



Institute for
Policy Integrity

NEW YORK UNIVERSITY SCHOOL OF LAW

December 10, 2021

Attn: Colorado State Office, Bureau of Land Management

Re: Draft Environmental Assessment for the 2022 First Competitive Oil & Gas Lease Sale (Doi-BLM-CO-0000-2022-0001-EA)

The Institute for Policy Integrity at New York University School of Law (“Policy Integrity”)¹ respectfully submits these comments on the Bureau of Land Management’s (“BLM”) Environmental Assessment on the First Quarter 2022 Competitive Lease Sale in Colorado (the “EA”).² Policy Integrity is a nonpartisan think tank dedicated to improving the quality of government decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and public policy. Policy Integrity has produced scholarship and regularly comments on BLM analysis of oil, gas, and coal leasing under the National Environmental Policy Act (“NEPA”).

In the EA, BLM proposes to lease over 141 thousand acres of land for fossil fuel development in Colorado.³ To account for the climate impacts of this leasing plan, BLM takes the important step of monetizing greenhouse gas emissions using the social cost of greenhouse gases. Though BLM monetizes over \$888 million in climate damages that would result from first quarter 2022 leasing in Colorado,⁴ the agency provides no explanation for how authorizing such climate damages is consistent with its duty “to prevent unnecessary or undue degradation of the lands.”⁵ In fact, in the accompanying Finding of No Significant Impact (“FONSI”), BLM claims that “it is not possible...to determine whether the emissions associated with the Proposed Action would have a ‘significant’ or ‘non-significant’ effect on the human environment.”⁶

While BLM takes a critical first step by monetizing greenhouse gas impacts of the Proposed Action and one alternative, it must incorporate this information into its decision of whether to approve new fossil fuel development. BLM also overlooks the option value of delaying leasing at this time and insufficiently addresses the possible environmental justice impacts of the

¹ This document does not purport to present the views, if any, of New York University School of Law.

² Bureau of Land Mgmt., Draft Environmental Assessment for the 2022 First Competitive Oil & Gas Lease Sale (Doi-BLM-CO-0000-2022-0001-EA) (Nov. 2021) [hereinafter “Colorado EA”]

³ *Id.* at 20.

⁴ *Id.* at 36 tbl. 15 (showing \$888.484 million in monetized greenhouse gas emissions for the Proposed Action at the 3% discount rate).

⁵ 43 U.S.C. § 1732(b).

⁶ Bureau of Land Mgmt., Finding of No Significant Impact: First Quarter 2022 Competitive Lease Sale (DOI-BLM-CO-0000-2022-0001-EA) at 3 (Nov. 2021) [hereinafter “Colorado FONSI”].

Proposed Action, which not only further deprives the public of important information but also leaves BLM with insufficient information with which to issue a decision.

These comments begin by commending BLM for applying the social cost of greenhouse gases to assess the Proposed Action's climate effects. It then offers the following recommendations for how BLM can improve its analysis.

- BLM should adopt a methodology for incorporating climate impacts into its decisionmaking by comparing the social cost values to all other monetizable effects covered in the EA or, if that is not feasible, comparing social cost values across alternatives and providing qualitative justification for its choice of alternative.
 - Separately, BLM should consider this Colorado lease sale with the other concurrent lease sales that BLM is overseeing for this period and assess their climate impacts cumulatively.
- BLM should also improve its analysis of the Proposed Action by:
 - Considering the option value of not leasing some or any of the parcels covered in the EA; and
 - Including a robust and thorough environmental justice analysis.

The comment letter explains each of these points in turn.

I. BLM Appropriately Applies the Social Cost of Greenhouse Gases in the EA

Although the social cost of greenhouse gases was originally developed for regulatory impact analyses,⁷ it is useful in any decisionmaking context that involves greenhouse gas emissions.⁸ It is particularly useful to understand the social benefits of reducing or avoiding emissions and it can also be used to internalize the effects of climate change that are not reflected in market prices for fossil fuels (or other goods or services that generate climate pollution).⁹ In the case of project or program determinations under NEPA, the social cost of greenhouse gases gives agencies an easy-to-understand value in the common metric of money to weigh against other monetized impacts.¹⁰

Accordingly, although BLM should have integrated its monetized climate damage totals into its decisionmaking assessment, as detailed further in Part II below, its application of the social cost of greenhouse gases here is warranted and overdue. BLM should consider providing further analysis using lower discount rates, consistent with the recommendation by the Interagency

⁷ Interagency Working Group on the Social Cost of Carbon, *Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866* (Feb. 2010) [hereinafter 2010 TSD].

⁸ See, e.g., Jayni Hein, *A New Way Forward on Climate Change and Energy Development for Public Lands and Waters* (2020), https://policyintegrity.org/files/publications/Climate_Change_and_Energy_Development_for_Public_Lands_and_Waters.pdf; Policy Integrity Comments to the Bureau of Land Mgmt. on Notice of Intention to Conduct a Review of the Federal Coal Leasing Program, 86 Fed. Reg. 46,873 (Aug. 20, 2021) (submitted on Oct. 5, 2021), https://policyintegrity.org/documents/Comments_of_the_Institute_for_Policy_Integrity_to_BLM_on_Coal_Program_10.05.21.pdf; Policy Integrity Comments for Department of the Interior's Programmatic Review of Federal Oil and Gas Leasing Program (Apr. 15, 2021), https://policyintegrity.org/documents/Comments_Programmatic_Review_of_Oil_and_Gas_Leasing_Program_04.15.21.pdf.

⁹ Max Sarinsky et al., Inst. for Pol'y Integrity, *Broadening the Use of the Social Cost of Greenhouse Gases in Federal Policy* 2-3 (2021).

¹⁰ *Id.* at 4-11.

Working Group on the Social Cost of Greenhouse Gases, and should update its analysis when the Working Group updates its social cost valuations to reflect the latest scientific and economic data.

a. Applying the Social Cost of Greenhouse Gases Allows BLM to Fulfill Its Obligations Under NEPA

As Policy Integrity has advised BLM numerous times in the past,¹¹ the social cost of greenhouse gases is not only an appropriate tool for assessing climate impacts under NEPA, but it also provides the necessary information and context that allow BLM to fulfill its legal obligations.

NEPA requires “hard look” consideration of beneficial and adverse effects of each alternative option for major federal government actions. The U.S. Supreme Court has called the disclosure of impacts the “key requirement of NEPA,” and held that agencies must “consider and disclose the *actual environmental effects*” of a proposed project in a way that “brings those effects to bear on [the agency’s] decisions.”¹² Greenhouse gas emissions are not on their own such effects, but rather, the actual effects are the incremental climate impacts caused by those emissions, including property lost or damaged by sea-level rise, coastal storms, flooding, and other extreme weather events, and human health impacts including mortality from heat-related illnesses and changing disease vectors like malaria and dengue fever.¹³ When agencies, including BLM in the past, provide only volumetric estimates of emissions, they are failing to meet their obligations under NEPA.¹⁴ By applying the social cost of greenhouse gases, BLM can consider the “actual environmental impacts” of a proposed action because the social cost metric translates the physical harms from climate change into economic damage valuations.

b. BLM Uses Appropriate Values to Assess Climate Impacts, But Should Consider Further Analysis Using Lower Discount Rates

BLM not only takes the important step of monetizing greenhouse gas emissions, but also uses the best available estimates to value climate damages in the EA. The social cost of greenhouse gases developed by the federal Interagency Working Group on the Social Cost of Greenhouse Gases (the “Working Group”) are still the best available estimates of the damages done by one additional ton of carbon dioxide, methane, or nitrous oxide emissions.¹⁵

¹¹ *E.g.*, Policy Integrity Comments to Utah State Office, Bureau of Land Management, on Failure to Monetize Greenhouse Gas Emissions or Consider Option Value in the Supplemental Environmental Impact Analysis for Greenhouse Gas Emissions Related to Oil and Gas Leasing in Utah (DOI-BLM-UT-0000-2021-0001-EA) (Oct. 27, 2020) [hereinafter “Policy Integrity Utah Comments”].

