
COMMENT

AARON J. KRAFT*

NEPA and Climate Change: Beneficial Applications and Practical Tensions

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* J.D. expected 2011, University of Oregon School of Law; B.S. Electrical Engineering, 2003, University of Idaho. The author thanks Marianne Dugan, public lands advocate and NEPA expert, for her thoughtful input and advice on this Comment.

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Global climate change is the preeminent environmental concern of the modern era. Climate change has and will continue to affect public health in the United States through increasingly frequent and intense heat waves, flooding, hurricanes, disease outbreaks, and exposure to allergens.¹ Climate change threatens domestic electricity production while rising temperatures from climate change increase peak electricity demand.² Increased temperatures also jeopardize the nation's transportation infrastructure—everything from roads to air travel.³ In the U.S. agricultural sector, climate change will drastically affect growing seasons, crop yields, and livestock productivity.⁴ The specific changes will vary regionally, but the results will be consistent: environmental constraints unlike any humankind have endured.

It is therefore axiomatic that the National Environmental Policy Act of 1969⁵ (NEPA)—the U.S. policy that seeks “to create and maintain conditions under which man and nature can exist”⁶—contemplates the causes and effects of, and adaptation to, climate change. To date, federal agencies have been reluctant to address climate change in their NEPA analyses, and federal courts have only recently entertained NEPA-based climate change claims. But greater scientific and public awareness about climate change and increasingly favorable case law indicate that NEPA should play a significant role in the fight against global warming.

There is, however, a potential downside to climate change considerations under NEPA. Federal agencies could use NEPA—and

¹ UNION OF CONCERNED SCIENTISTS, *BACKGROUND: UNITED STATES* (2009), available at http://www.ucsusa.org/assets/documents/global_warming/us-global-climate-change-report-national.pdf.

² *Id.*

³ *Id.*

⁴ *Id.*

⁵ National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321–4370f (2006). Congress has amended NEPA since it became effective in 1970 but did not alter its import. *See, e.g.*, P.L. 96-229, § 5, 94 Stat. 328 (codified as amended at 42 U.S.C. § 4370 (2006)) (authorizing the EPA Administrator to allow and be reimbursed for the use of EPA special testing facilities by outside research groups).

⁶ 42 U.S.C. § 4331(a).

public fears about climate change—to justify so-called “green” energy development on wild public lands previously thought to be off limits.

This Comment explores the benefits and problems of requiring agencies to consider climate change in their NEPA analyses. Part I presents an overview of NEPA, including statutory language, agency duties, and regulations that detail specific agency requirements. It then addresses the prospect of challenging federal action when agencies fail to consider climate change. Finally, it discusses the role of NEPA in agency decision making, relevant case law, and the issue of standing in NEPA-based climate change litigation.

Part II discusses the impact of probable congressional action on climate change and how that may affect agencies’ NEPA responsibilities. It discusses how courts should construe NEPA in the event Congress enacts climate legislation, and considers the role of agency discretion in the face of carbon regulation.

Part III considers the increased demand for renewable energy in a carbon-regulated world and whether federal agencies may use climate change to justify development on wild public lands through their required NEPA analysis. This part addresses agency discretion to allow public land development and highlights the need for comprehensive policies that recognize the value of unaltered ecosystems. Specifically, it considers agency action in the context of National Wildlife Refuges and unprotected, wilderness-quality BLM-managed lands.

Finally, Part IV concludes that federal agencies must consider climate change in their decisions. It argues that citizens should challenge agencies for failing to address climate considerations. But citizens must not allow the tremendous threat of climate change to justify irresponsible energy development, which itself would destroy natural places and invaluable ecosystem services.

I

NEPA AND ITS APPLICATION TO GLOBAL CLIMATE CHANGE

NEPA, enacted during a period of growing concern about ecological destruction,⁷ reflects an idyllic vision of environmentally conscious decision making. The sweeping language of NEPA may, as one commentator said, have “the greatest collection of mellifluous, hortatory language ever assembled under one statutory title.”⁸ But

⁷ RONALD A. CASS ET AL., ADMINISTRATIVE LAW 490 (2006).

⁸ *Id.* at 489.

NEPA's grand policy statements are bolstered by useful tools that citizens should employ in the battle against global climate change. NEPA's relevance to climate change—the paramount environmental concern—is readily apparent in the congressional declaration of policy and goals:

The Congress, recognizing the profound impact of man's activity on the interrelations of all components of the natural environment, . . . declares that it is the continuing policy of the Federal Government . . . to use all practicable means and measures . . . to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.⁹

Moreover, NEPA expressly identifies six points of national importance that federal agencies must consider in order to comply with the statute's broader environmental goals.¹⁰ Those considerations relate to intergenerational equity, health and safety, protection of wide-ranging environmental uses, historic and cultural preservation, equitable living standards, and enhanced sustainable resource use.¹¹ Climate change will have effects on each of these.¹²

A. The Nuts and Bolts of NEPA: § 102 and CEQ Regulations

NEPA implements Congress's declared policy by requiring federal agencies to report on "major Federal actions significantly affecting the quality of the human environment."¹³ By Executive Order 11,514, President Richard Nixon directed the Council on Environmental Quality (CEQ)¹⁴ to issue regulations implementing NEPA § 102(2)(C).¹⁵ CEQ is a division of the Executive Office of the

⁹ 42 U.S.C. § 4331(a) (2006).

¹⁰ *See id.* § 4331(b).

¹¹ *Id.*

¹² *See* CHRISTOPHER PYKE & KIT BATTEN, THE CTR. FOR AM. PROGRESS, FULL DISCLOSURE: AN EXECUTIVE ORDER TO REQUIRE CONSIDERATION OF GLOBAL WARMING UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT 11 (2008), available at <http://www.americanprogress.org/issues/2008/05/pdf/nepa.pdf>.

¹³ National Environmental Policy Act (NEPA) of 1969, Pub. L. No. 91-190, § 102(2)(C), 83 Stat. 853 (1970) (codified at 42 U.S.C. § 4332(2)(C) (2006)). Throughout this Comment, references to "NEPA § ___" refer to divisions of the Act as represented in Pub. L. No. 91-190. References to NEPA as codified in U.S. Code are made with "42 U.S.C. ___."

¹⁴ The Council on Environmental Quality was established by NEPA. 42 U.S.C. § 4342; *see also* 42 U.S.C §§ 4343–4347 (statutes governing the Council on Environmental Quality).

¹⁵ Exec. Order No. 11,514, Protection and Enhancement of Environmental Quality, 35 Fed. Reg. 4,247 (Mar. 5, 1970).

