

administered by BLM's Rio Puerco Field Office, in its December 2018 lease sale.

3. In this Supplemental Petition for Review, Plaintiffs now also challenge 12 additional parcels covering approximately 4,000 additional acres in two oil and gas leasing decisions—(1) BLM's November 2019 RPFO oil and gas lease sale, and (2) BLM's February 2020 RPFO and February 2020 FFO oil and gas lease sale—following BLM's denial of Plaintiffs' protests, on or about December 31, 2020.

4. The issuance of the challenged leases confers the right to expand oil and gas development in the San Juan Basin, and in particular, in and around Navajo communities. The reasonably foreseeable development of the leases—as described in the final RPFO December 2018 Environmental Assessment (“EA”), the final RPFO November 2019 EA and accompanying “supplemental analysis,” and the final RPFO February 2020 EA and final FFO February 2020 EA and accompanying “supplemental analyses”—include hydraulic fracturing (fracking)* and drilling, and will lead to the emission of air pollutants and greenhouse gases that harm human health and the environment. In conferring rights that authorize the expansion of oil and gas development, Federal Defendants failed to acknowledge or analyze the serious environmental consequences of this decision, including potentially significant impacts to air quality, human health, environmental justice, and climate.

5. In spite of the fact that oil and gas emissions are both warming the planet and threatening public health and the environment, particularly in and around Navajo communities, BLM is failing to acknowledge the full impact of its decisions to authorize and facilitate the

* Hydraulic fracturing, or fracking, as used here, refers to a combination of horizontal drilling and multi-stage hydraulic fracturing.

leasing and development of public lands for fossil fuels, including oil and gas in the San Juan Basin/Greater Chaco area.

6. In authorizing and issuing the 42 total oil and gas leases, Federal Defendants (1) failed to take a hard look at cumulative greenhouse gas (“GHG”) emissions and resulting impacts; (2) failed to take a hard look at the direct and cumulative health impacts of oil and gas leasing and development to nearby communities; (3) failed to take a hard look at environmental justice impacts; (4) failed to provide adequate opportunities for public participation; and (5) failed to provide a convincing statement of reasons to justify their decisions to forego an environmental impact statement (“EIS”).

JURISDICTION & VENUE

7. This action arises under NEPA, 42 U.S.C. §§ 4321-4370h, FLPMA, 43 U.S.C. §§ 1701-1787, and the Administrative Procedure Act (“APA”), 5 U.S.C. §§ 701-706.

8. Jurisdiction is proper in this Court pursuant to 28 U.S.C. § 1331, because the action raises a federal question. The Court has authority to issue the requested declaratory and injunctive relief pursuant to 28 U.S.C. §§ 2201, 2202, and 5 U.S.C. §§ 705, 706.

9. This action reflects an actual, present, and justiciable controversy between Citizen Groups and the Federal Defendants within the meaning of the Declaratory Judgment Act, 28 U.S.C. § 2201. Citizen Groups’ interests will be adversely affected and irreparably injured if Federal Defendants continue to violate NEPA and FLPMA as alleged herein, and if they affirmatively implement the decisions challenged herein. These injuries are concrete and particularized and fairly traceable to Federal Defendants’ challenged decisions, providing the requisite personal stake in the outcome of this controversy necessary for this Court’s jurisdiction.

10. The requested relief would redress the actual, concrete injuries to Citizen Groups caused by Federal Defendants' failure to comply with duties mandated by NEPA and its implementing regulations, and FLPMA and its implementing regulations.

11. The challenged agency actions are final and subject to judicial review pursuant to 5 U.S.C. §§ 702, 704, & 706.

12. Citizen Groups have exhausted any and all available and requested administrative remedies.

13. Venue in this Court is proper pursuant to 28 U.S.C. § 1391(e). This case involves public lands and environmental interests located in New Mexico. A substantial part of the events or omissions giving rise to the claims, as well as the underlying decision-making and guidance with respect to BLM's Oil and Gas Leasing Program, as disseminated to the agency's field offices, have occurred in this district due to decisions made here by Federal Defendants.

PARTIES

14. Plaintiff DINÉ CITIZENS AGAINST RUINING OUR ENVIRONMENT (Diné C.A.R.E.) is an all-Navajo organization comprised of grassroots community members active on Navajo Nation lands in and around the Four Corners region of Arizona, New Mexico, Colorado, and Utah. Diné C.A.R.E. advocates for our traditional teachings by protecting and providing a voice for all life within and beyond the Four Sacred Mountains. We promote regenerative and sustainable uses of natural resources consistent with the Diné philosophy of life. We empower local and traditional people to organize and determine their own destinies, in ways that protect the health of their communities, their long-held subsistence practices and way of life. Diné C.A.R.E. members live and subsist in the areas and landscapes that are directly harmed by oil

and gas leasing and development authorized by Defendants. Moreover, Diné C.A.R.E. continues to engage in traditional cultural and spiritual practices on these holy lands, which include cultural resources. Diné teachings indicate that our people first emerged into the Fourth World in the eastern region of Dinétah where many of these lease sales are located. Diné C.A.R.E. brings this action on its own behalf and on behalf of its adversely affected members.

