COMMENT

The Public's Interest and Durable Management of Energy Development on Public Lands

by Tommy Beaudreau, Janice Schneider, and Joshua Marnitz

Tommy Beaudreau is a Partner at Latham & Watkins LLP. Janice Schneider is a Partner at Latham & Watkins LLP. Joshua Marnitz is an Associate at Latham & Watkins LLP.

The United States owns, on behalf of all Americans, approximately 30% of the nation's land, totaling more than 600 million acres, including vast landscapes in the west and in Alaska. These lands include our national parks, national forests, wildlife refuges, national monuments, as well as other public lands that are overseen by the Bureau of Land Management (BLM) in the United States Department of the Interior (DOI or the Interior Department). In addition to managing more than 245 million surface acres—nearly one-half—of these public lands, the BLM is responsible for administering approximately 700 million acres of subsurface mineral estate. Offshore, the Interior Department manages and regulates the entire 1.7 billion-acre U.S. outer continental shelf (OCS), including for oil and gas exploration and development.

The Interior Department's stewardship responsibilities over these lands, and the diverse natural resources that they contain, are grounded in its authorizing statutes. For example, the BLM's fundamental mandate under the Federal Land Policy and Management Act of 1976 (FLPMA) is to administer public lands "on the basis of multiple use and sustained yield," which includes "meet[ing] the present and future needs of the American people."[1] Under the Mineral Leasing Act of 1920 (MLA), the Interior Secretary is charged with establishing terms for the leasing of oil, natural gas, and coal that are necessary "for the safeguarding of the public welfare."[2] Similarly, the Outer Continental Shelf Lands Act (OCSLA) establishes the OCS as a "vital natural resource" that should be "made available for expeditious and orderly development, subject to environmental safeguards, in a manner which is consistent with the maintenance of competition and other national needs."[3]

In light of these statutory directives that DOI's management of public lands be, broadly speaking, in the public's interest, Prof. Jayni Foley Hein argues in *Federal Lands and Fossil Fuels: Maximizing Social Welfare in Federal Energy Leasing* that the Interior Department must rethink its programs for the leasing of fossil fuels—including coal, oil, and natural gas—on public lands "with the goal of maximizing social welfare."[4] She observes that DOI's regulatory programs for leasing coal, oil, and natural gas on public lands have been in place, relatively unchanged, for decades. Indeed, the laws and regulations that govern these programs have seen few updates since they were promulgated the late 1970s and early 1980s, even though the conventional energy industries, as well as arguably the country's policy imperatives, have evolved substantially since then.

Professor Hein also argues forcefully that the Interior Department's current fossil fuel leasing programs employ "no mechanism to account for many significant externalities associated with fossil fuel extraction, transportation, and consumption."[5] She discusses that these programs fail to properly quantify, let alone address, major environmental and social effects, including related to greenhouse gas (GHG) emissions and their effect on climate.[6]

In light of the broad requirement that public lands be managed in the public's interest, Professor Hein recommends that to "better fulfill its statutory mandates under FLPMA, the Mineral Leasing Act, and OCSLA, Interior should update its leasing process and fiscal terms."[7] These proposed reforms include (1) requiring the development of strategic leasing plans to evaluate whether leasing would earn fair market value for taxpayers, including after considering social and environmental costs by using tools such as Social Cost of Carbon and Social Cost of Methane analyses; (2) optimizing fiscal terms for new leases, including by adding social cost of carbon and social cost of methane royalty "adders" to maximize net benefits; (3) requiring the development of alternative leasing scenarios by modeling energy substitution and climate effects; and (4) other reforms intended to curb royalty rate reduction "loopholes" and require consideration of alternatives, such as delaying

1. 43 U.S.C. §§ 1702(c), 1712(c)(1).
2. 30 U.S.C. § 187.
3. 43 U.S.C. § 1332(3).
4. Jayni Foley Hein, *Federal Lands and Fossil Fuels: Maximizing Social Welfare in Federal Energy Leasing*, 42 Harv. Envtl. L. Rev. 1, (2018), at 4.
5. *Id.* at 5.
6. *Id.* at 3-7.
7. *Id.* at 49.

lease sales, as part of a land management agency's analysis under the National Environmental Policy Act (NEPA).

