

Implications of the Trump Administration’s Withdrawal of the Final CEQ Guidance on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews

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ABSTRACT

CEQ guidance and the NEPA framework do not explicitly require federal agencies to address climate change in their environmental analyses. However, CEQ guidance documents have recommended that agencies consider the effects of a proposed agency action on GHG emissions and the effects of climate change on the proposed action. Surveys of federal EISs suggest that such CEQ guidance documents have prompted agencies to more thoroughly consider climate change. The Trump Administration’s withdrawal of the final CEQ guidance on climate change considerations in NEPA reviews may therefore discourage agency consideration of those effects. A review of federal case law, however, suggests that agencies should continue to thoroughly consider GHG emissions and the effects of climate change to produce adequate environmental analyses.

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INTRODUCTION

On March 18, 2017, President Donald Trump issued an Executive Order that withdrew the Council on Environmental Quality’s (“CEQ”) Final Guidance to federal agencies on considering climate change in their environmental analyses under the National Environmental Policy Act (“NEPA”).¹ This action is consistent with President Trump’s general approach towards climate change, such as his claim that climate change is a hoax and his decision to withdraw the United States from the Paris Climate Agreement.² Although this action is consistent with the Trump policy on climate change, it leaves federal agencies with a lack of clarity on how they should approach climate change. As the CEQ noted, “[c]limate change is a particularly complex challenge given its global nature and the inherent interrelationships among its sources, causation, mechanisms of action, and impacts.”³ Because of this complexity, CEQ issued guidance to assist federal agencies in their consideration of greenhouse gas (“GHG”) emissions and the effects of climate change when evaluating their proposed actions in accordance with NEPA.⁴ The Trump administration’s withdrawal of the CEQ guidance thus begs the question: what should federal agencies now do regarding climate change under NEPA?

The CEQ guidance and the NEPA framework do not explicitly require federal agencies to address climate change in their environmental analyses. However, surveys of federal Environmental Impact Statements (“EISs”) suggest that CEQ guidance documents have prompted agencies to more thoroughly consider GHG emissions and the effects of climate change. This in turn suggests that the Trump administration’s withdrawal of the final CEQ guidance may discourage agency consideration of climate change. But CEQ guidance documents were never binding, and federal agencies must also look to the courts for guidance on how to adequately carry out their NEPA obligations. Many federal courts have addressed the issue, and none have interpreted NEPA to *expressly* require consideration of climate change. However, a review of federal case law does suggest that, in applying NEPA, courts will require agencies to thoroughly consider GHG

1. Exec. Order No. 13,783, 82 Fed. Reg. 16,093 (Mar. 31, 2017); Withdrawal of Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews, 82 Fed. Reg. 16,576 (Apr. 5, 2017).

2. See Justin Worland, *The White House’s Climate Change Believers are Headed Out the Door*, TIME, Mar. 15, 2018, <http://time.com/5201421/rex-tillerson-climate-change-donald-trump/>.

3. COUNCIL ON ENVTL. QUALITY, FINAL GUIDANCE FOR FEDERAL DEPARTMENTS AND AGENCIES ON CONSIDERATION OF GREENHOUSE GAS EMISSIONS AND THE EFFECTS OF CLIMATE CHANGE IN NATIONAL ENVIRONMENTAL POLICY ACT REVIEWS 1, 2 (Aug. 1, 2016) [hereinafter CEQ Final Guidance], https://obamawhitehouse.archives.gov/sites/whitehouse.gov/files/documents/nepa_final_ghg_guidance.pdf.

4. *Id.* at 1.

emissions and climate change effects in order to produce an adequate environmental analysis under NEPA.

Part I of this Note provides background information on the legal frameworks involved: the NEPA framework, administrative law, and the relevant recommendations contained in the now-withdrawn CEQ guidance. Part II summarizes the findings of several surveys of federal EISs to demonstrate how agencies have responded to CEQ guidance on climate change considerations in NEPA reviews. Part III discusses federal cases that suggest agencies should continue to thoroughly consider climate change in their NEPA reviews to survive judicial review.

I. LEGAL FRAMEWORK

A. THE NATIONAL ENVIRONMENTAL POLICY ACT FRAMEWORK

NEPA imposes procedural requirements that federal agencies must follow whenever they take qualifying actions.⁵ NEPA does not require a substantive result. Instead, its function is to increase transparency and availability of information to enable more informed decision-making.⁶ To achieve this goal, NEPA requires a detailed EIS for every “major Federal action significantly affecting the quality of the human environment.”⁷ NEPA also authorized the creation of CEQ and tasked it with the duty to “review and appraise the various programs and activities of the Federal Government” and make recommendations regarding how to carry out certain provisions of the Act.⁸ Under this authority, CEQ promulgates rules implementing NEPA (“CEQ Regulations”) “to tell federal agencies what they must do to comply with the procedures and achieve the goals of the Act.”⁹

The steps of conducting environmental analyses under the NEPA framework are as follows. Before an agency completes a full EIS, it may conduct an Environmental Assessment (“EA”),¹⁰ which is a “concise public document” that provides “evidence and analysis” to determine whether to prepare an EIS or issue a Finding of No Significant Impact (“FONSI”).¹¹ The EA includes brief discussions of the need for the proposal, alternatives to the proposal, and environmental impacts of the proposed action and its alternatives.¹² If the agency determines

5. 42 U.S.C. §§ 4321–4347 (2012).

6. *See* *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 333 (1989) (stating that “NEPA itself does not impose substantive duties mandating particular results, but simply prescribes the necessary process for preventing uninformed—rather than unwise—agency action”).

7. 42 U.S.C. § 4332(C).

8. *See id.* § 4344(3).

9. 40 C.F.R. § 1500.1 (2017). CEQ Regulations are codified at 40 C.F.R. §§ 1500.1–1518.4 (2017).