¹² *Baltimore Gas & Elec. Co. v. Natural Res. Def. Council*, 462 U.S. 87, 96 (1983) (emphasis added).

¹³ For a more complete discussion of actual climate effects, including air quality mortality, extreme temperature mortality, lost labor productivity, harmful algal blooms, spread of West Nile virus, damage to roads and other infrastructure, effects on urban drainage, damage to coastal property, electricity demand and supply effects, water supply and quality effects, inland flooding, lost winter recreation, effects on agriculture and fish, lost ecosystem services from coral reefs, and wildfires, see EPA, *Multi-Model Framework for Quantitative Sectoral Impacts Analysis: A Technical Report for the Fourth National Climate Assessment* (2017); U.S. Global Change Research Program, *Climate Science Special Report: Fourth National Climate Assessment* (2017); EPA, *Climate Change in the United States: Benefits of Global Action* (2015); Union of Concerned Scientists, *Underwater: Rising Seas, Chronic Floods, and the Implications for U.S. Coastal Real Estate* (2018).

¹⁴ See Policy Integrity Utah Comments, *supra* note 11.

¹⁵ See, *e.g.*, Iliana Paul & Max Sarinsky, Inst. for Pol’y Integrity, *Playing with Fire: Responding to Criticism of the Social Cost of Greenhouse Gases* (June 2021), <https://policyintegrity.org/publications/detail/playing-with-fire> (citing

The Working Group was originally convened in 2009 and released the first social cost of carbon values in 2010.¹⁶ Between 2010 and 2016, the Working Group reconvened multiple times to refine its methodology and update the social cost values.¹⁷ In 2016, in addition to publishing updated estimates for the social cost of carbon, the Working Group also published estimates for two other common greenhouse gases: methane and nitrous oxide.¹⁸ Although the Working Group was disbanded by the Trump Administration in 2017, President Biden reconvened the Group in his first days in office.¹⁹ In February 2021, the Working Group released interim estimates that are based on its widely used 2016 estimates, only adjusted for inflation to 2020 dollars.²⁰ It is these robust numbers that BLM appropriately uses in the EA.²¹

BLM was also correct to apply social cost figures that reflect global climate damages in the EA. As the Working Group has recognized, the global valuation of climate damages is appropriate because the U.S. government and its citizens have extraterritorial interests and because a global estimate is a useful proxy for the ‘spillover’ effects of climate change that will affect U.S. interests and assets.²² Furthermore, there is not yet a reliable methodology for calculating domestic-only climate damages.²³

BLM also used a reasonable range of discount rates in the EA, although it should consider including lower discount rates as it refines its analysis. The Working Group developed a range of four estimates, three of which are based on discount rates of 2.5%, 3%, and 5%, and the fourth of which is derived from the 95th percentile of the 3% distribution and is meant to capture catastrophic impacts.²⁴ The 3% discount rate was used for the so-called ‘central’ estimate of the social cost of greenhouse gases and corresponds to the consumption discount rate,²⁵ which economists agree is the appropriate perspective from which to discount climate damages.²⁶

Richard Revesz et al., *Best Cost Estimate of Greenhouse Gases*, 357 *SCIENCE* 655 (2017); Michael Greenstone et al., *Developing a Social Cost of Carbon for U.S. Regulatory Analysis: A Methodology and Interpretation*, 7 *REV. ENV'T ECON. & POL'Y* 23, 42 (2013); Richard L. Revesz et al., *Global Warming: Improve Economic Models of Climate Change*, 508 *NATURE* 173 (2014) (co-authored with Nobel Prize winner Kenneth Arrow)).

¹⁶ 2010 TSD, *supra* note 7.

¹⁷ See Interagency Working Grp. on the Soc. Cost of Greenhouse Gases, Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide – Interim Estimates Under Executive Order 13,990 (2021) [hereinafter 2021 TSD].

¹⁸ Interagency Working Grp. on the Soc. Cost of Greenhouse Gases, Addendum to Technical Support Document on Social Cost of Carbon for Regulatory Impact Analysis under Executive Order 12866: Application of the Methodology to Estimate the Social Cost of Methane and the Social Cost of Nitrous Oxide 2–3 (2016), available at <https://perma.cc/Z2UK-ZRSX>.

¹⁹ *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*, Exec. Order 13,990, 86 Fed. Reg. 7037 (Jan. 20, 2021).

²⁰ 2021 TSD, *supra* note 17.

²¹ Colorado EA, *supra* note 2, at 36 & 39.

²² *Id.* at 14–16; see also Jason A. Schwartz, Inst. for Pol’y Integrity, *Strategically Estimating Climate Pollution Costs in a Global Environment* (2021); Paul & Sarinsky, *supra* note 15, at 5–6.

²³ Schwartz, *supra* note 22, at 27–28.

²⁴ 2010 TSD, *supra* note 7.

²⁵ *Id.* at 17.

²⁶ Peter Howard & Derek Sylvan, Inst. for Pol’y Integrity, *Expert Elicitation and the Social Cost of Greenhouse Gases* at 32 (2021)

Economists also agree that the Working Group appropriately excluded a 7% discount rate based on the opportunity cost of capital.²⁷

As the Working Group noted in its most recent technical support document, however, recent evidence supports the usage of lower discount rates for climate impacts. For one, the Working Group recognized that recent evidence indicates that the true consumption discount rate is likely below 3%, perhaps substantially.²⁸ The Working Group also recognized that the intergenerational nature of the climate problem further counsels for the use of lower discount rates.²⁹ In light of this extensive evidence, the Working Group recommended that agencies “conduct[] additional sensitivity analysis using discount rates below 2.5%.”³⁰

Accordingly, BLM should explore using a lower range of discount rates, including 1% and 2%. The New York Department of Environmental Conservation developed social cost of greenhouse gases estimates in late 2020 that were otherwise identical to the Working Group’s methodology but used discount rates of 1% and 2%,³¹ which BLM could incorporate consistent with the Working Group’s current recommendations until the Working Group releases updated social cost values next year.

BLM should also recognize that the social cost estimates it uses in the EA represent lower-bound estimates. Beyond the discounting issues discussing above, this is because the models used by the Working Group to calculate the social cost of greenhouse gases omit many significant adverse consequences of climate change.³² And while some potentially beneficial effects of climate change are omitted too, there is wide consensus that the excluded harms greatly outweigh the excluded benefits.³³ This further supports BLM using lower discount rates as points of comparison going forward.

