



Using Executive Authority to Account for the Greenhouse-Gas Emissions of Federal Projects

Jessica Goad and Kiley Kroh April 25, 2013

In his second Inaugural Address, President Barack Obama promised significant action on climate change during his second term, noting that, “The failure to [address it] would betray our children and future generations.”¹ Secretary of State John Kerry echoed that commitment in his remarks last month, calling attention to the ramifications of inaction on climate change and of continuing an “energy policy that results in acidification, the bleaching of coral, the destruction of species, the change in the Arctic because of the ice melt. ... The entire system is interdependent, and we toy with that at our peril.”²

In addition, the Obama administration has made good initial progress on new policies to decrease greenhouse-gas emissions, such as the adoption of the first-ever limits on carbon pollution from cars and trucks.³ While the administration’s renewed commitment to addressing one of the most pressing problems of our time is encouraging, the quantity and pace of fossil-fuel development on our federal lands and waters is at odds with the president’s goal of further reducing carbon pollution to prevent the worst impacts of climate change.

In light of this reality and in the face of a do-nothing Congress, the executive branch must find ways to use its authority to curb the greenhouse-gas emissions that fuel climate change, especially when the pollution is derived from public lands and waters.

The president can use his authority under existing law to take another important step in his quest to combat climate change: The National Environmental Policy Act, or NEPA, gives him the tools to require federal agencies to evaluate any possible carbon pollution or emissions and their effects for proposed federal projects.⁴

This statute, signed by President Richard Nixon in 1970, is one of our strongest and most effective environmental laws. It requires government agencies to assess the environmental impacts of their activities and also requires public participation such as public-comment periods and public meetings. This, in turn, often leads agencies to alter their projects to lower the potential environmental damage even as the projects proceed.

It is important to note that the National Environmental Policy Act does not mandate specific pollution controls or prohibit certain federal activities. Additionally, despite the claims and rhetoric of some members of Congress,⁵ using this authority will not “regulate” greenhouse-gas emissions. Rather, NEPA already requires agencies to assess the full environmental impacts of individual projects as part of holistic decision making, a process that includes considering less harmful alternatives. Ignoring climate change—the gravest environmental threat our planet faces—is a substantial and unacceptable omission.

Federal agencies are not currently required to explicitly account for the carbon pollution generated by activities under their jurisdiction, even though NEPA gives the federal government the authority to require such analyses.⁶ Unless an agency chooses to calculate the carbon pollution generated by a proposed project, the public and government officials have no way of knowing its impact on the climate. This means that proposed projects that generate significant amounts of carbon pollution, including coal mining on public lands, drilling for oil on the outer continental shelf, or construction of a new highway, are not consistently assessed for their anticipated carbon-pollution contribution. It is critical, however, that these impacts be considered and made public.

In February 2010 the White House Council on Environmental Quality took a first step toward addressing the lack of climate consideration in federal decision making by releasing draft NEPA guidance on the “Consideration of the Effects of Climate Change and Greenhouse Gas Emissions.”⁷ The document proposed providing federal agencies with a blueprint to account for carbon pollution and climate change when assessing the environmental impacts of a proposed project. Yet despite being released for public comment more than three years ago, the council has yet to finalize the guidance.

The National Environmental Policy Act requirement that government agencies report on the environmental consequences of proposed actions serves an important public-education purpose. Given the extraordinarily serious threat posed by climate change, government agencies should be required to report to the public on the likely greenhouse-gas emissions that will result from their decisions on public land and water management, particularly when it comes to fossil-fuel development. They must also evaluate alternatives that could accomplish the same goal while producing less pollution. This would be a critical decision-making tool for the federal government to help minimize its contribution to additional atmospheric pollution. And, as we discuss below, this would help streamline the process by avoiding duplication, easing implementation, and assuring consistency across agencies.

This issue brief makes the case for including climate change in future NEPA analyses and for calling on the Council on Environmental Quality to finalize its draft guidance. It also urges President Obama to issue an executive order making the guidance mandatory for agencies rather than voluntary. Finally, this brief focuses on one of the greatest shortcomings of the 2010 draft guidance—its failure to include the public land and water-resource-management agencies—and explains why this needs to be changed.

Why carbon pollution should be accounted for in federal environmental reviews

The National Environmental Policy Act currently does not explicitly require carbon pollution to be calculated or assessed during environmental analyses of government projects and actions. In the decades since NEPA became law, scientific knowledge regarding the impact of greenhouse gases on accelerating climate change has increased significantly. NEPA implementation guidance must be modernized to address this shortcoming, and agencies should be directed to assess the potential climate impacts of a proposed activity when developing environmental-impact statements, the comprehensive environmental reviews of proposed actions.