President¹⁶ and is charged with “apprais[ing] programs and activities of the Federal Government in the light [sic] of the policy set forth in [NEPA].”¹⁷ CEQ’s regulations refine NEPA’s broad directive, explaining the type of study an agency must prepare before undertaking environmentally destructive activity.¹⁸

1. NEPA § 102(2)(C) Requirements

The procedural standard established in § 102(2)(C) is the “teeth” of NEPA:

[A]ll agencies . . . shall [for all] major Federal actions significantly affecting the quality of the human environment, [provide] a detailed statement by the responsible official on—

- (i) the environmental impact of the proposed action,
- (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
- (iii) alternatives to the proposed action,
- (iv) the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity, and
- (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Prior to making any detailed statement, the responsible Federal official shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved.¹⁹

Noticeably absent from § 102—or any other provision of NEPA—is a substantive requirement or recommendation for how an agency should proceed in light of its reported findings. Accordingly, a cursory reading might lead one to believe NEPA is simply “green tape,” gumming up the bureaucratic works. Such a narrow reading, however, would disregard the important role of the Act, which is “to inject environmental considerations into the federal agency’s decisionmaking process . . . [and to] inform the public that the agency

¹⁶ 42 U.S.C. § 4342; *see also* The White House, *Executive Office of the President*, WHITEHOUSE.GOV., <http://www.whitehouse.gov/administration/eop/> (last visited Nov. 20, 2010).

¹⁷ 42 U.S.C. § 4342.

¹⁸ *See* 40 C.F.R. §§ 1500–1518 (2009).

¹⁹ 42 U.S.C. § 4332(2)(C).

has considered environmental concerns in its decisionmaking process.”²⁰ The very essence of NEPA is to hold government officials accountable, through transparent decision making, for environmentally destructive actions—ensuring they carefully consider and document the environmental effects of each proposal.²¹

2. CEQ’s Regulations and Compliance with NEPA

All federal agencies must comply with NEPA and the corresponding CEQ regulations, unless there is contrary statutory authority.²² CEQ’s NEPA-implementing regulations require each agency to promulgate and adhere to policies that comport with NEPA and CEQ standards.²³ To comply with NEPA, an agency must prepare an environmental impact statement (EIS) for any proposed “major” action that will have “significant” environmental impacts.²⁴ An EIS is intended to “provide full and fair discussion of significant environmental impacts and . . . inform decision makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.”²⁵ The EIS is to be “used by Federal officials in conjunction with other relevant material to plan actions and make decisions.”²⁶

Of course, not every federal action requires an EIS, only those that are “major” and have “significant” environmental impacts. But nearly every proposed action involving the federal government is a major action for purposes of NEPA analysis.²⁷ So the principal question in determining when to prepare an EIS is whether a proposed action has significant impacts. Whether a proposed action has significant

²⁰ *Weinberger v. Catholic Action of Haw./Peace Educ. Project*, 454 U.S. 139, 143 (1981).

²¹ *See* PYKE & BATTEN, *supra* note 12, at 7 (“NEPA is based on the simple notion that the public has a right to information about the costs and consequences [of the implications] of federal actions. The law is the most appropriate mechanism for ensuring consideration of the implications of federal actions for global warming.”).

²² 40 C.F.R. § 1500.3.

²³ *Id.* § 1500.6.

²⁴ *Id.* § 1502.3.

²⁵ *Id.* § 1502.1.

²⁶ *Id.*

²⁷ *See id.* § 1508.18. (“Major Federal action includes actions with effects that may be major and which are potentially subject to Federal control and responsibility. Major reinforces but does not have a meaning independent of significantly”); *see also* *Alaska v. Andrus*, 591 F.2d 537, 540 (9th Cir. 1979) (noting that even federal funding of local or state agency action can constitute major federal action if such funding is significant).

impacts is a function of both “context” and “intensity,” thus agencies must consider project location, long-term and short-term site-specific effects, beneficial and adverse effects, and human health and safety.²⁸ Agencies must consider both the direct effects and the reasonably foreseeable indirect effects of the proposed action.²⁹

In determining the significance of an action, an agency may prepare an environmental assessment (EA), a concise document that provides “evidence and analysis for determining whether to prepare an [EIS].”³⁰ The EA also aids an agency’s compliance with NEPA when no EIS is necessary and facilitates preparation of an EIS when one is necessary.³¹ If, on the basis of the EA, an agency makes a finding of no significant impact (FONSI), it may pursue the proposed action without preparing an EIS.³² Otherwise, the agency must prepare an EIS to comply with NEPA.³³

The Ninth Circuit’s threshold requirement for when an agency must prepare an EIS reflects NEPA’s precautionary character: “if the plaintiff raises substantial questions whether a project *may* have a significant effect, an EIS *must* be prepared.”³⁴ Nevertheless, nationally, ninety-nine percent of EAs result in FONSI.³⁵

There is an additional exception to the EIS requirement: a categorical exclusion (CE).³⁶

[CE] means a category of actions which do not individually or cumulatively have a significant effect on the human environment and which have been found to have no such effect in procedures adopted by a Federal agency in implementation of these regulations and for which, therefore, neither an environmental assessment nor an environmental impact statement is required.³⁷

²⁸ 40 C.F.R. § 1508.27.

²⁹ *See id.* § 1508.8. The CEQ regulations refer to both “effects” and “impacts” and use the terms interchangeably. *Id.*

³⁰ *Id.* § 1508.9(a)(1).

³¹ *Id.* § 1508.9(a)(2)–(3).

³² *Id.* § 1501.4(e).

³³ *See id.* § 1501.4.

³⁴ *LaFlamme v. Fed. Energy Regulatory Comm’n*, 852 F.2d 389, 397 (9th Cir. 1988) (first emphasis added) (citing *Found. for N. Am. Wild Sheep v. U.S. Dep’t of Agric.*, 681 F.2d 1172, 1178 (9th Cir. 1982)); *see also* *Natural Res. Def. Council v. Duvall*, 777 F. Supp. 1533, 1537 (E.D. Cal. 1991) (“[T]he [Ninth] Circuit has established a relatively low threshold for preparation of an EIS.”).

³⁵ Bradford C. Mank, *Civil Remedies*, in *GLOBAL CLIMATE CHANGE AND U.S. LAW* 183, 215 (Michael B. Gerrard ed., 2007).

³⁶ 40 C.F.R. § 1501.4(a)(2).

³⁷ *Id.* § 1508.4.

Under the regulation, agencies should only invoke CEs in a narrow set of circumstances. But there is growing public concern that agencies are misusing and abusing CE provisions,³⁸ and agency-claimed CEs are sometimes themselves the subjects of litigation. A recent report by the Government Accountability Office found the BLM frequently abused CEs and “may have thwarted NEPA’s twin aims of ensuring that BLM and the public are fully informed of the environmental consequences of BLM’s actions.”³⁹ In the context of unchecked oil and gas development in the Mountain West, for example, climate change implications may render any claim of insignificant impacts baseless,⁴⁰ thus providing a complete bar to CEs.