In sum, Professor Hein advocates a strategy for using existing administrative authorities governing the management of fossil fuel leasing on public lands to advance social welfare by addressing the social costs of GHG emissions related to the eventual combustion of those fuels. While the goals of using federal authorities to advance social welfare are laudable, we are skeptical that the proposed reforms can be implemented in a durable way in light of the absence of political consensus that the "public interest" and "social welfare" require that fossil fuel development on public lands be managed specifically to address GHG emissions and climate effects.

Absent clearer legislative authority establishing that the public's interests in managing oil, natural gas, and coal leasing and development on public lands includes GHG emissions reduction and advancing climate goals, administrative policy and even regulatory changes premised on the generalized statements about the nation's interests and needs—such as those currently contained in DOI's existing authorities under FLPMA, the MLA, OCSLA and other relevant statutes—are not likely to be durable. The advantages of using the interpretation and exercise of existing authority as a lever for action on emissions and climate change—i.e., the ability to act without seemingly unattainable new legislative mandates codifying these objectives—are the same features that make such action susceptible to significant policy swings between executive administrations. As we have seen in recent years, what is done administratively can be dismantled quickly.

I. Fossil Fuel Development on Public Lands

First, a brief discussion about the opportunity—and limitations—of using the management of fossil fuels leasing and development on public lands as a lever in climate policy. Professor Hein discusses the "fossil fuel boom" that has occurred in the United States over the past decade, and this is important context for the proposed administrative reforms and their potential to affect overall GHG emissions from fossil fuel development in the United States. Indeed, oil and natural gas production in the United States has increased dramatically since the mid-2000s, driven by technological advances such as horizontal drilling and hydraulic fracturing that have unlocked massive hydrocarbon resources found in shale formations. According to the U.S. Energy Information Administration (EIA), between 2008 and 2016, total U.S. oil production increased by 77% and natural gas production increased by 35%.[8] This trend in increased domestic oil production has continued in recent years, and the EIA reports that the U.S. produced nearly 12 million barrels of oil per day in March 2019, which is more than double the 5.5 million barrels per day produced in March 2010.[9]

However, this unprecedented growth in domestic oil and natural gas production has largely been a story about the rise of shale basins, which happen to coincide predominately with private and state managed lands. While federal onshore oil production has increased by 59% since 2008, that growth is dwarfed by what has happened on non-federal lands.[10] The EIA estimates that 90% of the growth in oil and natural gas development between 2011 and 2016 can be attributed to tight oil and shale gas plays located primarily on state and private (i.e., non-federal) lands.[11] Similarly, while offshore oil production from the federal OCS in the Gulf of Mexico has remained relatively steady, it has decreased as a percentage of overall domestic oil and gas production from approximately 29% in March 2010 to 16% in March 2019.[12]

Federal coal is a different picture altogether. Due largely to market forces, plant retirements, regulation, and the proliferation of cheap natural gas, total coal production in the United States declined approximately 23% from 2008 to 2015.[13] The production of federal coal, which accounts for nearly 40% of the coal produced in the United States, has declined approximately 19% during that same time period.[14]

Therefore, while public lands remain a source of significant oil, natural gas, and coal production, they are not responsible for the fossil fuel production boom that the United States has experienced over the past decade. Oil production in the U.S. has risen dramatically over the past 10 years, but public lands have not played a significant role in that growth. Meanwhile, for a variety of reasons, coal production from public lands continues to trend downward. Accordingly, public lands do not present a game-changing opportunity for advancing climate policy through administrative changes to federal oil, natural gas, and coal leasing programs, particularly under existing authorities.

II. Case Studies in the Limitations of Using Existing Administrative Authorities to Advance Social Welfare

The absence of political consensus supporting reinterpretation of the public's interest in how fossil fuels leasing is managed on public lands is illustrated by the short-lived reforms attempted during the Barack Obama Administration. In this comment, we discuss three examples, each of which highlights different aspects of the political, legal, and practical challenges that face Professor Hein's proposed

8. United States Government Accountability Office, Report to Congressional Committees Gao-17-540, Oil, Gas, and Coal Royalties: Raising Federal Rates Could Decrease Production on Federal Lands But Increase Federal Revenue, at 12 (June 2017) ("GAO Royalties Report") (citing EIA data).

9. EIA, Monthly Crude Oil and Natural Gas Report, *at* https://www.eia.gov/petroleum/production/ (last visited June 27, 2019).

10. *See supra* note 8, at 12. (citing Office of Natural Resources Revenue data).

11. *Id.* (citing EIA data).

12. *See supra* note 9.