10. Agencies may prepare an EA if the proposed action is not covered by 40 C.F.R. § 1501.4(a). *Id.* § 1501.4(b). Section 1501.4(a) provides that, in determining whether to prepare an EIS, the agency shall “[d]etermine . . . whether the proposal is one which: (1) Normally requires an [EIS], or (2) Normally does not require either an [EIS] or an [EA] (categorical exclusion).” *Id.* § 1501.4(a).

11. *Id.* § 1508.9(a).

12. *Id.* § 1508.9(b).

through the EA that the proposed action “will not have a significant effect on the human environment,” it shall prepare a FONSI providing the reasons why an EIS will not be prepared.¹³ If the agency determines that the proposed action will have a significant effect on the human environment, then it must prepare a full EIS.¹⁴

The EIS is statutorily required to contain a discussion of (i) the proposed action’s environmental impact; (ii) any unavoidable adverse environmental effects; (iii) alternatives to the proposed action; (iv) the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity; and (v) any irreversible and irretrievable commitments of resources.¹⁵ The CEQ Regulations define “effects” to include direct effects, reasonably foreseeable indirect effects, and effects that are the cumulative result of incremental impacts of the action “when added to other past, present and reasonably foreseeable future actions regardless of what agency . . . or person undertakes such other action.”¹⁶ The discussion of alternatives, which the CEQ Regulations call “the heart of the environmental impact statement,” should present the impacts of the proposal and the alternatives in a comparative form that sharply defines the issues and provides a “clear basis for choice among options by the decisionmaker and the public.”¹⁷ Taking “no action” must be among the alternatives.¹⁸ The agency usually must complete the EIS in two stages, and it may supplement the EIS.¹⁹ The agency must first issue a draft EIS and allow the opportunity for comment before issuing a final EIS.²⁰ Agencies must prepare supplemental EISs (“SEIS”) to either the draft or final EIS if substantial changes to the proposed action occur or significant new information or circumstances related to the environmental concerns associated with the proposed action or its impacts arise.²¹

NEPA does not provide a private right of action, so claims are reviewed under the Administrative Procedure Act (“APA”).²² “Courts often characterize NEPA’s procedural requirement as obliging agencies to take a ‘hard look’ at the environmental consequences and alternatives.”²³ Thus, an agency that fails to take a hard look at the environmental effects of its proposed actions and alternatives will fail

13. *See id.* §§ 1508.13, 1501.4(e).

14. 42 U.S.C. § 4332(C).

15. *Id.* § 4332(C)(i)–(v).

16. 40 C.F.R. §§ 1508.7–1508.8.

17. *Id.* § 1502.14.

18. *Id.* § 1502.14(d).

19. *Id.* § 1502.9.

20. *Id.* § 1502.9(a)–(b).

21. *Id.* § 1502.9(c)(1)(i)–(ii).

22. *See e.g.*, *WildEarth Guardians v. U.S. Bureau of Land Mgmt.*, 870 F.3d 1222, 1227 (10th Cir. 2017).

23. *Id.* (citing *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989); *New Mexico ex rel. Richardson v. Bureau of Land Mgmt.*, 565 F.3d 683, 704 (10th Cir. 2009); *Biodiversity Conservation All. v. U.S. Forest Serv.*, 765 F.3d 1264, 1267 (10th Cir. 2014)).

the arbitrary and capricious standard under the APA.²⁴ It is important to mention once more that NEPA does not require any particular substantive result, and agency actions challenged under NEPA and the APA may only fail for not meeting the various procedural requirements aforementioned.²⁵ Particularly relevant to our discussion is that neither NEPA nor CEQ Regulations on procedural requirements explicitly mention climate change.²⁶ However, although the absence of express references to “climate change” or “GHG emissions” in NEPA or CEQ Regulations provides some flexibility in what factors federal agencies must consider, it does not necessarily mean that climate change is irrelevant to federal agency environmental analyses. Part III discusses the successful challenges that have been filed under NEPA and the APA for agency failure to consider climate change. Additionally, CEQ has issued guidance documents to assist federal agencies in considering climate change in their NEPA documents.²⁷

B. ADMINISTRATIVE LAW FRAMEWORK – THE EFFECT OF CEQ GUIDANCE

The term “guidance document” includes a wide variety of regulatory materials, including training manuals for agency staff, compliance guides directed to the general public, memoranda from agency leaders directing agency staff members, and statements outlining how an agency intends to regulate in a policy area.²⁸ Guidance documents are also called “policy statements.”²⁹ In administrative law, policy statements are documents intended to inform the public of an agency’s position on a particular issue, and they are not subject to the notice-and-comment procedures of the APA.³⁰ Although policy statements are exempt from notice-and-comment procedures, they also are not legally binding. Indeed, one of the tests for whether a document qualifies as a policy statement is whether it has binding legal effect.³¹ The Final CEQ Guidance on Consideration of Climate Change Impacts in NEPA Reviews issued August 1, 2016 (“Final Guidance”) expressly

24. *See* Motor Vehicle Mfrs. Ass’n of U.S. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983) (holding that “under the ‘arbitrary and capricious’ standard . . . the agency must examine the relevant data and articulate a satisfactory explanation for its action including a ‘rational connection between the facts found and the choice made.’”).

25. *See Robertson*, 490 U.S. at 333.

26. Although the regulations include indirect effects on air, water, and other natural systems, they do not explicitly mention climate change. *See* 40 C.F.R. § 1508.8.

27. Council on Environmental Quality, *CEQ Releases Final Guidance on Greenhouse Gases and Climate Change*, Obama White House Archives, <https://obamawhitehouse.archives.gov/administration/eop/ceq/initiatives/nepa/ghg-guidance> (last visited Oct. 8, 2018).

28. Connor Raso, *Strategic or Sincere? Analyzing Agency Use of Guidance Documents*, 119 YALE L. J. 782, 788 (2010).

29. *Id.* at 790.

30. 5 U.S.C. § 553(b)(3)(A).