B. The Necessity for Climate Change Considerations in NEPA Analyses

As detailed above, unchecked climate change will certainly alter the way humans live.⁴¹ It is therefore imperative that NEPA—the national policy concerned with involving and informing the public of environmentally destructive action—incorporate climate change considerations.

1. Applying NEPA to Climate Change

A NEPA analysis should include climate change if a proposed agency action directly or indirectly causes significant environmental impacts on climate. Increased greenhouse gas (GHG) concentrations in the atmosphere cause climate change.⁴² Burning fossil fuels or damaging GHG sinks increases GHG concentrations. Thus, climate change likely cannot be considered a direct impact of any agency action

³⁸ See, e.g., Sarah Gilman, *Is the BLM Practicing Unsafe CX?*, HIGH COUNTRY NEWS, Nov. 9, 2009, <http://www.hcn.org/issues/41.19/is-the-blm-practicing-unsafe-cx> (last visited Nov. 21, 2010).

³⁹ U.S. GOV’T ACCOUNTABILITY OFFICE, REPORT TO CONGRESSIONAL REQUESTERS, ENERGY POLICY ACT OF 2005: GREATER CLARITY NEEDED TO ADDRESS CONCERNS WITH CATEGORICAL EXCLUSIONS FOR OIL AND GAS DEVELOPMENT UNDER SECTION 390 OF THE ACT (2009), available at <http://www.gao.gov/new.items/d09872.pdf>. Fortunately, the Council on Environmental Quality has recently proposed new guidance on CEs. Memo from Nancy H. Sutley, Chair, Council on Env’tl. Quality, to Heads of Federal Dep’ts and Agencies, Feb. 18, 2010.

⁴⁰ Discussed in depth *infra*, Part I.B.

⁴¹ See UNION OF CONCERNED SCIENTISTS, *supra* note 1.

⁴² See U.S. GLOBAL CLIMATE CHANGE RESEARCH PROGRAM, GLOBAL CLIMATE CHANGE IMPACTS 13 (Thomas R. Karl et al. eds., 2009), available at <http://downloads.globalchange.gov/usimpacts/pdfs/climate-impacts-report.pdf>.

because the damaging effect—climate change—is at least one step removed from the agency action—increasing GHGs. Consequently, the question of whether climate change is a reasonably foreseeable indirect impact of agency action becomes the threshold issue. Because of the overwhelming evidence and widespread scientific consensus concerning climate change, it is in fact a reasonably foreseeable indirect impact of GHG emissions for purposes of NEPA analysis.⁴³

CEQ reached that very conclusion in 1997 when it issued a draft memo announcing its intent to require consideration of climate change under NEPA.⁴⁴ In that memo, CEQ determined that according to the best available scientific evidence, global warming was the reasonably foreseeable impact of GHG emissions and should require analysis under NEPA:

The available scientific evidence, (e.g., as contained in the Second Assessment Report by the IPCC) indicates that climate change is ‘reasonably foreseeable’ impacts [sic] of emissions of greenhouse gases, as that phrase is understood in the context of NEPA and the CEQ regulations. . . . As a result, climate change should be considered in NEPA documents.

Specifically, federal agencies must determine whether and to what extent their actions affect greenhouse gases. Further, federal agencies must consider whether the actions they take, e.g., the planning and design of federal projects, may be affected by any changes in the environment which might be caused by global climatic change.⁴⁵

But CEQ never promulgated these requirements.⁴⁶

2. Recent Political Pressure to Require Climate Change Considerations Under NEPA

Recently, public interest organizations have increased political efforts in an attempt to require agencies to consider climate change

⁴³ See INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2007: SYNTHESIS REPORT, SUMMARY FOR POLICYMAKERS 7 (2007) [hereinafter IPCC 2007 SUMMARY] (“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”); INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2007: THE PHYSICAL SCIENCE BASIS, 23 (Cambridge University Press 2007) (defining the term *very likely* as meaning more than a ninety percent probability of occurring).

⁴⁴ See Draft Memorandum from Kathleen A. McGinty, Chairman CEQ, to Heads of Fed. Agencies 4 (Oct. 8, 1997), available at <http://www.mms.gov/eppd/compliance/reports/ceqmemo.pdf>.

⁴⁵ *Id.*

⁴⁶ PYKE AND BATTEN, *supra* note 12, at 9.

under NEPA. Pro-environment stakeholders, acting on behalf of the public interest, have pressed CEQ to revisit the issue via a petition for rulemaking.⁴⁷ CEQ has yet to undertake rulemaking, but is again considering guidance to federal agencies that recommends how and when they should consider GHGs in their NEPA analyses.⁴⁸ CEQ currently “*proposes* to advise Federal agencies that they should consider opportunities to reduce GHG emissions caused by proposed Federal actions and adapt their actions to climate change impacts throughout the NEPA process and to address these issues in their agency NEPA procedures.”⁴⁹ But CEQ’s proposal would rely on the global nature of the climate change problem to justify only cursory consideration of GHGs for proposed actions that “may be so small as to be a negligible consideration.”⁵⁰

On another tack, the Center for American Progress released a report that encouraged an executive order to mandate NEPA-climate change analysis.⁵¹ That report also highlights the success states have had in requiring climate change considerations in state-based environmental impact assessment documents.⁵²

Whether CEQ or the President act on the issue, however, is probably not critical to NEPA challenges. The overwhelming weight of evidence, changing public opinion, and growing judicial appreciation for climate change all favor NEPA plaintiffs. Case law on the subject is far from settled, but the trend favors thoughtful climate change consideration in NEPA documents.

3. NEPA-Based Challenges and Relevant Case Law

NEPA is a procedural device that, at most, requires an agency to consider the complete effects of its decision. Nevertheless, the fact that NEPA imposes no substantive reporting requirements should not

⁴⁷ See International Center for Technology Assessment et al., Petition Requesting that the Council on Environmental Quality Amend its Regulations to Clarify that Climate Change Analyses be Included in Environmental Review Documents (Feb. 28, 2008), available at <http://www.icta.org/doc/CEQ%20Petition%20Final%20Version%202-28-08.pdf>.

⁴⁸ See Memorandum from Nancy H. Sutley, Chair, Council on Env'tl. Quality, on Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions, to the Heads of Federal Departments and Agencies (Feb. 18, 2010), available at http://ceq.hss.doe.gov/nepa/regs/Consideration_of_Effects_of_GHG_Draft_NEPA_Guidance_FINAL_02182010.pdf.

⁴⁹ *Id.* at 1 (emphasis added).

⁵⁰ *Id.* at 3.

