

ARTICLES

THE EVOLUTION OF NEPA IN THE FIGHT AGAINST CLIMATE CHANGE

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I. INTRODUCTION

The National Environmental Policy Act (“NEPA”) is the first environmental charter of the United States.¹ Signed into law on January 1, 1970, NEPA addresses the need for overarching national environmental guidance in the country. During the course of its forty year history, NEPA has been used to challenge a wide range of federal actions including the issuance of operating permits under the Clean Air Act,² the approval of forest management plans approved under the National Forest Management Act,³ the

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1. 42 U.S.C. §§ 4321–4370c (2006).
2. 42 U.S.C. §§ 7401–7671q (2006).
3. 16 U.S.C. § 1600 *et seq.* (2006).

construction of highways under the Federal-Aid Highways Act,⁴ and the issuance of oil leases under the Outer Continental Shelf Lands Act.⁵ Given the breadth of NEPA's applicability, it was inevitable that NEPA would become a tool to combat climate change. The use of NEPA to require federal agencies to take a "hard look" at greenhouse gas ("GHG") emissions makes perfect sense because many federal actions directly or indirectly contribute to GHG emissions. Since 1990, in *City of Los Angeles v. NHTSA*,⁶ plaintiffs have used NEPA, successfully and unsuccessfully, to challenge federal actions that might have an impact on the global climate.

The attraction of using NEPA as a sword to combat climate change lies in the Act's holistic approach to review of federal actions. Unlike the Clean Air Act⁷ and other single medium statutes, NEPA applies to all federal actions and agencies.⁸ NEPA's holistic application is an acknowledgment of the interconnected relationship that is unique to the Earth. Indeed, you cannot understand the impact that a federally-approved logging road will have on an ecosystem unless you know something about soil erosion, water quality, air impacts, biodiversity, and species endangerment. Climate change is no less complex. Federal decisions related to oil exploration, transportation projects, coal-fired power plants, forest management, and others have an impact on climate. As noted ecologist Barry Commoner stated in his book, *The Closing Circle*, there is one ecosphere for all living organisms and what affects one, affects all.⁹ That is, "everything is connected to everything else." It is this interconnectedness that NEPA requires to be examined.

This article explores and analyzes the various uses of NEPA as a statutory tool to combat climate change. The article begins by first providing an overview of the NEPA statutory requirements. Second, in order to provide a backdrop for the case law that has come out of NEPA's enforcement, the article provides a review of both climate change science and the regulatory actions conducted in response. Third, the case law related to NEPA climate change litigation is surveyed. Fourth, an analysis of that case law within the

4. 23 U.S.C. § 109 (2006).

5. 43 U.S.C. §§ 1331–1356a (2006).

6. *City of Los Angeles v. Nat'l Highway Transp. Safety Admin.*, 912 F.2d 478 (D.C. Cir. 1990).

7. 42 U.S.C. §§ 7401–7671q.

8. The only agency that has a limited exemption from NEPA is the U.S. Environmental Protection Agency, under the Energy Supply and Environmental Coordination Act of 1974. The Act exempts EPA for its actions under the Clean Air Act, 15 U.S.C. § 793(c)(1). Additionally, under the Clean Water Act, EPA is exempted from the obligations to prepare an EIS on some actions, 33 U.S.C. § 1371(c)(1).

9. BARRY COMMONER, *THE CLOSING CIRCLE: NATURE, MAN & TECH.*, at 16 (Alfred A. Knopf ed., Bantam Books 1982) (1971).

context of the NEPA regulations is conducted. Fifth, a review of the draft CEQ guidance on Assessing GHG Impacts from Proposed Federal Actions is assessed. Sixth, a proposed congressional response is appraised. Lastly, the impact on future litigation is considered.

II. THE NATIONAL ENVIRONMENTAL POLICY ACT

Overview

NEPA has three main components: provisions articulating national environmental policies and goals,¹⁰ provisions that require federal agencies to implement those policies and goals,¹¹ and finally a section that establishes the Council on Environmental Quality (“CEQ”).¹² NEPA’s policies and goals are broad, general, and inspirational.¹³ NEPA requires federal agencies to give environmental factors the same consideration as other factors in their decision making process. To ensure that such policies are obeyed, NEPA requires CEQ to ensure that Federal agencies meet their obligations under the Act.

While the requirements of NEPA are mandatory, they are largely procedural in nature and supplement existing legal requirements of federal agencies.¹⁴ The CEQ regulations require agencies to integrate NEPA requirements from the beginning of the project planning process to ensure that the decision making process reflects environmental values, avoids delays, and reduces conflict.¹⁵ Moreover, these statutory and regulatory requirements are interdisciplinary in approach and require the development of appropriate alternatives to recommended courses of actions.¹⁶

10. 42 U.S.C. § 4331.

11. 42 U.S.C. § 4333.

12. 42 U.S.C. § 4341.

13. For instance Section 101 recognizes “the profound impact of man’s activities on the interrelations of all components of the natural environment” and that “each person should enjoy a healthful environment . . . and to contribute to the preservation and enhancement of the environment.” *See* 42 U.S.C. §§ 4331(a) & (c).

14. *See* 42 U.S.C. § 4335. *See also* *Vt. Yankee Nuclear Power Corp. v. Natural Res. Def. Council*, 435 U.S. 519 (1978), *cert. granted*, 459 U.S. 1034 (1982), *rev’d on other grounds*, 462 U.S. 87 (1983).

15. 40 C.F.R. § 1501.2 (2010).

16. *Id.*

The NEPA Process

The NEPA process begins when a federal agency develops a proposal for which it will take action, for example, a permit, license, or request of approval. Once the agency has developed a proposed action, it must then determine whether that action will be the subject of a Categorical Exclusion (“CE”), an Environmental Assessment (“EA”), or an Environmental Impact Statement (“EIS”). A proposed action is the subject of a CE if the agency concludes the action or actions do not either individually or cumulatively have a significant effect on the quality of the human environment.¹⁷ If the proposed action does not qualify for a CE, the agency must prepare an EA or an EIS.¹⁸ The EA helps determine the significance of the environmental impacts of the proposal and assesses alternative means of achieving the agency’s objectives.¹⁹ The EA process ends with either a Finding of No Significant Impact (“FONSI”) or a requirement to prepare an EIS.²⁰

A federal agency must prepare an EIS if it is proposing a federal action that it determines will significantly affect the quality of the human environment.²¹ The EIS process starts with publication of a Notice of Intent (“NOI”) in the *Federal Register*. The purpose of the NOI is to announce the agency’s intent to prepare an EIS for the proposal at issue while providing basic information about the proposal, in preparation for the scoping process.²² The next major step in the EIS process is the release of the draft EIS for public comment. There are a number of key components in the draft EIS. The “Purpose and Need” statement explains why the agency action is necessary.²³ In this statement, the agency must identify and evaluate alternative ways of fulfilling the need of the proposed action.²⁴ If an agency has a preferred alternative at the time it publishes a draft EIS, the draft must identify that

17. C.F.R. § 1508.4 (2010).

18. Intrinsic to NEPA is the “rule of reason,” which ensures that agency discussions focus on issues that merit discussion and deemphasize issues that do not advance an understanding of issues or decision-making process regarding the proposal, its alternatives, and mitigation measures. 40 C.F.R. §§ 1500.4(f) & (g), 1501.7 & 1508.25 (2010).

19. 40 C.F.R. § 1508.9.

20. A FONSI is a report that establishes why the agency determined that there are no significant environmental impacts expected to occur upon implementation of the action, 40 C.F.R. § 1508.3.

21. 40 C.F.R. § 1501.7.

22. Among other things, the scoping process identifies significant issues that require substantive analysis in the EIS, identifies other environmental requirements that need to be integrated into the process, and establishes a schedule for the EIS and decision on the proposed action. 40 C.F.R. § 1501.7.

23. 40 C.F.R. § 1502.13 (2010).

24. 40 C.F.R. § 1502.14.

alternative.²⁵ The agency must analyze the full range of direct, indirect, and cumulative effects of the preferred alternative, if any, and of the reasonable alternatives identified in the draft EIS.²⁶ Moreover, appropriate mitigation measures must be included in the draft EIS.²⁷

When the public comment period is finished, the agency analyzes comments, conducts further analysis as necessary, and prepares the final EIS.²⁸ The agency then publishes the final EIS and the Environmental Protection Agency will publish a Notice of Availability in the Federal Register. The ROD, or Record of Decision, is the final step for agencies in the EIS process. The ROD is the written record of the agency's decision. It identifies the alternatives considered, including the environmentally preferred alternative, and discusses mitigation plans, including any enforcement and monitoring commitments.²⁹

A New Cause of Action

*Calvert Cliffs' Coordinating Committee, Inc. v. United States Atomic Energy Commission (Calvert Cliffs')*³⁰ is one of the most influential cases in the area of environmental law, especially with regard to NEPA. *Calvert Cliffs'* originally arose as a challenge to a nuclear power plant that was slated for construction in Calvert Cliffs, Maryland. The plaintiff argued that the rules adopted by the federal Atomic Energy Commission did not satisfy the rigor demanded by NEPA because, unlike NEPA, the agency's rules did not require evaluation of the environmental impacts of proposed nuclear power plants. In response, the defendants argued that the vagueness of NEPA leaves room for agency discretion. Ultimately, the court sided with the plaintiff and held the Commission must revise its rules governing consideration of environmental issues.

Calvert Cliffs' represents the first time a federal court found NEPA to create a cause of action against federal agencies that do not comply with the Act's directives.³¹ The court held that federal agencies must consider environmental issues just as they consider other matters within their

25. 40 C.F.R. § 1502.14(e).

26. 40 C.F.R. §§ 1508.7 & 1508.8.

27. 40 C.F.R. § 1502.14.

28. *Calvert Cliffs' Coordinating Comm. v. U.S. Atomic Energy Comm'n*, 449 F.2d 1109, 1116 (D.C. Cir. 1971).

29. 40 C.F.R. § 1505.2.

30. *Calvert Cliffs'*, 449 F.2d at 1116.

31. *Id.* at 1111.

mandates.³² As the court correctly noted, this was only the beginning of a flood of new litigation seeking judicial assistance in protecting the natural environment.³³

III. THE SCIENCE BEHIND CLIMATE CHANGE, THE REGULATORY ACTIONS IMPLEMENTED IN RESPONSE AND THE POLICY BEHIND THEM

Contrary to what some detracted may claim, the regulatory actions undertaken by the United States' government have, in fact, made in response to very real scientific evidence of climate change. For the purposes of this paper, the most relevant scientific research is the increasing levels of CO₂ concentrations and the findings of the Intergovernmental Panel on Climate Change ("IPCC"). The EPA, in response to this body of research, its own investigations and the work done by other federal agencies, universities and non-profits promulgated a document entitled: "Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act."³⁴

Underlying the EPA's finding is "the precautionary principal."³⁵ This rule requires action to avoid serious or irreversible potential harm, despite lack of scientific certainty as to the likelihood, magnitude, or causation of that harm. As applied to environmental policy, the precautionary principle requires that for significant changes to the environment such as deforestation or dams, the burden of proof lies with those who oppose the implementation of additional environmental protection measures to address a potential problem. The precautionary principle is explicitly recognized in American jurisprudence.³⁶ Consequently, those who would challenge the EPA's regulations must overcome not only *Mead*³⁷ and *Chevron*,³⁸ but also this fundamental principal.

32. *Id.*

33. *Id.*

34. Env'tl. Prot. Agency, *Endangerment & Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act* (2009), available at http://www.epa.gov/climatechange/endangerment/downloads/Federal_Register-EPA-HQ-OAR-2009-0171-Dec.15-09.pdf.

35. See, e.g., *Ethyl Corp. v. EPA*, 541 F.2d 1, 6 (D.C. Cir.), cert. denied, 426 U.S. 941 (1976) (where this principal was applied).

36. *Id.*

37. *United States v. Mead Corp.*, 533 U.S. 218 (2001).

38. *Chevron U.S.A., Inc. v. Natural Resource Defense Council, Inc.*, 467 U.S. 937 (1984).