²⁷ Peter Howard & Jason Schwartz, Inst. for Pol’y Integrity, *About Time: Recalibrating the Discount Rate for the Social Cost of Greenhouse Gases* at 4-5 (June 2021)

²⁸ 2021 TSD, *supra* note 17, at 19–21 (“The average rate of return on inflation adjusted 10-year Treasury Securities over the last 30 years (1991-2020) is 2.0 percent. These rates are not without historic precedent, such that over the last 60 years the inflation adjusted 10-year Treasury Securities is 2.3 percent. Current real rates of returns below 2 percent are expected to persist.”).

²⁹ *Id.* at 21 (“[A] consideration of discount rates below 3 percent, including 2 percent and lower, are warranted when discounting intergenerational impacts.”). *See also* Howard & Schwartz, *supra* note 27, at

³⁰ *Id.* at 21.

³¹ N.Y. Dep’t of Env’t Conservation, *Establishing a Value of Carbon: Guidelines for Use by State Agencies* 16–18 (2020), https://www.dec.ny.gov/docs/administration_pdf/vocfguid.pdf. Pursuant to DEC’s estimates, at a discount rate of 2%, social cost valuations for year 2020 emissions equal \$125 per ton of carbon dioxide, \$2,782 per ton of methane, and \$44,727 per ton of nitrous oxide. *Id.* at 3. *See also* N.Y. Dep’t of Env’t Conservation & Res. for the Future, *Estimating the Value of Carbon: Two Approaches* (2020) (explaining considerations and methodology).

³² *See* Peter Howard, *Omitted Damages: What’s Missing from the Social Cost of Carbon* 6 (2014), available at https://policyintegrity.org/files/publications/Omitted_Damages_Whats_Missing_From_the_Social_Cost_of_Carbon.pdf [hereinafter “Omitted Damages”]. *See also* Paul & Sarinsky, *supra* note 15, at 10–12 (discussing how the Working Group’s estimates account for positive impacts of climate change). For more on what effects are currently included in the Working Group’s estimates, *see* Inst. for Pol’y Integrity, *A Lower Bound: Why the Social Cost of Carbon Does Not Capture Critical Climate Damages and What That Means for Policymakers* 5 (2019), available at https://policyintegrity.org/files/publications/Lower_Bound_Issue_Brief.pdf; *Climate Impacts Reflected in the SCC Estimates*, Cost of Carbon Project, <https://costofcarbon.org/scc-climate-impacts>.

³³ *See* Paul & Sarinsky, *supra* note 15, at 10–12.

Until the Working Group publishes new estimates, BLM should continue to use the February 2021 interim estimates and consider including additional lower discount rates, as well.

c. BLM Should Use the Working Group's Updated Estimates When They Become Available

Under the Obama Administration, the Working Group sought feedback from the National Academies of Sciences, Engineering, and Medicine (“National Academies”), leading to the National Academies releasing two reports, in 2016 and 2017, detailing how the Working Group could improve its methodology.³⁴ Because the Working Group was disbanded by the Trump Administration, it was not able to conduct regular updates of the social cost values between 2017 and 2021. In an executive order in early 2021, President Biden reconvened the Working Group and tasked it with developing long-awaited updates by January 2022.³⁵ These updated estimates are expected to reflect recommendations made by the National Academies, and potentially other methodological revisions to incorporate more recent developments in experts’ understanding of the science and economics of climate change.³⁶ Because these new estimates will build upon the Working Group’s robust approach and incorporate important input from experts and the public,³⁷ the Working Group should apply these figures in NEPA assessments once they are released.

Though BLM took the important step of using the best available estimates to monetize climate impacts in the EA, and should continue to do so in any future NEPA assessments for fossil fuel development, it should go further by incorporating this vital information into its decision of whether to approve lease sales. The following section explains how can improve its decisionmaking process to take into account climate damages.

II. BLM Should Fully Integrate Climate Impacts into Its Decisionmaking, and Not Move Forward with the Lease Sale Unless It Determines that the Sale’s Benefits Justify Its Substantial Climate Costs

BLM is tasked with managing federal lands to serve the public interest, and should not pursue fossil-fuel development on those lands without balancing environmental harms with economic benefits.³⁸ However, in practice, BLM infrequently rejects a fossil-fuel project because of its foreseeable environmental impacts, even if those adverse impacts are very large.³⁹ Instead of

³⁴ Nat’l Acad. Scis., Eng’g & Med., *Valuing Climate Damages: Updating Estimation of the Social Cost of Carbon Dioxide* 3 (2017), available at <https://perma.cc/TT87-25PU>; Nat’l Acad. Scis., Eng’g & Med., *Assessment of Approaches to Updating the Social Cost of Carbon: Phase 1 Report on a Near-Term Update* 1–2 (2016), available at <https://perma.cc/TJM6-XE65>.

³⁵ Exec. Order 13,990 § 5(b).

³⁶ 2021 TSD, *supra* note 17, at 11-13.

³⁷ The Office of Management and Budget held a public comment period on behalf of the Working Group. Notice of Availability and Request for Comment on “Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates Under Executive Order 13990,” 86 Fed. Reg. 24,669 (May 7, 2021).

³⁸ 43. U.S.C. § 1701(a).

³⁹ For example, BLM approved Willow Master Development Plan, which it forecasted would produce over 230 million metric tons of greenhouse gas emissions over the plan’s lifetime. Bureau of Land Mgmt., Willow Master Development Plan Final Environmental Impact Statement at 36 tbl. 3.2.2 (2020). This volume of emissions translates to over \$15 billion in climate damages using the social cost of greenhouse gas “central” estimate of \$56 per metric ton for year 2025 emissions. See 2021 TSD. However, note that the social cost estimates increase over time, for example the social cost of carbon is \$79 per metric ton for year 2045 emissions, so actual climate damages would be much higher than \$15 billion as the plan’s would emit greenhouse gases 30 years into the future.

continuing along this path, BLM should transparently weigh all factors at issue in an environmental impact statement or environmental assessment, including for this EA, and make its determination based on which alternative best balances adverse and beneficial effects on society.

While presenting the potential climate impacts of this leasing decision in monetary terms is a critical step, it alone is insufficient to satisfy the demands of rational decisionmaking. The “hard look” consideration of effects from a proposed action means presenting the relative magnitude and severity of effects, which the social cost metric provides, and then weighing adverse impacts against beneficial impacts. And while the social cost of greenhouse gases allows BLM to show the magnitude of the Proposed Action’s climate impacts, BLM claims the metric is insufficient to determine the significance of climate effects,⁴⁰ and so it seems these enormous climate effects, though presented in understandable terms, will have little to no bearing on BLM’s ultimate decision. Therefore, BLM falls short of meeting its obligations under NEPA, even though it has adopted a tool that enables it to do so.