31. *See* Am. Mining Congress v. Mine Safety & Health Admin., 995 F.2d 1106, 1112 (D.C. Cir. 1993) (“[I]nsofar as our cases can be reconciled at all” regarding whether a rule is legislative instead of an interpretive rule or general policy statement, “we think it almost exclusively on the basis of whether the purported [rule] has ‘legal effect’ . . .”).

stated that it is “not a rule or regulation . . . and is not legally enforceable.”³² Therefore, the Final Guidance was a nonbinding document that was only meant to assist federal agencies in considering the effects of climate change in accordance with NEPA and CEQ Regulations. It did not impose upon federal agencies any affirmative duty to consider climate change in NEPA reviews. However, as will be discussed in more detail below, agency guidance documents—though nonbinding—significantly affect agency action and are often cited in court opinions.³³

C. CEQ FINAL GUIDANCE

Although the Final Guidance had no binding legal effect—even prior to being withdrawn—three aspects of the Final Guidance are of particular relevance to this discussion. First, the Final Guidance continued the practice from the previous draft guidance of framing climate change considerations in NEPA reviews as “the potential effects of a proposed action on climate change as indicated by assessing GHG emissions,” and the “effects of climate change on a proposed action.”³⁴ As discussed in Part III, federal courts have also analyzed agency consideration of climate change under this framework.

Second, the CEQ recommended that agencies quantify the direct and indirect GHG emissions of their proposed actions.³⁵ It discussed widely available and broadly used quantification tools, and it suggested that where the agency determines that quantification of GHG emissions would not be warranted because such quantification tools are not reasonably available, agencies should provide a qualitative analysis and their “rationale for determining that the quantitative analysis is not warranted.”³⁶ Part III demonstrates how this aspect of the Final Guidance may survive through case law in which courts have held that an agency should consider climate change impacts in its NEPA review or at least provide a reasoned explanation as to why it did not.

Third, the Final Guidance discussed “methods to appropriately analyze reasonably foreseeable direct, indirect, and cumulative GHG emissions and climate effects.”³⁷ The CEQ recommended that when agencies “compare a project’s estimated direct and indirect emissions with GHG emissions from the no-action alternative, agencies should draw on existing, timely, objective, and authoritative analyses.”³⁸ However, when agencies find that such information is unavailable or that quantification would be overly speculative, “then the agency should quantify

32. CEQ Final Guidance, *supra* note 3, at 1 n.3.

33. See Katherine Lee, *CEQ’s Draft Guidance on NEPA Climate Analyses: Potential Impacts on Climate Litigation*, 45 ENVTL. L. REP. (ENVTL. LAW INST.) 10925, 10929 (2015).

34. CEQ Final Guidance, *supra* note 3, at 4.

35. *Id.* at 11.

36. *Id.* at 12–13.

37. *Id.* at 5.

38. *Id.* at 16.

emissions to the extent that this information is available and explain the extent to which quantified emissions information is unavailable while providing a qualitative analysis of those emissions.”³⁹ Part III discusses a similar situation regarding indirect effects and how federal courts seem to want agencies to at least consider climate change impacts to the extent that available information allows.

II. FEDERAL AGENCY PRACTICE FOLLOWING CEQ GUIDANCE

Although NEPA and CEQ regulations do not explicitly require federal agencies to address climate change considerations in their NEPA reviews, federal agencies have been doing so after the first CEQ draft guidance on the matter. The CEQ issued its first guidance on climate change considerations in NEPA reviews in a draft published on February 18, 2010—followed by another draft on December 24, 2014 and the Final Guidance on August 1, 2016.⁴⁰ The Sabin Center for Climate Change Law at Columbia Law School (the “Center”)⁴¹ has conducted several surveys of climate change considerations in federal EISs done around the time the CEQ guidance documents were published. These surveys provide insight as to how federal agencies responded to the guidance.

The first draft guidance suggested that federal agencies use a threshold level of direct GHG emissions of 25,000 metric tons annually as an indicator that the climate impacts of a project warrant NEPA analysis.⁴² For long-term projects that have annual emissions of less than 25,000 metric tons, the guidance encouraged agencies to consider the project’s cumulative long-term emissions.⁴³ The first draft guidance did not suggest that federal agencies should consider the impacts of climate change on the proposed project. The Center conducted a survey of federal EISs from January 1, 2009, through December 31, 2011.⁴⁴ The survey revealed that such EISs frequently addressed GHG emissions from projects—i.e.,

39. *Id.*

40. See COUNCIL ON ENVTL. QUALITY, DRAFT NEPA GUIDANCE ON CONSIDERATION OF THE EFFECTS OF CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS, 75 Fed. Reg. 8046 (proposed Feb. 18, 2010) [hereinafter CEQ First Draft], <https://obamawhitehouse.archives.gov/sites/default/files/microsites/ceq/20100218-nepa-consideration-effects-ghg-draft-guidance.pdf>; COUNCIL ON ENVTL. QUALITY, REVISED DRAFT GUIDANCE FOR FEDERAL DEPARTMENTS AND AGENCIES ON CONSIDERATION OF GREENHOUSE GAS EMISSIONS AND THE EFFECTS OF CLIMATE CHANGE, 79 Fed. Reg. 77802 (proposed Dec. 24, 2014) [hereinafter CEQ Second Draft], https://obamawhitehouse.archives.gov/sites/default/files/docs/nepa_revised_draft_ghg_guidance_searchable.pdf.

41. The American Bar Association recently awarded the Center with the Distinguished Achievement in Environmental Law and Policy Award in recognition of its contributions to environmental protection. See Past Award Recipients, AM. BAR ASS’N, https://www.americanbar.org/groups/environment_energy_resources/awards/law_policy_award/past_recipients.html (last visited Oct. 8, 2018).

42. CEQ First Draft, *supra* note 40, at 1.

43. *Id.* at 1–2.