15. Plaintiff SAN JUAN CITIZENS ALLIANCE is a grassroots organization dedicated to social, economic, and environmental justice in the San Juan Basin with approximately 1,000 members. San Juan Citizens Alliance organizes San Juan Basin residents to protect our water and air, our public lands, our rural character, and our unique quality of life while embracing the diversity of our region's people, economy, and ecology. With longstanding efforts to address the impacts of oil and gas development to these interests, San Juan Citizens Alliance is deeply concerned that impacts from the continued sale and development of our public lands for oil and gas leasing will irreparably harm these landscapes and communities. San Juan Citizens Alliance members use and plan to continue to use lands affected by the challenged actions. San Juan Citizens Alliance brings this action on its own behalf and on behalf of its adversely affected members.

16. Plaintiff WILDEARTH GUARDIANS is a non-profit membership organization based in Santa Fe, New Mexico, with offices throughout the West. Guardians has more than 278,923 members and activists, some of whom live, work, or recreate on public lands on and near the leases challenged herein. Guardians and its members are dedicated to protecting and restoring the wildlife, wild places, wild rivers, and health of the American West. Towards this

end, Guardians and its members work to replace fossil fuels with clean, renewable energy in order to safeguard public health, the environment, and the Earth's climate.

17. Plaintiff SIERRA CLUB was founded in 1892 and is the nation's oldest grassroots environmental organization, with over 779,000 members nationwide, and 9,040 members in New Mexico. Sierra Club is dedicated to the protection and preservation of the environment. The Sierra Club's mission is to explore, enjoy and protect the wild places of the earth; to practice and promote the responsible use of the earth's ecosystems and resources; and to educate and enlist humanity to protect and restore the quality of the natural and human environments. The Sierra Club has a New Mexico chapter, known as the Rio Grande chapter. The Northern New Mexico Group of the Rio Grande chapter, centered at Santa Fe, presently has approximately 3,225 members. Sierra Club has members that use the Greater Chaco area for recreation such as hiking, climbing, backpacking, camping, fishing and wildlife viewing, as well as for business, scientific, spiritual, aesthetic, and environmental purposes, including areas affected by oil and gas development under these lease sales.

18. The Citizen Groups' members and supporters use and enjoy, and intend to continue to use and enjoy, lands affected by the challenged leasing authorizations. Citizens Groups' members and supporters also use and enjoy, and intend to continue to use and enjoy, lands that are around or within view of lands affected by the challenged leasing authorizations, as well as federal public lands affected by subsequent lease development. Citizen Groups' members and supporters use, and intend to continue to use, these lands to enjoy cultural resources, wildlands, wildlife habitat, rivers, streams, and healthy environments frequently and on an ongoing basis long into the future, including in 2020, 2021, and in subsequent years. The

affected lands within or near the lease sale parcels include very popular and iconic landscapes, including, but certainly not limited to, Chaco Culture National Historical Park and the Greater Chaco Landscape.[†]

19. Citizen Groups’ members’ enjoyment of public lands in and adjacent to the leases challenged herein will be adversely affected and diminished, and irreparably injured, as a result of BLM’s leasing actions. Citizen Groups’ members have not only recreated on public lands that include the lease sale parcels that are the subject of this lawsuit, but also, they enjoy public lands adjacent to these parcels. The reasonably foreseeable development of these lease parcels will industrialize these treasured landscapes; produce visible air pollution that is offensive and harmful to human health, especially for children and those in the lease area already facing multiple environmental and social stressors; add to the cumulative harmful effects of greenhouse gas emissions; and lead to connected development that will further adversely impact nearby public lands and harm the health, aesthetic and recreational interests, cultural practices, and spiritual well-being of the people and communities who visit, use, and depend on these lands and call them home.

20. These are actual, concrete and particularized injuries caused by Federal Defendants’ failure to comply with mandatory duties under NEPA and FLPMA.

21. Citizen Groups and their members have a procedural interest in Federal Defendants’ full compliance with planning and decision-making processes under NEPA and FLPMA for the RPFO December 6, 2018, RPFO November 7, 2019, and RPFO and FFO

[†] Citizen Groups use the term “Greater Chaco Landscape” to denote the area encompassing all of the known material manifestations of the “Chaco Phenomenon” including Chaco Culture National Historical Park, Chacoan Outliers, Chaco Cultural Archaeological Protection Sites, and the prehistoric Great North Road.

February 6, 2020 oil and gas lease sales, and Federal Defendants' attendant duty to substantiate their decisions in the record for the lease sales.

22. The aesthetic, recreational, scientific, educational, religious, and procedural interests of Citizens Groups and their members have been adversely affected and irreparably injured by the process that led to the Federal Defendants' decisions to authorize the 42 lease parcels, and will be adversely affected and irreparably injured by Federal Defendants' authorizations of irresponsible development on the leases. These are actual, concrete injuries caused by Federal Defendants' failure to comply with mandatory duties under NEPA. The relief sought would redress the injuries.

23. Federal Defendant UNITED STATES BUREAU OF LAND MANAGEMENT is an agency within the United States Department of the Interior and is responsible for managing public lands and resources in New Mexico, including federal onshore oil and gas resources and the leasing program for those resources. In this managerial capacity, BLM is responsible for implementing and complying with federal law, including the federal laws implicated by this action.