On the issue of significance, BLM claims: “There are no established thresholds for NEPA analysis to contextualize the quantifiable [greenhouse gas] emissions or social cost of an action in terms of the action’s propensity to affect the climate,”⁴¹ and so BLM is unable “to determine whether the emissions associated with the Proposed Action” are significant.⁴² However, BLM’s assessment of significance to the Proposed Action’s climate impacts is a legal conclusion that requires reasoned judgment by the agency,⁴³ so while there may be no bright line test for significance, BLM should have been able to conclude that over \$888 million in climate damages is significant. In fact, on numerous occasions, courts have determined that much smaller effects—in fact over a hundred times smaller in magnitude—are significant enough to warrant careful consideration.⁴⁴ In addition to making a finding of significance, BLM should take at least one of the following steps to facilitate its decisionmaking to ensure that climate impacts are given adequate consideration.

a. BLM Should Compare Monetized Climate Impacts to Other Monetizable Effects

The most rational way for BLM to contextualize the Proposed Action’s monetized climate impacts and incorporate them into a public interest assessment is to balance those effects against other monetized project impacts in a form of cost-benefit analysis. The economic benefits of the Proposed Action are particularly well-suited to monetization and thus can be compared to monetized climate impacts and other adverse environmental effects.

⁴⁰ Colorado FONSI, *supra* note 6, at 3 (“Due to the cumulative and global nature of climate change, it is not possible for the BLM to determine whether the emissions associated with the Proposed Action would have a “significant” or “non-significant” effect on the human environment.”).

⁴¹ *Id.*

⁴² *Id.*

⁴³ *Spiller v. White*, 352 F.3d 235, 244 n.5 (5th Cir. 2003) (“[D]etermining whether significance exists inherently involves some sort of a subjective judgment call.”); *see also* 40 C.F.R. § 1501.3(b) (“In considering whether the effects of the proposed action are significant, agencies shall analyze the potentially affected environment and degree of the effects of the action.”).

⁴⁴ *See, e.g., High Country Conservation Advocates*, 52 F. Supp. 3d at 1191 (determining it was arbitrary not to monetize 1.23 million tons of carbon dioxide). The volume of emissions under consideration in this case would lead to at least \$68 million in climate damages using the social cost of greenhouse gas “central” estimate of \$56 per metric ton for year 2025 emissions. *See* 2021 TSD, *supra* note 17.

For decades, courts have recognized that carefully balancing costs and benefits facilitates rational decisionmaking and is appropriate under NEPA.⁴⁵ As courts have recognized, “NEPA mandates a rather finely tuned and systematic balancing analysis” of “environmental costs” against “economic and technical benefits.”⁴⁶ While NEPA does not require a full and formal cost-benefit analysis, it does “mandate[] at least a broad, informal cost-benefit analysis,” and so agencies must “fully and accurately” and “objectively” assess environmental, economic, and technical costs.⁴⁷

While the social cost of greenhouse gases offers many advantages for assessing climate impacts, one of its key advantages is that it presents climate damages in a metric—money—that BLM routinely uses to assess other project impacts. This sort of comparison of economic benefits against environmental and technical costs lies at the heart of NEPA and is fundamental to rational decisionmaking. As the U.S. Court of Appeals for the Fifth Circuit has recognized in the NEPA context, the use of monetized values to assess environmental and health impacts is “in many instances desirable” since it enables agencies to “giv[e] weight and consideration to the ecological costs to future generations” and to “decid[e] whether present economic benefits indicate that the depletion of irreplaceable natural resources should proceed.”⁴⁸

And over the past year, the federal government has emphasized the decisionmaking benefits of monetizing climate impacts in environmental analysis, explaining that monetized climate benefits facilitate comparison to other project impacts including monetized economic effects. In April 2021, for instance, Interior Secretary Deb Haaland issued a Secretarial Order recognizing that the social cost of greenhouse gases provides a “relevant to the choice among different alternatives being considered,” emphasizing the tool’s utility for comparing climate costs against “a monetized assessment of socioeconomic impacts.”⁴⁹ And in a recent environmental analysis conducted under NEPA, the U.S. Postal Service recognized that monetized climate damages “provide a benchmark for the economic evaluation of a proposed action.”⁵⁰ While BLM does

⁴⁵ *Calvert Cliffs' Coordinating Comm., Inc. v. United States Atomic Energy Com.*, 449 F.2d 1109, 1113 (D.C. Cir. 1971) (noting that “NEPA mandates a rather finely tuned and systematic balancing analysis” of “environmental costs” against “economic and technical benefits.”); *Chelsea Neighborhood Ass'ns v. U.S. Postal Serv.*, 516 F.2d 378, 386 (2d Cir. 1975) (“NEPA, in effect, requires a broadly defined cost-benefit analysis of major federal activities.”); *Sierra Club v. Sigler*, 695 F.2d 957, 978-79 (5th Cir. 1983) (stating that NEPA “mandates at least a broad, informal cost-benefit analysis,” and so agencies must “fully and accurately” and “objectively” assess environmental, economic, and technical costs.).

⁴⁶ *Calvert Cliffs' Coordinating Comm., Inc. v. U.S. Atomic Energy Comm'n*, 449 F.2d 1109, 1113 (D.C. Cir. 1971) (internal quotation marks omitted). *See also, e.g., Chelsea Neighborhood Ass'ns v. U.S. Postal Serv.*, 516 F.2d 378, 386 (2d Cir. 1975) (“NEPA, in effect, requires a broadly defined cost-benefit analysis of major federal activities.”); *Cape May Greene, Inc. v. Warren*, 698 F.2d 179, 188 (3d Cir. 1983) (“In short, the National Environmental Policy Act requires a balancing between environmental costs and economic and technical benefits.”); *Hughes River Watershed Conservancy v. Glickman*, 81 F.3d 437, 446 (4th Cir. 1996) (“NEPA requires agencies to balance a project's economic benefits against its adverse environmental effects.”).

⁴⁷ *Sierra Club v. Sigler*, 695 F.2d 957, 978-79 (5th Cir. 1983) (holding that NEPA “mandates at least a broad, informal cost-benefit analysis,” and so agencies must “fully and accurately” and “objectively” assess environmental, economic, and technical costs). *See also Chelsea Neighborhood Ass'ns v. U.S. Postal Serv.*, 516 F.2d 378, 386 (2d Cir. 1975) (“NEPA, in effect, requires a broadly defined cost-benefit analysis of major federal activities.”).

⁴⁸ *Sierra Club v. Morton*, 510 F.2d 813, 827 (5th Cir. 1975).

⁴⁹ Department-Wide Approach to the Climate Crisis and Restoring Transparency and Integrity to the Decision-Making Process, Secretarial Order 3399 § 5(b) (Apr. 16, 2021).

⁵⁰ U.S. Postal Serv., Draft Environmental Impact Statement: Next Generation Delivery Vehicle Acquisitions 4-15 to 4-16 (2021).

monetize greenhouse gas emissions in the EA, it fails to take the next step of using those monetized values to determine whether or not to approve of the action.

One recent example exemplifies how comparing monetized of climate impacts with other monetized impacts can promote rational decisionmaking and environmental protection pursuant to NEPA's aims. In a 2018 assessment, the Office of Surface Mining, Reclamation, and Enforcement declined to apply the social cost of greenhouse gases for a proposed coal mine expansion and deemed the project's emissions insignificant upon a cursory examination—even though, as current valuations of the social cost of greenhouse gases would have revealed, the project's annual emissions contribute roughly \$9 billion in climate harm.⁵¹ This figure significantly exceeds the projected economic benefits of the mine expansion of less than \$3 billion annually.⁵² Had it monetized key impacts, the agency should have determined not to proceed with this harmful project.