13. *See supra* note 8, at 14.

14. *Id.*

reforms to manage fossil fuels leasing on public lands with an eye toward social welfare, as defined as reducing carbon pollution and addressing climate change.

First, we discuss the 2016 *Federal Coal Program Programmatic Environmental Statement—Scoping Report* (the Coal PEIS Scoping Report), which former Interior Secretary Jewell commissioned to provide a broad review of the federal coal leasing program similar to the comprehensive, programmatic evaluation and reorientation that Professor Hein recommends.

Second, we examine the Obama Administration's consideration of changes to onshore oil and gas royalty rates, including potentially to account for negative externalities associated with carbon pollution through analytical tools such as the Social Cost of Carbon, premised on the BLM's established authority to set royalty rates through regulation.

Finally, we discuss the BLM's 2016 *Final Rule on Waste Prevention, Production Subject to Royalties, and Resource Conservation* (the BLM Methane Rule), which hewed closely to BLM's traditional stewardship responsibilities to prevent waste and ensure a fair return to the taxpayer, as opposed to any climate-related emission reduction policy, and yet nevertheless was immediately targeted for rescission and revision following the 2016 election and change in the political party governing the federal Executive Branch.

A. *The 2016 Federal Coal PEIS*

The MLA affords the Secretary of the Interior substantial discretion in implementing the federal coal leasing program by authorizing the Secretary to manage federal lands for coal leasing "as he finds appropriate and in the public interests."[15] The Federal Coal Leasing Amendments Act of 1976 amended the MLA to require that all public lands available for coal leasing be offered competitively. The MLA also directs the federal government not to accept any bid on a coal lease tract that is less than the "fair market value."[16] On the royalties side, the MLA generally establishes a floor for surface coal royalties of 12.5%, and authorizes the Secretary to establish a lesser royalty rate for coal recovered from underground mining operations.[17] The BLM regulations implementing the federal coal leasing program were primarily developed in the late 1970s, and the program has not been subject to comprehensive review since the 1980s. Meanwhile, as discussed above, the coal industry and energy markets have changed substantially since that time. Additionally, in recent years the Government Accountability Office (GAO) and DOI Inspector General's Office have criticized the federal coal leasing program for failing to provide for a fair return to taxpayers.[18]

In January 2016, Interior Secretary Jewell issued Secretarial Order 3338, which directed BLM to prepare a Programmatic Environmental Impact Statement under NEPA to identify and analyze potential leasing and management reforms for the federal coal program (Coal PEIS).[19] Secretarial Order 3338 stated that the Coal PEIS would "provide a vehicle for the Department to undertake a comprehensive review of the program and consider whether and how the program may be improved and modernized to foster the orderly development of BLM administered coal on Federal lands in a manner that gives proper consideration to the impact of that development on important stewardship values, while also ensuring a fair return to the American public."[20] Secretarial Order 3338 highlighted three main concerns to be addressed in the Coal PEIS—fair return, climate change, and market conditions.[21] Secretarial Order 3338 also imposed a "pause on the issuance of new federal coal leases for thermal (steam) coal" administered by the BLM to "allow future leasing decisions to benefit from the recommendations that result" from the Coal PEIS.[22] Professor Hein points to the Coal PEIS directed under Secretarial Order 3338 as exactly the type of analysis that she recommends be done "regularly to determine whether taxpayers are receiving 'fair market value' and whether the program is aligned with climate change or other environmental goals."[23]

The problem, from the perspective of Professor Hein's recommendations, is that Secretarial Order 3338 and the Coal PEIS, which were premised on the Secretary's authorities under the MLA, FLPMA and other statutes to act in the public interest, resulted in no change to the way BLM administers the federal coal program.

Just before the end of the Obama Administration in January 2017, BLM published its Coal PEIS Scoping Report.[24] In the Coal PEIS Scoping Report, BLM found that "[c]onsideration of the implications of Federal coal leasing for climate change, as an extensively documented threat to the health and welfare of the American people, falls squarely within the factors to be considered in determining the public interest."[25] In fact, BLM in the Coal PEIS Scoping Report identified for additional analysis many of the same proposals made by Professor Hein, including accounting