24. Federal Defendant DAVID BERNHARDT is sued in his official capacity as the Secretary of the United States Department of the Interior and is responsible for managing the public lands and resources in New Mexico and, in that official capacity, is responsible for implementing and complying with federal law, including the federal laws implicated by this action.

25. Federal Defendant WILLIAM PERRY PENDLEY is sued in his official capacity as Acting Director of the Bureau of Land Management, exercising authority of the director. He is

responsible for managing the public lands, resources, and public mineral estate of the United States, including lands and resources in New Mexico and the Greater Chaco area. In his official capacity, Acting Director Pendley is responsible for implementing and complying with federal law, including the federal laws implicated by this action.

26. Federal Defendant TIM SPISAK is sued in his official capacity as State Director for the Bureau of Land Management in New Mexico. He is responsible for managing public lands under BLM authority, including lands and resources in New Mexico subject to the decision at issue herein, in accordance with NEPA and other federal law.

LEGAL BACKGROUND

I. National Environmental Policy Act (NEPA)

27. NEPA is our “basic national charter for the protection of the environment.” 40 C.F.R. § 1500.1. Through NEPA, Congress recognized that “each person should enjoy a healthful environment”—and that the federal government must by all practicable means “assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings,” and “attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences,” among other policies. 42 U.S.C. § 4331(b).

28. NEPA regulations explain, in 40 C.F.R. §1500.1(c), that:

Ultimately, of course, it is not better documents but better decisions that count. NEPA’s purpose is not to generate paperwork – even excellent paperwork – but to foster excellent action. The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment.

29. “Agencies shall integrate the NEPA process with other planning at the earliest possible time to insure that planning and decisions reflect environmental values, to avoid delays later in the process, and to head off potential conflicts.” 40 C.F.R. § 1501.2.

30. NEPA achieves its purpose through “action forcing procedures. . . require[ing] that agencies take a *hard look* at environmental consequences.” *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989) (citations omitted) (emphasis added).

31. Federal agencies must comply with NEPA before there are “any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.” 42 U.S.C. § 4332(2)(C)(v); *see also* 40 C.F.R. §§ 1501.2, 1502.5(a). For oil and gas, “the leasing stage is the point of no return with respect to GHG emissions.” *WildEarth Guardians v. Zinke*, 368 F. Supp. 3d 41, 66 (D.D.C. 2019). Thus, BLM is required to fully analyze the reasonably foreseeable impacts of GHG emissions at the leasing stage. *Id.*

32. To accomplish these purposes, NEPA requires that all federal agencies prepare a “detailed statement” regarding all “major federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(C). This statement, known as an EIS, must, among other things, rigorously explore and objectively evaluate all reasonable alternatives, analyze all direct, indirect, and cumulative environmental effects, and include a discussion of the means to mitigate adverse environmental impacts. 40 C.F.R. §§ 1502.14 and 1502.16.

33. Direct effects include those that “are caused by the action and occur at the same time and place.” 40 C.F.R. § 1508.8(a). Indirect effects include effects that “are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.” 40 C.F.R. § 1508.8(b). Cumulative effects are “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 (Federal or non-Federal) or person undertakes such other actions.” 40 C.F.R. § 1508.7. “Effects” are synonymous with “impacts.” 40 C.F.R. § 1508.8.

34. An agency may also prepare an Environmental Assessment (“EA”) to determine whether an EIS is necessary. 40 C.F.R. §§ 1501.3, 1508.9. An EA must include a discussion of alternatives and the environmental impacts of the action. 40 C.F.R. § 1508.9.

35. If an agency decides not to prepare an EIS, an EA must “provide sufficient evidence” to support a Finding of No Significant Impact (“FONSI”). 40 C.F.R. § 1508.9(a)(1). Such evidence must demonstrate that the action “will not have a significant effect on the human environment[.]” 40 C.F.R. § 1508.13. An assessment of whether or not an impact is “significant” is based on a consideration of the “context and intensity” of the impact. 40 C.F.R. § 1508.27.

36. “Context” refers to the scope of the proposed action, including the interests affected. 40 C.F.R. § 1508.27(a). “Intensity” refers to the severity of the impact and must be evaluated with a host of factors in mind, including but not limited to, “[t]he degree to which the proposed action affects *public health or safety*[.]” (emphasis added), “[t]he degree to which the action may adversely affect. . . significant scientific, cultural, or historical resources[.]” “[t]he degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration[.]” “[w]hether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment [.]” and “[w]hether the action is related to other actions with individually insignificant but cumulatively significant impacts[.]” 40 C.F.R. § 1508.27(b). Further,

“Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.” 40 C.F.R. § 1508.27(b)(7).

37. NEPA requires BLM to consider “any adverse environmental effects which cannot be avoided.” 42 U.S.C. § 4332(2)(C)(ii).

38. These effects include “ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative” effects. 40 C.F.R. § 1508.8.

39. If an agency does find that its major action significantly affects the human environment, NEPA requires the agency to prepare an EIS. *See* 42 U.S.C. § 4332 (C).

40. Fundamental to NEPA is its *public participation* function: it “guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision.” *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989).