44. PATRICK WOOLSEY, COLUMBIA LAW SCHOOL SABIN CTR. FOR CLIMATE CHANGE LAW, CONSIDERATION OF CLIMATE CHANGE IN FEDERAL EISs, 2009–2011 3 (2012), <http://columbiaclimatelaw.com/files/2016/06/Woolsey-2012-07-Consideration-of-Climate-Change-in-Federal-EISs-2009-2011.pdf>.

a project's effect on climate change—but that they considered the effects of climate change on proposed projects far less often.⁴⁵

The Center conducted another survey of federal EISs from July 2012 through December 2014.⁴⁶ The CEQ's second draft guidance was published on December 24, 2014, meaning the results of the Center's second survey again reflected agency practice in response to the first draft guidance discussed above. The Center surveyed 238 EISs and found that most agencies considered climate change impacts and were applying the CEQ-recommended 25,000 metric tons of CO₂ equivalent annual emissions threshold for quantifying GHG emissions.⁴⁷ This second survey contained more detailed discussion of the portion of EISs that considered climate change. Of the 238 EISs surveyed, 214 (90%) contained some discussion of GHG emissions or climate change impacts, 172 (72%) discussed the GHG emissions associated with a proposed action, and 167 (70%) discussed how climate change may affect the proposed action.⁴⁸ In its analysis of the survey results, the Center found that agencies "frequently cited the CEQ's 2010 draft guidance as well as various Executive Orders and agency policies on climate change when discussing these topics."⁴⁹ The Center noted that this suggests that the draft guidance documents have prompted a more thorough consideration of climate change impacts in EISs.⁵⁰

The Center's most recent survey of federal EISs covered the period from September 2016 to November 2016.⁵¹ The CEQ published its second draft guidance on December 14, 2014 and its Final Guidance on August 1, 2016. The survey therefore covered EISs that were in the drafting process before the Final Guidance was released and EISs that were drafted and/or published after the Final Guidance was released.⁵² The second draft guidance recommended the same 25,000 metric tons of CO₂ equivalent threshold for a project's direct GHG emissions as the first guidance, but—unlike the first draft guidance—it *also* recommended that agencies consider the impacts of climate change on the propose agency action.⁵³

45. *Id.* at 8.

46. JESSICA WENTZ ET AL., COLUMBIA LAW SCHOOL SABIN CTR. FOR CLIMATE CHANGE LAW, SURVEY OF CLIMATE CHANGE CONSIDERATIONS IN FEDERAL ENVIRONMENTAL IMPACT STATEMENTS, 2012-2014 i (2016), <http://columbiaclimatelaw.com/files/2016/06/Wentz-et-al.-2016-02-Climate-Change-Considerations-in-Federal-EIS-2012-14.pdf>.

47. *Id.* at ii, 5, 11.

48. *Id.* at ii.

49. *Id.*

50. *Id.*

51. SALONI JAIN ET AL., COLUMBIA LAW SCHOOL SABIN CTR. FOR CLIMATE CHANGE LAW, HOW DID FEDERAL ENVIRONMENTAL IMPACT STATEMENTS ADDRESS CLIMATE CHANGE IN 2016? i (2017), <http://columbiaclimatelaw.com/files/2017/02/Jain-et-al-2017-02-How-Did-Federal-EISs-Address-Climate-Change-in-2016.pdf>.

52. *See id.* at 3.

53. CEQ Second Draft, *supra* note 40, at 24.

The Final Guidance included, among other things,⁵⁴ the recommendations discussed in Part I.C. above. Although its recommendations were similar to those in the second draft guidance, a notable difference is the absence of the 25,000 metric ton threshold suggestion.⁵⁵ However, the authors of the Sabin Center's report considered it "reasonable to monitor agency implementation of the [Final] guidance" at this stage because the second draft guidance "contained very similar instructions."⁵⁶ Thus, during the period that the Center conducted its survey, CEQ guidance advised federal agencies to consider both the direct GHG emissions from proposed projects as well as the impacts of climate change on proposed projects. Out of all 31 Federal EISs covered in the survey, the Center found that every single one acknowledged climate change: 20 (65%) considered direct GHG emissions of a proposed project, 16 (52%) considered indirect GHG emissions, and 25 (81%) considered effects of climate change on the proposed project.⁵⁷ These results show that the CEQ guidance documents have continued to encourage federal agencies to consider climate change in NEPA reviews.

These three surveys that the Sabin Center conducted suggest that, although NEPA and CEQ Regulations do not explicitly require consideration of climate change and the CEQ guidance documents are not legally binding, federal agencies have been prompted by the guidance documents to consider climate change in NEPA reviews. Their response to the guidance may also suggest that President Trump's withdrawal of the Final Guidance on March 28, 2017 could encourage federal agencies to no longer consider, or consider to a lesser degree, climate change in NEPA reviews. The Center plans on conducting another survey of federal EISs following the withdrawal, which could shed light on how agencies have actually responded.⁵⁸ However, as Part III will demonstrate, even without the Final Guidance, federal agencies may still be prompted to consider climate change because of a building body of federal case law regarding the adequacy of NEPA reviews.

III. FEDERAL CASE LAW AND THE ADEQUACY OF NEPA REVIEWS

A body of federal case law has been developing concerning the adequacy of federal agency consideration of a proposed action's effect on GHG emissions and

54. *E.g.*, CEQ Final Guidance, *supra* note 3, at 5 (advising agencies to use existing information and tools when assessing future proposed actions, counseling agencies to use information developed during NEPA review to consider alternatives that are more climate resilient, and highlighting the consideration of reasonable alternatives).

55. *See generally id.*

56. JAIN ET AL., *supra* note 51, at 3.

57. *Id.* at i, 1 tbl. 2.1. The report noted that although there was high consistency in assessing GHG emissions, the EISs "largely failed to address . . . (i) GHG emissions mitigation and (ii) adaptation to climate change." *Id.* at 31.