CO₂ Concentrations

Carbon dioxide (CO₂) concentrations and climate change have long been linked in the discussion of global climate change. When CO₂ atmospheric levels were first monitored in 1959, the mean concentration was 315 parts per million (ppm).³⁹ Since then, they have continued to rise in spite of increasing global awareness of the climate change implications. By the time NEPA was enacted in 1970, the mean concentration rose to 325 ppm. By 1990, when the U.S. Global Change Research Program,⁴⁰ wrote its first report on climate change, the mean concentration of CO₂ in the atmosphere was 354 ppm.⁴¹ By the time the U.N. Convention on Climate Change⁴² was ratified by the U.S. Senate and signed into law by President Bush in 1992, the mean concentration of CO₂ in the atmosphere was 356 ppm.⁴³

On April 2, 2007, when the U.S. Supreme Court issued its opinion in *Massachusetts v. EPA*,⁴⁴ holding that greenhouse gases are air pollutants covered by the Clean Air Act, the mean concentration of CO₂ in the atmosphere was 383 ppm.⁴⁵ By 2009, when EPA issued its endangerment finding under the Clean Air Act, where it found that six greenhouse gases taken in combination endanger both the public health and the public welfare of current and future generations,⁴⁶ the mean concentration of CO₂ in the atmosphere was 387 ppm.⁴⁷ As a result of these rising CO₂ concentration levels, both the Intergovernmental Panel on Climate Change (IPCC) and EPA have concluded that these levels have an adverse impact on Earth's climate.

Intergovernmental Panel on Climate Change Findings

As the data on increasing levels of CO₂ concentrations increased in volume and quality, the scientific community began to respond. Climate

39. Nat'l Oceanic & Atmospheric Admin., ftp://ftp.cmdl.noaa.gov/ccg/co2/trends/co2_annmean_mlo.txt (last visited Nov. 22, 2010).

40. 15 U.S.C. § 2931 (2010).

41. Nat'l Oceanic & Atmospheric Admin., *supra* note 39.

42. United Nations, Framework Convention on Climate Change, *available at* http://unfccc.int/essential_background/convention/items/2627.php (last visited Nov. 22, 2010).

43. Nat'l Oceanic & Atmospheric Admin., *supra* note 39.

44. *Mass. v. EPA*, 549 U.S. 497 (2007).

45. Nat'l Oceanic & Atmospheric Admin., *supra* note 39.

46. *See* Endangerment & Cause or Contribute Findings for Greenhouse Gases under § 202(a) of the Clean Air Act, 74 Fed. Reg. 66496 (Dec. 15, 2009) (to be codified at 40 C.F.R. ch. I).

47. Nat'l Oceanic & Atmospheric Admin., *supra* note 39.

science, like any legitimate scientific undertaking, is an iterative process. It circles back on itself such that useful ideas are built upon and used to learn even more about a particular topic. This often means that successive investigations of a topic lead back to the same question, but on a more nuanced level. In the scientific process all ideas are tested with evidence from the natural world. Moreover, members of the scientific community play an important role in this process by “peer reviewing” the ideas and evidence on a particular topic.

This iterative process has been a hallmark of the Intergovernmental Panel on Climate Change (“IPCC”). The IPCC is a scientific body reviews and assesses the most recent scientific, technical and socio-economic information produced worldwide relevant to the understanding of climate change.⁴⁸ It does not conduct any research nor does it monitor climate related data or parameters. Rather, its function is to review relevant information so as to ensure an objective and complete assessment of that information.

The IPCC issued its first assessment report in 1990,⁴⁹ which played a role in the creation of the United Nations Framework Convention on Climate Change. Its second assessment report in 1995⁵⁰ was instrumental in the adoption of the Kyoto Protocol⁵¹ in 1997. The third assessment report was issued in 2001, and the fourth was published in 2007.⁵² With each succeeding report, the global community gets a better understanding of climate change. In its Fourth Assessment Report: Climate Change 2007, the IPCC concluded, *inter alia*, that “warming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice and rising global average sea level.”⁵³

48. IPCC was established by the United Nations Environment Programme and the World Meteorological Organization in order to give the world a scientific view on the current state of climate change and its potential environmental and socio-economic impacts. See Intergovernmental Panel on Climate Change, Org., <http://www.ipcc.ch/organization/organization.htm> (last visited Dec. 17, 2010).

49. Intergovernmental Panel on Climate Change, *History*, http://www.ipcc.ch/organization/organization_history.shtml (last visited Dec. 17, 2010).

50. Intergovernmental Panel on Climate Change, *supra* note 49.

51. United Nations Framework Convention on Climate Change, *Kyoto Protocol*, http://unfccc.int/kyoto_protocol/items/2830.php (last visited Dec. 17, 2010).

52. Intergovernmental Panel on Climate Change, *supra* note 49.

53. Intergovernmental Panel On Climate Change, *Climate Change 2007: Synthesis Report, Observed Changes in Climate & Their Effects* (2007), available at http://www.ipcc.ch/publications_and_data/ar4/syr/en/spms1.html.

Moreover, the fourth report stated: “there is very high confidence that the net effect of human activities since 1750 has been one of warming.”⁵⁴ Most of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic GHG concentrations.⁵⁵ In addition, the assessment noted that “continued GHG emissions at or above current rates would cause further warming and induce many changes in the global climate system during the 21st century that would very likely be larger than those observed during the 20th century.”⁵⁶

Some of those changes would include “warming greatest over land and at most high northern latitudes and least over Southern Ocean and parts of the North Atlantic Ocean,”⁵⁷ reduced snow cover area, and an increased frequency of hot extremes, heat waves and heavy precipitation. The report noted that key vulnerabilities may be associated with many climate-sensitive systems, including food supply, infrastructure, health, water resources, coastal systems, ecosystems, global biogeochemical cycles, ice sheets and modes of oceanic and atmospheric circulation.⁵⁸ As a result, the impacts of climate change are very likely to impose net annual costs, which will increase over time as global temperatures increase.⁵⁹

EPA’s Endangerment Finding

In response to findings such as those of the IPCC and to the Supreme Court’s decision in *Massachusetts v. EPA*,⁶⁰ the EPA issued a final rule entitled “Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act.”⁶¹ The rule contains two major conclusions. First, the EPA found that the current and projected concentrations of the six key well-mixed greenhouse gases, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆), in the atmosphere

54. Intergovernmental Panel on Climate Change, *Climate Change 2007: Synthesis Report, Causes of Change* (2007), available at http://www.ipcc.ch/publications_and_data/ar4/syr/en/spms2.html.

55. Intergovernmental Panel on Climate Change, *supra* note 54.

56. Intergovernmental Panel on Climate Change, *Climate Change 2007: Synthesis Report, Projected Climate Change & Its Impacts* (2007), http://www.ipcc.ch/publications_and_data/ar4/syr/en/spms3.html.

57. Intergovernmental Panel on Climate Change, *supra* note 56.

58. *Id.*

59. Intergovernmental Panel on Climate Change, *Climate Change 2007: Synthesis Report, the Long-Term Perspective* (2007), http://www.ipcc.ch/publications_and_data/ar4/syr/en/spms5.html.

60. *Mass. v. EPA*, 549 U.S. 497 (2007).

61. Fed. Reg., *supra* note 46.

threaten the public health and welfare of current and future generations. Second, the EPA found that the combined emissions of these well-mixed greenhouse gases from new motor vehicles contribute to the greenhouse gas pollution, which threatens public health and welfare.

The EPA reached these two conclusions based on the body of scientific evidence, which included work of the EPA, other federal agencies, universities, and international bodies, including the work of the IPCC, related to this issue.⁶² It found that the effects related to climate change include, but are not limited to, more persistent and extreme heat waves, more intense wildfires, reduced agricultural yields, increased drought, more frequent downpours and flooding, damage to aquatic resources, and reduced diversity in wildlife and ecosystems.⁶³ Additionally, the EPA found that the impacts on public health include “reduced air quality, increases in temperatures, changes in extreme weather events, increases in food- and water-borne pathogens, and changes in aeroallergens.”⁶⁴

Moreover, “certain groups, including children, the elderly, and the poor, are most vulnerable to these climate-related health effects.”⁶⁵ EPA concluded that the evidence provides compelling support for finding that greenhouse gas air pollution endangers the public welfare of both current and future generations, and that the risk and the severity of adverse impacts on public welfare are expected to increase over time.⁶⁶

Underlying this finding and the regulations promulgated in its name is the “precautionary principle.”⁶⁷ As indicated earlier, this principle requires action to avoid serious or irreversible potential harm, despite lack of scientific certainty as to the likelihood, magnitude, or causation of that harm. In the context of global climate change, this puts the burden of proof on those who oppose the implementation of additional environmental protection measures to address a potential problem.

The most significant component of the precautionary principle as applied to environmental litigation is its applicability to potentially irreversible actions, such as the effects associated with climate change. The Earth’s climate is a large, complex non-linear dynamical system. As a result, the increase in temperature may be much greater and faster than estimated. This

62. *Id.* at 66510–12.

63. *Id.* at 66524–26.

64. *Id.* at 66497.

65. *Id.* at 66498.

66. *Id.* at 66498–99.

67. *See Ethyl Corp. v. EPA*, 541 F.2d at 6.

may cause even more damage to the Earth's ecosystem and cause greater human distress than expected. Moreover, it may also be very difficult to reduce temperatures even with a significant reduction in the emission of greenhouse gases.

The precautionary principle is explicitly recognized in American jurisprudence.⁶⁸ As recently as *Massachusetts v. EPA*, the U.S. Supreme Court reaffirmed this principle under the Clean Air Act.⁶⁹ In addition to the Clean Air Act, the concept of precaution is embedded in a number of environmental statutes as well. For instance, the Clean Water Act,⁷⁰ the Toxic Substances Control Act,⁷¹ the Federal Insecticide, Fungicide and Rodenticide Act,⁷² the Resource Conservation and Recovery Act,⁷³ and the Comprehensive Environmental Response, Compensation, and Liability Act,⁷⁴ to name a few, all incorporate precaution into their statutory frameworks. In addition to those acts, NEPA exemplifies precautionary action. Namely, NEPA stresses forethought and attention to consequences by requiring an EIS for any federally-funded project, along with mandating consideration of alternative plans. Consequently, in view of the scientific evidence, NEPA, with its holistic framework, interdisciplinary approach, precautionary outlook, is an excellent vehicle to review federal actions that might have an impact on climate.

Taken together, the science behind climate change, the findings of the IPCC, the EPA's final rule and the precautionary principal create a situation that is ripe for litigation. As the following case summary indicates, when the compliance requirements of NEPA are added into the mix, the floodgates of litigation are thrown open.

68. *Id.*

69. *See Mass.*, 594 U.S. 497, at 506 n.7 (citing *Ethyl Corp.*, 541 F.2d at 6) (“[T]he Clean Air Act ‘and common sense . . . demand regulatory action to prevent harm, even if the regulator is less than certain that harm is otherwise inevitable.’”).

70. 33 U.S.C. §§ 1251–87 (2006) (prohibiting discharge of toxic pollutants in toxic amounts under Clean Water Act § 101(a)(3), 33 U.S.C. § 1251(a)(3)).

71. 15 U.S.C. §§ 2601–29 (2006) (requiring premanufacture review of new chemical substances prior to their introduction into the marketplace under Toxic Substances Control Act § 5, 15 U.S.C. § 2604).

72. 7 U.S.C. § 136 *et seq.* (2006) (pesticides must be registered with EPA, Federal Insecticide, Fungicide & Rodenticide Act § 136a).

73. 42 U.S.C. §§ 6901 *et seq.* (2006) (a national policy that hazardous wastes will be treated, stored, and disposed so to minimize the present and future threat to human health and the environment, under Resource Conservation & Recovery Act § 1003(b), 42 U.S.C. § 6902(b)).

74. 42 U.S.C. §§ 9601 *et seq.* (2006) (Authority for EPA to respond to “a release or substantial threat of release . . . of any pollutant or contaminant which may present an imminent and substantial danger to public health or welfare” under Comprehensive Env'tl. Response, Comp., & Liab. Act § 3, 42 U.S.C. §§ 9604(a)(1)(B)).