⁵¹ See generally, e.g., PYKE & BATTEN, *supra* note 12.

⁵² *Id.* at 11 (referring specifically to Massachusetts and California state provisions).

dissuade the climate change litigator, given successful NEPA claims in other contexts.⁵³ While courts are not free to reject agency action simply because a judge disagrees with the decision, judges can and do determine whether an agency adequately considered the impacts of, and alternatives to, the proposed action.⁵⁴

NEPA itself does not provide for judicial review, so plaintiffs challenging an agency that violates NEPA must prove the agency was “arbitrary [and] capricious” under the Administrative Procedure Act (APA).⁵⁵ In other words, a court may reject an agency decision not to prepare an EIS if the court determines that the decision was arbitrary or capricious.⁵⁶ Thus, if an agency issues a FONSI regarding effects from a proposed action’s GHG emissions—or fails to consider GHG emissions entirely—a NEPA plaintiff must prove the proposed action will have a significant impact with respect to climate change.⁵⁷ While that burden of proof may have been exceedingly difficult to meet twenty years ago, the current understanding of global climate change supports an argument that *any* increase in atmospheric GHG concentrations threatens human health and safety.⁵⁸

Case law on NEPA-based climate change litigation, although sparse, reflects an increased understanding of GHG-induced threats.⁵⁹ In 1993, in *City of Los Angeles v. National Highway Traffic Safety Administration*, the first NEPA-based climate change challenge,⁶⁰ the D.C. Circuit held that L.A.’s allegation of NEPA violations failed on the merits. It concluded that the “theoretical increase” in GHGs

⁵³ See, e.g., *Nat’l Parks & Conserv. Ass’n v. Babbitt*, 241 F.3d 722 (9th Cir. 2001) (overturning a Nat’l Parks Service FONSI in light of a “clear error in judgment” for failing to adequately address findings by the Parks Service’s own experts); *California ex rel. Lockyer v. U.S. Dep’t of Agric.*, 575 F.3d 999 (9th Cir. 2009) (holding a Forest Service CE claim unreasonable and overturning a repeal of the “Roadless Rule,” in part for violation of NEPA).

⁵⁴ Mank, *supra* note 35, at 216.

⁵⁵ Administrative Procedure Act, 5 U.S.C. § 706(2)(A) (“The reviewing court shall hold unlawful and set aside agency action . . . found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law[.]” See also Mank, *supra* note 35, at 216.

⁵⁶ Mank, *supra* note 35, at 217.

⁵⁷ *Id.*

⁵⁸ See E.P.A., Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 18,886–901 (Apr. 24, 2009) (to be codified at 40 C.F.R. ch. 1); IPCC 2007 SUMMARY, *supra* note 43, at 7.

⁵⁹ For a list of NEPA-based climate change litigation, see Arnold & Porter LLP, Climate Change Litigation in the U.S. (2010), available at <http://www.climatecasechart.com>.

⁶⁰ See *id.*

associated with the National Highway Traffic Safety Administration's (NHTSA) proposed corporate average fuel economy (CAFE) standards was not sufficient to trigger an EIS under the APA's arbitrary and capricious standard.⁶¹ That decision was, however, issued over the prophetic dissent of Chief Judge Patricia Wald:

[T]he evidence in the record suggests that we cannot afford to ignore even modest contributions to global warming. If global warming is the result of the cumulative contributions of myriad sources, any one modest in itself, is there not a danger of losing the forest by closing our eyes to the felling of the individual trees?⁶²

By 2003, the Eighth Circuit was willing to require a more thorough climate change analysis. That court, in *Mid States Coalition for Progress v. Surface Transportation Board*, held that the Surface Transportation Board (STB)⁶³ was obligated to consider the effects of increased coal burning as a result of a new railroad project that would link coalfields in Wyoming with power plants in Minnesota.⁶⁴ On remand, the STB did consider the incremental increase in coal consumption, found it insubstantial, and approved the rail line.⁶⁵ The Sierra Club, which took issue with the modeling used by the STB, challenged that decision.⁶⁶ With the second challenge, however, the Eighth Circuit concluded that STB's rationale and modeling were sufficient to survive arbitrary and capricious review.⁶⁷ Nevertheless, *Mid States* offers "valuable precedent for global warming plaintiffs in NEPA cases to require consideration of climate change issues,"⁶⁸ because it recognizes that climate change is indeed a reasonably foreseeable harm.

⁶¹ *City of Los Angeles v. Nat'l Highway Traffic Safety Admin.*, 912 F.2d 478, 484, 490 (D.C. Cir. 1990).

⁶² *Id.* at 501 (Wald, C.J., dissenting).

⁶³ The Surface Transportation Board is the successor of the Interstate Commerce Commission, is affiliated with the Department of Transportation, and has jurisdiction over new railroad line construction. Surface Transportation Board, *About STB—Overview*, STB.DOT.GOV, <http://www.stb.dot.gov/stb/about/overview.html> (last visited Nov. 21, 2010).

⁶⁴ *Mid States Coalition for Progress v. Surface Transp. Bd.*, 345 F.3d 520, 550 (8th Cir. 2003) ("We believe that it would be irresponsible for the Board to approve a project of this scope without first examining the effects that may occur as a result of the reasonably foreseeable increase in coal consumption.").

⁶⁵ *See Mayo Found. v. Surface Transp. Bd.*, 472 F.3d 545 (8th Cir. 2006).

⁶⁶ *See id.*

⁶⁷ *Id.* at 556.

⁶⁸ Mank, *supra* note 35, at 218.

Climate change plaintiffs also received favorable precedent from a recent Ninth Circuit decision. In *Center for Biological Diversity v. National Highway Transportation Safety Administration*, that court remanded a FONSI based on an impenetrable EA.⁶⁹ Apparently, the court could not determine whether NHTSA had considered climate change in the EA, but certainly thought that it should.⁷⁰ The court wrestled with the possibility of remanding to NHTSA with instructions to prepare an EIS,⁷¹ but decided to remand for preparation of an EA or an EIS, as NHTSA determined appropriate.⁷² On remand, however, the court instructed NHTSA that it could not disregard the clear mandate of NEPA simply because NHTSA thought its duty to comply with NEPA was limited by the Energy Policy and Conservation Act of 1975 (EPCA).⁷³ “NEPA,” the court said, “prohibits uninformed agency action.”⁷⁴ That the agency acted pursuant to some other statutory authority was not sufficient. Moreover, the court intimated that a subsequent EA, faithful to NEPA, would not result in a FONSI.⁷⁵

In 1997, when CEQ was poised to require agencies to consider climate change under NEPA, it discussed the need for agencies to evaluate both the causes and the effects of a warming planet:

[T]here are two aspects of global climate change which should be considered in NEPA documents: (1) the potential for federal actions to influence global climatic change (*e.g.*, increased emissions or sinks of greenhouse gases) and (2) the potential for global climatic change to affect federal actions (*e.g.*, feasibility of coastal projects in light of projected sea level rise).⁷⁶

Now, despite the lack of CEQ direction, courts are increasingly demanding that federal agencies take a hard look at whether their actions will contribute to climate change. But given the increasing body of science highlighted above, the CEQ’s second requirement—

⁶⁹ *Ctr. for Biological Diversity v. Nat’l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1178 (9th Cir. 2008).