58. E-mail from Michael Burger, Exec. Dir., Columbia Law School Sabin Center for Climate Change Law, to Thien Chau, J.D. Candidate at Georgetown University Law Center (Oct. 16, 2017, 09:47 EST) (on file with author).

the effects of climate change on the proposed action. The following discussion provides an in-depth analysis of federal cases to parse out what requirements the courts have imposed on federal agencies. Subpart A first discusses cases that commentators have suggested could act as precedent for holding that agencies should consider climate change in NEPA reviews. Subpart B then discusses cases that illuminate the particular ways in which federal agencies should consider indirect effects, cumulative effects, and methods of analysis relating to climate change and GHG emissions.

A. CASES SUGGESTING THAT AGENCIES SHOULD CONSIDER CLIMATE CHANGE

The U.S. District Court for the District of Alaska appears to be the first federal court to suggest that agencies should consider the impacts of climate change on proposed projects in NEPA reviews.⁵⁹ However, a close analysis shows that the Court's opinion is shaky ground for the principle that agencies should consider the impacts of climate change. In *Kunaknana v. U.S. Army Corps of Engineers*, residents of a town near a proposed drill site brought a NEPA action under the APA against the U.S. Army Corps of Engineers ("ACE") challenging its decision to issue a permit to an oil production company to fill certain wetlands.⁶⁰ The plaintiffs alleged that ACE's determination that a supplemental EIS was unnecessary was arbitrary and capricious because ACE failed to satisfactorily explain its decision.⁶¹ The court agreed, but it came to that conclusion for various reasons.

Plaintiffs made several arguments as to why ACE's decision was arbitrary and capricious. They claimed that ACE failed to consider (1) changes to the project that occurred since the 2004 EIS; (2) documents cited in the 2011 Record of Decision (ROD) that post-date the 2004 EIS; and (3) new information about the impacts of climate change on the project.⁶² The court determined that because ACE failed to provide a reasoned explanation for why it chose not to consider points (1) and (2), ACE's decision was arbitrary.⁶³ However, the court did not decide in the same opinion whether ACE should have evaluated post-2004 climate change information. Instead, the court deferred that determination until "further briefing from the parties on the appropriate remedy" for ACE's "failure to adequately explain its decision not to prepare an SEIS."⁶⁴ On remand, ACE evaluated the effects of climate change and determined that the SEIS was not necessary.⁶⁵ The court upheld ACE's determination, finding that ACE's "limited

59. See *Kunaknana v. U.S. Army Corps of Eng'rs*, 23 F. Supp. 3d 1063 (D. Alaska 2014).

60. See *id.* at 1067–68, 1085.

61. See *id.* at 1069, 1099.

62. See *id.* at 1090, 1093.

63. See *id.* at 1093–94.

64. See *id.* at 1098.

65. See *Kunaknana v. U.S. Army Corps of Eng'rs*, 2015 WL 3397150, at *11 (D. Alaska 2015).

consideration . . . was adequate and its decision not to prepare an SEIS” due to new information about climate change was not arbitrary or capricious.⁶⁶

Although it has been suggested that the court in this case “[required] an agency to consider the effect of climate change on a NEPA proposal,”⁶⁷ that may be too broad of a reading. The court had already decided that ACE’s decision to forego an SEIS was arbitrary and capricious on other grounds. It was “[b]y agreement of the parties” that the court “also ordered that the Corps address on remand whether post-2004 climate change information warrants the preparation of an SEIS.”⁶⁸ Therefore, the requirement that ACE consider climate change impacts may be limited because the court order was based on a stipulation by both parties.

While the district court in *Kunaknana* focused on the impacts of climate change on an agency’s proposed project, the D.C. Circuit’s holding in *Sierra Club v. FERC* discussed whether federal agencies should consider the impacts of a proposed project on GHG emissions. In *Sierra Club*, plaintiffs challenged the Federal Energy Regulatory Commission’s (“FERC”) decision to approve the construction and operation of three interstate natural gas pipelines.⁶⁹ Plaintiffs argued that FERC’s assessment of the environmental impact of the pipelines was inadequate because, among other things, it failed to consider the amount of power plant GHG emissions that the pipelines would make possible.⁷⁰ The D.C. Circuit concluded that FERC’s EIS “should have either given a quantitative estimate of the downstream [GHG] emissions that will result from burning the natural gas that the pipelines will transport or explained more specifically why it could not have done so.”⁷¹

Although the D.C. Circuit’s holding may appear to say that federal agencies should consider the effect of their proposed projects on GHG emissions, it may be limited. The D.C. Circuit noted that its holding relied on its finding that, because FERC had authority to “deny a pipeline certificate on the ground that the pipeline would be too harmful to the environment, the agency is a ‘legally relevant cause’ of the . . . environmental effects of pipelines it approves.”⁷² However, the court’s reliance on FERC’s legal authority to mitigate environmental harm may not be so limiting. Many agency actions that trigger NEPA requirements are attached to legal authority to mitigate environmental harm.⁷³ Thus, *Sierra Club*

66. *Id.*

67. WENTZ ET AL., *supra* note 46, at 7 n.28.

68. *Kunaknana*, 2015 WL 3397150, at *2.

69. *Sierra Club v. Fed. Energy Regulatory Comm’n*, 867 F.3d 1357, 1363 (D.C. Cir. 2017).

70. *See id.* at 1363, 1371.

71. *Id.* at 1374.

72. *Id.* at 1373.

73. In *Friends of Capital Crescent Trail v. Fed. Transit Admin.*, 253 F. Supp. 3d 296, 299 (D.D.C. 2017), plaintiffs filed a NEPA challenge to a Department of Transportation (“DOT”) approval of a transit system that involved DOT’s authority under the Federal-Aid Highway Act, which includes an obligation to “minimize harm” to public parks. 23 U.S.C. § 138(a). Additionally, while most EPA actions under the Clean Water Act are not covered by NEPA, issuance of National Pollutant Discharge

can stand for the principle that federal agencies should consider the effect of their proposed projects on GHG emissions.