41. NEPA and its implementing regulations include express public participation requirements. Federal agencies “shall to the fullest extent possible encourage and facilitate public involvement in decisions which affect the quality of the human environment.” 40 C.F.R. § 1500.2 (d). NEPA’s implementing regulations describe public participation requirements in additional detail at 40 C.F.R. § 1506.6, beginning with the mandate that “agencies shall make diligent efforts to involve the public in preparing and implementing their NEPA procedures” and “solicit appropriate information from the public.” 40 C.F.R. § 1506.6 (a) and (d).

A. Executive Order 12898 and the CEQ Guidance on Environmental Justice in the NEPA Process.

42. Executive Order 12898 (“EO 12898”) requires that 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” to the greatest extent practicable.

43. Environmental justice, in turn, is defined by the U.S. Environmental Protection Agency (EPA) as “the fair treatment and *meaningful involvement* of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.” (emphasis added). According to the EPA, environmental justice “will be achieved” when “everyone enjoys” two things: 1) “the same degree of protection from environmental and health hazards,” and 2) “equal access to the decision-making process to have a healthy environment in which to live, learn, and work.”

44. Environmental Justice is a “relevant factor” at which federal agencies must take a hard look under NEPA. The CEQ has developed guidance specifically addressing environmental justice in the NEPA process, which states that “[e]nvironmental justice issues may arise at any step of the NEPA process and agencies should consider these issues at each and every step of the process, as appropriate.”

45. The CEQ Guidance further states that environmental justice considerations (“agency consideration of impacts on low income populations, minority populations, or Indian tribes”) can illuminate disproportionately high and adverse effects that are “significant” under NEPA, according to the factors in 40 C.F.R. § 1508.27(b), but that would otherwise be overlooked.

46. The CEQ Guidance also explicitly directs agencies to ensure *meaningful* community involvement in the NEPA process, stating that “[a]gencies should be aware of the diverse constituencies within any particular community when they seek community representation and should endeavor to have complete representation of the community as a whole. Agencies also should be aware that *community participation must occur as early as possible if it is to be meaningful.*” (emphasis added).

II. Federal Land Policy and Management Act (FLPMA)

47. The Federal Land Policy and Management Act (“FLPMA”), 43 U.S.C. §§ 1701–1787, directs that “the public lands be managed in a manner that will protect the quality of [critical resource] values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use.” 43 U.S.C. § 1701(a)(8). This substantive mandate requires that BLM not elevate the development of oil and gas resources above other critical resource values in the planning area. To the contrary, FLPMA requires that where oil and gas development would threaten the quality of critical resources, conservation of these resources should be the preeminent goal.

48. To accomplish the above goals, FLPMA explicitly requires adequate opportunities for public participation in the federal land use planning process. It states, “The Secretary *shall, with public involvement* and consistent with the terms and conditions of this Act, develop, maintain, and, when appropriate, revise land use plans which provide by tracts or areas for the use of the public lands.” 43 U.S.C. § 1712 (a) (emphasis added). It further states, “The Secretary shall allow an opportunity for public involvement and by regulation shall establish

procedures, including public hearing where appropriate, to give Federal, State, and local governments and the public, adequate notice and opportunity to comment upon and participate in the formulation of plans and programs relating to the management of public lands.” 43 U.S.C. § 1712 (f).

III. Legal Framework for Federal Oil and Gas Lease Authorizations

A. Mineral Leasing Act

49. Under the Mineral Leasing Act (“MLA”), as amended, the Secretary of the Interior is responsible for managing and overseeing mineral development on public lands, not only to ensure safe and fair development of the mineral resource, but also to “safeguard[]...the public welfare.” 30 U.S.C. § 187.

50. The Secretary has certain discretion, constrained by the laws at issue in this case, to determine where, when, and under what terms and conditions mineral development should occur. 43 C.F.R. § 3101.1-2.

51. The MLA regulations provide: “Each proper BLM State office shall hold sales at least quarterly if lands are available for competitive leasing” and “[l]ease sales shall be conducted by a competitive oral bidding process.” 43 C.F.R. § 3120.1-2.

52. Not all of the parcels offered for sale in any given BLM lease sale are awarded through competitive bidding. Parcels offered but not sold at auction are made available for private sale for two years after the competitive lease sale. 30 U.S.C. § 226(b)(1)(A).

53. BLM’s MLA regulations also state that “[t]he authorized officer may suspend the offering of a specific parcel while considering a protest or appeal against its inclusion in a Notice of Competitive Lease Sale.” 43 C.F.R. § 3120.1-3.

B. BLM's Oil and Gas Planning and Management

54. BLM manages onshore oil and gas development through a three-phase process. Each phase is distinct, serves distinct purposes, and is subject to distinct rules, policies, and procedures.

55. In the first phase, BLM prepares a Resource Management Plan ("RMP") in accordance with 43 C.F.R. §§ 1600 *et seq.*, along with additional guidance found in BLM's Land Use Planning Handbook (H-1601-1) (hereafter, "BLM Handbook"). An RMP projects present and future use of public lands and their resources by establishing management priorities, as well as guiding and constraining BLM's implementation-stage management. With respect to fluid minerals leasing decisions, the RMP determines which lands containing federal minerals will be open to leasing and under what conditions. BLM's determinations are to be based on a hard look analysis of the direct, indirect, and cumulative impacts to the human environment of predicted implementation-stage development in the RMP's corresponding EIS.