In 2008 the Center for American Progress urged the forthcoming president to issue an executive order that would require federal agencies to include global-warming impacts when assessing the environmental consequences of federal projects. The report, “Full Disclosure: An Executive Order to Require Consideration of Global Warming Under the National Environmental Policy Act,”⁸ noted that:

... the U.S. government currently lacks a systematic process for evaluating the consequences of federal actions for greenhouse gas emissions or vulnerability to changing climatic conditions. This situation contributes directly to a critical gap in information needed to make decisions about the costs and consequences of federal actions for global warming.

Including greenhouse-gas emissions in federal environmental analyses is critical for multiple reasons. First, NEPA requires a “hard look” at the impacts of agency actions on issues from water and air quality to local species and their habitats.⁹ Ignoring the potential for contributing to climate change in this review process is a tremendous shortcoming that ignores the fundamental basis for this law, which is to understand the long-term environmental implications of the federal government’s decisions. This oversight must be corrected.

Closing this information gap would also provide the public with facts about the greenhouse-gas emissions generated by proposed federal activities. Americans are concerned about the impacts of unchecked global warming on their health, communities, and way of life.¹⁰ Ultimately, the public has the right to know whether and to what extent the actions the federal government plans to take may contribute to climate change and its effects, including extreme weather, smog, or sea-level rise.

Finally, a comprehensive understanding of how the federal government and its activities contribute to climate change will allow agencies to better plan and assess ways to reduce such emissions. It would also enable federal managers to redesign proposed projects and activities to minimize their climate impact.

Including greenhouse-gas emissions in federal environmental analyses is not unprecedented. In 2011 for instance, the U.S. Department of the Interior’s Bureau of Land Management issued a final environmental-impact statement¹¹ on the Hay Creek II coal lease in the Powder River Basin north of Gillette, Wyoming, which included about 277 million tons of coal.¹² The impact assessment included a relatively thorough discussion of the impacts the sale would have on carbon emissions and the role that the leasing of federal coal from the Powder River Basin has on overall U.S. greenhouse-gas emissions. It concluded that the coal mined and combusted as a result of the lease sale would almost double annual carbon pollution generated by the mine.¹³ It also revealed that total coal production in the Powder River Basin accounted for more than one of every eight tons of U.S. carbon pollution in 2008.¹⁴

While some may argue that quantifying the full climate impacts of federal projects is difficult and speculative, the government often analyzes the economic impacts of such projects, which is also a highly speculative process. In the environmental-impact statement for Lease Sale 193 in the Chukchi Sea off Alaska, for example, the U.S. Department of the Interior calculated the projected economic benefit of developing the reserves based on an estimate of how much oil would be produced as a result of the sale—an estimation based on the best available information. In contrast, when it came to analyzing the greenhouse-gas emissions from the lease sale, the agency only estimated the climate impacts of the drilling activities and not the emissions consequences of burning that oil, even though the science was available to make those estimates.¹⁵ The Arctic region is believed to contain 13 percent of the world’s undiscovered oil and 30 percent of its natural gas, according to the U.S. Geological Survey.¹⁶ Exploiting those reserves will contribute to global climate change, and that fact should be acknowledged and made public.

It would also be valuable to standardize agencies’ analyses of carbon pollution from proposed projects. Currently, federal attempts at assessing the impacts of projects on climate change are inconsistent and vary by agency. As a spokesperson from the Council on Environmental Quality put it, “Each agency currently differs in how their NEPA reviews consider the climate change impacts of projects, as well as how climate change impacts such as extreme weather will affect projects.”¹⁷ Agency differences in accounting for greenhouse-gas emissions was also recently seen in the Environmental Protection Agency’s comments on the U.S. Department of State’s draft supplemental environmental impact statement for the Keystone XL pipeline, in which it “commended” the agency for analyzing impacts on the climate but rated the analysis “insufficient information,” which means they do not know enough to fully assess the environmental impacts of a tar-sands pipeline.¹⁸ Without a clear directive from the president and a blueprint for their environmental-review processes, federal agencies will continue their haphazard and often-incomplete assessments.