IV. CASE LAW UNDER NEPA RELATED TO CLIMATE CHANGE

Overview

Climate change litigation under NEPA rarely has just one plaintiff and one defendant, nor is the litigation typically about just one issue. Climate change may be just one of many issues that a plaintiff raises. As such, this litigation typically requires the examination of several statutes. It may also require the court to review multiple federal actions. Moreover, NEPA litigation often touches upon procedural issues such as standing to sue. Because there is a mix of procedural and substantive issues, these cases are very difficult to categorize. As a result, a meaningful analysis of these cases requires that each case be examined on its own merits. Only by looking at these cases in the aggregate do certain patterns emerge that provide for a roadmap for future litigants.

City of Los Angeles v. National Highway Traffic Safety Administration

In *City of Los Angeles v. NHTSA*,⁷⁵ New York City, Los Angeles, the State of California, Public Citizen, Union of Concerned Scientists, the Center for Auto Safety, and the Natural Resources Defense Council (“NRDC”) collectively challenged the National Highway Transportation Safety Administration’s (“NHTSA”) decision not to prepare an environmental impact statement (“EIS”) in developing the Corporate Average Fuel Economy (“CAFE”) standards as required the 1975 Energy Policy and Conservation Act (“EPCA”).⁷⁶

This case concerned the NHTSA’s decision, based on its EA, that its proposed rule would not significantly affect the quality of the human environment and hence it did not have to prepare an EIS under NEPA.⁷⁷ In a *per curiam* opinion, the court held that although the petitioners had standing to sue under the CAFE standards for model years (“MYs”) 1987–88 under NEPA [based upon the defendants’ obligations under the Clean Air Act (“CAA”)].⁷⁸ The petitioners’ challenges failed on the merits.⁷⁹

75. *City of Los Angeles*, 912 F.2d at 475.

76. *Id.* at 478.

77. *Id.*

78. *Id.* at 481.

79. *Id.* at 482.

This case is important to the litigation history of NEPA, not because of its ultimate finding, but rather because the court recognized that car emissions, a “new and potentially catastrophic environmental phenomenon” in global warming, “fit squarely into the broad NEPA framework.”⁸⁰ The case is also noteworthy both because the court recognized that the petitioners had standing and how the court reached this conclusion.⁸¹ To establish standing in a case alleging that an agency failed to follow NEPA, a plaintiff must show that the challenge fits within NEPA’s zone of interest requirement. To do so, the court held that a litigant must show he was adversely affected or aggrieved by the failure to comport with NEPA’s requirements and that the aggrieving action is covered by NEPA’s congressional mandate.⁸²

In this case, NRDC met its burden. NRDC argued that the agency’s failure to prepare an EIS created the risk that it would overlook global climate change effects that could come from lower fuel efficiency standards for MY 1989, especially the effects from increased CO₂.⁸³ The court found that NRDC had established that a serious environmental harm, global warming, was at stake.⁸⁴ Next, the court noted that NRDC had proven that its members have a sufficient geographical nexus to the location where the consequences are most likely to be felt.⁸⁵ Without an EIS evaluating consequences of the CAFE standards, the uncertainty of the real environmental impact will remain. Thus, the court recognized NRDC was aggrieved under NEPA and it thereby had standing.⁸⁶

NRDC’s challenge met the zone of interest requirement under NEPA because its concerns about global warming fall under the broad congressional mandate of NEPA.⁸⁷ The court found that while the environmental problems associated with increases in global temperatures were complex, the resultant harms were real and undisputed enough to fall within the areas of specific congressional concern.⁸⁸ As a result, the court held that NRDC was aggrieved within the zone of interest to be protected.⁸⁹

80. *Id.*

81. *Id.*

82. *Id.*

83. *Id.* at 493.

84. *Id.* at 494.

85. *Id.*

86. *Id.*

87. *Id.* at 495.

88. *Id.*

89. *Id.*

Finally, the court addressed whether NRDC must establish that the incremental impact of the emissions from the CAFE rollback has a significant effect on global warming for standing purposes to prove causation.⁹⁰ Judge Wald asserted that to meet the causal nexus standard, a petitioner only needs to show that the alleged injury is “fairly traceable” to the proposed action.⁹¹ Since NRDC had presented evidence that further information might influence NHTSA’s decision, the court held that it had established a causal nexus.⁹²

Although the NRDC overcame the hurdle of standing, ultimately NHTSA won the case. In writing for the majority of the court on the merits, Judge D.H. Ginsberg found that NHTSA did not prepare an EIS because it believed that the impact of its CAFE decision would not have a significant impact on the environment.⁹³ The court agreed with NHTSA’s decision not to prepare an EIS and the petitions for review were denied.

Foundation on Economic Trends v. Watkins

In *Foundation On Economic Trends v. Watkins*,⁹⁴ the plaintiffs sued the Secretary of Energy, the Secretary of Agriculture and the Secretary of the Interior under NEPA and the Administrative Procedure Act (“APA”).⁹⁵ The plaintiffs asked the court to declare forty-two actions of the defendants unlawful. They argued that the defendants authorized, approved, or funded programs and actions that contributed to or ameliorated the greenhouse effect without discussing and evaluating the impacts of those contributions in environmental documentation, review, and decision-making. Therefore, the actions violated NEPA.⁹⁶ The court held that the plaintiffs lack standing to challenge the defendants’ failure to comply with NEPA under either the informational injury or environmental injury approach.⁹⁷ The court granted the defendants’ motion for summary judgment, and denied the plaintiffs’ motion to amend their complaint.⁹⁸

90. *Id.*

91. *Id.* (this portion of the case has been overruled by *Florida Audubon Soc’y v. Bentsen*, 94 F.3d 658, 669 (D.D.C. 1996)).

92. *Id.* at 498.

93. *Id.*

94. *Found. on Econ. Trends v. Watkins*, 794 F. Supp. 395 (D.D.C. 1992).

95. Admin. Procedure Act, 5 U.S.C. §§ 500–706 (2006).

96. *Watkins*, 794 F. Supp. at 395.

97. *Id.* at 397.

98. *Id.* at 396.

In its standing analysis, the court noted that litigants must meet both the constitutional requirements for standing and the requirements imposed by Congress in the APA to obtain judicial review of agency action under NEPA.⁹⁹ Under the Constitutional standing analysis, a plaintiff must allege that his personal injury is fairly traceable to the alleged unlawful conduct of the defendant and must show that his injury likely will be redressed by the relief requested.¹⁰⁰ Additionally, where there is a challenge to a federal agency's compliance with NEPA, the Plaintiffs' right to judicial review is governed by § 10(a) of the APA.¹⁰¹

In an attempt to establish standing, the plaintiffs relied on the doctrine of informational standing. This doctrine stems from a footnote in *Scientists' Institute for Public Information, Inc., v. Atomic Energy Commission*, authored by Judge Skelly Wright.¹⁰² *Scientists' Institute for Public Information Inc.* and other cases suggest that an organization may have informational standing when an organization asserts a plausible link between an agency's actions, the informational injury, and the organization's activities, and where the organization can point to concrete ways in which their programmatic activities have been harmed by an infringement on the right to information on the environmental effects of government actions created by NEPA.¹⁰³

In the case at hand, the plaintiffs argued that they suffered injury to their information dissemination activities due to the defendants' failure to address the effects of various federal actions on global warming under NEPA.¹⁰⁴ The plaintiffs further argued that they were harmed in disseminating information to the public because of the defendants' failure to consider the effects of such federal actions.¹⁰⁵

The court began by criticizing the informational standing doctrine, in part by noting that it goes against the U.S. Supreme Court's holding that a plaintiff needs to have more than a mere interest in a problem to confer standing.¹⁰⁶ Further, the court stated that Plaintiffs' claim of informational injury is "virtually indistinguishable from an ideological interest in the problem of

99. *Id.*

100. *Id.* at 397.

101. *Watkins*, 794 F. Supp. at 397.

102. *See Scientists' Inst. for Pub. Info. Inc. v. Atomic Energy Comm'n*, 481 F.2d 1079, 1086–87 n.29 (D.C. Cir. 1973).

103. *Watkins*, 794 F. Supp. at 398 (*quoting* *Competitive Enters. Indus. v. Nat'l Highway Safety Admin.*, 901 F.2d 107, 122–23 (D.C. Cir. 1990)).

104. *Id.*

105. *Id.*

106. *Id.*

global warming that, without more, is insufficient to confer standing.”¹⁰⁷ In so stating, the court essentially held that an informational injury does not qualify as an environmental consequence of an agency’s failure to comply with NEPA and therefore, it is not a distinct and palpable injury for standing purposes.¹⁰⁸

After finding that the plaintiffs lacked standing, the court denied the plaintiffs’ motion to amend their complaint.¹⁰⁹ The court was not persuaded by the plaintiffs’ collective reliance on one of the individual plaintiff’s in the case by the name of Rifkin. While the court agreed that an injury to an individual’s recreational use or aesthetic enjoyment of the environment will confer standing under NEPA, the court held that Rifkin must show that he has a direct stake in the outcome of the forty-two federal actions challenged in order to invoke the power of the court to review them under NEPA.¹¹⁰ The court found that Rifkin failed to meet this burden.¹¹¹ Thus, the remaining plaintiffs could not acquire standing through Rifkin.

Seattle Audubon Society v. Lyons

In *Seattle Audubon Society v. Lyons*,¹¹² the plaintiffs sued the Secretary of Agriculture and the Secretary of Interior for a 1994 forest management plan. In addition to NEPA, the Multiple-Use Sustained Yield Act of 1960,¹¹³ the National Forest Management Act,¹¹⁴ the Endangered Species Act,¹¹⁵ and the Clean Water Act¹¹⁶ were also implicated in the lawsuit. The case centered on the proper management of 24 million acres of federal land in Washington, Oregon, and northern California, which is home to the northern spotted owl.¹¹⁷ In addition to raising concerns specifically directed at protecting the owl, plaintiffs also raised issues involving climate change.¹¹⁸ However, the court expressly held the Forest Service EIS (“FSEIS”) adequately considered the impacts of timber harvest on water quality, air quality, and climate change.¹¹⁹

107. *Id.* at 399.

108. *Id.*

109. *Id.*

110. *Id.*

111. *Id.* at 400.

112. *Seattle Audubon Society v. Lyons*, 871 F. Supp. 1291 (W.D. Wash. 1994).

113. 16 U.S.C. § 528 *et seq.* (2006).

114. 16 U.S.C. § 1600 *et seq.*

115. 16 U.S.C. § 1531 *et seq.*

116. 33 U.S.C. § 1311 *et seq.*

117. *Lyons*, 871 F. Supp. at 1291.

118. *Id.*

119. *Id.*

As a result, the FSEIS's discussion on climate change complied with NEPA and its regulations.¹²⁰ Moreover, the court determined that the entire forest plan was within the bounds of the law.¹²¹

Association of Public Agency Customers v. Bonneville
Power Administration

In *APAC Inc., v. Bonneville Power Administration*, the Association of Public Agency Customers ("APAC") filed suit against the Bonneville Power Administration ("BPA"), a federal agency under the Department of Energy, for violations under NEPA and several other causes of action.¹²² BPA was created to market low-cost hydroelectricity generated by federal facilities in the Pacific Northwest and is governed by four statutes: the Pacific Northwest Electric Power Planning and Conservation Act of 1980, the Pacific Northwest Federal Transmission System Act, the Pacific Northwest Consumer Power Preference Act, and the Bonneville Project Act.¹²³

In 1992, BPA started negotiations on new power purchase contracts and engaged in a parallel environmental review process to assure that it was in compliance with NEPA.¹²⁴ The Final Business Plan, published in June 1995, discussed six alternatives that would help BPA adapt to changing electric utility standards.¹²⁵ In August 1995, BPA adopted the Market-Driven alternative under its Record of Decision ("ROD") rather than one of the environmentally preferred alternatives.¹²⁶

Petitioners identified nine reasons why the Business Plan EIS failed to adequately consider a number of adverse environmental effects that would result should the BPA adopt the Market Driven Plan.¹²⁷ Doing so would relieve direct service industries, which purchase power directly from BPA, of stranded cost liability and permit them transmission access.¹²⁸ One of the nine reasons was focused on the impact the Business Plan would have on climate

120. *Id.* at 1301.