56. Along with the RMP, BLM generally develops a reasonably foreseeable development scenario ("RFDS") outlining the projected pace and scope of oil and gas development within the RMP planning area. An RFDS does not include any analysis of environmental impacts and is not a NEPA document.

57. In the second phase, oil and gas companies typically nominate leaseholds for sale through the submission of an "Expression of Interest." *See* 43 C.F.R. § 3120.1-1 (providing that "lands included in any expression of interest...shall be offered for competitive bidding"). BLM then assesses whether these lands are available, identifies the boundaries for lands to be offered for lease, and proceeds to offer up those lands through a lease sale. Leases are sold in accordance

with 43 C.F.R. §§ 3120 *et seq.*, and agency guidance, including BLM Instruction Memorandum (“IM”) 2010-117, which applies to all oil and gas leases issued between May 17, 2011 and January 29, 2018, and BLM IM No. 2018-034, which applies to all oil and gas leases issued between January 30, 2018 and the current day. The BLM state office generally oversees the lease sale, while the BLM field office where the specific lease parcels are located conducts NEPA review, solicits public comment, and applies appropriate site-specific leasing stipulations.

58. BLM regulations allow for the public to protest the sale of specific parcels. 43 C.F.R. § 3120.1-3. Although BLM may proceed with a lease sale after a protest has been filed, BLM must resolve any and all protests received prior to issuing a lease parcel to a successful bidder. BLM Competitive Leases Handbook H-3120-1, Section II.G. (“Every effort must be made to decide the protest prior to the sale.”); IM 2018-034 (“State offices should attempt to resolve protests in a signed decision before the sale of the protested parcels.”).

59. NEPA regulations mandate that agencies “shall to the fullest extent possible . . . [e]ncourage and facilitate public involvement in the decisions which affect the quality of the human environment.” 40 C.F.R. § 1500.2 (d). Agencies, including BLM, are required to involve the public in preparing EAs “to the extent practicable.” 40 C.F.R. §1501.4(b). BLM regulations also require public participation during oil and gas lease sales. *See* 40 C.F.R. § 3120.1-3 (requiring a protest period), § 3120.4-1 (requiring notice of a competitive lease sale).

60. Prior to the point BLM sells a lease, BLM may refuse to lease public lands, even if public lands were made available for leasing pursuant to the RMP. BLM also has the authority to subject leases to terms and conditions, which can serve as “stipulations” to protect the environment. 43 C.F.R. § 3101.1-3. Once BLM issues leases, it may only impose conditions of

approval (“COAs”) that are delimited by the terms and conditions of the lease. *Id.* § 3101.1-2. A lease stipulation is therefore legally and functionally different than a COA, as those terms are used by BLM.

61. Once the lease is sold, the lease purchaser has the right to use as much of the leased land as is necessary to explore and drill oil and gas within the lease boundaries, subject to stipulations attached to the lease. 43 C.F.R. § 3101.1-2

62. The Secretary of the Interior has the authority to cancel leases that have been “improperly issued.” 43 C.F.R. § 3108.3(d). A lease may be canceled where BLM has not complied with NEPA prior to lease issuance.

63. The third phase occurs once BLM issues a lease. In order to develop the minerals, the lessee is required to submit an application for permit to drill (“APD”) to BLM prior to drilling. 43 C.F.R. § 3162.3-1(c). At this stage, BLM may condition the approval of the APD on the lessees’ adoption of “reasonable measures” whose scope is delimited by the lease and the lessees’ surface use rights. 43 C.F.R. § 3101.1-2.

64. Oil and gas operations must be conducted in accordance with BLM regulations at 43 C.F.R. §§ 3160 *et seq.*

IV. Administrative Procedure Act

65. The APA provides a right to judicial review for any “person suffering legal wrong because of agency action.” 5 U.S.C. § 702. Actions that are reviewable under the APA include final agency actions “for which there is no other adequate remedy in a court.” 5 U.S.C. § 704.

66. Under the APA, a reviewing court shall “hold unlawful and set aside agency action . . . found to be arbitrary, capricious, an abuse of discretion, or otherwise not in

accordance with law.” 5 U.S.C. § 706(2)(A). A court must also compel agency action unlawfully withheld or unreasonably delayed. 5 U.S.C. § 706(1).

FACTUAL BACKGROUND

I. BLM’s Competitive Oil and Gas Lease Sales

A. BLM’s December 6, 2018 Competitive Oil and Gas Lease Sale

67. On or about July 10, 2018, BLM released a list and map of 30 nominated parcels for inclusion in the December 2018 competitive oil and gas lease sale. BLM then initiated a 3- week public scoping period.

68. On July 20, 2018, Citizen Groups submitted scoping comments and associated exhibits to BLM that outlined many concerns with the agency’s oil and gas leasing process, as well as specific resource concerns requiring site-specific analysis and consideration prior to lease authorization.