⁷⁰ *See id.* at 1179–80.

⁷¹ *See id.*

⁷² *Id.* at 1180.

⁷³ *Id.* at 1213–14.

⁷⁴ *Id.* at 1214.

⁷⁵ *Id.* at 1179–80.

⁷⁶ Draft Memorandum from Kathleen A. McGinty, Chairman CEQ, to Heads of Fed. Agencies 5 (Oct. 8, 1997) available at <http://www.boemre.gov/eppd/compliance/reports/ceqmemo.pdf>.

consideration of climate change effects on federal action—is also primed for judicial review.

4. *Standing for NEPA-Based Climate Change Claims*

As with any case, plaintiffs bringing NEPA-based climate change claims must have constitutional standing to trigger federal court jurisdiction.⁷⁷ Generally, standing requires that a plaintiff demonstrate three things: (1) an actual or imminent concrete “injury in fact” that is (2) allegedly caused by, or fairly traceable to, the defendant’s action, which injury is (3) redressable by the court.⁷⁸ One court, however, has determined that plaintiffs pursuing NEPA-based climate change claims bear a relaxed burden in showing causation and redressability.⁷⁹

In *Friends of the Earth v. Watson*, the court considered assertions that NEPA plaintiffs lacked standing.⁸⁰ In that case, Friends of the Earth (FOE) challenged the action of two corporations owned by the U.S. government, both of which financed and insured export projects that likely contributed to climate change.⁸¹ FOE alleged that the defendant corporations violated NEPA because they failed to evaluate the climate-changing effects of their actions.⁸² Responding to the defendants’ challenge that FOE lacked standing, the court articulated the relaxed standing requirement for NEPA claims.⁸³

In order to demonstrate injury in fact, FOE had to show that the challenged government action likely threatened one of FOE’s concrete interests, and that the government defendant violated procedural rules designed to protect that interest.⁸⁴ FOE succeeded on both fronts.⁸⁵ First, FOE put forth evidence that the challenged federal action created climate-changing GHGs and thus degraded the

⁷⁷ See *Friends of the Earth, Inc. v. Laidlaw Envtl. Services (TOC), Inc.*, 528 U.S. 167, 180 (2000).

⁷⁸ *Id.* at 180–81 (citing *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560–61 (1992)).

⁷⁹ *Friends of the Earth, Inc. v. Watson*, No. C 02-4106, 2005 WL 2035596, at *2 (N.D. Cal. 2005). *Summers v. Earth Island Institute*, the Supreme Court’s most recent environmental standing case, suggests it would also relax the causation and redressability requirement in NEPA-based climate change claims. See *Summers v. Earth Island Institute*, 129 S. Ct. 1142, 1153 (2009) (Kennedy, J., concurring).

⁸⁰ 2005 WL 2035596 at *2–3.

⁸¹ *Id.* at *1.

⁸² *Id.*

⁸³ *Id.* at *2.

⁸⁴ *Id.*

⁸⁵ See *id.* at *2–3.

environment, which FOE had an interest in preserving.⁸⁶ Second, FOE pointed to NEPA as the procedural device intended to protect its interest in halting climate change.⁸⁷

FOE then readily met the relaxed causation and redressability requirements. FOE demonstrated causation by showing that the defendants' involvement in the particular action likely caused the alleged harm because the underlying projects would not proceed without the defendants' aid.⁸⁸ FOE satisfied the redressability prong when it successfully argued that the defendants might have considered other actions if they had performed a NEPA analysis.⁸⁹ That is, FOE demonstrated that the court could provide relief if it ordered the defendants to follow NEPA and the agency subsequently changed its final decision. Importantly, the court's opinion reflects a willingness to consider both the delayed and cumulative effects of GHG emissions associated with agency actions.⁹⁰

NEPA has proven an effective tool for environmental litigation since its inception in the 1970s. Its application to climate change plaintiffs is, however, still relatively novel. During the past sixteen years, courts have become increasingly willing to consider agency inaction in the context of climate change analysis. While there is room for improvement with respect to the acceptable level of consideration and the quality of agency analysis, the judicial trend is tracking the growing public appreciation of the climate change crisis. But the U.S. Supreme Court has yet to rule on NEPA-based climate change litigation. Additionally, the field will likely be further complicated by new EPA regulation⁹¹ or possible congressional action in the climate change arena.

⁸⁶ *Id.* at *3.

⁸⁷ *See id.* at *1, *2 n.2.

⁸⁸ *Id.* at *3–4.

⁸⁹ *Id.* at *4.

⁹⁰ *See id.* at *3 (referring to effects of GHGs from existing defendant-funded projects considered alone and in conjunction with additional GHGs from proposed actions). *But see* Mank, *supra* note 35, at 218 (noting the import of the court's decision but emphasizing that the standing decision does not necessarily foreshadow its decision on the merits).

⁹¹ *See* EPA, *Final Rule: Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule Fact Sheet*, <http://www.epa.gov/nsr/documents/20100413fs.pdf> (last visited Nov. 20, 2010) (outlining new GHG regulation of large stationary sources under the Clean Air Act).

II

NEPA CHALLENGES

IN THE FACE OF PROPOSED CLIMATE CHANGE LEGISLATION

Congressional action on climate change, despite recent setbacks, is still likely to occur at some point in the future. Yet the effect that climate legislation would have on NEPA remains unclear. Congress seemed poised to move on climate legislation due to popular demand and—more importantly—the likelihood of a piecemeal regulatory regime managed by EPA.⁹² In 2009, the House passed the American Clean Energy and Security Act (ACES),⁹³ colloquially known as the Waxman-Markey Bill, by a slim majority. While ACES was a broad-brush swipe at U.S. energy, economic, and national security problems, it also included the first-draft domestic attempt to significantly reduce GHG emissions.

The Senate also considered an omnibus-style bill with comparable GHG-specific language.⁹⁴ That bill failed,⁹⁵ but initial analyses indicated the Senate bill would have attempted substantially the same GHG emission reductions as ACES.⁹⁶ Both would have established automobile emission standards and implemented a cap-and-trade regulatory regime for large stationary GHG sources.⁹⁷ Neither version sought to expressly preempt NEPA,⁹⁸ indeed, both were properly read as complements to NEPA. Given the likelihood that NEPA will someday be construed alongside climate change legislation, the question is: In the face of rather comprehensive climate change legislation, what is NEPA's role?