121. *Id.* at 1300.

122. *Ass'n of Pub. Agency Customers, Inc. v. Bonneville Power Admin.*, 126 F.3d 1158, 1169 (9th Cir. 1997).

123. *Id.* at 1163.

124. *Id.* at 1166.

125. *Id.* at 1168.

126. *Id.*

127. *Id.* at 1186–88.

128. *Id.* at 1186.

change.¹²⁹ Specifically, the petitioners asserted that the Business Plan EIS failed to consider impacts on the Canadian environment, in violation of Executive Order 12114. Executive Order 12114 requires agencies to develop procedures that take extraterritorial impacts to global commons into account in major federal actions.¹³⁰

Further, the petitioners claimed that the Business Plan EIS did not discuss global warming implications. The petitioners alleged that NEPA required such an assessment because the Market Driven plan would result in increased direct service industries operations, which would in turn lead to an increase in the effects of greenhouse gases. The Business Plan EIS was also alleged to have failed to discuss trans-boundary impacts of continued Canadian gas exploration.¹³¹ As with the other eight reasons, the court found that the concerns raised by the petitioners were insufficient to hold the EIS inadequate.¹³² With respect to the climate change concern in particular, the court found the EIS did examine the environmental impact to increased direct service industries operations including CO₂ output.¹³³

Border Power Plant Working Group v. Department of Energy

*Border Power Plant Working Group v. Department of Energy*¹³⁴ concerned two applications, one for Presidential Permits and federal rights-of-way. These permits were required for construction on electricity transmission lines within the U.S. and across the U.S.-Mexico border, connecting new power plants in Mexico with the power grid in southern California, to begin.

The threshold issue in the case was whether the power plants were within the scope of the NEPA review.¹³⁵ The court found that the plants were not “projects” subject to U.S. jurisdiction because they are located outside of the U.S.¹³⁶ However, the court said the Mexican power plants might still be important to the environmental analysis required for the NEPA review of the transmission lines because if the permits are granted, the plants might cause adverse environmental effects. The court relied on *Sylvester v. U.S. Army*

129. *Id.*

130. *Id.*

131. *Id.*

132. *Id.*

133. *Id.*

134. *Border Plant Working Grp. v. Dept. of Energy*, 260 F. Supp. 2d 997 (S.D. Cal. 2003).

135. *Id.* at 1012.

136. *Border Plant Working Grp.*, 260 F. Supp. 2d at 1013.

*Corps of Engineers*¹³⁷ to determine whether the transmission lines and the power plants would exist in the absence of the other. The court said that while the proposed action did not include the operation of the Mexican power plants, the question was really whether the scope of the NEPA review should include these power plants due to effects of the transmission lines.¹³⁸ This determination had to be made because Ninth Circuit precedent required that the effects be causally linked to the proposed federal action for NEPA to require consideration of those effects in an EA or EIS.¹³⁹

Since there were different factual circumstances to be considered for each permit, the court stated that it would consider the permits separately.¹⁴⁰ The court found that the BCP transmission line was a but-for cause of the generation of power at the EBC turbine and that the TDM plant was also an “effect” of the T-US transmission line because both the EBC turbine and the TDM plant existed primarily to supply electricity to these transmission lines.¹⁴¹ Therefore, the emissions resulting from the operation of the EBC turbine are effects of the BCP line and must be analyzed under NEPA.¹⁴² The court found, however, that the two turbines in the LRPC and the EAX turbine, which almost exclusively generated power for Mexico, were not causally linked to the BCP line and therefore their emissions did not have to be assessed under NEPA.¹⁴³

Next, the court decided whether the agencies acted arbitrarily when they issued a “Finding of No Significant Impact” as required by the APA’s cause of action.¹⁴⁴ First, the court held that the agencies did not act arbitrarily by not considering whether emissions from the plants would violate the Clean Air Act.¹⁴⁵ Second, the court found that the agencies did not act arbitrarily in issuing the FONSIIs because ozone pollution was uncertain and the court was not in a position to resolve disagreements among scientists as to methodology.¹⁴⁶ Third, the agencies did not take the required “hard-look” at the impacts of the proposed actions on the Salton Sea, an ecologically critical

137. *Id.* at 1013–14 (*citing* *Sylvester v. U.S. Army Corps of Engineers*, 884 F.2d 394, 400 (9th Cir. 1989)).

138. *Id.* at 1013.

139. *Id.* at 1014.

140. *Id.* at 1016.

141. *Id.* at 1017.

142. *Id.*

143. *Id.*

144. *Id.*

145. *Id.* at 1020.

146. *Id.*

area.¹⁴⁷ Fourth, the court found that DOE had not adequately responded to comments concerning the water and air impacts of the power plants.¹⁴⁸ Fifth, the court found that the Mexican plants were not subject to local U.S. air pollution laws and the power plants need not be considered in the decision-making process.

Finally the court decided that the EA was inadequate as a matter of law because it did not disclose the significance of the plant emissions and those emissions had potential environmental impacts that were indicated in the record.¹⁴⁹ For example, the EA underestimated the emissions from the TDM plant and did not evaluate CO₂ for global warming impacts or ammonia for public health impacts from these emissions.¹⁵⁰ The court found that the EA was also inadequate because it did not provide a range of reasonable and feasible alternatives. The analysis of alternatives is essential to an environmental analysis. The court stated, however, that the EA adequately considered the cumulative impact of the TDM and LRPC emissions.¹⁵¹ Neither the EA or the FONSI discussed the action's cumulative impact on water quality and quantity in the New River or Salton Sea.¹⁵² Therefore, the court found the whole cumulative analysis in the EA to be inadequate because it did not consider the combined impacts of future, specific power plants in the region, and the cumulative impact on water resources.¹⁵³

Mid States Coalition for Progress v. Surface Transportation Board

In *Mid States Coalition for Progress v. Surface Transportation Board*,¹⁵⁴ several different groups of petitioners challenged a decision of the Surface Transportation Board ("STB" or "Board") which gave final approval to the Dakota, Minnesota, & Eastern Railroad Corporation's ("DM&E") proposed construction of 280 miles of rail line. The construction was to consist of a new line, which would reach the coal mines of Wyoming's Powder River Basin ("PRB"), and upgrades to 600 miles of existing rail lines.¹⁵⁵ The petitioners argued that the Board's approval violated 49 U.S.C. § 10901 (which gave the

147. *Id.* at 1022.

148. *Id.* at 1023.

149. *Border Plant Working Grp.*, 260 F. Supp. 2d at 1026.

150. *Id.* at 1027.

151. *Id.*

152. *Id.*

153. *Id.* at 1032.

154. *Mid States Coal. for Progress v. Surface Transp. Bd.*, 345 F.3d 520, 532 (8th Cir. 2003).

155. *Id.* at 533.

Board the exclusive authority for the construction and operation of rail lines), NEPA, the National Historic Preservation Act,¹⁵⁶ and the Fort Laramie Treaty of 1868. While the court found that the Board should prevail on most issues at trial, it remanded the decision back to the Board for further consideration.¹⁵⁷

One group of petitions (the City of Rochester, the Mayo Foundation, and Olmstead County) made nineteen separate arguments that the Board failed to act pursuant to NEPA in matters related noise, traffic, location, cost, vibrations, derailments, and terrorist attacks, to name a few.¹⁵⁸ The court concluded, however, that the Board acted pursuant to NEPA while remanding on several issues.¹⁵⁹ The court decided that the SEA did not take a hard look at the issue of horn noise mitigation because the only mention of this was in a footnote in the FSEIS.¹⁶⁰

A second set of petitioners, the Mid States Coalition for Progress, argued that the SEA failed to include and analyze different possible routes for the northern alignment of the new track as project alternatives and only focused on the southern alignment.¹⁶¹ The court disagreed and held the SEA met its requirement under NEPA under which it only had to consider reasonable and feasible alternatives.¹⁶²

A third petitioner, the Sierra Club, argued that SEA failed to consider the effects on air quality caused by an increase in the supply of low sulfur coal to power plants, made possible by the new stretch of track.¹⁶³ An increase in coal consumption would increase the emissions of other noxious air pollutants such as nitrous oxide, CO₂, particulates, and mercury, which were not then and are not currently capped under the CAA.¹⁶⁴ The court concluded that NEPA requires federal agencies to consider any adverse environmental effects¹⁶⁵ and under the CEQ regulations,¹⁶⁶ this includes both direct and indirect effects.¹⁶⁷ DM&E asserted that things such as coal usage were speculative.¹⁶⁸ The court

156. *Id.* at 553–55 (citing Nat'l Historic Preservation Act, 16 U.S.C. §§ 470–470w-6 (2006)).

157. *Mid States Coal. for Progress*, 345 F.3d at 555 (citing Fort Laramie Treaty of 1868, U.S.-Sioux Indians, Apr. 29, 1868, 15 Stat. 635).

158. *Mid States Coal. for Progress*, 345 F.3d at 534-35.

159. *Id.* at 545.

160. *Id.* at 536.

161. *Id.* at 545.

162. *Id.* at 546.

163. *Id.* at 548.

164. *Id.*

165. 42 U.S.C. § 4332(C)(ii) (2006 & Supp. 2010).

166. 40 C.F.R. § 1508.8 (2010).

167. *Mid States Coal. for Progress*, 354 F.3d at 549.

168. *Id.*

noted, however, that while the extent of the effect was speculative, the nature of the effect of an increase in coal was not.¹⁶⁹

That is, the proposed project would increase the long-term demand for coal and with that would also increase adverse effects resulting from burning coal, like CO₂ emissions.¹⁷⁰ Contrary to DM&E's assertion, the agency may not simply ignore the likely effect of the increased burning of coal.¹⁷¹ The CEQ regulations devise a specific procedure for evaluating reasonably foreseeable significant adverse effects on the human environment when there was incomplete or unavailable information.¹⁷² Therefore, the agency must include this procedure in its EIS, and evaluate the effects that increased coal consumption will have on the environment before the project could be approved.¹⁷³

The court did find that the Board complied with § 106 of the NHPA.¹⁷⁴ The court found that all parties had an adequate opportunity to include public comments under NHPA and that the public was encouraged to comment on all aspects of the DEIS.¹⁷⁵

The Sioux argued that the Board violated the Fort Laramie Treaty of 1868 and breached the government's fiduciary duty to them when it licensed the construction of the new extension without first obtaining the Sioux's consent.¹⁷⁶ The Court found that the treaty was not applicable because DM&E's proposed line would not pass through any present-day reservations.¹⁷⁷

Senville v. Peters

In *Senville v. Peters*,¹⁷⁸ the Vermont Public Interest Research Group, Friends of the Earth, Sierra Club, and Conservation Law Foundation sued the Administrator of the Federal Highway Administration ("FHWA") and the Secretary of the Vermont Agency of Transportation ("VTrans"). The plaintiffs sought a declaration that FHWA violated NEPA, and other laws, by approving

169. *Id.*

170. *Id.*

171. *Id.*

172. *Id.*

173. *Id.* at 549–50.

174. *Mid States Coal. for Progress*, 354 F.3d at 552–53.

175. *Id.* at 553.

176. *Id.* at 555.

177. *Id.* at 556.