Although BLM does not present an evaluation of economic impacts in the EA—and thus has no monetized economic projections against which to compare the Proposed Action's climate cost—it should—and could readily—generate that information.⁵³ In fact, BLM and other agencies routinely monetize the economic benefits of a proposed actions, like output, royalties, and tax revenue.⁵⁴ If BLM has enough information to generate projected greenhouse gas emissions, it likely has enough information to estimate economic output from fossil fuel development. Volumetric estimates of recoverable oil or gas can be used to calculate the market value—or economic benefit⁵⁵—of extracting oil or gas through simple multiplication using publicly available data on fossil fuel prices. In doing this, BLM should give high, middle, and low estimates for output to better capture the volatility of the fossil fuel markets.

BLM should also incorporate other adverse environmental impacts of the Proposed Action—not just monetized climate impacts—into its balancing of costs and benefits. Though many environmental and social costs of fossil fuel extraction may be difficult to calculate, the value of these effects is certainly not zero. Agencies have also developed estimates for other key parameters that are frequently assessed under NEPA, such as local pollution,⁵⁶ noise,⁵⁷ and energy security.⁵⁸ BLM can look to methodologies used by other agencies for monetizing a

⁵¹ Bull Mountains Mine No. 1 Federal Mining Plan Modification Environmental Assessment D-2 (2018). This project was expected to result in the release of approximately 190 million tons of greenhouse gases, *id.* at 56, which equals about 172.36 million metric tons. Using the central social cost of carbon estimate of \$51 per metric ton emitted in the year 2020, this amounts to \$8.79 billion in climate harm for 2020 emissions. *See* 2021 TSD, *supra* note 17, at 5 tbl.ES-1.

⁵² While OSM did not directly report the total value of extracted coal, it did estimate that the mine expansion will result in 86.8 million tons of coal per year that will sell for \$32.50 per ton. OSM, *supra* note 51, at 18, G-6. 86.8 million multiplied by \$32.50 equals \$2.821 billion—less than one-third of the annual climate damage cost.

⁵³ Current regulations from the Council on Environmental Quality call on agencies to assess the “economic benefits” of a proposed action as part of its NEPA analysis. 40 C.F.R. § 1502.16(a)(10).

⁵⁴ *See, e.g.*, Bureau of Land Mgmt., Moneta Divide Natural Gas and Oil Development Project Final Environmental Impact Statement at 4-277 to 4-289 (Feb. 2020) [hereinafter “Moneta Divide FEIS”] (showing annual tax and royalty revenues, as well as employment earnings).

⁵⁵ *See* Off. of Mgmt. & Budget, Circular A-4: Regulatory Analysis 21 (2003) (“Economists ordinarily consider market prices as the most accurate measure of the marginal value of goods and services to society.”).

⁵⁶ *See, e.g.*, EPA, Regulatory Impact Analysis: Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards 7-19 to 7-28 (Aug. 2021)

⁵⁷ *Id.* at 3-42 to 3-43.

⁵⁸ *Id.* at 3-15 to 3-27.

variety of impacts. By monetizing key economic, environmental, and social impacts, BLM would gain better insight into the relative merits of different alternatives and be better positioned to identify the approach that best promotes the public welfare.⁵⁹ When BLM has estimated the costs and benefits of each alternative, it can compare the two sides of the ledger and determine if the Proposed Action is the most net beneficial.

In short, the monetized climate-damage estimates that BLM presents in the EA should serve as a basis for the agency to balance the Proposed Action's environmental costs against its economic benefits. BLM should more fully monetize the foreseeable impacts discussed in the EA—including any beneficial economic impacts—and then weigh the benefits and costs, and factor that calculation into its decisionmaking. While climate damages are certainly a major consideration, BLM should also include other monetizable effects in its analysis.

b. BLM Should Compare Monetized Climate Impacts Across Alternatives

If BLM cannot monetize other impacts of the alternatives being considered, it should at least compare the social cost of greenhouse gas totals of each alternative and discuss why it is appropriate to choose one alternative over the others with this comparison in mind. In the EA, BLM considers the Proposed Action, leasing over 141 thousand acres of land for oil and gas development, and the Partial Leasing Alternative, which includes approximately five thousand acres for lease.⁶⁰

The Council on Environmental Quality's ("CEQ") implementing regulations state that NEPA assessments "shall provide full and fair discussion of significant environmental impacts and shall inform decision makers and the public of reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment."⁶¹ Therefore, BLM should not only analyze alternatives to the Proposed Action, but use the NEPA process to make a determination about which alternative to approve based on the environmental impacts of each alternative considered. Here, BLM chooses the most harmful alternative among those considered and fails to justify its choice to move forward with the Proposed Action rather than Alternative 3 or the No Action Alternative.

In the EA, BLM monetizes the greenhouse gas emissions impacts from both the Proposed Action and the Partial Leasing Alternative, a less aggressive leasing scenario.⁶² Tables 15 and 16 show the social cost of greenhouse gases for development, operation, and end-use for each plan using all three of the Working Group's discount rates and the 95th percentile estimate.⁶³ Based on a 3% discount rate, BLM finds that the Proposed Action would contribute roughly \$888 million in climate damages and the Partial Leasing Alternative would contribute over \$121 million in climate damages.⁶⁴ Based on a 2.5% discount rate, climate damages from the Proposed Action are over \$1.3 billion and climate damages for the modified proposal are over \$181 million.⁶⁵ Despite these enormous differences in monetary values, nowhere does BLM explain why it is

⁵⁹ See *id.* at 10 ("By measuring incremental benefits and costs of successively more stringent regulatory alternatives, you can identify the alternative that maximizes net benefits.").

⁶⁰ Colorado EA, *supra* note 2, at 20.

⁶¹ 40 C.F.R. § 1502.1

⁶² Colorado EA, *supra* note 2, at 20.

⁶³ *Id.*

⁶⁴ *Id.*

⁶⁵ *Id.*

appropriate to move forward with a plan that would cause hundreds of millions of dollars more in climate damages. BLM also fails to show in similar terms the climate damages from the No Action Alternative—namely \$0—and attempt to justify choosing a proposal that would cause hundreds of millions of dollars in climate damages compared to an alternative that causes none.

In this discussion of alternatives, BLM should also explain why its choice of alternative is in keeping with its mandate and executive guidance. For example, Interior Secretarial Order 3399 notes that “NEPA requires Federal Agencies to consider the environmental effects of proposed major Federal actions...including ensuring that agencies adequately consider the climate change-related impacts of their actions.”⁶⁶ The Order goes on to say that “[t]he NEPA process can support the Department’s policy...to reduce greenhouse gas emissions.”⁶⁷ In this instance, where the Proposed Action is a more harmful alternative and contributes to greater greenhouse gas emissions, BLM should reconsider its choice to proceed with the Proposed Action over other project alternatives and, at minimum, explain how its selection of alternative fits with the Secretary’s order to use the NEPA process to reduce greenhouse gas emissions.

c. BLM Should Analyze Each Lease Sale Within the Context of All of the First Quarter Oil and Gas Proposed Sales

Another way of determining significance of climate impacts and incorporating those findings into its decisionmaking would be for BLM to discuss climate damages and other effects on both on a project-by-project basis *and* as part of the greater leasing program and to make the determination based on the cumulative effects. BLM released several other environmental assessments for first quarter 2022 mineral lease sales in other states around the same time as it released this EA, yet makes no connection between the various assessments. While any given state’s lease sales may not necessarily produce a substantial amount of climate damages—although the EA in question here certainly does—BLM should disclose both the climate costs of the Proposed Action as well as the climate costs from the oil and gas first-quarter lease sales in order to provide a clearer picture of the cumulative environmental effects to which this lease sale contributes.