It is important to note that including carbon-pollution estimates in federal environmental analyses might actually help streamline the process and decrease litigation. Dozens of

cases have already been brought against the government alleging its failure to properly assess carbon pollution in NEPA analyses.¹⁹ Clarified guidance to the agencies from CEQ might help decrease the frequency of such lawsuits.

CEQ's 2010 draft guidance to federal agencies proposed guidelines for including climate change in environmental analyses, including a suggested threshold that agencies conduct such reviews if the proposed project will likely yield at least 25,000 metric tons of carbon-dioxide-equivalent emissions every year.

While the draft guidance is an important first step, CEQ should finalize this guidance as soon as possible as one important way of addressing climate change using existing executive authority. In addition to finalizing the guidance, we recommend—as we did in 2008—that the president add a degree of permanence to the guidance by issuing an executive order requiring all NEPA analyses to fully assess potential carbon pollution from proposed projects. This will ensure that agencies have greater certainty about how to include greenhouse-gas emissions in NEPA analyses.

Public lands and waters must be included

The U.S. Department of the Interior manages approximately 500 million acres of land onshore and more than 1 billion acres of coastal waters, while the U.S. Forest Service under the U.S. Department of Agriculture manages 193 million acres of national forests and grasslands—all on behalf of the American people.²⁰ These agencies have jurisdiction over whether to lease the publicly owned energy resources in these places to private companies and individuals. In 2011, 43 percent of our nation's coal, 32 percent of its oil, and 21 percent of its natural gas came from federal lands and waters.²¹ These public resources are a major contributor to the nation's energy mix, but they also represent a significant portion of the greenhouse-gas pollution that is fueling global climate change.

Despite the massive production of carbon-emitting fossil fuels from federally owned lands and waters, the agencies tasked with managing these areas were excluded from CEQ's draft NEPA guidance. Upon release, the agency stated that:

CEQ does not propose to make this guidance applicable to Federal land and resource management actions, but seeks public comment on the appropriate means of assessing the GHG emissions and [carbon] sequestration that are affected by Federal land and resource management decisions.²²

A report by Stratus Consulting for The Wilderness Society determined the “ultimate downstream [greenhouse gas] emissions” from fossil fuels extracted from public lands and waters generate a shocking 23 percent of the nation's greenhouse gases and 27 percent of all energy-related greenhouse-gas emissions:

This estimate does not account for the large number of indirect emissions sources—identified in this report—that span the entire production consumption continuum. ... Overall, ultimate downstream GHG emissions resulting from fossil fuel extraction from federal lands and waters by private leaseholders in 2010 are estimated to total 1,551 MMTCO_{2e} [million metric tons of carbon dioxide equivalent].²³

This amount is comparable to the emissions of 323 million passenger vehicles every year, or 439 coal-fired power plants.²⁴ For the sake of comparison, there are only about 250 million vehicles²⁵ and 589 coal-fired power plants in America.²⁶ Emissions from public lands and waters thus exceed those either from all vehicles in America or three-quarters of all U.S. coal-fired power plants.

Projects on public lands and waters also constitute the majority of the environmental-impact statements undertaken by federal agencies under NEPA. Comments sent to CEQ by a coalition of environmental groups, for instance, note that between May 2007 and May 2010, “973 EISs out of a total of 1,504 in that period were in the category of land and resource management actions.”²⁷ (This uses a broad definition of federal-resource management actions that includes projects undertaken by the Army Corps of Engineers and other agencies, in addition to the U.S. Department of the Interior and U.S. Forest Service.)

Excluding federal land and resource-management actions from the draft guidance prepared by CEQ is a major loophole that must be closed in the final version. Because they generate such a significant amount of greenhouse-gas emissions and also a significant number of NEPA analyses, federal lands and waters must not be overlooked when it comes to the actions that the Obama administration can take on climate.

Not only is it critical that proposed activities on federal lands and waters are included in required NEPA analyses, but all stages of resource extraction and consumption should also be evaluated. The emissions that stem from fossil-fuel production are an important piece of assessing overall environmental impact, however, the potential climate impact doesn’t end there. Full lifecycle emissions from resource-extraction activities on public lands and waters should therefore be included in the NEPA analyses—not just the production itself but also the downstream uses such as the burning of coal, oil, and natural gas.

As Govs. Jay Inslee (D-WA) and John Kitzhaber (D-OR) recently urged, acknowledging the contributions of federal actions toward climate change would “ensure that we do not simply pass these tough issues on to future generations.”²⁸

Conclusion

Climate change poses some of the most pressing health, economic, and security threats of our time. The longer we delay significant reductions in our carbon pollution, the more we ensure that the devastating impacts of climate change—including sea-level rise, raging wildfires, and consistent drought—will continue.