178. *Senville v. Peters*, 327 F. Supp. 2d 335 (D. Vt. 2004).

and funding Segments of A-B of Chittenden County Circumferential Highway (“CCCH”). Further, the plaintiffs sought an order requiring FHWA to withdraw its approval of CCCH and an injunction against ground-disturbing work of segment A-B.¹⁷⁹ The court found that the plaintiffs met their burden on a number of these issues and enjoined construction of the project until the defendants fully complied with NEPA.¹⁸⁰

Preliminarily, the court agreed with the plaintiffs and found that the Final Revised EA (“FREA”) was inadequate.¹⁸¹ Under NEPA case law, federal agencies are required to consider alternatives to a proposed action even when a full EIS is not prepared.¹⁸² While the FREA contained an “alternatives” section, it did not look at alternatives to the project and only considered changes to the selected alternative.¹⁸³ Because of this, the FREA was in violation of both NEPA and CEQ regulations.¹⁸⁴ With respect to segmentation, the court found that segments A-B did have independent utility and would serve the purposes of reducing traffic volume and improving traffic flow.¹⁸⁵

In addition to challenging the adequacy of the FREA, the plaintiffs also argued that the defendants

failed to consider, or inadequately considered: (1) significant new environmental impacts associated with a fundamental change in the phased construction of the project; (2) significant new air quality impacts; (3) significant new water quality impacts; (4) significant new impacts to rare, threatened, and endangered species; (5) significant new environmental justice impacts; (6) significant new noise impacts; and (7) significant new induced growth impacts.¹⁸⁶

In response, the court first deferred to the decision of the FHWA that phased construction would not result in significant impacts that had not been studied.¹⁸⁷ From there, the court dealt with the allegations relating to air quality impacts, which the plaintiffs claimed failed to consider new circumstances and information related to CO₂ emissions and global warming, hazardous air pollutants, particulate matter, and ozone.¹⁸⁸ On this issue, the

179. *Id.* at 340.

180. *Id.* at 370.

181. *Id.* at 369–70.

182. *Id.* at 351.

183. *Id.* at 352.

184. *Id.*

185. *Id.* at 355.

186. *Senville*, 327 F. Supp. 2d at 356.

187. *Id.*

188. *Id.* at 358.

court found that while these specific studies were desirable, they were not required.¹⁸⁹ Thus, NEPA had not been violated by the failure to conduct the studies.¹⁹⁰

Similarly, the FWHA was determined to have taken a hard look at new information regarding water quality.¹⁹¹ Therefore, its decision that water quality impacts were expected to be less than what was thought in 1986 was neither arbitrary nor capricious.¹⁹² The court found that this assessment was, in turn, an adequate basis upon which to support its finding that no species in question would suffer a significant impact.¹⁹³ The court determined that FHWA also took a hard look at noise impacts in the FREA and its decision that an SIS was not required was not arbitrary or capricious.¹⁹⁴

The agency's finding, however, that no additional or new significant indirect or cumulative impacts were found to be arbitrary and capricious.¹⁹⁵ The agency engaged in no discussion related to the indirect impacts to agricultural lands, induced growth, or other cumulative impacts.¹⁹⁶ As a result, the court held that the environmental documentation for the project was legally inadequate.¹⁹⁷

Friends of the Earth v. Watson

In *Friends of the Earth v. Watson*,¹⁹⁸ the plaintiffs sued Peter Watson, President and CEO of Overseas Private Investment Corp. ("OPIC"), Peter Merril, Vice Chairman and First Vice President of the Export-Import Bank of the U.S. ("Ex-Im") for failure of the OPIC and Ex-Im to comply with the APA and NEPA when funding particular projects that contribute to climate change.¹⁹⁹ The defendants immediately moved for summary judgment on the following bases: (1) lacking of standing; (2) lack of final agency actions; (3) a

189. *Id.*

190. *Id.*

191. *Id.* at 359.

192. *Id.* at 360.

193. *Id.* at 362.

194. *Id.* at 355.

195. *Id.* at 362.

196. *Id.*

197. *Id.* at 370.

198. *Friends of the Earth, Inc. v. Watson*, 2005 U.S. Dist. LEXIS 42335 (N.D. Cal. Aug. 23, 2005).

199. *Id.* at *7.

claim that OPIC's organic statute precludes judicial review; and (4) a claim that OPIC is not subject to NEPA.²⁰⁰

The defendants contended that the plaintiff lacked standing because the injuries alleged were insufficient.²⁰¹ The defendants argued that the plaintiff could not show an injury-in-fact, causation, or redressability.²⁰² However, the court disagreed and found that the plaintiffs only needed to show that it is reasonably probable that the challenged action will threaten their concrete interests.²⁰³

In response to the claim that there was no injury-in-fact, the plaintiffs argued that it was undeniable that the projects would have significant consequences.²⁰⁴ Even though the defendants contested the credibility of the plaintiff's evidence, the court determined that the plaintiff's evidence was sufficient to demonstrate a reasonable probability that emissions from defendants' projects will threaten the plaintiff's concrete interests.²⁰⁵ The court then held that the plaintiffs had sufficiently established causation.²⁰⁶ The court pointed to evidence linking the defendants to certain energy projects.²⁰⁷ Ex-Im and OPIC both stated that these projects would not have proceeded without their support and participation.²⁰⁸ Therefore, summary judgment on the issues of injury-in-fact and causation was inappropriate.²⁰⁹

The plaintiffs were also found to have met the redressability requirement for standing.²¹⁰ Neither OPIC nor Ex-Im conducted environment assessments under NEPA.²¹¹ As a result, the court found that the plaintiff's had shown redressability because they demonstrated that the defendants' decisions could be influenced by further environmental studies.²¹² Thus, the court, by compelling the defendants to conduct the assessments required by NEPA, could provide sufficient redress for the plaintiffs alleged injuries.²¹³

200. *Id.* at *5.

201. *Id.* at *8.

202. *Id.*

203. *Id.* at *10.

204. *Id.* at *14.

205. *Id.*

206. *Id.*

207. *Id.*

208. *Id.*

209. *Id.*

210. *Id.*

211. *Id.*

212. *Id.*

213. *Id.* at 18.

Having disposed of the plaintiff's alleged lack of standing, the court next turned to the defendants' claim that there was no final agency action. The defendants' argued that the plaintiffs were not challenging a final agency action and instead were making a broad programmatic challenge.²¹⁴ However the court found that the plaintiffs' challenges were not overly broad or programmatic because OPIC's organic statute did not preclude judicial review.²¹⁵ The statute is silent as to judicial review and the defendants failed to clearly demonstrate that Congress intended to preclude this type of judicial inquiry.²¹⁶

Finally, the court held that the environmental procedures under OPIC's statute did not displace NEPA.²¹⁷ The defendants pointed to Ninth Circuit case law that precluded NEPA review in some instances.²¹⁸ However, the court noted that the record did not evince Congressional intent preclude NEPA.²¹⁹ As a result, the court denied the defendants' motion for summary judgment.²²⁰

Mayo Foundation v. Surface Transportation Board

In *Mayo Foundation v. Surface Transportation Board*,²²¹ the court affirmed the Surface Transportation Board's ("STB") decision to approve the Dakota, Minnesota & Eastern Railroad Corp's (DM&E) railroad construction project.²²² The appellants challenged the STB's approval of the DM&E's proposed construction of 280 miles of new rail line, which would reach the coalmines of Wyoming's Powder River Basin ("PRB"), as well as the upgrade 600 miles of existing rail line along Minnesota and South Dakota.²²³ Appellants argued that the STB's approval violated 49 U.S.C. § 10901 and NEPA.²²⁴ The court denied the appellants' challenge.²²⁵

214. *Id.*

215. *Id.*

216. *Id.*

217. *Id.* at 22.

218. *Id.*

219. *Id.*

220. *Id.* at 27.

221. *Mayo Foundation v. Surface Transportation Board*, 472 F.3d. 545 (8th Cir. 2006), *on remand from Mid States Coal. for Progress*, 345 F.3d 520.

222. *Id.*

223. *Id.* at 549.

224. *Id.*

225. *Id.*

Following STB's approval, the court reversed the STB's approval for its failure to comply with NEPA.²²⁶ The court remanded the case back to the Board for it to reconsider its decision on two issues; (1) to stop short of imposing mitigating conditions of horn noise and (2) to consider expected effects of increased coal consumption.²²⁷ On remand the STB issued both a supplemental environmental impact statement ("DSEIS") and a final supplemental environmental impact statement ("FSEIS"). STB subsequently approved the project.²²⁸

Appellants, the Mayo Foundation, City of Rochester, and Olmstead County then argued that DM&E's acquisition of I&M Rail Link ("IMRL") constituted "significant new circumstances" and should have been considered as an alternative route for purposes of the NEPA analysis.²²⁹ The court found that the STB's prior decisions, which found that the IMRL was not a reasonable alternative to the DM&E's route through Rodchester, thoroughly explained its conclusion for it not investigating the IMRL as an alternative route.²³⁰ Therefore, the STB was not required to consider the environmental impacts of IMRL and the STB's decision was not arbitrary, capricious, or an abuse of discretion.²³¹

Appellants Rochester and Olmstead County argued that STB should have required DM&E to fund measures for the establishment of quiet zones in Rochester, to build sound walls, and to install noise insulation at places subject to adverse levels of horn noise.²³² On remand, the STB again did not impose horn noise mitigation other than requiring DM&E liaisons to assist in the establishment of quiet zones.²³³ The court found that STB sufficiently addressed this matter on remand when it adopted the rationale in its FSEIS, which showed that there were no instances where a railroad was required to fund a quiet zone or other horn noise abatement program.²³⁴

Appellant Sierra Club argued that the STB had not adequately addressed the expected increase in consumption of PRB coal, and the corresponding increase in emissions from that coal, which would likely result due to the

226. *Id.*

227. *Id.*

228. *Id.*

229. *Id.* at 551.

230. *Id.* at 552.

231. *Id.*

232. *Id.*

233. *Id.*

234. *Id.*

availability of a shorter and cheaper distribution route.²³⁵ Therefore, the Sierra Club argued, the STB did not handle this issue correctly on remand.²³⁶ This aspect of the case had been remanded by the circuit court because it had found the STB wrong in arguing that such effects were too speculative given the CEQ regulations for evaluating reasonably foreseeable significant adverse effects on the human environment.²³⁷ The court also remanded the case back in order for the Board to consider the effects of other pollutants, including nitrous oxide, CO₂, particulates, and mercury.²³⁸

On remand, the STB used the Energy Information Administration's National Energy Modeling System (NEMS).²³⁹ Using NEMS, the STB concluded that increases in such emissions would be less than one percent.²⁴⁰ The court rejected the Sierra Club's argument and said that the STB extensively discussed the potential impacts on air quality that may result from the project's implementation on remand.²⁴¹ Further, the court stated that the STB adequately considered the reasonably foreseeable significant adverse effects of increased coal consumption.²⁴² As a result, the court affirmed the Board's decision.²⁴³

Center for Biological Diversity v. U.S. Department of the Interior

In *Center for Biological Diversity v. U.S. Dept. of the Interior*,²⁴⁴ the Department of Interior ("DOI") began the formal administrative process to expand leasing areas in the Outer Continental Shelf ("OCS") for offshore oil and gas development for the years between 2007–2012.²⁴⁵ The five-year leasing program included the expansion of previous lease offerings in the Beaufort, Bearing, and Chukchi Seas off the coast of Alaska.²⁴⁶ Appellants argued that the leasing program violates the Outer Continental Shelf Lands

235. *Id.*

236. *Id.*

237. *Id.* at 553.

238. *Id.*

239. *Id.*

240. *Id.* at 555.

241. *Id.*

242. *Id.* at 556.

243. *Id.* at 556.

244. *Center for Biological Diversity v. U.S. Dept. of the Interior*, 563 F.3d 466 (D.C. Cir. 2009).

245. *Id.* at 472.

246. *Id.*

Act (OCSLA),²⁴⁷ the Endangered Species Act (“ESA”),²⁴⁸ and NEPA.²⁴⁹ Petitioner’s NEPA claims centered around two issues: (1) the leasing program violated OCSLA and NEPA because DOI failed to take the effects of climate change into consideration; (2) the leasing program violated OCSLA and NEPA because DOI failed to conduct a sufficient biological baseline on the seas.

The court addressed the NEPA claims by first looking at the justiciability of the petitioners’ climate change and baseline data claims under NEPA.²⁵⁰ The petitioners argued that DOI failed to account for present and future impacts of climate change on the program areas and the impact of climate change of the additional consumption caused by the program.²⁵¹ The court held that these NEPA claims were not ripe because of the multiple stage process of the leasing program.²⁵² Case law indicated that NEPA obligations mature only when an agency reaches a critical stage of a decision which will result in irreversible and irretrievable commitments of resources to such an action.²⁵³ The leasing program at issue in the case had not reached this critical stage because at the time petitioners filed their petition, DOI had approved the program but no lease-sales had occurred.²⁵⁴ As a result, any harm to the petitioners caused by the need of waiting for the issue to ripen would be outweighed by the harm done to the DOI by pressing these issues before they were justiciable.²⁵⁵

Friends of the Earth v. Mosbacher

In *Friends of the Earth v. Mosbacher*,²⁵⁶ the plaintiffs, Friends of Earth, Greenpeace, and others, sued the Overseas Private Investment Corporation (“OPIC”) and the Export-Import Bank of the U.S. (“Ex-Im”) under the APA and NEPA for projects that these agencies funded which emitted GHGs. The plaintiffs asserted that the defendants needed to conduct an environmental review under NEPA before they provided funding for such projects. Further,

247. 43 U.S.C. §§ 1331–1356a.