Agencies have a longstanding obligation to consider the cumulative effects of projects under their review, and such a review can be particularly useful to assessing a proposed action’s contribution to “cumulative environmental problems” like climate change.⁶⁸ Until CEQ revised its definition last year as part of a rulemaking that the agency is now working to rescind,⁶⁹ cumulative effects was defined under the NEPA implementing regulations as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency...or person undertakes such actions.”⁷⁰ In other words, agencies should not look at a proposed action in a vacuum, but rather consider that action within its broader context.

In its currently proposed revisions to the NEPA implementing rules, which includes reinstating the prior definition of cumulative effects, CEQ recognizes that “[a]nalysis of reasonably

⁶⁶ Sec. Order 3399 § 3.

⁶⁷ *Id.* at § 5

⁶⁸ National Environmental Policy Act Implementing Regulations Revisions, 86 Fed. Reg. 55,575, 55,764 (Oct. 7, 2021).

⁶⁹ *See id.*

⁷⁰ 40 C.F.R. § 1508.7

foreseeable cumulative effects is integral to sound and complete environmental review. Cumulative effects analysis is an essential component of NEPA analysis, as it allows agencies and the public to understand how the incremental impacts of a proposed action contribute to cumulative environmental problems such as...climate change.”⁷¹ CEQ goes on to note that reinstating the definition of cumulative impacts “aligns with longstanding legal precedent interpreting NEPA to require agencies to consider cumulative effects,” citing a 1976 U.S. Supreme Court decision where the court held that ““when several proposals...that will have cumulative or synergistic environmental impact upon a region are pending concurrently before an agency, their environmental consequences must be considered together.””⁷² The numerous lease sales that are “pending concurrently before” BLM and will have cumulative climate impacts are exactly the types of actions that should be considered on a cumulative basis.

If BLM looked at the impacts of the Proposed Action alongside the other leasing proposals it is currently reviewing, it would find that all first quarter 2022 lease sales combined would contribute \$4.2 billion in climate damages using the Working Group’s social cost metric at the 3% discount rate, or \$6.37 billion in climate damages using the 2.5% discount rate.⁷³ In other words, BLM is currently deciding whether to approve billions in climate damages from oil and gas leasing without disclosing to the public what benefits it gets in return. The magnitude of these quarterly lease sales, both individually and in combination, exemplifies the importance of viewing certain proposed actions cumulatively.

For example, in *Delaware Riverkeeper Network v. Federal Energy Regulatory Commission*, the U.S. Court of Appeals for the District of Columbia Circuit noted that “[t]he justification for the rule against segmentation”—that is, separating a larger project into smaller constituent parts—“is obvious,” as it is meant to prevent agencies from obscuring related actions that “collectively have a substantial impact.”⁷⁴ The court goes on to state that NEPA was meant “to instill in the environmental decisionmaking process a more comprehensive approach so that long term and cumulative effects of small and unrelated decisions could be recognized, evaluated and either

⁷¹ 86 Fed. Reg. 55,764

⁷² 86 Fed. Reg. 55,765 (quoting *Kleppe v. Sierra Club*, 427 U.S. 390, 410 (1976)).

⁷³ The total climate damages for the concurrent lease sales comes from adding up the figures presented in each EA. Bureau of Land Mgmt., 2022 First Quarter Competitive Lease Sale Environmental Assessment (DOI-BLM-WY-0000-2021-0003-EA) (Oct. 2021) (showing climate damages of \$3.2 billion at the 3% discount rate and \$4.87 billion at the 2.5% discount rate); Bureau of Land Mgmt., Oklahoma Field Office Oil and Gas Lease Sale Quarter 1 2022, Environmental Assessment (DOI-BLM-NM-0040-2021-0033-EA) (showing climate damages of \$8,384,000 at the 3% discount rate and 12,538,000 at the 2.5% discount rate); Bureau of Land Mgmt., Environmental Assessment DOI-BLM-Eastern States-J0000-2021-0037-EA (Oct. 2021) (showing climate damages of \$4,100,000 at the 3% discount rate and \$6,173,000 at the 2.5% discount rate); Bureau of Land Mgmt., First Quarter 2022 Oil and Gas Lease Parcel Sale (DOI-BLM-MT-0000-2021-0006-EA) (showing climate damages of \$43,578,000 at the 3% discount rate and \$66,112,000 at the 2.5% discount rate for the Proposed Action); Bureau of Land Mgmt., Utah 2022 1st Quarter Competitive Oil and Gas Lease Sale (DOI-BLM-UT-0000-2021-0007-EA) (showing climate damages of \$22,567,000 at the 3% discount rate and \$33,863,999 at the 2.5% discount rate for the Proposed Action); Bureau of Land Mgmt., Pecos District Office Oil and Gas Lease Sale, Environmental Assessment Quarter 1 2022 (DOI-BLM-NM-P000-2021-0001-EA) (showing climate damages of \$32,740,000 at the 3% discount rate and \$48,948,000 at the 2.5% discount rate); Bureau of Land Mgmt., Environmental Assessment for the 2022 First Quarter Competitive Oil and Gas Lease Sale (DOI-BLM-NV-B0000-2021-0007-Other) (showing climate damages of \$5,726,000 at the 3% discount rate and \$8,541,000 at the 2.5% discount rate); Colorado EA (showing climate damages of \$882,484,000 at the 3% discount rate and \$1,326,367,000 at the 2.5% discount rate).

⁷⁴ *Delaware Riverkeeper Network v. FERC*, 753 F.3d 1304, 1313 (D.C.Cir. 2014) (citing *NRDC v. Hodel*, 865 F.2d 288, 297 (D.C.Cir.1988)) (internal quotations omitted).

avoided, mitigated, or accepted as the price to be paid for the major federal action under consideration.”⁷⁵

BLM’s existing approach to oil and gas leasing views each proposed action on a state-by-state basis and so partially obscures the enormous accumulation of greenhouse gases from these concurrent and substantively related actions. If BLM considered the Proposed Action in conjunction with these other pending lease sales, it could even more easily understand the significance of the environmental damage that these lease sales would cause. Thus, BLM should at the very least consider the cumulative climate damages from all proposed first quarter 2022 leasing actions and determine if the cumulative effects are indeed significant.

III. BLM Should Also Consider Other Important Impacts in Its Decisionmaking

While the climate impacts covered in the EA are clearly significant and warrant adequate consideration, BLM should also consider the option value of waiting to lease, as well as the environmental justice impacts of the Proposed Action.

a. BLM Should Consider the Option Value of Not Leasing at This Time

In addition to its failure to incorporate the enormous climate impacts into its determination, BLM also errs by failing to consider the option of further deferring these lease sales so it can gain additional information about market conditions and other critical factors. The option value here is particularly strong given that one of the counties included in the Proposed Action, Las Animas County, “is considered to be an important cultural landscape for some Tribes,” and so BLM must conduct Tribal consultation and “work with the Tribes to determine a strategy for addressing the concerns associated with those lands.”⁷⁶ In addition, BLM should consider option value because it did not adequately assess the economic impacts of the Proposed Action and thus is uncertain of the economic benefits.