While Congress has shown no signs that it will take action to address the growing threat of climate change, there are a number of executive authorities under existing laws to address the crisis. The National Environmental Policy Act, which requires analyses of the environmental impacts of federal activities, is frequently overlooked in this context but could be an important tool for assessing the potential climate impacts from a proposed project—a key first step in shaping informed decisions.

The Council on Environmental Quality should finalize its draft guidance for federal agencies to include carbon pollution in NEPA analyses, and the president should issue an executive order on this subject to give it more clarity and permanence. Additionally, CEQ must be certain to include federal resource-management agencies in its final guidance. Burning the oil, coal, and natural gas that come from our public lands and waters accounts for nearly a quarter of all U.S. greenhouse-gas emissions.²⁹ Ignoring the federal mineral estate in the guidance is leaving out a large portion of the federal governments' activities related to climate change.

As President Obama made clear in his 2013 State of the Union address:

I will direct my cabinet to come up with executive actions we can take, now and in the future, to reduce pollution, prepare our communities for the consequences of climate change, and speed the transition to more sustainable sources of energy.³⁰

Ensuring that federal agencies—especially the land- and ocean-management agencies—assess greenhouse-gas pollution generated by proposed federal actions when reviewing their impacts is an important step in making this promise a reality.

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Endnotes

- 1 J.K. Trotter, "Read and Watch Obama's Second Inaugural Address," *The Atlantic*, January 21, 2013, available at <http://www.theatlanticwire.com/politics/2013/01/text-obamas-inaugural-address/61224/>.
- 2 U.S. Department of State, "Remarks at the Ross Sea Conservation Reception," available at <http://www.state.gov/secretary/remarks/2013/03/206395.htm> (last accessed April 2013).
- 3 Daniel J. Weiss and Jackie Weidman, "5 Ways the Obama Administration Revived the Auto Industry by Reducing Oil Use" (Washington: Center for American Progress, 2012), available at <http://www.americanprogress.org/issues/green/report/2012/08/27/34054/5-ways-the-obama-administration-revived-the-auto-industry-by-reducing-oil-use/>.
- 4 42 U.S.C. Chapter 55 § 4321-4370, available at <http://www.law.cornell.edu/uscode/text/42/chapter-55>.
- 5 Letter from Sen. David Vitter and others to Nancy Sutley, April 22, 2013, available at http://www.epw.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=98a39407-2e20-4155-966b-a665faa69f64.
- 6 Mark Drajem, "Obama Will Use Nixon-Era Law to Fight Climate Change," *Bloomberg*, March 15, 2013, available at <http://www.bloomberg.com/news/2013-03-15-obama-will-use-nixon-era-law-to-fight-climate-change.html>; Amy Harder, "Approving the Keystone Pipeline Won't Bring Obama Bipartisan Goodwill," *National Journal*, March 17, 2013, available at <http://www.nationaljournal.com/daily/approving-the-keystone-pipeline-won-t-bring-obama-bipartisan-goodwill-20130317>.
- 7 Council on Environmental Quality, "Draft NEPA Guidance On Consideration Of The Effects Of Climate Change And Greenhouse Gas Emissions" (2010), available at <http://www.whitehouse.gov/sites/default/files/microsites/ceq/20100218-nepa-consideration-effects-ghg-draft-guidance.pdf>
- 8 Christopher Pike and Kit Batten, "Full Disclosure: An Executive Order to Require Consideration of Global Warming Under the National Environmental Policy Act" (Washington: Center for American Progress, 2008), available at <http://www.americanprogress.org/wp-content/uploads/issues/2008/05/pdf/nepa.pdf>.
- 9 For a summary of relevant case law, see Council on Environmental Quality, "Major Cases Interpreting The National Environmental Policy Act," available at http://ceq.hss.doe.gov/nepa/caselaw/Major_NEPA_Cases.pdf.