248. 16 U.S.C. §§ 1531–1544.

249. *Id.* at 471.

250. *Id.* at 480.

251. *Id.*

252. *Id.*

253. *See* Wyoming Outdoor Council v. U.S. Forest Service, 165 F.3d 43 (D.C. Cir. 1999).

254. *Id.*

255. *Id.*

256. *Friends of the Earth v. Mosbacher*, 488 F. Supp. 2d 889 (N.D. Cal. 2007).

the plaintiffs argued that the defendants must take a “hard look” at the GHG emissions from these projects.²⁵⁷ Those project included: (1) Chad-Cameroon Pipeline Project; (2) Sakhalin Oil Field Project; (3) West Seno I and II Oil and Gas Fields Projects; (4) Cantarell Oil Field Project; (5) Hamaca Heavy Crude Oil Project; and (6) Dezhou Coal-Fired Power Plan Project.²⁵⁸

Both OPIC and Ex-Im had developed climate change reports, which concluded that their projects were not significant contributors to climate change.²⁵⁹ The plaintiffs argued that both agencies had supported and continued to provide financial assistance to international fossil fuel projects that emit GHGs.²⁶⁰ Plaintiffs claimed that these GHG emissions did have a significant effect on the domestic environment.²⁶¹ The plaintiffs filed motions for summary judgment and the defendants filed cross-motions for the same.²⁶²

Preliminarily, the plaintiffs argued that the projects were major federal actions subject to NEPA because of the amount of financing provided and because of the environmental guidelines imposed in connection with that financing.²⁶³ As the court noted, significant federal funding can transform a state or local project into a major federal action.²⁶⁴ To determine if a project qualifies as a major federal action under NEPA, both the nature of the federal funds used and the extent of federal involvement must be assessed.²⁶⁵

To this end, the court then analyzed the scale of the defendants’ projects, the amounts of their loan guaranties, and the percentage of the projects’ total cost that came from the loans.²⁶⁶ Additionally, the court looked at the nature of the defendants’ involvement and whether they imposed conditions along with their financing.²⁶⁷ If the defendants’ amount of financing did not influence the scope of the project, the defendants did not possess sufficient control or the responsibility necessary to make these projects major federal actions.²⁶⁸ The court held that the information in the record was insufficient to establish whether the defendants possessed the necessary control over the

257. *Id.* at 892.

258. *Id.*

259. *Id.*

260. *Id.*

261. *Id.*

262. *Id.*

263. *Id.* at 912.

264. *Id.*

265. *Id.*

266. *Id.* at 912–13.

267. *Id.* at 913–16.

268. *Id.* at 915–16.

decision-making process.²⁶⁹ The plaintiffs had failed to show that any of the projects qualified as major federal actions.²⁷⁰ However, the defendants failed to prove that their projects did not qualify as major federal actions.²⁷¹ Therefore, the court denied both parties' motions for summary judgment.²⁷²

The plaintiffs argued that collectively the defendants have supported 162 other fossil fuel fired power plants around the world that were not identified in the second amended complaint.²⁷³ The defendants countered that the plaintiffs failed to sufficiently identify these other projects.²⁷⁴ The court held that the plaintiffs failed to provide sufficient information about the total costs of these projects or the level of control and responsibility the defendants had over these projects.²⁷⁵

Having determined that the plaintiffs failed to prove any of the undertakings to be major federal projects subject to NEPA with sufficient certainty to warrant summary judgment, the court readily disposed of the plaintiffs' remaining claims. The plaintiffs had argued that since the seven projects identified in their complaint represented actions that were "cumulative," the defendants should have prepared a single EIS under NEPA.²⁷⁶ Given that since that the court could not determine whether the individual projects in the complaint qualified as major federal actions, the court found that it could not decide whether any of these actions would qualify as cumulative actions for purposes of summary judgment.²⁷⁷ However, the court did note that the Ninth Circuit has generally found that a single EIS for cumulative actions is required when there is a geographical or temporal nexus among the actions or when an agency may have divided a project into multiple actions.²⁷⁸

Finally, the court held that the plaintiffs are not entitled to an injunction directing the defendants to prepare an EA or an EIS for each and every fossil fuel project they may approve in the future.²⁷⁹ The court stated it is impossible

269. *Id.* at 917–18.

270. *Id.* at 918.

271. *Id.* at 918.

272. *Id.*

273. *Id.* at 917.

274. *Id.*

275. *Id.* at 919.

276. *Id.*

277. *Id.*

278. *Id.*

279. *Id.* at 920.

to assert that each project that the defendants may undertake in the future would trigger NEPA.²⁸⁰

North Slope Borough v. Minerals Management Service

In *North Slope Borough v. Minerals Mgm't Service*,²⁸¹ plaintiffs North Slope Borough ("NSB") and the Alaska Eskimo Whaling Commission ("AEWC") filed a motion for a preliminary injunction to enjoin the sale by the United States of certain oil and gas leases located in the Beaufort Sea. That sale was approved the Minerals Management Service ("MMS") and the Department of Interior. The plaintiffs argued that MMS's decision not to supplement a 2003 environmental impact statement ("EIS") was arbitrary and capricious, and therefore violated NEPA.²⁸²

The plaintiffs argued that higher oil prices, the cumulative impact of climate change, and increased industry interest in the Beaufort Sea and polar bears were new circumstances that required a SEIS.²⁸³ Further, plaintiffs argued that if a lease sale were to be permitted, plaintiffs' subsistence activities would suffer irreparable harm from the effect of seismic testing on whales, waterfowl, seals, and caribou.²⁸⁴ Plaintiffs argued that the public interest in ensuring that federal agencies comply with federal environmental laws overrides possible economic harm, which could result from temporarily enjoining the sale.²⁸⁵

The defendants countered that that MMS was not required to prepare a SEIS because the 2003 EIS was based on generous development scenarios and a lease sale did not present a materially different assessment of environmental impact from what was stated in the 2003 EIS.²⁸⁶ Further, defendants argued that any injury is only speculative and the public interest would be harmed by enjoining the sale.²⁸⁷

The court denied the plaintiffs' motion for preliminary injunction because it determined that MMS's FONNSI was not arbitrary and capricious and the Agency did take a hard look at the plaintiffs' concerns prior to issuing this

280. *Id.*

281. *N. Slope Borough v. Mineral Mgmt. Serv.*, No. 3:07-cv-0045-RRB, 2007 WL 1106110 (D. Alaska Apr. 12, 2007).

282. *Id.* at *1.

283. *Id.* at *3.

284. *Id.*

285. *Id.*

286. *Id.*

287. *Id.*

finding.²⁸⁸ The court reiterated that the plaintiffs have the burden of proof and must show they are entitled to a preliminary injunction.²⁸⁹ The court stated that the plaintiffs would unlikely win this motion because while NEPA requires agencies to take into account all environmental considerations, it does not require that they should elevate environmental concerns over others.²⁹⁰

The court found that most of the plaintiffs' concerns were considered in various scenarios of the 2003 EIS and therefore were not new or unanticipated developments.²⁹¹ Given the Outer Continental Shelf Leasing Act ("OCLSA"), the Marine Mammal Protection Act and its regulations, significant harm would unlikely result from the sale. The court gave deference to the agency's expertise and experience and found that the balance of hardships weighs in favor of the defendants who invested time and money in preparing for the lease sales.²⁹² Further, the court held that if it issued an injunction, it would be relying on mere speculation.²⁹³

Audubon Naturalist Society v. Department of Transportation

In *Audubon Naturalist Society v. Department of Transportation*,²⁹⁴ the Audubon Naturalist Society commenced an action for injunctive and declaratory relief under NEPA, the Department of Transportation Act,²⁹⁵ the APA, and the Clean Water Act, ("CWA").²⁹⁶ The Audubon Society contested the proposed highway project, the Intercounty Connector ("ICC") which connects I-95/US1 in Prince George County, MD and I-270 in Montgomery County, MD. The Environmental Defense Fund and Sierra Club challenged the ICC and sought injunctive and declaratory relief under the Safe, Accountable, Flexible, and Efficient Transportation Equity Act ("SAFETEA-LU"),²⁹⁷ the Federal-Aid Highways Act,²⁹⁸ NEPA, the APA, and the CAA.²⁹⁹

288. *Id.* at *4.

289. *Id.*

290. *Id.*

291. *Id.*

292. *Id.*

293. *Id.*

294. *Audubon Naturalist Soc'y, Inc. v. U.S. Dept. of Transp.*, 524 F. Supp. 2d 642, 656 (D. Md. 2007).

295. 49 U.S.C. § 303 (2006).

296. 33 U.S.C. § 1344 (2006).

297. 23 U.S.C. § 134 (2006).

298. 23 U.S.C. § 109.

299. *Audubon Naturalist Soc'y*, 524 F. Supp. 2d at 657.

The plaintiff's climate change arguments centered on the Federal-Aid Highways Act ("FAHA") and NEPA.³⁰⁰ They claim that the FHWA violated FAHA by failing to make a determination that the proposed ICC was in the best overall public interest.³⁰¹

Plaintiffs contended that the defendants did not consider climate change and air pollution impacts.³⁰² However, the court found that the defendants did consider these impacts. For instance, the defendants found that there would be no new violations of the National Ambient Air Quality Standards as a result of the ICC.³⁰³ As a result, the court held that the defendants had adequately considered these potential adverse effects.³⁰⁴ Moreover, the court found that in response to comments, the FHWA explained that the "issue of global climate change is an important national and global concern that is being addressed in several ways by the Federal government."³⁰⁵ The record showed that the response went on to say that the agency believed it was not useful to "consider greenhouse gas emissions as part of the project-level planning and development process," since there are "no national regulatory thresholds for greenhouse gas emissions or concentrations that have been established through law or regulation."³⁰⁶

The court concluded that the defendants did not act arbitrarily or capriciously in concluding that no particular mitigation is needed here for the supposed impacts of a single stretch of highway on the global problem of climate change.³⁰⁷ Consequently, the court found that the defendants followed the mandates of NEPA and the section 109(h) regulations in considering the environmental effects and alternatives.³⁰⁸ The court also held that the defendants acted according to NEPA in its conclusion that the ICC project is in the "best overall public interest."³⁰⁹

300. *Id.* at 706.

301. *Id.*

302. *Id.* at 708.

303. *Id.*

304. *Id.*

305. *Id.*

306. *Id.*

307. *Id.* at 709.

308. *Id.*

309. *Id.*

Center for Biological Diversity v. National Highway Transportation
Safety Administration

In *Center for Biological Diversity v. NHTSA*,³¹⁰ appellants challenged the National Highway Transportation Safety Administration's (NHTSA) final rule, titled "Average Fuel Economy Standards for Light Trucks, Model Years 2008–2011."³¹¹ The appellants, Center for Biological Diversity, challenged the final rule under the Energy Policy and Conservation Act ("EPCA"),³¹² and NEPA. In their first climate change challenge, the appellants' contended that the rule was arbitrary and capricious and contrary to EPCRA because its calculation of the costs and benefits of alternative fuel economy standards assigns zero value to the benefit of CO₂ emissions reductions.³¹³

The court found that the NHTSA's failure to monetize benefits of GHG emissions reductions was arbitrary and capricious for several reasons.³¹⁴ First, the record showed that there is a range of values where mitigating climate change emissions have an estimated positive benefit and the value of carbon emissions reductions is not zero.³¹⁵ Second, NHTSA gave no reason for why it believed the range of values presented to it was "extremely wide."³¹⁶ Third, NHTSA's reasoning is arbitrary and capricious because it has monetized other uncertain benefits, such as the reduction of criteria pollutants, crash, noise, and congestion costs, and the value of increased energy security.³¹⁷ Finally, NHTSA's conclusion that commenters did not reliably demonstrate that monetizing the value of carbon reduction would have affected the stringency of the CAFE standard is contrary to the record.³¹⁸ The Court found that NHTSA's decision not to monetize the benefit of carbon emissions reduction was arbitrary and capricious, and remanded to NHTSA for it to include a monetized value for this benefit in its analysis of the proper CAFE standards.³¹⁹

Appellants also argued that NHTSA's Environmental Assessment is inadequate under NEPA because it does not take a "hard look" at the GHG

310. *Center for Biological Diversity v. NHTSA*, 538 F.3d 1172 (9th Cir. 2008).