69. On October 19, 2018, Citizen Groups submitted a supplemental information letter, pursuant to 40 C.F.R § 1502.9(c)(1)(ii), raising additional concerns regarding the validity of the December 2018 lease sale in light of a recent Memorandum Decision and Preliminary Injunction concerning BLM Instruction Memorandum 2018-034 (“IM 2018-034”), *Western Watersheds Project v. Zinke*, 2018 WL 4550396, Case No. 1:18-cv-00187-REB (Doc. 74), (D. Idaho Sept. 21, 2018) (Decision reaffirmed on the merits in *Western Watersheds Project v. Zinke*, 2020 WL 959242, Case No. 1:18-cv-00187-REB) (Doc. 174), (D. Idaho Feb. 27, 2020)). In that decision, the court concluded that BLM, through IM 2018-034’s new procedures, unlawfully eliminated required minimum levels of public involvement in mineral leasing decisions.

70. BLM offered no additional information about the proposed lease sales and provided no other opportunity for public participation until it released a final RPFO EA and unsigned FONSI on October 22, 2018. Neither Citizen Groups nor any other members of the public had the opportunity to review and comment on a Draft EA.

71. BLM provided a protest period of 10 business days for the final EA and unsigned FONSI, which included a “proposed action” to lease all 30 parcels covering approximately 40,802.37 acres under standard lease terms and conditions.

72. On October 31, 2018, Citizen Groups timely submitted a protest of all parcels in the December 2018 RPFO lease sale. This protest reiterated many of the concerns raised in scoping comments, and offered detailed technical information, expert reports, and legal analysis.

73. On December 6, 2018, BLM held a competitive oil and gas lease sale for 30 parcels on public lands administered by the RPFO, totaling 40,802.37 acres of BLM-administered federal mineral estate. All 30 parcels were sold.

74. On April 8, 2019, WildEarth Guardians submitted supplemental comments and exhibits via email in light of the decision in *WildEarth Guardians v. Zinke*, 368 F. Supp. 3d 41 (D.D.C. 2019), and two climate studies released after completion of BLM’s protest period, but before BLM’s final decision. In *WildEarth Guardians v. Zinke*, the D.C. District Court invalidated BLM’s approval of 282 leases in Wyoming because the agency had failed to take a hard look at greenhouse gas emissions, including failing to reasonably quantify direct greenhouse gas emissions from the parcels as a whole, failing to quantify indirect greenhouse gas emissions, and failing to quantify and compare cumulative greenhouse gas emissions from

the lease sales at a regional and national scale. *Id.* at 71, 75–77. The two climate reports discussed and included as exhibits by Guardians were the Fourth National Climate Assessment, Volume IV, which describes in detail the human welfare, societal, and environmental elements of climate change and variability for the ten regions of the U.S. (report released November 2018), and the U.S. Geological Survey’s assessment of direct and indirect greenhouse gas emissions produced from extraction and combustion of federal lands and minerals between 2005 and 2014 (report released November 2018).

75. On or about October 30, 2019, BLM denied Citizen Groups’ protest of the December 2018 lease sale.

76. On October 30, 2019, BLM issued the December 2018 leases, with an effective date of November 1, 2019.

77. On or about October 30, 2019, BLM issued an EA and FONSI and Decision Record approving the December 2018 lease sale.[‡] The same day, BLM issued an EA Addendum entitled “Addendum to the Rio Puerco Field Office December 2018 Competitive Oil and Gas Lease Sale Environmental Assessment,” DOI-BLM-NM-0000-2018-0042-EA (“RPFO December 2018 EA Addendum”). BLM referred to the Addendum in its October 30, 2019 denial of Citizen Groups’ protest. The Addendum “contains information and analysis that supplements, replaces, or corrects analyses in the Rio Puerco Field Office December 2018 Competitive Oil and Gas Lease Sale Environmental Assessment.” The Addendum includes a supplemental “cumulative impacts scenario” and updated analyses of greenhouse

[‡] The FONSI and Decision Record are dated October 30, 2019. The EA, FONSI, and Decision Record were posted to ePlanning November 1, 2019.

gas emissions, air quality, groundwater quality and quantity, night skies, impacts on environmental justice populations, paleontological resources, and threatened/endangered species and BLM sensitive wildlife species. The Addendum also includes discussion of four issues “not directly addressed” in the previously published EA: induced seismicity, social cost of carbon, public health and safety impacts, and socioeconomic impacts. BLM did not provide an opportunity for public comment on the EA Addendum.

78. On August 31, 2020, BLM posted on ePlanning a report of leases issued for the December 2018 lease sales, showing that the leases were issued on October 30, 2019 with an effective date of November 1, 2019.

B. BLM’s November 7, 2019 Competitive Oil and Gas Lease Sale

79. On or about May 28, 2019 BLM released a list and map of 4 nominated parcels for inclusion in the November 2019 competitive oil and gas lease sale.

80. BLM then provided a public scoping period of 10 business days, from May 28, 2019 to June 10, 2019.

81. On June 10, 2019, Citizen Groups submitted scoping comments and associated exhibits to BLM that outlined many concerns with the agency’s oil and gas leasing process, as well as specific resource concerns requiring site-specific analysis and consideration prior to lease authorization.

82. On July 15, 2019, BLM released a draft EA and FONSI and provided a public comment period of 10 business days, from July 15, 2019 to July 26, 2019.