⁹² See, e.g., Joseph Romm, *The Dangerous Myth that the EPA's Endangerment Finding Can Somehow Stop Dangerous Warming if the Climate Bill Dies*, CLIMATE PROGRESS, July 15, 2009, <http://climateprogress.org/2009/07/15/the-dangerous-myth-epa-endangerment-finding/>.

⁹³ American Clean Energy and Security (ACES) Act of 2009, H.R. 2454, 111th Cong. (as passed by H.R., June 26, 2009).

⁹⁴ Clean Energy Jobs and American Power Act, S. 1733, 111th Cong. (2009).

⁹⁵ See Carl Hulse & David M. Herszenhorn, *Democrats Call Off Effort for Climate Bill in Senate*, N.Y. TIMES, July 23, 2010, at A15.

⁹⁶ See PEW CENTER ON GLOBAL CLIMATE CHANGE, AT A GLANCE: CLEAN ENERGY JOBS AND AMERICAN POWER ACT (2009) [hereinafter Pew CEJAPE], available at <http://www.pewclimate.org/docUploads/short-summary-kerry-boxer-epw-committee-11-05-09.pdf>.

⁹⁷ See *id.*; PEW CENTER ON GLOBAL CLIMATE CHANGE, AT A GLANCE: AMERICAN CLEAN ENERGY AND SECURITY ACT OF 2009 (2009) [hereinafter Pew ACES], available at <http://www.pewclimate.org/docUploads/Waxman-Markey-short-summary-revised-June26.pdf>.

⁹⁸ See, e.g., ACES, H.R. 2454, 111th Cong. (as passed by H.R., June 26, 2009).

A. Construing NEPA in a Carbon-Regulated World

ACES⁹⁹ and NEPA are iterations of the same idea; both Acts aim to promote harmony between humans and their environment. The professed goal of the Safe Climate Act—Title III of ACES—is “to help prevent, reduce the pace of, mitigate, and remedy global warming and its adverse effects.”¹⁰⁰ Those adverse effects include decreases in human health and loss of life; damage to property from rising ocean levels, acidification, and sea ice melt; loss of trade, employment, and farms; damage or harm to plants, forests, lands, waters, and wildlife; and decreasing natural resources.¹⁰¹ Likewise, the declared purpose of NEPA is “to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man.”¹⁰² Accordingly, NEPA and ACES—or its duly enacted revision—seek the same ends. To the extent climate-preserving legislation addresses agency action, it would serve only to limit agency discretion regarding certain, discrete GHG sources. Where agencies retain discretion, they must comply with NEPA—and citizens should challenge agencies when they ignore climate-changing effects of a proposed action. Indeed, a similar issue was litigated in *Center for Biological Diversity v. National Highway Transportation Safety Administration*.¹⁰³

In fact, ACES would strengthen claims for serious climate change analyses because it lists, in great detail, congressional findings of the extensive harm posed by GHG emissions.¹⁰⁴ ACES incorporates by reference conclusions of the Intergovernmental Panel on Climate Change and the National Academy of Sciences.¹⁰⁵ The proposed legislation discusses the serious incremental effects of emissions, and it expresses the importance of limiting small and large amounts of GHGs to achieve its safe climate goals.¹⁰⁶ It goes on to recognize that the dispersed, widely applicable nature of climate change “does not

⁹⁹ Throughout this section references to ACES serve as a proxy for potential climate change legislation.

¹⁰⁰ ACES § 311(b).

¹⁰¹ *Id.* § 311(a)(3).

¹⁰² 42 U.S.C. § 4321 (2006).

¹⁰³ *See* *Ctr. for Biological Diversity v. Nat’l Highway Traffic Safety Admin.*, 538 F.3d 1172 (9th Cir. 2008); *see also supra* Part I.B.3, p. 569.

¹⁰⁴ ACES § 311(a)(1).

¹⁰⁵ *Id.* § 311(a)(2).

¹⁰⁶ *Id.*

minimize the adverse effects individual persons have suffered, will suffer, and are at risk of suffering because of global warming.”¹⁰⁷

In effect, ACES reiterates and refines the sporadic NEPA-based climate change case law that has developed over the past fifteen years. ACES presents a specific congressional finding of scientific evidence regarding the significant harm caused to individuals based on every incremental increase of GHGs in the atmosphere. In doing so, ACES paves the way for challenges based on an agency’s failure to consider the effects of the changing climate on a proposed action. It calls into question the reasonableness of any agency claim that small amounts of GHGs are insignificant or that an action could not be affected by climate change. Under the proposed legislation, *any* net increase of GHG emissions would warrant an EIS, because *any* increase could have significant effects. Thus, every federal action should be analyzed for the impacts it would have on the changing climate.

Moreover, ACES states that every person is at risk of particularized harm as a result of climate change. This expressly identified potential for concrete injury, coupled with the procedural right created by NEPA, would likely provide a solid basis for standing. While there may be a constitutional question regarding Congress’s ability to legislate standing, ACES’s definitive finding of harm weighs in favor of NEPA plaintiffs.¹⁰⁸

B. GHG Sources Within and Beyond ACES’s Reach

Any future climate legislation would probably limit agency discretion with respect to some GHG sources, but NEPA should be used to require informed decision making about federal actions that involve discretionary GHG pollution as well. ACES limits GHG regulation to stationary sources with annual emissions greater than 25,000 tons of carbon-dioxide equivalent (CO₂e), petroleum producers and importers, distributors of natural gas, and certain other commercial and industrial emitters.¹⁰⁹ A court could interpret this to mean that compliance with ACES, e.g., operating within the cap-and-trade regime, has no effect on climate change because it is *de jure*

¹⁰⁷ *Id.* § 311(a)(4).

¹⁰⁸ See *Summers v. Earth Island Institute*, 129 S. Ct. 1142 (2009); *Massachusetts v. E.P.A.*, 549 U.S. 497 (2007); *Lujan v. Defenders of Wildlife*, 504 U.S. 555 (1992); Christopher J. Sprigman, Comment, *Standing on Firmer Ground: Separation of Powers and Deference to Congressional Findings in the Standing Analysis*, 59 U. CHI. L. REV. 1645 (1992).