15. 30 U.S.C. § 201(a)(1).
16. *Id.*
17. 30 U.S.C. § 207(a).
18. *See* Office of the Inspector General, U.S. Department of the Interior, Coal Management Program, U.S. Department of the Interior, Report No. CR-EV-BLM-0001-2012 (June 2013); Government Accountability Office, Coal Leasing: Blm Could Enhance Appraisal Process, More Explicitly Consider Coal Exports, and Provide More Public Information, Gao-14-140 (Dec. 2013); Government Accountability Office, Oil, Gas, and Coal Royalties: Raising Federal Rates Could Decrease Production on Federal Lands But Increase Federal Revenue, GAO-17-540 (June 2017).
19. U.S. Department of the Interior Secretarial Order No. 3338, *Discretionary Programmatic Environmental Impact Statement to Modernize the Federal Coal Program*, at 1 (Jan. 15, 2016).
20. *Id.*
21. *Id.* at 4-5.
22. *Id.* at 8-10. Secretarial Order 3338 also included numerous exceptions to this moratorium on new coal leasing by BLM, including for lease sales associated with applications in advanced stages of review, emergency leasing, and certain lease modifications and lease exchanges.
23. *See supra* note 4, at 27.
24. U.S. Department of the Interior, Bureau of Land Management, Federal Coal Program Programmatic Environmental Impact Statement—Scoping Report (Jan. 2017).
25. *Id.* at ES-2.

for social costs of coal production and pricing externalities associated with carbon emissions through either increased royalty rates or the imposition of a carbon "adder" equivalent to a per-ton fee to be paid in addition to the royalty.[26]

The Coal PEIS never advanced beyond scoping. One of the early acts of the Donald Trump Administration was to rescind Secretarial Order 3338, terminate the Coal PEIS review, and lift the moratorium on new coal leasing by BLM.[27] The Coal PEIS was politically contentious at the time it was proposed, and despite responding to calls for modernizing and reforming the federal coal program and purporting to be grounded in the Secretary's general authority under the MLA, FLPMA and other statutes to act in the public interest, it did not survive a presidential election and change in administration.[28]

B. Onshore Oil and Natural Gas Royalty Rates and the Social Cost of Carbon

Our next case study in the challenges of using existing authorities to implement durable change in the public's interest concerns the previous administration's attempts to adjust royalty rates for onshore oil and gas production from public lands, including consideration of the use of social cost of carbon calculations to quantify external costs. Those efforts were not a broad re-evaluation of the BLM's oil and gas program, such as contemplated by the Coal PEIS, but rather consideration of how existing authorities could be used to quantify and recoup social costs related to GHG emissions.

Under the MLA, the royalty rate for non-competitively issued oil and gas leases on BLM-managed lands is fixed at 12.5%.[29] For competitively issued oil and gas leases on BLM-managed lands, the MLA requires a royalty "at a rate not less than 12.5%."[30] In 2015, BLM issued an Advanced Notice of Proposed Rulemaking (ANPR) to assist BLM in preparing a proposed rule to provide the Interior Secretary with "the flexibility to adjust royalty rates in response to changes in the oil and gas market."[31] Among the questions BLM asked in the ANPR was whether BLM should "consider other factors in determining what royalty level might provide a fair return, such as life cycle costs, externalities, or the social costs associated with the extraction and use of the oil and gas resources."[32] BLM also asked commenters if the agency should consider factors such as externalities and social costs, and to "please explain how it should do so."[33]

Professor Hein proposes an answer. She explains that because "environmental externalities vary with the amount of fossil fuels that are produced," increased royalty rates on oil and gas could be used to recoup the social costs of carbon associated with these fuels. Accordingly, she recommends that DOI use "economic tools to measure the cost of these impacts, such as the Social Cost of Carbon and Social Cost of Methane" to help establish royalty rates as a "type of Pigouvian tax: a tax levied on activity that generates negative externalities."[34]

While BLM's consideration of oil and gas royalty rate adjustments during the Obama Administration never advanced to the point of implementing royalty rates at levels tied to recovery of the social costs of carbon pollution, the Obama Administration worked to develop the Social Cost of Carbon as a tool for federal agencies to use, including in evaluating GHG emissions and climate effects under NEPA. In August 2016, the White House Council on Environmental Quality (CEQ) published its *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*, which required federal agencies to consider GHG emissions and climate change issues when evaluating the potential impacts of a federal action under NEPA.[35] CEQ specifically suggested that federal agencies use the Social Cost of Carbon analytical tool.[36]

