promulgated the rule.<br>3) Agency reports indicated potentially significant effects from similar projects on various resources but concluded there would be no significant cumulative impacts, without justification. The court would not accept general statements about risk or unsupported conclusions of no significant cumulative impacts. |
| *Wild West Inst. v. Bull*, 547 F.3d 1162 (2008) | Plaintiffs challenged the Middle East Fork Project on the Bitterroot National Forest. They contended that the agency had inappropriately excluded external scientific analysis on soil quality impacts. Plaintiffs also brought a challenge that the agency did not properly consider cumulative impacts in light of its obligations under NFMA. | CEA adequate<br>The court ruled for the agency on all counts. On the NEPA challenge, the court found that the agency had properly included the external scientific findings in its discussion of cumulative impacts to soil quality. |
| *League of Wilderness Defenders v. U.S. Forest Serv.*, 549 F.3d 1211 (2008) | A challenge to the CEA for the Deep Creek Vegetation Management Project on the Ochoco National Forest, Oregon. | CEA inadequate<br>1) The court found that considering cumulative impacts in the aggregate was permissible, based |

| Ninth Circuit Cases | CEA-related challenges | Court decision |
|---|---|---|
| | The Forest Service had considered aggregate cumulative impacts of past actions, rather than impacts of individual past actions, failed to consider past and future timber sales in its analysis, and had not adequately considered cumulative impacts from grazing. | on guidance from CEQ.<br>2) However, the agency failed to adequately consider past timber sales in its analysis. Furthermore, the agency improperly tried to tier to a non-NEPA document (a Watershed Analysis).<br>3) The court supported the agencies analysis of future projects and grazing activities. |
| *Ecology Ctr. v. Castaneda*, 574 F.3d 652 (2009) | A challenge to nine timber sale projects on the Kootenai National Forest, Montana. Plaintiffs argued the agency's CEA was inadequate for failure to discuss effects of past projects on an individual basis. | CEA adequate<br>1) The court upheld the agency's analysis, finding adequate discussion of past projects.<br>2) The court reiterated that "an aggregated [CEA] that includes relevant past projects is sufficient."[305] |

[305] 574 F.3d 652, 667 (9th Cir. 2009).

TABLE 2. Tenth Circuit CEA Cases: Primary Challenges and Holdings

| **Tenth Circuit Cases** | **CEA-related challenges** | **Court decision** |
|---|---|---|
| *Colo. Wild v. U.S. Forest Serv.*, 435 F.3d 1204 (2006) | A facial and applied challenge to CatEx category 13 as applied to Shaw Lake vegetation management project on Rio Grande National Forest, Colorado. Plaintiffs argued the use of the category would lead to cumulative impacts. | 1) The court ruled that the agency's process was adequate.<br>2) Scoping, the illegality of segmenting a project, and the extraordinary circumstances requirement, according to the court, serve as safety valves when it comes to cumulative impacts. |
| *Utah Envtl. Congress v. Bosworth*, 443 F.3d 732 (2006) | An applied challenge to a CatEx of Seven Mile Spruce Beetle Management Project on the Fishlake National Forest, Utah. Plaintiffs argued the project should not have been approved under the CatEx because of the lack of a preliminary analysis to determine that the project would not have cumulative effects, because the agency failed to analyze cumulative impacts on management indicator species and sensitive species, and because it failed to delineate an appropriate CEA area beyond the project area. They also argued extraordinary circumstances should have precluded use of CatEx. | 1) The court stated that the requirement to perform a CEA would render the use of categorical exclusions useless. The agency already determined that the category would not have significant cumulative effects as part of the creation of the CatEx category, which the plaintiffs did not challenge.<br>2) An agency only needs to perform a CEA if "extraordinary circumstances" are present that preclude use of a CatEx. The court found that no significant extraordinary circumstances existed, and therefore the use of the CatEx was justified. |

| Tenth Circuit Cases | CEA-related challenges | Court decision |
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| *Utah Envtl. Congress v. Richmond*, 483 F.3d 1127 (2007) | A challenge to EIS for Trout Slope West project on the Ashley National Forest, Utah that the agency failed to adequately analyze the nature of cumulative effects and only provided description. Plaintiffs argued the agency described negative effects but did not provide a useful CEA. | 1) The court ruled that the agency adequately analyzed cumulative effects, providing sufficient information and detail and including analysis of relevant past projects in conjunction with the current project.<br>2) Plaintiffs disagreed with conclusions of the agency but offered no evidence why the analysis was inaccurate or violated NEPA. |