311. 71 Fed. Reg. 17566 (Apr. 6, 2006).

312. 49 U.S.C. §§ 32901–19.

313. *Center for Biological Diversity*, 538 F.3d at 1180.

314. *Id.* at 1200.

315. *Id.*

316. *Id.*

317. *Id.*

318. *Id.* at 1202.

319. *Id.*

implications of its rulemakings and does not analyze a reasonable range of alternatives or examine the rule's cumulative impact.³²⁰ The court found that NHTSA clearly has statutory authority to impose or enforce fuel economy standards under the EPCA, and it could have exercised its discretion in setting higher standards if an EIS contained evidence that so warranted.³²¹ The CAFE standard will affect the level of the nation's greenhouse gas emissions and impact global warming. As a result, the EPCA does not limit NHTSA's duty under NEPA to assess the environmental impacts, including the impact on climate change. EPCA's goal of energy conservation and NEPA's goals to protect, restore, and enhance the environment are complementary.³²²

The court next examined the EA to determine whether it had adequately considered the possible consequences of the proposed agency action when concluding that the action will have no significant impact on the environment. The court also addressed whether NHTSA's determination that no EIS is required is a reasonable conclusion.³²³ The court found that the EA's cumulative impacts analysis was inadequate.³²⁴ The court noted that the fact that climate change is largely a global phenomenon that includes actions outside of the agency's control does not release the agency from the duty of assessing the effects of its actions on global warming within the context of other actions that also affect global warming.³²⁵ The cumulative impacts regulation specifically provides that the agency must assess the "impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions."³²⁶ The impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct.³²⁷

The court concluded that NHTSA's FONSI was arbitrary and capricious.³²⁸ Therefore, the court found that the agency must prepare an EIS because the evidence raises a substantial question as to whether the Final Rule may have a significant impact on the environment.³²⁹ Petitioners have raised

320. *Id.* at 1215.

321. *Id.*

322. *Id.*

323. *Id.*

324. *Id.* at 1216.

325. *Id.*

326. See 40 C.F.R. § 1508.7.

327. *Center for Biological Diversity*, 538 F.3d at 1217.

328. *Id.* at 1220.

329. *Id.*

a “substantial question” as to whether the CAFE standards for light trucks from model years 2008–2011 “may cause significant degradation of some human environmental factor,” particularly in light of the compelling scientific evidence concerning “positive feedback mechanisms” from GHG emissions in the atmosphere.³³⁰ Moreover, NHTSA failed to provide a convincing statement of reasons for its finding of insignificance.³³¹ The EA did not provide a “statement of reasons” for a finding of no significant impact, or a “convincing statement of reasons.” Moreover, there was no analysis or statement of reasons in the section of the EA that discusses environmental impacts.³³²

Montana Environmental Information Center v. U.S. Bureau of
Land Management

In *Montana Environmental Information Center v. U.S. Bureau of Land Management*,³³³ the plaintiffs, the Montana Environmental Information Center, the Oil and Gas Accountability Project, and WildEarth Guardians, filed a complaint and alleged violations of the Federal Land Policy and Management Act (“FLPMA”),³³⁴ the Mineral Leasing Act (“MLA”),³³⁵ NEPA, and Department of the Interior Secretarial Order 3226, which directs the Bureau of Land Management (“BLM”) to consider and analyze potential climate change impacts when making decisions about public lands. According to the complaint, the BLM did not follow the directive of the order when it approved certain oil and gas leases. The complaint further alleged that the planning and decision making process for the lease sales failed to address GHG emissions by quantifying and reducing methane and other emissions.³³⁶

On March 12, 2010, the parties settled the lawsuit and the BLM agreed to suspend certain oil and gas leases, which would allow the BLM to conduct further review of the leases under NEPA.³³⁷ Such review will, in accordance

330. *Id.* at 1221.

331. *Id.* at 1223.

332. *Id.*

333. First Amended Complaint at 2, *Mont. Env'tl. Info. Ctr. v. U.S. Bureau of Land Mgmt.*, No. 9:08-CV-00178-DVM (D. Mont. 2010), *available at* http://meic.org/files/energy/2010-blm-settlement-docs/MT1stAmendedComplaint_BLMO-Gleasechallenge_1.15.2009.pdf.

334. 43 U.S.C. § 1701 *et seq.*

335. 30 U.S.C. § 181 *et seq.*

336. *Supra* note 333.

337. *Id.*; telephone interview with Meghan Anderson, attorney, W. Environmental Law Ctr. (Oct. 8, 2010).

with the CEQ regulations integrate other environmental review procedures to the extent required by other federal statutes, regulations, and agency policies and procedures including FLPMA, MLA, and Secretarial Order 3226. As a result of this settlement, BLM must, for the first time, conduct climate change reviews along with other environmental assessments required by federal law.

V. CASE LAW ANALYSIS

A. Climate Change is within the Purview of NEPA

The primary commonality throughout all of the cases is that effects from various projects on climate change do fit within the rubric of NEPA. As the court in *City of Los Angeles v. NHTSA* stated, the new and potentially catastrophic environmental phenomenon presented by global warming fits squarely within the broad framework of NEPA.³³⁸ In addition, the court in that case took note of the precautionary aspects under NEPA. That is, the legislative intent behind NEPA is to anticipate and predict the environmental effects of a proposed action before it takes place.³³⁹ Moreover, the court specifically found that while the timing and scope of injuries from global warming are uncertain, it is worse not to evaluate its possible consequences in an EIS.³⁴⁰ As a result, climate change is considered “reasonably foreseeable” and should be taken into account in the review of any applicable federal proposal.³⁴¹

Other courts also echoed the theme that NEPA requires consideration of climate impacts. In *Border Power Plant Working Group v. Department of Energy*,³⁴² the issue addressed by the court was whether the projects at issue should be evaluated for the CO₂ emissions that would potentially result.³⁴³ The court held that such emissions need to be assessed.³⁴⁴ In *Mid States Coalition for Progress v. Surface Transportation Board*,³⁴⁵ the court also found that federal agencies must evaluate projects that are likely to result in the increase

338. *City of Los Angeles*, 912 F.2d at 478.

339. *Id.* at 495.

340. *Id.*

341. See 40 C.F.R. §§ 1502.4 (2010) (relating to major federal actions requiring the preparation of environmental impact statements), 1508.7 (relating to cumulative impacts), 1508.8 (relating to effects), and 1508.25 (relating to scope).

342. *Border Power Plant Working Grp.*, 260 F. Supp. 2d at 997.

343. *Id.* at 1026.

344. *Id.* at 1028–29.

345. *Mid States Coal. for Progress*, 345 F.3d at 520.

of CO₂ emissions.³⁴⁶ The court in *Center for Biological Diversity v. NHTSA*, found that the failure to monetize benefits from reductions in GHG emissions was arbitrary and capricious.³⁴⁷

While the plaintiffs in the above cases were not always successful in their challenges, it is nevertheless important to note that none of the courts found that climate change, global warming, or GHG gas emissions were not within the scope of review of NEPA. For instance, in *Seattle Audubon Society v. Lyons*, the court expressly held that the FSEIS at issue adequately considered the impacts of climate change related to a forest management plan.³⁴⁸ The court in *APAC Inc. v. Bonneville Power Administration*, held that the EIS at issue properly examined the environmental impact of CO₂ input related to increased direct service industries operations.³⁴⁹ In *Center for Biological Diversity v. U.S. Department of the Interior*, the court found that the plaintiffs' claims under NEPA related to climate change impacts from an oil leasing program were not ripe.³⁵⁰ The court in *Friends of the Earth v. Mosbacher*, held that the Overseas Private Investment Corporation was subject to NEPA for projects they funded that could increase CO₂ emissions.³⁵¹ In *North Slope Borough v. Minerals Mgm't Services*, the federal district court found that the agency took a hard look at the plaintiffs' concerns, including those related to climate change, before it issued the FONNSI.³⁵² The court in *Audubon Naturalist Society v. Department of Transportation* found that the agency did account for the plaintiff's concerns related to climate change for the construction of a new highway project.³⁵³

Only in *Senville v. Peters* did the court find that an evaluation of climate change effects was not required related to a proposed road construction project.³⁵⁴

B. Direct and Indirect Effects Must Be Examined

The NEPA regulations recognize two types of effects: direct and indirect. Direct effects are "those caused by the action and occur at the same time and

346. *Id.* at 550.

347. *Center for Biological Diversity*, 538 F.3d at 533.

348. *Seattle Audubon Society*, 871 F. Supp. at 1323.

349. *APAC Inc. v. Bonneville Power Administration*, *supra* note 122, at 1187.

350. *Center for Biological Diversity*, 563 F.3d at 480.

351. *Friends of the Earth*, 488 F. Supp. 2d at 907.

352. *North Slope Borough*, No. 3:07-cv-0045-RRB, 2007 WL 110616 at 5.

353. *Audubon Naturalist Society*, 524 F. Supp. 2d at 708.

354. *Senville*, 327 F. Supp. 2d at 355.

place.”³⁵⁵ Indirect effects are “those caused by the action and are alter in time or further removed in distance, but are still reasonably foreseeable.”³⁵⁶ Moreover, indirect effects “may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.”³⁵⁷ The regulation further states that “effects includes ecological (such as the effects on natural resources and on components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect or cumulative.”³⁵⁸ Both the IPCC reports³⁵⁹ and EPA’s Endangerment Finding³⁶⁰ found that the net effect of human activities since 1750 has been one of warming. Moreover, as both the IPCC and EPA note in their reports, this warming is expected to result in widespread adverse environmental effects.³⁶¹

The courts have effectively adopted a posture that these direct and indirect effects must be examined. For instance, in *Center for Biological Diversity*, the court found that the proposed CAFE standards for a certain class of vehicles would have a direct effect of GHGs.³⁶² Additionally, the court noted that the defendant agency did not disagree that improved CAFE standards could have a significant effect on CO₂ emissions in the atmosphere, which could impact climate change.³⁶³ Likewise, the court in *Mid States Coalition for Progress v. Surface Transportation Board*, found that a proposal to construct and upgrade a rail line to reach coalmines in Wyoming’s Powder River basin required federal agencies to consider direct and indirect effects under the NEPA regulations.³⁶⁴ In that case, those effects are the increase in the long-term demand for coal, and any effects that result from burning coal, such as CO₂ emissions.³⁶⁵

355. 40 C.F.R. § 1508.8(a).

356. 40 C.F.R. § 1508.8(b).

357. *Id.*

358. *Id.*

359. See, e.g., Lenny Bernstein et al., *Climate Change 2007: Synthesis Report*, IPCC, Nov. 12, 2007, http://www.ipcc.ch/publications_and_data/ar4/syr/en/spms1.html.

360. 74 Fed. Reg. 66496–01, 66517–01 (Dec. 15, 2009) (to be codified at 40 C.F.R. Chapter I).

361. *Id.*

362. *Center for Biological Diversity*, 538 F.3d 1172.

363. *Id.* at 547.

364. *Mid States Coalition for Progress*, 345 F.3d at 549.

365. *Id.* at 550.

C. Cumulative Impacts Must Be Assessed

Under the NEPA regulations promulgated by CEQ, “cumulative impact” is defined “as the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions.”³⁶⁶ The regulations further provide that “cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.”³⁶⁷ This definition accurately describes human-induced climate change, which is nothing more than a series of human activities that have resulted in higher temperatures and corresponding ecological affects. Moreover, the courts also view a cumulative impact analysis as a necessary component of any NEPA review related to climate change.