In March 2017, President Trump's Executive Order 13783 directed CEQ to rescind its 2016 guidance on analyzing GHG emissions and climate change under NEPA.[37] This Executive Order also disbanded the Interagency Working Group on Social Cost of Greenhouse Gases (IWG) and withdrew the technical analyses generated by the IWG as "no longer representative of governmental policy."[38] On June 21, 2019, CEQ issued its *Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions*, which among other things proposed advising federal agencies that they "need not weigh the effects of the various alternatives in NEPA in a monetary cost-benefit analysis using any monetized Social Cost of Carbon (SCC) estimates and related documents . . . or other similar cost metrics."[39]

26. *Id.* at 6-13.
27. Presidential Executive Order 13783, *Promoting Energy Independence and Economic Growth* (Mar. 28, 2017); U.S. Department of the Interior Secretarial Order 3348, *Concerning the Federal Coal Moratorium* (Mar. 29, 2017); U.S. Department of the Interior Secretarial Order 3349, *American Energy Independence* (Mar. 29, 2017).
28. Indeed the Trump Administration recently doubled down on its position in the face of litigation over this issue. *See, e.g.,* Draft Environmental Assessment, *Lifting the Pause on the Issuance of New Federal Coal Leases for Thermal (Steam) Coal*, DOI-BLM-WO-WO2100-2019-0001-EA (May 2019).
29. 30 U.S.C. §226(c).
30. 30 U.S.C. §226(b)(1)(A).
31. Bureau of Land Management, Advanced Notice of Proposed Rulemaking, Oil and Gas Leasing; Royalty on Production, Rental Payments, Minimum Bids, Bonding Requirements, and Civil Penalty Assessments, 80 Fed. Red. 22148 (Apr. 21, 2015).
32. *Id.* at 22, 154.
33. *Id.*
34. *See supra* note 4, at 18.
35. Council on Environmental 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, 81 Fed. Reg. 51866 (Aug. 5, 2016).
36. *Id.*
37. *See supra* note 27; *see also* 82 Fed. Reg. 16576 (Apr. 5, 2017) (CEQ notice withdrawing the guidance).
38. *See supra* note 27.
39. Council on Environmental Quality, Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions, 84 Fed. Reg. 30097 (June 26, 2019).

While BLM during the Obama Administration never went as far as to propose a rule that would allow for consideration of externalities associated with GHG emissions to be factored into royalty rates for oil and gas production, even the analytical tools, such as the Social Cost of Carbon, necessary for developing the calculation of such an approach to royalty rates were rejected following the 2016 election. Where even such tools are deemed not consistent with federal policy, it seems unlikely that BLM would enjoy the political support necessary to administratively use royalty rates as a form of tax to recoup external costs related to GHG effects on climate, particularly under the existing statutory framework.

C. BLM Methane Rule

This brings us to our final case study—the 2016 BLM Methane Rule. BLM attempted to use its existing authorities to directly address upstream methane emissions in the 2016 BLM Methane Rule.[40] The MLA specifically requires BLM to ensure that lessees "use all reasonable precautions to prevent waste of oil or gas developed in the land" and comply with rules "for the prevention of undue waste."[41] Coupled with BLM's obligation to obtain a fair return for the American public on produced resources such as natural gas, these waste prevention requirements are four square with the traditional exercise of BLM's authorities in the public interest.

The BLM Methane Rule hewed closely to that traditional understanding of BLM's responsibility to serve the public's interest by regulating oil and gas operations to prevent the waste of resources and to ensure a fair return to the taxpayer. For example, the BLM Methane Rule required operators to develop waste minimization plans; established clear criteria for when flared gas would be subject to royalties; generally prohibited venting and tightened rules on flaring of associated gas from oil wells; and established standards for detecting and/or addressing gas leaks from equipment at the well site or elsewhere on the lease, the operation of high-bleed pneumatic controllers and certain pneumatic pumps, controlling gas emissions from storage vessels, downhole well maintenance and liquids unloading, and well drilling and completions.[42] BLM also included provisions authorizing variances from requirements under the BLM Methane Rule where a state or tribe demonstrates that a state, local, or tribal regulation imposes equally effective requirements.[43]

Despite its grounding in traditional notions of the public interest in regulating emissions from oil and gas operations, as opposed to achieving goals related to climate policy, the BLM Methane Rule was immediately a target for rescission following the 2016 election. The BLM Methane Rule narrowly survived a rescission under the Congressional Review Act, and did so only because of concerns in the U.S. Senate about permanently impairing BLM's authority to regulate to prevent waste and ensure fair return.