B. CASES SHAPING HOW AGENCIES SHOULD CONSIDER CLIMATE CHANGE

The previous section discussed cases that could potentially be used as precedent to require federal agencies to consider climate change when conducting NEPA reviews. The following cases demonstrate the *particular ways* that courts have required agencies to consider climate change by finding the agencies' analyses of certain aspects of NEPA review to be inadequate.

1. Cumulative Impacts Analysis

The cumulative impacts analysis required under NEPA may sometimes be challenging and is “often the subject of controversy.”⁷⁴ NEPA’s requirements “often overwhelm practitioners,” and the inadequacy of some federal agencies’ cumulative impacts analyses has been the focus of litigation under NEPA.⁷⁵ The Ninth Circuit cleared up some of this confusion through its holding in *Center for Biological Diversity v. National Highway Traffic Safety Administration*, which some practitioners have understood to suggest that “future NEPA analyses for a wide range of projects requiring federal approval will need to take into account the impacts of [GHG] emissions on climate change.”⁷⁶

In *Center for Biological Diversity*, petitioners challenged the National Highway Traffic Safety Administration’s (“NHTSA”) issuance of a final rule setting CAFE⁷⁷ standards.⁷⁸ Petitioners claimed, among other things, that the NHTSA failed to take a hard look at the cumulative impacts of the rule on GHG emissions when it decided not to prepare an EIS.⁷⁹ The agency’s decision was based on its conclusion that the Energy Policy and Conservation Act (“EPCA”)

Elimination System (“NPDES”) permits are covered, 33 U.S.C. § 1371(c), and NPDES permits cannot be issued unless they meet conditions set under the Act meant to protect the environment. *See* 33 U.S.C. § 1342(a)(1).

74. Matthew P. Reinhart, *The National Environmental Policy Act: What Constitutes an Adequate Cumulative Environmental Impacts Analysis and Should it Require an Evaluation of Greenhouse Gas Emissions?*, 17 U. BALT. J. ENVTL. L. 145, 146 (2010).

75. *Id.* at 146–47.

76. *See* Lauren E. Schmidt & Geoffrey M. Williamson, *Recent Developments in Climate Change Law*, 37 COLO. LAWYER 63, 69 (2008). In Reinhart’s article in which he analyzed NEPA regulation and circuit court holdings on general cumulative impact analysis requirements, he also suggested that “federal courts will require all federal agencies to determine whether their proposed actions will have a cumulative environmental impact on global climate change.” Reinhart, *supra* note 74, at 147.

77. The Corporate Average Fuel Economy (“CAFE”) standards are set by the NHTSA to “regulate how far our vehicles must travel on a gallon of fuel.” Nat’l Highway Traffic Safety Admin., *Corporate Average Fuel Economy*, <https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy> (last visited Oct. 8, 2018).

78. *Ctr. for Biological Diversity v. Nat’l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1180–81 (9th Cir. 2008).

79. *Id.* at 1181.

does not create an obligation for it to assess the cumulative impact of its rule on climate change.⁸⁰ The Ninth Circuit found this argument to be without merit because NHTSA's regulations, which set fuel economy levels that translate directly into tailpipe GHG emissions, are the proximate cause of those GHG emissions.⁸¹ Therefore, under NEPA, the agency must consider cumulative impacts.⁸² Critical to this discussion are the Ninth Circuit's statements after it decided that the NHTSA's regulations are a proximate cause of GHG emissions.

The Ninth Circuit's broad language in this case provides a strong basis for requiring agencies to consider cumulative impacts on climate change resulting from their proposed actions. The globally dispersed nature of climate change's effects and causes creates uncertainty in how to measure the impacts of one agency action. Nevertheless, the court held that "the fact that climate change is largely a global phenomenon that includes actions that are 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."⁸³ Additionally, the court said that the "impact of [GHG] emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct."⁸⁴ The court was also sure to address concerns about a single agency action having too small of an impact on climate change to be considered. It held that "[a]ny given rule setting a CAFE standard might have an 'individually minor' effect on the environment, but these rules are 'collectively significant actions taking place over a period of time.'"⁸⁵ The Ninth Circuit thus makes it clear that, although the proposed agency action being reviewed may have an individually minor effect that is not considered significant under NEPA, the collective impact of that action over time may still have a significant effect.

2. Indirect Effects

In addition to cumulative effects, agencies must also consider reasonably foreseeable indirect effects of their proposed actions under NEPA.⁸⁶ The following case provides strong ground for requiring the consideration of GHG emissions at least through the NEPA indirect effects analysis. In *Mid States Coalition For Progress v. Surface Transportation Board*, petitioners challenged the decision of the Surface Transportation Board ("STB") to give final approval to a railroad corporation's proposal to construct roughly 280 miles of new rail line, which would reach the coal mines of the Powder River Basin in Wyoming, and an upgrade to

80. *Id.* at 1216.

81. *Id.* at 1216–17.

82. *See id.* at 1217.

83. *Id.* (emphasis original) (internal citation omitted).

84. *Id.* at 1217.

85. *Id.*

86. 40 C.F.R. §§ 1508.7–1508.8.