- 10 See, for example, GfK Custom Research North America, "Stanford University Climate Adaptation National Poll" (2013), available at <http://woods.stanford.edu/sites/default/files/documents/Climate-Adaptation-Results-TOPLINE.pdf>.
- 11 Bureau of Land Management, "Hay Creek II Coal Lease Application," available at <http://www.blm.gov/wy/st/en/info/NEPA/documents/hpd/HayCreekII.html> (last accessed April 2013); Bureau of Land Management, "Cumulative Analyses," available at (<http://www.blm.gov/pgdata/etc/medialib/blm/wy/information/NEPA/cfodocs/haycreekii/feis.Par.89003.File.dat/07chap4.pdf>).
- 12 "Notice of Availability of the Buckskin Mine Hay Creek II Coal Lease-by-Application Final Environmental Impact Statement, Wyoming," *Federal Register* 76 (146) (2011): 45612-45614, available at <http://www.blm.gov/pgdata/etc/medialib/blm/wy/information/NEPA/cfodocs/haycreekii/feis.Par.70424.File.dat/FR-072911.pdf>.
- 13 Bureau of Land Management, "Cumulative Analyses."
- 14 *Ibid.*, p. 4-127.
- 15 Bureau of Ocean Energy Management, *Chukchi Sea Planning Area: Oil and Gas Lease Sale 193 and Seismic-Surveying Activities in the Chukchi Sea* (U.S. Department of the Interior, 2007), available at http://www.boem.gov/uploadedFiles/BOEM/About_BOEM/BOEM_Regions/Alaska_Region/Environment/Environmental_Analysis/2007-026-Vol%20I.pdf.
- 16 U.S. Geological Survey, "90 Billion Barrels of Oil and 1,670 Trillion Cubic Feet of Natural Gas Assessed in the Arctic," Press release, July, 23, 2008, available at <http://www.usgs.gov/newsroom/article.asp?ID=1980>.
- 17 Drajem, "Obama Will Use Nixon-Era Law to Fight Climate Change."
- 18 Letter from Cynthia Giles to Jose W. Fernandez and Kerri-Ann Jones, April 22, 2013, available at <http://epa.gov/compliance/nepa/keystone-xl-project-epa-comment-letter-20130056.pdf>.
- 19 Arnold and Porter, "Climate Change Litigation in the U.S.," available at <http://www.climatecasechart.com/>.
- 20 Jessica Goad, Christy Goldfuss, and Tom Kenworthy, "The Jobs Case for Conservation: Creating Opportunity Through Stewardship of America's Public Lands" (Washington: Center for American Progress, 2011), available at http://www.americanprogress.org/wp-content/uploads/issues/2011/09/pdf/public_lands.pdf.
- 21 U.S. Energy Information Administration, "Sales of Fossil Fuels Produced from Federal and Indian Lands, FY 2003 through FY 2011" (2012), available at <http://www.eia.gov/analysis/requests/federalands/pdf/eia-federalandsales.pdf>.
- 22 Council on Environmental Quality, "Draft NEPA Guidance On Consideration Of The Effects Of Climate Change And Greenhouse Gas Emissions."
- 23 Stratus Consulting and The Wilderness Society, "Greenhouse Gas Emissions from Fossil Energy Extracted from Federal Lands and Waters" (2012), available at <http://wilderness.org/sites/default/files/FINAL%20STRATUS%20REPORT.pdf>.
- 24 U.S. Environmental Protection Agency, "Greenhouse Gas Equivalencies Calculator," available at <http://www.epa.gov/cleanenergy/energy-resources/calculator.html#results> (last accessed April 2013).
- 25 U.S. Department of Transportation, "Table 1-11: Number of U.S. Aircraft, Vehicles, Vessels, and Other Conveyances," available at http://www.rita.dot.gov/bts/sites/rita.dot.gov/bts/files/publications/national_transportation_statistics/html/table_01_11.html (last accessed April 2013).
- 26 U.S. Department of Transportation, "Table 4.1. Count of Electric Power Industry Power Plants, by Sector, by Predominant Energy Sources within Plant, 2002 through 2011," available at http://www.eia.gov/electricity/annual/html/epa_04_01.html (last accessed April 2013).
- 27 Letter from the Council on Environmental Quality to Ted Boling, May 24, 2010, available at http://www.whitehouse.gov/files/ceq/partnership_project_0.pdf.
- 28 Letter from Jay Inslee and John Kitzhaber to Nancy Sutley, March 25, 2013, available at http://www.thestranger.com/images/blogimages/2013/03/25/1364249814-nancy_sutley.pdf.
- 29 Stratus Consulting and The Wilderness Society, "Greenhouse Gas Emissions from Fossil Energy Extracted from Federal Lands and Waters."
- 30 Fox News, "Transcript of Obama's State of the Union speech," February 12, 2013, available at <http://www.foxnews.com/politics/2013/02/12/transcript-obama-state-union-speech/>.