The Interior Department then turned to revising the BLM Methane Rule through the Administrative Procedures Act notice and comment rulemaking process. In September 2018, BLM published the final revised Methane Rule, entitled *Waste Prevention, Production Subject to Royalties, and Resource Conservation; Rescission or Revision of Certain Requirements* (Revised Methane Rule).[44] The Revised Methane Rule eliminated a number of provisions of the original BLM Methane Rule, including requirements related to waste management plans, leak detection and repair, and gas capture. The Revised Methane Rule also modified requirements related to gas capture and the flaring of associated gas royalty-free, downhole well maintenance and liquids unloading, and the measuring and reporting of volumes of gas vented or flared.

Despite being premised on preventing waste and ensuring fair return, BLM in the Trump Administration determined that the costs to industry of compliance with the original BLM Methane Rule outweighed its benefits. BLM originally estimated the BLM Methane Rule would result in a minimum annual net benefit of $46 million, and produce a minimum increase in oil and gas royalties of $3 million.[45] In the Revised Methane Rule, however, BLM estimated that the reduction of compliance costs would exceed the forgone cost savings from recovered natural gas and the value of the forgone methane emissions reductions, producing minimum benefits of $734 million.[46] BLM further estimated that the Revised Methane Rule would result in minimum forgone royalty payments to the federal government, tribal governments, states, and private landowners of $28.3 million.[47] Thus, not only were the social costs associated with fugitive emissions not a factor in the new cost benefit analysis, BLM eliminated or modified a number of provisions under the original BLM Methane Rule because the compliance cost to industry outweighed the value of prevented waste of gas or lost royalty revenue to the taxpayer.

III. Conclusion

Determining the public interest, in order to manage the United States' shared resources on public lands in a way that maximizes social welfare, is inherently political. As illustrated by efforts during the Obama Administration to exercise existing authorities related to the administration of energy development on public lands—efforts that fell along a continuum of executive authority from re-imagining the entire federal coal program through the lens

40. Department of the Interior, Bureau of Land Management, Final Rule, Waste Prevention, Production Subject to Royalties, and Resource Conservation, 81 Fed. Reg. 83008 (Nov. 18, 2016).
41. 30 U.S.C. §§ 187, 225.
42. *See supra* note 40.
43. *Id.*
44. Bureau of Land Management, Waste Prevention, Production Subject to Royalties, and Resource Conservation; Rescission or Revision of Certain Requirements, 83 Fed. Reg. 49184 (Sept. 28, 2018).
45. *See supra* note 40, at 83014.
46. *See supra* note 44, at 49205.
47. *Id.*

of climate policy, to reinterpreting existing authority to include accounting for the social costs of GHG emissions in royalty rates and NEPA analyses, to hewing closely to traditional understanding of the public interest in curbing waste and ensuring fair return through regulation of fugitive emissions—absent political consensus, the reforms recommended by Professor Hein are unlikely to be durable or result in meaningful changes to the oversight of energy development on public lands.

This does not mean that changes to how the Interior Department manages energy development on public lands are impossible. But, recent experience does tell us that the U.S. Congress has a role to play. As Interior Secretary Bernhardt stated in his recent testimony during a U.S. House of Representatives budget hearing, there is not a clear statutory mandate, or even policy consensus, that public lands—and energy development on public lands in particular—must be managed with climate impacts in mind. When asked whether it is his job as Interior Secretary to help address climate change, he responded, "You know what, there is not a 'shall' for 'I shall manage the land to stop climate change' or something similar to that. You guys come up with the 'shalls.'"[48]

Exercising administrative authorities based on the interpretation of the public interest mandate under FLPMA, the MLA, OCSLA, and other existing statutes is not enough to accomplish the social welfare objectives that Professor Hein argues are necessary to reflect the true social cost of GHG emissions related to energy development on public lands and address the effects of climate change on our landscapes. Lasting and effective changes in the way public lands are managed—the kinds of changes that can survive swings in the political pendulum—would also require Congress to weigh in on defining the public's interest in energy development on public lands.

48. *Rep. Chellie Pingree Asks Secretary Bernhardt About Climate Change and Scientist Vacancies*, C-SPAN (May 7, 2019), https://www.c-span.org/video/?c4796445/rep-chellie-pingree-asks-secretary-bernhardt-climate-change-scientist-vacancies.