600 miles of existing rail line.⁸⁷ The proposed railways were projected to make available “100 million tons of low-sulfur coal per year at reduced rates,” which would “increase the consumption of low-sulfur coal vis-à-vis other fuels.”⁸⁸ Petitioner’s NEPA claim was based on the STB’s failure in its EA to assess the impact on emissions of air pollutants such as CO₂ that would result from the project increasing the availability of low-sulfur coal.⁸⁹ The Eighth Circuit decided in favor of the petitioners and held that the STB could not approve the project without first examining the effects that may occur as a result of the reasonably foreseeable increase in coal consumption, i.e., the indirect effects of the project.⁹⁰

The court rejected the railroad’s argument regarding the speculation involved in assessing the effects of any foreseeable increase in coal consumption. The railroad argued that if the increased availability of coal will drive the construction of additional power plants, the STB would need to know where those plants would be built and how much coal they would use in order to determine the indirect effects on emissions.⁹¹ Because the railroad had not finalized coal-hauling contracts with any utilities yet, it argued that that determination would be purely speculative and not the type of reasonably foreseeable impact that must be analyzed under NEPA.⁹² In rejecting that argument, the Eighth Circuit held that, even if the railroad’s statement was accurate, it would only show that the extent of the effect is speculative, whereas the nature of the effect is still reasonably foreseeable, and that effect therefore should still be considered.⁹³

Although this holding could be read as a requirement that agencies must consider climate change in their environmental analyses,⁹⁴ it is likely more narrowly tailored: agencies must assess a proposed action’s indirect effect on climate change even when the extent of that effect is speculative. However, this narrow reading still encourages agencies to consider climate change in their NEPA reviews, so long as an effect in the nature of an impact on GHG emissions is reasonably foreseeable.

There is still another aspect of the holding in *Mid States* to consider. When James Holcomb claimed that *Mid States* provided precedent for requiring GHG analysis under NEPA, he also included a critique that, because the Eighth Circuit did not provide “any frame of reference or regulatory benchmark . . . the Mid-States court’s conclusory finding of significance does not appear entirely

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

88. *Id.* at 548.

89. *See id.*

90. *See id.* at 549–50.

91. *Id.* at 549.

92. *Id.*

93. *See id.* at 549 (holding that “when the nature of the effect is reasonably foreseeable but its extent is not, we think that the agency may not simply ignore the effect”).

94. *See James R. Holcomb, IV, NEPA and Climate Change: After the CEQ’s Draft Guidance*, 41 *TEX. ENVTL. L.J.* 259, 266 (2011).

supportable under NEPA.”⁹⁵ This critique is inaccurate, however, for two reasons. First, as Holcomb himself acknowledges, “it is challenging to demonstrate significance in the context of GHG emissions under NEPA.”⁹⁶ The CEQ’s guidance documents were issued partly to address this challenge because NEPA and CEQ Regulations do not provide clear direction. The Eighth Circuit, acknowledging this challenge, did not make the claim that the indirect effect on GHG emissions resulting from the agency’s final decision was significant. Indeed, the court merely stated that uncertainty as to the extent of an effect on GHG emissions itself is not enough to allow agencies to outright ignore potential effects on GHG emissions altogether.⁹⁷ Second, the court also addressed what an agency must do to evaluate foreseeable adverse effects when there is incomplete or unavailable information.⁹⁸ The court noted that CEQ Regulations require an agency to (1) make clear that it does not have enough information to evaluate the effects and (2) include in the EIS information explaining the lack of evaluating data.⁹⁹ Thus, if an agency is faced with a situation where its proposed action has a reasonably foreseeable effect in the *nature* of an effect on GHG emissions, but the *extent* of that effect is unclear, then instead of ignoring that effect, the agency must either assess it or explain in an EIS that it lacks the information to evaluate that effect. This interpretation of the *Mid States* ruling is well grounded in the NEPA framework,¹⁰⁰ and is not like the “conclusory finding” that Holcomb claims finds no support under NEPA.

3. Analysis of Alternatives

As mentioned above, the reasonable range of alternatives that NEPA requires to put in an EIS is considered “the heart of the environmental impact statement.”¹⁰¹ This step of the process focuses on comparing the environmental harms that would be caused by each alternative, including the no-action alternative. In some instances, the agency may claim that a certain environmental harm that would result from its preferred action would be the same for the no-action alternative. The agency may reach this conclusion based on the reasoning that if the agency did not take the preferred action, another party would or a similarly harmful action might take place, and that environmental harm would have occurred

95. *Id.*

96. *Id.*

97. See *Mid States Coal. for Progress*, 345 F.3d at 549 (stating that “when the *nature* of the effect is reasonably foreseeable but its *extent* is not, we think that the agency may not simply ignore the effect”).

98. *Id.*

99. *Id.* at 550.

100. The Eighth Circuit partly based its reasoning on the requirements of 40 C.F.R. § 1502.22. See *id.* at 549.

101. 40 C.F.R. § 1502.14.

anyway.¹⁰² Thus, in the context of climate change, the issue may not be that the agency did not consider a proposed action's potential GHG emissions. Instead, the issue may be that the agency used a substitute cost assumption to claim that there would be no appreciable difference between its preferred action and a no-action alternative. However, the Tenth Circuit in *WildEarth Guardians v. U.S. Bureau of Land Management* put agencies on notice that the "perfect substitution" assumption is not a shortcut to avoid consideration of GHG emissions because the assumption may be considered irrational.¹⁰³

In *WildEarth Guardians*, the petitioners challenged a U.S. Bureau of Land Management ("BLM") coal lease in the Powder River Basin region.¹⁰⁴ Pursuant to NEPA, BLM prepared an EIS comparing its preferred action of leasing to a no-action alternative in which none of the coal leases would be issued.¹⁰⁵ Regarding the CO₂ emissions and impacts on climate change, BLM concluded that there were "no appreciable differences" between U.S. total CO₂ emissions under either alternative.¹⁰⁶ BLM reached this conclusion by applying the perfect substitution assumption and reasoning that, "even if it did not approve the proposed leases, the same amount of coal would be sourced from elsewhere."¹⁰⁷ BLM's decision was challenged under NEPA and the APA, and the court applied the arbitrary and capricious test, looking for whether the agency failed "to take a 'hard look' at the environmental effects of the alternatives before it."¹⁰⁸ The Tenth Circuit ruled for the petitioners and held that BLM's error was in its reliance on a faulty assumption.¹⁰⁹ The court determined that (1) the perfect substitution assumption was not supported by the record or "basic economic principles" and (2) even if BLM had enough data to choose between the preferred and no-action alternatives, the court would still conclude that the perfect substitution assumption was arbitrary and capricious "because the assumption itself is irrational."¹¹⁰ The second point is important because it distinguished the court's decision as holding that the reliance on the perfect substitution assumption was the agency's primary error, not its preference to issue coal leases over the no-action alternative.