¹⁰⁹ See ACES § 312(13) (defining “covered entities” for purposes of the Act).

within the permissible emissions levels, as determined by congressional findings. So agency discretion to find a significant impact from or to disallow projects with new GHG emissions could be limited. Indeed, the Supreme Court had suggested this interpretation:

[W]here an agency has no ability to prevent a certain effect due to its limited statutory authority over the relevant actions, the agency cannot be considered a legally relevant “cause” of the effect. Hence, under NEPA and the implementing CEQ regulations, the agency need not consider these effects in its EA when determining whether its action is a “major Federal action.”¹¹⁰

Thus, an agency unable to deny actions based on GHG contributions could not be challenged for its failure to consider climate change in an EIS.¹¹¹

But ACES does not cover all GHG-emitting entities or GHG-enhancing activities.¹¹² One can expect that potentially regulated parties will take action to avoid regulation while still producing GHGs. To be sure, a climate bill would likely address the biggest offenders in the emitting field, but some slack will necessarily fall into the black box of bureaucratic discretion. It is therefore imperative that agency decision making thoroughly weigh the proposed benefit of every ounce of unregulated CO₂e and, to the extent possible, consider the effects of regulated sources.

III

NEPA’S DARK SIDE: USING CLIMATE CHANGE TO JUSTIFY ENCROACHMENT ON WILD PUBLIC LANDS

The bold pronouncements of NEPA, combined with the detailed findings of ACES, support the climate change litigator’s case for broader and more thorough environmental analysis by federal agencies. But there is a flip side to the rising awareness of global warming: an EIS for a renewable energy project that discusses the full ramifications of climate change, including the potential for diverted GHG-emissions, could sway an agency—and the public—to favor sacrificing wild lands for “clean energy.” Climate change could be used to push public land development that would otherwise not survive a NEPA analysis that comes under public scrutiny.

¹¹⁰ Dep’t of Transp. v. Pub. Citizen, 541 U.S. 752, 770 (2004).

¹¹¹ *See id.*

¹¹² An example of a GHG-enhancing activity might be eliminating a carbon sink.

A. Renewable Energy Development on Public Lands

The rush for GHG-free energy is just beginning. If Congress ever succeeds in pricing CO₂e, there will be increased demand for “green power.” Much renewable energy development has and will continue to take place on public lands. Moreover, those projects often require larger amounts of land than traditional fossil fuel-based technology. Concentrating solar power (CSP),¹¹³ for example, could require as many as 3000 square miles for a utility-scale production facility.¹¹⁴ That type of facility would occupy roughly two percent of the state of Nevada¹¹⁵—an attractive part of the country for those looking to capture solar energy. Furthermore, harnessing solar power may require developers to intrude into fragile desert ecosystems.¹¹⁶

Wind energy development similarly threatens to disrupt sensitive habitats and to infringe on wild landscapes. The proposed China Mountain wind project in Southern Idaho, for example, would wreak havoc on some of the most productive greater sage-grouse habitat.¹¹⁷ In an effort to avoid the worst impacts, public land advocates in Oregon hope to cooperate with wind energy developers to select least-impact sites.¹¹⁸ Industry groups acknowledge that evaluating environmental impacts and habitat concerns will extend project timelines,¹¹⁹ putting pressure on developers to accept consensual project siting in order to expedite development.

Encouraging responsible renewable energy policy promises a holistic approach to climate change—harnessing renewable energy while minimizing impacts on wild, often vital ecosystems. In the push

¹¹³ “Concentrating solar power (CSP) is a renewable generation technology that uses mirrors or lenses to concentrate the sun’s rays to heat a fluid, e.g., water, which produces steam to drive turbines.” GIGATON THROWDOWN, REDEFINING WHAT’S POSSIBLE FOR CLEAN ENERGY BY 2020 59 (2009) [hereinafter GIGATON] available at http://gigatonthrowdown.org/files/Gigaton_EntireReport.pdf.

¹¹⁴ *Id.* at 66.

¹¹⁵ *Id.*

¹¹⁶ *Id.*

¹¹⁷ See Industrial Wind Action Group, *Idaho’s Wildlife Would Suffer From Wind Farm*, WINDACTION.ORG (July 6, 2008), <http://www.windaction.org/opinions/16902> (quoting letter from David Parrish, former regional supervisor for Idaho Department of Fish and Game); Notice of Intent to Prepare an Environmental Impact Statement for the Proposed China Mountain Wind Project, 73 Fed. Reg. 21,362 (Apr. 21, 2008) available at <http://edocket.access.gpo.gov/2008/pdf/E8-8511.pdf>.

¹¹⁸ See OREGON NATURAL DESERT ASSOCIATION, OREGON’S HIGH DESERT AND WIND ENERGY 15 (2009) [hereinafter ONDA REPORT] available at <http://onda.org/protecting-wildlife-and-clean-water/climate-change/WinReportRevision120109.pdf>.

¹¹⁹ GIGATON, *supra* note 113, at 66.

for a carbon-limited economy, policymakers must not forget the important role that intact, untrammelled wild lands play in the ecosystem.¹²⁰ There will be no net gain if public lands are sacrificed wholesale in the name of staving off global warming. Policy decisions must recognize that wild areas offer more value left alone than as renewable energy sites. Fortunately, NEPA, if faithfully executed, can serve as a clearinghouse for the important tradeoffs that must be considered when siting new energy facilities.

B. The Importance of “Hands-Off” Wild Public Lands

The national focus on climate change sharpened when the U.S. Fish and Wildlife Service listed the polar bear as a threatened species in 2008.¹²¹ The public largely recognizes the intrinsic value of species preservation and is generally loath to allow—let alone contribute to—the demise of a species or essential habitat. Furthermore, there is widespread appreciation for pristine, unaltered, natural lands.¹²² Accordingly, energy development policies must respect the hands-off status of wild public lands. Among these hands-off lands are National Wildlife Refuges (NWRs) and many areas managed by the Bureau of

¹²⁰ The Obama administration is making strides toward pragmatic public land management that seeks to incorporate climate change science. *See* Order No. 3289, Sec’y of the Interior, Sept. 14, 2009 (discussing the current Department of Interior policy with regard to planning for increased renewable energy development on public lands). But land management policies change with administrations, so there is an ever-present need for a vigilant, climate-conscious public. *See* Order No. 3226, Sec’y of the Interior, Jan. 19, 2001 (requiring Department of Interior bureaus to consider climate change in their planning efforts during the Clinton presidency) *replaced by* Order No. 3226, Amend.No. 1, Sec’y of the Interior, Jan. 16, 2009 (outlining G.W. Bush-era policy regarding climate change and public land management) *reinstated by* Order No. 3289, *supra*.

¹²¹ *See* World Wildlife Federation, *U.S. Government Affirms that Climate Change is Putting Polar Bears in Peril*, WORLDWILDLIFE.ORG, <http://www.worldwildlife.org/who/media/press/2008/WWFPresitem9010.html> (last visited Nov. 22, 2010).