83. On July 26, 2019, Citizen Groups submitted comments and associated exhibits on the draft EA and unsigned FONSI.

84. On September 9, 2019, BLM released a final EA and FONSI, which included a “proposed action” to lease all 4 parcels covering 2,838.34 acres under standard lease terms and conditions.

85. From September 9, 2019 to September 20, 2019, BLM provided a public protest period of 10 business days for the EA and unsigned FONSI.

86. On September 20, 2019, Citizen Groups timely submitted a protest of all parcels in the November 2019 RPFO lease sale. This protest reiterated many of the concerns raised in scoping and Draft EA comments, and offered detailed technical information, expert reports, and legal analysis.

87. On November 7, 2019, BLM held a competitive oil and gas lease sale for 4 parcels on public lands administered by the RPFO, totaling 2,838.34 acres of BLM-administered federal mineral estate. All 4 parcels were sold.

88. On or about December 30, 2020, BLM issued an EA and FONSI and Decision Record approving the November 7, 2019 lease sale, and issued the leases. The same day, BLM issued a “supplemental analysis” entitled “Rio Puerco Field Office November 2019 Oil and Gas Lease Sale Supplemental Analysis,” DOI-BLM-NM-A010-2019-0041-EA (“November 2019 Supplemental Analysis”).

89. According to BLM, the November 2019 Supplemental Analysis “provides information, data, and/or analyses that are 1) new since publication of the EA for the lease sale protest period (September 9, 2019) and since work was completed on the Final EA...” BLM states that the “analysis in this document completely replaces the analysis of the same issues in the Final EA.” The two “issues analyzed in detail” for which the analyses “completely replace

the analyses in Final EA Sections 3.5.1 and 3.5.2” are “Air Quality” and “Greenhouse Gases and Climate Change,” respectively. BLM has not provided an opportunity for public comment on the November 2019 Supplemental Analysis.

90. On December 31, 2020 BLM denied Citizen Groups’ protest of the November 2019 RPFO lease sale.

C. BLM’s February 6, 2020 Competitive Oil and Gas Lease Sales

91. On or about August 26, 2019, BLM released a list and map of 7 nominated parcels for inclusion in the Rio Puerco Field Office (“RPFO”) February 2020 competitive oil and gas lease sale, and a list and map of one nominated parcel for inclusion in the Farmington Field Office (“FFO”) February 2020 competitive oil and gas lease sale.

92. BLM then provided a public scoping period of 10 business days, from August 26, 2019 to September 9, 2019.

93. On September 6, 2019, Citizen Groups submitted scoping comments and associated exhibits to BLM that outlined many concerns with the agency’s oil and gas leasing process, as well as specific resource concerns requiring site-specific analysis and consideration prior to lease authorization.

94. On October 15, 2019, BLM released draft EAs and unsigned FONSIIs for the RPFO and FFO February 2020 lease sales, and provided a public comment period of 10 business days, from October 15, 2019 to October 28, 2019.

95. On October 28, 2019, Citizen Groups submitted comments and associated exhibits on the draft EAs and unsigned FONSIIs.

96. On December 9, 2019, BLM released final EAs and FONSIIs for the RPFO and

FFO February 2020 lease sales, which included a “proposed action” to lease all 7 RPFO parcels, and a “proposed action” to lease 1 FFO parcel, together covering 1,330.08 acres, under standard lease terms and conditions.

97. On December 18, 2019, Citizen Groups timely submitted a protest of all parcels in the February 2020 RPFO and FFO lease sales. This protest reiterated many of the concerns raised in scoping and Draft EA comments, and offered detailed technical information, expert reports, and legal analysis.

98. On February 6, 2020, BLM held a competitive oil and gas lease sale for 7 parcels on public lands administered by the RPFO and 1 parcel on public lands administered by the FFO, totaling 1,330.08 acres of BLM-administered federal mineral estate. All 8 parcels were sold.

99. On or about December 30, 2020, BLM issued EAs and FONSI and Decision Records approving the February 6, 2020 lease sales, and issuing the leases. The same day, BLM issued supplemental analyses entitled “Rio Puerco Field Office February 2020 Oil and Gas Lease Sale Supplemental Analysis,” DOI-BLM-NM-A010-2019-0084-EA, and “Farmington Field Office February Oil and Gas Lease Sale Supplemental Analysis,” DOI-BLM-NM-F010-2019-0103-EA. (Together, “February 2020 Supplemental Analyses”).

100. According to BLM, each February 2020 Supplemental Analysis “provides information, data, and/or analyses that are 1) new since publication of the EA for the lease sale protest period (September 9, 2019) [sic] and since work was completed on the Final EA...” BLM states that the “analysis in this document completely replaces the analysis of the same issues in the Final EA.” The two “issues analyzed in detail” for which the analyses “completely

replace the analyses in Final EA Sections 3.5.1 and 3.5.2” are “Air Quality” and “Greenhouse Gases and Climate Change,” respectively. BLM has not provided an opportunity for public comment on the February 2020 Supplemental Analyses.