The informational value of delay is known as “option value,” and it has long been considered a relevant factor for federal leasing and mineral decisions by agencies, courts, and economists. The value associated with the option to delay can be large, especially when there is a high degree of uncertainty about price, extraction costs, and the social and environmental costs imposed by drilling—each of which are present here. For instance, it may be advantageous for BLM to further defer some or all of these leases, pending more comprehensive environmental information such as by taking up the recommendations made above. If BLM learns of new information regarding, for instance, environmental or safety hazards, developmental value, recreational value, carbon sink value, or cultural significance, it is much more difficult to act on this information when the land is already leased due to the length of the lease and the possibility that the land’s character will be irreparably changed through resource extraction.⁷⁷ Thus, the D.C. Circuit has explained, there is a “tangible present economic benefit to delaying the decision to drill for fossil fuels to preserve the opportunity to see what new technologies develop and

⁷⁵ *Id.* (citing *NRDC v. Callaway*, 524 F.2d 79, 88 (2d Cir.1975) (internal quotations omitted)).

⁷⁶ Colorado EA, *supra* note 2, at 41.

⁷⁷ See Jayni Hein et al., Inst. for Pol’y Integrity, *Look Before You Lease* 17 (2020), https://policyintegrity.org/files/publications/Option_Value_Report.pdf.

what new information comes to light.”⁷⁸ And this option value “can be quite substantial, especially for tracts that are only marginally profitable at current prices” and so yield little present economic benefit if leased now.⁷⁹

In light of the uncertainty and near-irreversibility associated with leases for mineral development, BLM should account for option value at the lease sale stage by offering only high-potential lands with limited multiple-use conflicts, if any, in lease sales, and deferring other parcels that pose potential resource conflicts. In fact, the federal government has considered option value in other resource management determinations—such as the Bureau of Ocean and Energy Management’s Outer Continental Shelf leasing program from 2015, and more recent decisions from the U.S. Forest Service and other agencies.⁸⁰ And courts have held that the government must consider option value when it engages in mineral leasing.⁸¹ Yet here BLM fails to consider option value or the potential to defer any of the lease parcels.

BLM’s disregard for option value is not only itself problematic, but also creates a scenario in which the agency is likely to violate its requirement under the FLPMA to obtain “fair market value” for any lease sale. Specifically, BLM risks repeating a pattern of obtaining minimal payments from oil companies to sit on parcels while depriving the public of the enjoyment of those lands. As of the end of fiscal year 2020, about half of the over 26.6 million acres of federal land locked up in oil and gas leases—nearly 13 million acres—was lying idle without production.⁸² In Colorado, nearly 40% of all leased acres are currently idle.⁸³ Interior has recognized the need for rulemaking to ensure that the federal government and local communities receive adequate value for the leasing of federal lands,⁸⁴ and should limit further leasing before it takes appropriate action.

One reason that developers lease lands despite low expectations to drill and “little evidence that much oil or gas is easily accessible” is that they may be “hoping that the land will increase in value nonetheless, because of higher energy prices, new technologies that could make exploration and drilling more economical or the emergence of markets for other resources hidden

⁷⁸ *Ctr. for Sustainable Econ. v. Jewell*, 779 F.3d 588, 610 (D.C. Cir. 2015).

⁷⁹ Michael Livermore, *Patience Is an Economic Virtue: Real Options, Natural Resources, and Offshore Oil*, 84 U. COLO. L. REV. 581, 638–39 (2013).

⁸⁰ *See, e.g.*, U.S. Bureau of Ocean & Energy Mgmt., 2017-2022 Outer Continental Shelf Oil and Gas Leasing Draft Proposed Program at 5-20, 8-3 to 8-19 (2015), <https://perma.cc/8AU3-7MS4> (stating that (i) environmental and social cost uncertainties can affect the size, timing and location of leasing; (ii) option value can be a component of the “fair market value” of a lease; and (iii) BOEM can raise minimum bids, rents, and royalties for leases to account for option value); *see also* Inst. for Pol’y Integrity, Comments on the Draft Environmental Assessment for the Proposed September 2020 Competitive Oil and Gas Lease Sale, Docket No. DOI-BLM-UT-0000-2020-0004-EA at 14–15 (July 9, 2020) (attached) (listing additional examples,).

⁸¹ *Ctr. for Sustainable Econ.*, 779 F.3d at 610 (explaining that an agency may “act[] irrationally in failing to [consider] the informational value of delay,” and highlighting Interior’s “qualitative analysis of the benefits of delaying [offshore] leasing” as satisfying this standard); *California v. Watt*, 668 F.2d 129, 1319–20 (D.C. Cir. 1981) (remanding an offshore leasing determination because Interior failed to “properly consider[] the economic effect of delaying lease sales,” keying in on the fact that the agency “ignored the price rises in crude oil that make delay a factor increasing the value of any recovered resources”).

⁸² *Compare Oil and Gas Statistics*, BUREAU OF LAND MGMT. tbl. 2, <https://www.blm.gov/programs-energy-and-minerals-oil-and-gas-oil-and-gas-statistics>, with *id.* tbl. 6.

⁸³ *Id.*

⁸⁴ U.S. Dep’t of the Interior, Report on the Federal Oil and Gas Leasing Program Prepared in Response to Executive Order 14008 at 6–14 (Nov. 2021).

beneath the surface.”⁸⁵ In other words, buyers are considering option value—as rational economic actors do when making market decisions. Yet by moving forward with the Proposed Action, BLM fails to preserve the option to use these public lands to promote other valuable uses like recreation and conservation. Because the public derives little monetary benefit from unproductive leases,⁸⁶ yet leasing lands for fossil fuel development still deprives the public of the lands’ other beneficial uses, further study on resource potential, market conditions, and possible land-use conflicts would help elucidate whether BLM will obtain fair market value for these lands.

b. BLM Should Perform a Robust Environmental Justice Analysis

Finally, BLM’s analysis is deficient because it effectively omits a large and important category of effects. Specifically, the EA includes nearly no useful information in its environmental justice analysis. As discussed above, a full picture of the effects of the Proposed Action on the human environment are necessary to inform rational decisionmaking.⁸⁷ By excluding socioeconomic effects, BLM misses a key opportunity to contextualize the Proposed Action’s climate and other environmental costs, and risks the possibility of engaging in leasing that reduces social welfare.⁸⁸ Omitting the Proposed Action’s actual effects on environmental justice further limits the agency’s analysis and undermines BLM’s obligations under recent executive guidance and Executive Order 12,898.

Agencies have been tasked with addressing environmental justice since President Clinton’s Executive Order 12,898 in 1994,⁸⁹ and CEQ issued its own environmental justice guidance for the NEPA review process only a few years later.⁹⁰ President Biden supplemented these authorities earlier this year by issuing a presidential memorandum and multiple executive orders that aim to elevate the consideration of environmental justice in agency decisionmaking. On the first day of his term, President Biden signed Executive Order 13,985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*.⁹¹ The Order identifies how “[e]ntrenched disparities [have] denied . . . equal opportunity to individuals and communities,” including those disparities created by public policy.⁹² Accordingly, the Order

⁸⁵ Eric Lipton & Hiroko Tabuchi, *Energy Speculators Jump on Chance to Lease Public Land at Bargain Rates*, N.Y. TIMES (Nov. 27, 2018), <https://www.nytimes.com/2018/11/27/business/energy-speculators-public-land-leases.html>.