¹²² *See, e.g.*, Sierra Club, *Welcome to the Sierra Club*, SIERRACLUB.ORG, <http://www.sierraclub.org/welcome/> (describing the Sierra Club mission to protect, among other things, wild places and listing a membership of 1.3 million) (last visited Nov. 22, 2010); The Nature Conservancy, *About Us*, NATURE.ORG, <http://www.nature.org/aboutus/?src=t5> (describing TNC’s mission of protecting ecologically important lands and listing a membership of over 1 million members) (last visited Nov. 22, 2010); Western Watersheds Project, *About Western Watersheds Project*, WESTERNWATERSHEDS.ORG, <http://www.westernwatersheds.org/about> (describing Western Watersheds Project’s mission to protect and restore western watersheds and listing a membership of 1400) (last visited Nov. 22, 2010); Oregon Natural Desert Association, *About Us*, ONDA.ORG, <http://onda.org/about> (describing ONDA’s mission to protect, restore, and defend native deserts and listing a membership of 1400) (last visited Nov. 22, 2010).

Land Management (BLM), both of which may be surprisingly vulnerable to political whims.

1. Potential for Development in NWRs

NWRs are managed pursuant to the National Wildlife Refuge Improvement Act of 1997 (NWRIA).¹²³ The NWRIA expresses a federal policy of perpetual wildlife and habit conservation throughout a system of refuges:

The mission of the System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.¹²⁴

The Act seeks to accomplish this goal by managing NWRs with an eye toward protecting flora and fauna.¹²⁵ But the NWRIA also allows “compatible uses” of NWRs beyond simple protection of species.¹²⁶ “[C]ompatible use,” as used in NWRIA, “means a wildlife-dependent recreational use *or any other use of a refuge that, in the sound professional judgment of the Director, will not materially interfere with or detract from the fulfillment of the mission of the System or the purposes of the refuge.*”¹²⁷ This language provides tremendous discretion in determining what activities will occur on refuges.

Moreover, the NWRIA provides that the Secretary of the Interior may authorize certain activities unrelated to a specific refuge:

The Secretary [of the Interior] is authorized, under such regulations as he may prescribe, to . . . permit the use of, or grant easements in, over, across, upon, through, or under any areas within the [NWR] System for purposes such as but not necessarily limited to, powerlines, telephone lines, canals, ditches, pipelines, and roads, including the construction, operation, and maintenance thereof, whenever he determines that such uses are compatible with the purposes for which these areas are established.¹²⁸

This provision apparently grants the Secretary authority to allow utility infrastructure in an NWR. Consequently, the Secretary could determine after a NEPA analysis that renewable energy development

¹²³ 16 U.S.C. § 668dd (2006).

¹²⁴ *Id.* § 668dd(a)(2).

¹²⁵ *Id.* § 668dd(a)(4)(B).

¹²⁶ *Id.* § 668dd(a)(3)(D).

¹²⁷ *Id.* § 668ee(1) (emphasis added).

¹²⁸ *Id.* § 668dd(d)(1)(B).

within an NWR could reasonably comport with the mission of a refuge. Such a decision is not readily dismissed as arbitrary and capricious, particularly if the options are couched as either (1) helping slow climate change or (2) conserving wildlife—both noble endeavors.

Presumably, NWRs would be among the last sites considered for energy development, but the discretionary nature of both the NWRIA and NEPA do not foreclose the option. Indeed, a detailed EIS and a favorable political climate could lead the Secretary to conclude that energy development is appropriate wherever it will produce the most power.

2. Potential for Development on Wilderness-Quality BLM Lands

Many BLM-managed lands are currently in a wilderness-quality state, but are not formally recognized as wilderness. “The wilderness ethic holds that certain lands should be preserved in their natural condition, unaffected by human activities.”¹²⁹ Congress passed the Wilderness Act to set aside lands “[i]n order to assure that . . . expanding settlement and growing mechanization, does not occupy and modify all areas within the United States and its possessions”¹³⁰ Under the Federal Land Policy and Management Act (FLPMA), Congress directed the BLM to inventory and recommend land within its purview that qualified for wilderness designation.¹³¹ In accordance with this mandate, the BLM recommended 10.7 million acres for designation, between 1976 and 1991.¹³² Those recommendations were likely substantially influenced by political pressure from the extractive industry lobby, which has an inherent interest in limiting the amount of wilderness lands.¹³³ Thus, many wilderness-quality lands remained that were never officially recognized as such and were left in the realm of BLM discretion.

Fortunately, active citizen groups have taken it upon themselves to survey and recommend additional pristine lands for wilderness preservation.¹³⁴ These areas are models of biodiversity, natural heritage, and human-powered recreational pursuits.¹³⁵ But without

¹²⁹ JAN G. LAITOS ET AL., NATURAL RESOURCES LAW 1323 (2006).

¹³⁰ 16 U.S.C. § 1131(a) (2006).

¹³¹ 43 U.S.C. § 1782(a) (2006).

¹³² LAITOS ET AL., *supra* note 129, at 1328.

¹³³ *Id.* at 1329.

¹³⁴ *See, e.g.*, ONDA REPORT, *supra* note 118, at 24.

¹³⁵ *See* ONDA REPORT, *supra* note 118.

officially protected status or wilderness-type management, these natural jewels are subject to agency discretion. Once more, an EIS that accounts for climate change might sway decision makers and the public to favor renewable energy development over preservation.

This again underscores the necessity for tight standards in the NEPA process that require objective analyses, considering *all* environmental impacts and encouraging public participation throughout. The fear that climate change might destroy wildlife habitat should not force hasty policy decisions that would themselves compromise wild lands and their inhabitants. Wildlife would be no better off with habitat lost through development than habitat lost from global warming. In addition, the public—as the ultimate check on agency decision making—must not overlook the invaluable ecosystem services that wild lands provide.

IV CONCLUSION

In the new era of climate change awareness and frenzied renewable energy development, it is imperative that agencies live up to the lofty goals of NEPA. NEPA provides a robust framework that helps ensure informed government action when it is not pushed to the margins of decision making. Moreover, NEPA is a useful litigation tool that can limit knee-jerk agency action.

The global climate is changing. With continued inaction, the climate will heat to unlivable temperatures. Federal agencies can no longer ignore the growing scientific data about the impact of GHG emissions. To the extent that federal officials are making discretionary decisions, they must recognize that all net increases in GHG emissions are significant impacts that should trigger NEPA analyses. Additionally, decision makers must evaluate all proposed federal action for long-term fitness in a changing climate. Today's prudent action might not survive in a warmer world that imposes a hefty price on carbon.

Finally, the United States must meet the immense challenges of climate change head-on, but not at the expense of all that is worth saving. Decision makers and the public cannot ignore the value of wild public lands. And citizens must vigilantly guard against irresponsible development purportedly justified by the climate emergency.