In *Center for Biological Diversity v. NHTSA*, the plaintiffs argued that the NHTSA did not take a “hard look” at the GHG implications of its CAFE standards rulemaking and did not examine the rule’s cumulative impact.³⁶⁸ The court held that the EA’s cumulative impact analysis was inadequate.³⁶⁹ In particular, the court noted that even though climate change is a global issue, this does not release an agency from its duty to assess the effects of its actions on global warming.³⁷⁰ The cumulative impact regulation requires such an assessment. Moreover, the court noted that the impact of GHG emissions on climate change is precisely the kind of cumulative impact analysis that NEPA requires agencies to conduct.³⁷¹

The court in *Border Power Plant Working Group v. Department of Energy*, found that the agency must analyze under NEPA the construction and operation of power plant turbines in Mexico that provide power to the United States as well as the transmission lines in the United States, because both the power plants and the transmission lines might have direct or indirect environmental effects, including climate change.³⁷² The court remanded the action back to the agency because the entire cumulative impact analysis failed to include these necessary evaluations. The impact analysis also did not

366. 40 C.F.R. § 1508.7.

367. *Id.*

368. *Center for Biological Diversity*, 538 F.3d at 1216.

369. *Id.*

370. *Id.*

371. *Id.*

372. *Border Power Plant Working Group*, 260 F. Supp. 2d at 1016.

include an evaluation of CO₂ emissions from these projects and did not consider the combined impacts of future power plants in the region.³⁷³

D. The Role of Uncertainty

As previously noted, NEPA is one of the best national examples of precautionary action, since it stresses forethought and attention to consequences. Moreover, its regulations anticipate that there may be data gaps in decision making and evaluating reasonably foreseeable significant adverse effects on the human environment. NEPA requires “the agency shall always make clear that such information is lacking.”³⁷⁴ Furthermore, “reasonably foreseeable” adverse effects include “impacts which have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.”³⁷⁵ For instance, while the IPCC’s Fourth Assessment Report on Climate Change in 2007³⁷⁶ finds that it is *very likely* that over the past fifty years cold days, cold nights and frosts have become less frequent over most land areas, and hot days and hot nights have become more frequent,³⁷⁷ the report only found that it is *likely* that heat waves have become more frequent over most land areas.³⁷⁸ This means that in the case of the former finding there is a greater than 90 percent probability of occurrence, while in the case of the latter finding there is a greater than 66 percent probability of occurrence.³⁷⁹ This is the type of uncertainty that the NEPA regulations expect will be built into any analysis. Moreover, the courts have conclusively held that even uncertain effects must be analyzed under NEPA.

For example, in determining whether the plaintiffs had standing under the causation element in *City of Los Angeles v. NHTSA*, the court noted that to obtain standing, a plaintiff only needs to show that the alleged injury is fairly traceable to the proposed action.³⁸⁰ To require a high level of certainty is

373. *Id.* at 1032.

374. 40 C.F.R. § 1502.22.

375. 40 C.F.R. § 1502.22.

376. *Supra* note 53.

377. *Id.*

378. *Id.*

379. Intergovernmental Panel on Climate Change, ANNEX I, *User Guide & Access to More Detailed Info.*, 83, http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_appendix.pdf.

380. *City of Los Angeles*, 912 F.2d at 483 (citing *Nat’l Wildlife Fed’n v. Hodel*, 839 F.2d 694, 704 (D.C. Cir. 1988)).

wrong, since the legislative intent of NEPA is to anticipate and predict the environmental effects of a proposed action before it takes place.³⁸¹ For instance, in *Mid States Coalition for Progress v. Surface Transportation Board*, the court rebuffed the defendant's suggestion that increased coal-use would result because of the proposed rail project was speculative, and found that the effects of increased coal-use related to climate change was not speculative.³⁸² Moreover, the court noted that the agency could not ignore such an effect and the CEQ regulations devised a specific procedure for evaluating reasonably foreseeable significant adverse effects on the human environment when there was incomplete or unavailable information.³⁸³

VI. CEQ DRAFT GUIDANCE ON ASSESSING GHG IMPACTS FROM PROPOSED FEDERAL ACTIONS

With the ever-increasing importance of assessing GHG impacts from proposed federal actions, and a growing body of case law relative to that assessing, CEQ developed a guidance document entitled "Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions."³⁸⁴ The draft guidance's purpose is to assist in explaining how federal agencies should analyze the environmental effects of a proposed agency action under § 102 of NEPA and the relevant CEQ regulations. The guidance provides that "if a proposed action would be reasonably anticipated to cause direct emissions of 25,000 metric tons or more of CO₂-equivalent GHG emissions on an annual basis, agencies should consider this an indicator that a quantitative and qualitative assessment may be meaningful to decision makers and the public."³⁸⁵ However, the guidance is not proposed to be applicable to federal land and resources management decisions.³⁸⁶ Examples of proposed projects that could potentially fall within the scope of this guidance include approval of a large solid waste landfill, coal-fired power plants, or a methane venting coal mine.³⁸⁷

381. *Id.*

382. *Mid States Coalition for Progress*, 345 F.3d at 549.

383. *Id.* at 550.

384. Memo from Nancy Sutley, Chair of Council on Env'tl. Quality, *Draft NEPA Guidance on Consideration of the Effects of Climate Change & Greenhouse Gas Emissions* (Feb. 18, 2010), available at http://ceq.hss.doe.gov/nepa/regs/Consideration_of_Effects_of_GHG_Draft_NEPA_Guidance_FINAL_02182010.pdf.

385. Sutley, *supra* note 384, at 1.

386. *Id.* at 2.

387. *Id.* at 3.

In evaluating GHG emissions from a project, federal agencies and departments should quantify those emissions using technical guidance issued under Executive Order 13514. This executive order relates to GHG accounting and reporting, EPA's mandatory GHG reporting rule, and the Department of Energy's voluntary GHG reporting rule.³⁸⁸ If the emissions meet the reportable thresholds, agencies should consider mitigation measures and reasonable alternatives to reduce GHG emissions.³⁸⁹ The CEQ guidance suggests that among the measures and alternatives to be considered are enhanced energy efficiency, lower GHG-emitting technology, renewable energy, planning for carbon capture and sequestration, and capturing or beneficially using fugitive methane emissions.³⁹⁰

It is through the scoping process that agencies should determine the appropriate emphasis that should be placed on climate change considerations.³⁹¹ Agencies should consider things like the sensitivity, location, and time frame of the proposed action in determining that emphasis. Any analysis that emphasizes climate change considerations should consider effects on the environment, public health and safety, and vulnerable populations who are more likely to be adversely effected by climate change.³⁹² Moreover, "[a]gencies should consider the specific effects of the proposed action . . . , the nexus of those effects with projected climate change effects on the same aspects of our environment, and the implications for the environment to adapt to the projected effects of climate change."³⁹³

One example given is an industrial process that may draw water from a reduced stream caused by decreased snow pack or significant heat that is exposed to increasing atmospheric temperatures.³⁹⁴ Another illustration is a proposal that would draw copious amounts of water, which would be required a discussion on changes in water availability associated with climate change.³⁹⁵ In the analysis of any proposed action, agencies should rely on NEPA's "rule of reason" to govern the detail in any environmental effects analysis related to climate change.³⁹⁶

388. *Id.* at 4.

389. *Id.* at 5.

390. *Id.* at 6.

391. *Id.*

392. *Id.*

393. Sutley, *supra* note 384, at 7.

394. *Id.*

395. Sutley, *supra* note 384, at 7.

396. *Id.*

The guidance document highlights the importance of identifying reasonably foreseeable effects. For instance, “[a]gencies should be clear about the basis for projecting the changes from the existing environment to the reasonably foreseeable affected environment, including what would happen under this scenario and the probability or likelihood of this future condition.”³⁹⁷

Long-term projects located in areas that are vulnerable to climate change should be considered in any analysis. As an example, the guidance discusses the development of transportation infrastructure located on a barrier island that may need design changes to cope with rising sea levels due to climate change.³⁹⁸

The guidance also highlights the importance of adaptive changes related to climate change. The guidance notes, “where adaptation to the effects of climate change is important, the significant aspects of these changes should be identified in the agency’s final decision and adoption of a monitoring program should be considered.”³⁹⁹

The guidance recognizes that it is “now well established that rising global GHG emissions are significantly affecting the Earth’s climate.”⁴⁰⁰ As a result, all reasonably foreseeable significant adverse effects on the human environment should be identified in any NEPA analysis.⁴⁰¹ The guidance also recognizes that “research on climate change impacts is an emerging and rapidly evolving science.”⁴⁰² Consequently, “agencies should consider uncertainties associated with long-term projections from global and regional climate change models.”⁴⁰³

VII. CONGRESSIONAL RESPONSE

Senator James Inhofe of Oklahoma introduced legislation in the 111th Congress to prohibit the use of NEPA to document, predict, or mitigate the climate effects of specific federal actions.⁴⁰⁴ In essence, the bill provides that compliance with NEPA shall not include consideration of: (1) the greenhouse gas emissions, or any climate change effects of those emissions, of a proposed

397. *Id.*

398. *Id.*

399. *Id.*

400. Sutley, *supra* note 384, at 10.

401. Sutley, *supra* note 384, at 8.

402. *Id.*

403. *Id.*

404. NEPA Certainty Act, S. 3230, 111th Congress (2010).

action and alternative actions; or (2) the relationship of climate change effects to a proposed action or alternatives, including the relationship to proposal design, environmental impacts, mitigation, and adaptation measures.⁴⁰⁵ To date, the U.S. Senate only referred the bill to Committee.⁴⁰⁶

VIII. FUTURE IMPACT CLIMATE CHANGE ANALYSIS WITHIN THE NEPA FRAMEWORK

As indicated, there is a robust body of case law that deals with climate change within the context of NEPA. Federal courts recognize that climate change impacts can be addressed in NEPA litigation. Failure to address these impacts at that initial stage of litigation will almost certainly result in a legal challenge. Consequently, all parties to any NEPA action—federal agencies, industry, environmental groups, and the public-at-large—should ensure that climate change impacts are addressed during the scoping process. Moreover, interested parties should ensure that any concerns they have related to climate impacts should be submitted during the public comment process or risk failure to establish standing to challenge an agency decision.

Potential litigants should also use this body of case law as a means to apply and interpret the NEPA regulations to any proposed federal action. For instance, the court in *Center for Biological Diversity v. NHTSA* held that the EA's cumulative impact analysis was inadequate.⁴⁰⁷ The court noted that even though climate change is a global issue, this does not release an agency from its duty to assess the effects of its actions on global warming.⁴⁰⁸ The cumulative impact regulation requires such an assessment.

However, the most important development in NEPA litigation is the CEQ's promulgation of its draft guidance relative to assessing GHG impacts from proposed federal actions. This guidance, while still in draft form, provides all parties with a written explanation on how federal agencies should analyze climate change impacts under NEPA and the CEQ regulations. The expectation is that failure to follow this draft guidance may result in a legal challenge. It will be interesting to see if and how courts will apply to guidance to climate change challenges under NEPA.

405. *Id.*

406. Gov Track, Senate Bill 3230, *available at* www.govtrack.us/congress/bill.xpd?bill=s111-3230 (last accessed Dec. 21, 2010).

407. *Center for Biological Diversity*, 538 F.3d at 1221.

408. *Id.*

IX. CONCLUSION

In many respects, the statutory structure of NEPA makes it an ideal planning tool for projects that might impact climate. Unlike the single medium statutes, NEPA applies to all federal actions and agencies. Moreover, this approach is systematic and interdisciplinary in its in planning and decisionmaking. As the court in *City of Los Angeles v. NHTSA* stated, global warming is a “new and potentially catastrophic environmental phenomenon that fits squarely into the broad NEPA framework.”⁴⁰⁹ Consequently, the development of GHG guidance by the CEQ to use NEPA in a consistent manner to address climate change concerns in federal planning is a welcome sign that NEPA will remain a relevant tool to combat climate change.

409. *City of Los Angeles*, 912 F.2d at 478.