More critical to this discussion, however, is the court's first point that the perfect substitution assumption was not supported by the record or basic economic principles. The Tenth Circuit noted, "[t]hat this perfect substitution assumption lacks support in the record is enough for us to conclude that the analysis which

102. See *Ctr. for Sustainable Econ. v. Jewell*, 779 F.3d 588, 604-05 (D.C. Cir. 2015) (upholding the agency's analysis of environmental cost wherein forgoing oil leases on the outer continental shelf would result in pollution from substitute energy sources).

103. *WildEarth Guardians v. U.S. Bureau of Land Mgmt.*, 870 F.3d 1222, 1236 (10th Cir. 2017).

104. *Id.* at 1226.

105. *Id.* at 1227.

106. *Id.* at 1228.

107. *Id.*

108. *Id.* at 1233.

109. *Id.* at 1237-38.

110. *Id.* at 1235-38.

rests on this assumption is arbitrary and capricious.”¹¹¹ The court is thus not holding that the perfect substitution assumption can never be used to justify a determination that there would be no appreciable difference in GHG emissions between preferred and no-action alternatives. Instead, the BLM in this case failed because, in preparing its EIS, it employed a “blanket assertion . . . unsupported by hard data.”¹¹² This reasoning is particularly relevant in climate change cases because, as will be discussed below, climate change is now a “scientifically verified reality” and climate modeling technology exists.¹¹³ Thus, an agency may no longer claim the perfect substitute assumption without addressing the realities of climate change. However, a faulty assumption alone is not enough to render the whole analysis unreasonable. In deciding whether the assumption that BLM relied on rendered its analysis unreasonable, the Tenth Circuit applied the rule from *Baltimore Gas*.¹¹⁴

In *Baltimore Gas & Electric Co. v. NRDC*, the Supreme Court upheld an agency FONSI that was based on a zero-release assumption after the Court considered three factors: (1) the assumption’s limited purpose in the overall environmental analysis; (2) the overestimation of environmental effects, which meant the assumption did not determine the overall direction the NEPA analysis took; and (3) the Court’s deference to agency “special expertise, at the frontiers of science.”¹¹⁵ The BLM’s perfect substitution assumption failed this test because (1) the record of decision (“ROD”) showed that the assumption was “key to the ultimate decision”; (2) BLM’s carbon emissions analysis seems to underestimate the effect on climate change; and (3) this issue is not on the frontiers of science as defined in *Baltimore Gas* because BLM acknowledged that climate change is a “scientifically verified reality” and climate modeling technology exists.¹¹⁶

The Tenth Circuit’s findings that (1) the BLM’s perfect substitution assumption was unsupported by the record and that (2) under *Baltimore Gas*, the assumption rendered its environmental analysis unreasonable are critically important for future NEPA reviews. First, it suggests that agencies wishing to employ the perfect substitute assumption must find ample support in the ROD and basic economic principles. Agencies should explain how such an assumption is a rational methodology for determining that there is no appreciable difference in GHG emissions between a preferred action and a no-action alternative. Second, agencies must also pay careful attention to the test in *Baltimore Gas* in case their reasoning for applying the perfect substitute assumption is unsupported

111. *Id.* at 1235.

112. *Id.*

113. *Id.* at 1236–37.

114. *Id.* at 1236.

115. *Id.* (citing *Baltimore Gas & Elec. Co. v. NRDC*, 462 U.S. 87, 89, 102–04 (1983)).

116. *WildEarth Guardians*, 870 F.3d at 1236–37. The Court in *Baltimore Gas* defined “scientific frontier” as “barely emergent knowledge and technology.” *Id.* at 1237 (citing *Baltimore Gas*, 462 U.S. at 92).

by the record. Thus, while the Tenth Circuit's decision in *WildEarth Guardians* does not necessarily foreclose use of the perfect substitute assumption altogether, it puts agencies on notice that they should tread carefully when employing the assumption in their EISs.

CONCLUSION

Viewed in the context of the Sabin Center's findings on agency consideration of climate change in their EISs, President Trump's withdrawal of the CEQ's Final Guidance in March 2017 may prompt agencies to no longer consider, or provide a less in-depth analysis of, climate change impacts. However, as the review of federal case law in Part III suggested, federal agencies should continue to thoroughly consider climate change in their NEPA reviews. Otherwise, their environmental analyses may be deemed inadequate upon judicial review.

Though President Trump has withdrawn the Final Guidance, its recommendations are still helpful for federal agencies seeking to have their environmental analyses upheld in court. First, like the CEQ recommended agencies to do in its guidance documents, federal courts have viewed climate change impacts in the context of NEPA review as (1) the potential effects of a proposed agency action on GHG emissions and (2) the potential effects of climate change on a proposed action. Second, the CEQ recommendation that agencies either quantify GHG emissions or provide a rationale for determining that quantification is not warranted is similar to the holdings in *Kunaknana* and *Sierra Club*. The courts in both cases required the agencies to consider climate change or at least provide a reasoned explanation for why they did not. Third, the CEQ's recommendation that, even when quantification may be overly speculative, agencies should quantify emissions to the extent that available information allows is like the holding in *Mid States* where the court held that the agency could not ignore the effect on GHG emissions simply because the extent of the effect is speculative. Finally, the courts in *Center for Biological Diversity* and *WildEarth Guardians* clarified how agencies may conduct cumulative impacts analysis and compare the effects of alternatives in the context of climate change. Together, these cases demonstrate that, despite the change in viewpoint of the new administration, federal agencies would be wise to thoroughly consider climate change in their NEPA review.