⁸⁶ The government does not receive royalties when a parcel is undeveloped, thereby depriving taxpayers of the primary source of income from onshore leasing. That leaves only lease and rental payments for the land itself, but these are frequently negligible. The Mineral Leasing Act imposes a minimum upfront bid of just \$2 per acre for onshore oil and gas leases. Additionally, a parcel that does not receive any bids can still be leased noncompetitively, whereby the first qualified applicant is entitled to lease the land upon payment of a \$435 application fee. Rental payments for nonproducing lands are also minimal: A company pays an annual rental fee of only \$1.50 per acre during the first five years of the rental term, and just \$2 per acre thereafter.

⁸⁷ See *supra* notes 38-44 and accompanying text.

⁸⁸ *Id.*

⁸⁹ Exec. Order No. 12,898 § 1-101, 59 *Fed. Reg.* 7629 (Feb. 11, 1994) (“To the greatest extent practicable and permitted by law, . . . each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations[.]”).

⁹⁰ Council on Env’t Quality, *Environmental Justice: Guidance Under the National Environmental Policy Act* (Dec. 10, 1997), https://www.epa.gov/sites/production/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf.

⁹¹ Exec. Order No. 13,985.

⁹² *Id.* § 1.

calls on the federal government to “pursue a comprehensive approach to advancing equity for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality.”⁹³ A week after signing Executive Order 13,985, President Biden issued a separate, sweeping executive order calling for widespread action to combat climate change.⁹⁴ Executive Order 14,008 reaffirms “that environmental and economic justice are key considerations” for agencies.⁹⁵

Earlier this year, the Secretary of the Interior also made calls to improve environmental justice across the Department. Secretarial Order 3399 notes how “[t]he NEPA process can support the Department’s policy...to prioritize environmental justice,”⁹⁶ and directs the Department’s bureaus and offices to “consider impacts on both the natural or physical environmental *as well as social, cultural, and economic impacts*” in their NEPA analyses.⁹⁷ The Secretarial Order also establishes a Climate Task Force at the Department of the Interior whose mission includes “identifying policies and action to address current and historical environmental injustice to address the disproportionately high and adverse human health, environmental, and climate-related and other cumulative impacts on disadvantaged communities.”⁹⁸

By ignoring these recent calls for improved attention to environmental justice, BLM is not only acting inconsistently with agency policy, but also foregoing an opportunity to explore how oil and gas leasing in Colorado contributes to inequality, including by contributing to disparate impacts of climate change.⁹⁹ Such disparate impacts of climate change that BLM should consider include economic impacts from reduced crop yields and increased food and energy prices; human health impacts due to vulnerabilities to heat stress, respiratory illness, and other diseases that will be exacerbated by climate change; and resource and infrastructure impacts related to inequalities in adaptability to sea-level rise and extreme weather events.¹⁰⁰

Although environmental justice is often thought of as problem in densely populated areas, there are a number of environment justice impacts from fossil fuel leasing in rural areas that BLM can and should address in the EA. For example, in a 2020 environmental impact statement for an oil and gas project in Wyoming, BLM acknowledged that most categories of effects analyzed elsewhere in that environmental impact statement (e.g., air quality and vegetation) could have environmental justice implications.¹⁰¹ In this same 2020 document, BLM also considers the

⁹³ *Id.* The Order defines two terms: “equity” and “underserved communities.” It defines “equity” as “the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer [] persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality.” It defines “underserved communities” as “populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life, as exemplified by the list in the preceding definition of ‘equity.’” *Id.* § 2.

⁹⁴ Exec. Order No. 14,008, 86 Fed. Reg. 7619 (Jan. 27, 2021).

⁹⁵ *Id.* §§ 219, 221(b).

⁹⁶ Sec. Order 3399 § 5.

⁹⁷ *Id.* § 5(c). Emphasis added.

⁹⁸ Sec. Order 3399 § 4.

⁹⁹ Iliana Paul, Christine Pries, & Max Sarinsky, Inst. for Pol’y Integrity, *Improving Environmental Justice Analysis* (Jan. 2021), <https://policyintegrity.org/publications/detail/improving-environmental-justice-analysis>.

¹⁰⁰ *Id.* at 6-9.

¹⁰¹ Moneta Divide FEIS, *supra* note 54, at 4-295 to 4-298 (Feb. 2020) [hereinafter “Moneta Divide FEIS”].

environmental justice impacts of the project’s socioeconomic effects, noting that the “sudden influx of oil and gas workers” during early phases of the project “has the potential to adversely affect quality-of-life factors in surrounding communities, including a potential increase in crime that could disproportionately affect tribal communities.”¹⁰² However, in the EA, BLM claims that because “no surface-disturbing activities are associated with the lease sale...direct impacts from the lease sale would not disproportionately or adversely affect environmental justice populations.”¹⁰³

In order to meet its obligations to consider and address environmental justice, BLM should conduct a robust environmental justice analysis for the Proposed Action and other alternatives. This should include gathering sufficiently granular data that takes into account the nature of potential impacts, like exposure to local air pollutants or contamination of drinking water, and disaggregating adverse and beneficial effects by groups. More details on what elements environmental justice analysis in the NEPA context could include can be found in Policy Integrity’s comments to CEQ on proposed revisions to the NEPA implementing regulations.¹⁰⁴

In conclusion, while BLM takes an important and appropriate step by monetizing greenhouse gas emissions in the EA to assess the climate impacts of the Proposed Action and other alternatives, BLM should incorporate these findings into its decisionmaking. BLM could monetize other effects that are easily monetizable and weigh the adverse impacts, including climate damages, against the beneficial effects; compare the climate damages across alternatives and justify its choice of one alternative over others; and consider the EA along with other concurrent leasing decisions as part of an assessment of cumulative impacts. BLM should also consider the option value of delaying leasing some or all parcels covered in the EA and conduct a robust environmental justice analysis, and ensure these important elements are reflected in its final determination.

Sincerely,

Iliana Paul, Senior Policy Analyst
Max Sarinsky, Senior Attorney

Attachments

¹⁰² *Id.* at ES-18 (Feb. 2020).

¹⁰³ Colorado EA, *supra* note 2, at 47.

¹⁰⁴ Inst. for Pol’y Integrity, Comments on the National Environmental Policy Act Implementing Regulations Revisions, 86 Fed. Reg. 55,757 (CEQ-2021-0002) at 43-47 (Nov. 22, 2021) (attached)

1) Inst. for Pol’y Integrity, Comments on the Draft Environmental Assessment for the Proposed September 2020 Competitive Oil and Gas Lease Sale, Docket No. DOI-BLM-UT-0000-2020-0004-EA at 14–15 (July 9, 2020)

2) Inst. for Pol’y Integrity, Comments on the National Environmental Policy Act Implementing Regulations Revisions, 86 Fed. Reg. 55,757 (Nov. 22, 2021)