101. On December 31, 2020, BLM denied Citizen Groups’ protest of the February 2020 RPFO and FFO lease sales.

II. Cumulative Greenhouse Gas Emissions and Climate Change Impacts

A. The Climate Crisis

102. The scientific consensus is clear: as a result of greenhouse gas (“GHG”) emissions, our climate is rapidly destabilizing with potentially catastrophic results, including rising seas, more extreme heatwaves, increased drought and flooding, larger and more devastating wildfires and hurricanes, and other destructive changes. It is now conclusively established that GHG emissions from the production and combustion of fossil fuels are the predominant drivers of climate change.

103. Carbon dioxide (“CO₂”) is the leading cause of climate change and the largest source of GHG emissions in the United States. According to a 2017 EPA report, *Inventory of U.S. Greenhouse Gas Emissions and Sinks, 1990-2015*, carbon dioxide comprised 82.2 percent of total U.S. GHG emissions, or 5,411.4 million metric tons, in 2015. EPA’s data indicates that fossil fuel combustion accounted for 93.3 percent of CO₂ emissions within the U.S. in 2015.

104. Methane (CH₄) is an extremely potent GHG, with a global warming potential 87 times that of CO₂ over a 20-year period. Over a 100-year period, methane has a climate impact 28 to 36 times greater than that of CO₂ on a ton-for-ton basis. Large amounts of methane are

released during the extraction, processing, transportation, and delivery of oil and gas, with significant climate impacts.

105. The Intergovernmental Panel on Climate Change (“IPCC”) is a Nobel Prize-winning scientific body within the United Nations that reviews and assesses the most recent scientific, technical, and socio-economic information relevant to our understanding of climate change. In its 2014 assessment report on climate change, the IPCC provided a summary of our understanding of human-caused climate change:

- Human influence on the climate system is clear, and recent anthropogenic emissions of [GHGs] gases are the highest in history. Recent climate changes have had widespread impacts on human and natural systems.
- Warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, and sea level has risen.
- Anthropogenic [GHGs] emissions have increased since the pre-industrial era, driven largely by economic and population growth, and are now higher than ever. This has led to atmospheric concentrations of carbon dioxide, methane, and nitrous oxide that are unprecedented in at least the last 800,000 years. Their effects, together with those of other anthropogenic drivers, have been detected throughout the climate system and are extremely likely to have been the dominant cause of the observed warming since the mid-20th century.
- In recent decades, changes in climate have caused impacts on natural and human systems on all continents and across the oceans. Impacts are due to observed climate change, irrespective of its cause, indicating the sensitivity of natural and human systems to changing climate.
- Continued emission of [GHGs] will cause further warming and long-lasting changes in all components of the climate system, increasing the likelihood of severe, pervasive, and irreversible impacts for people and ecosystems. Limiting climate change would require substantial and sustained reductions in [GHG] emissions which, together with adaptation, can limit climate change risks.

- Surface temperature is projected to rise over the 21st century under all assessed emission scenarios. It is very likely that heat waves will occur more often and last longer, and that extreme precipitation events will become more intense and frequent in many regions. The ocean will continue to warm and acidify, and global mean sea level will continue to rise.

106. The western United States, and New Mexico especially, is particularly susceptible to the effects of climate change. The West is also experiencing increasing temperatures and prolonged droughts, with widespread impacts across our forests, wildlife, and human communities that threaten resilience in the face of continued warming. Local economies, which rely on consistent precipitation and snowfall for surface and groundwater recharge, agriculture, recreation, and other uses, have also seen significant impacts.

107. According to the Third and Fourth National Climate Assessments, increased warming, drought, and insect outbreaks, all caused by or linked to climate change, have exacerbated wildfires and impacts to people and ecosystems in the Southwest.

108. Future projections for the West are even more alarming, particularly in the Southwest, where climate change threatens to lead “to aridification (a potentially permanent change to a drier environment) . . . through increased evapotranspiration, lower soil moisture, reduced snow cover, earlier and slower snowmelt, and changes in the timing and efficiency of snowmelt and runoff.” Climate change-related drought has already had massive impacts on food production and the agricultural economy of rural areas in the Southwest, and poses a long-term threat to food security in the region.

109. The IPCC recently issued a special report in October 2018 that examined, in more depth, the impacts of global warming of 1.5°C above pre-industrial levels as compared to 2.0°C. The IPCC’s findings included:

- Climate models project robust differences in regional climate characteristics between present-day and global warming of 1.5°C, and between 1.5°C and 2°C. These differences include increases in: mean temperature in most land and ocean regions (high confidence), hot extremes in most inhabited regions (high confidence), heavy precipitation in several regions (medium confidence), and the probability of drought and precipitation deficits in some regions (medium confidence).
- By 2100, global mean sea level rise is projected to be around 0.1 meter lower with global warming of 1.5°C compared to 2°C (medium confidence).
- On land, impacts on biodiversity and ecosystems, including species loss and extinction, are projected to be lower at 1.5°C of global warming compared to 2°C. Of 105,000 species studied, 6% of insects, 8% of plants and 4% of vertebrates are projected to lose over half of their climatically determined geographic range for global warming of 1.5°C, compared with 18% of insects, 16% of plants, and 8% of vertebrates for global warming of 2°C (medium confidence).
- For oceans, coral reefs are projected to decline by a further 70-90% at 1.5°C (high confidence) with larger losses (> 99%) at 2°C (high confidence).
- Climate-related risks to health, livelihoods, food security, water supply, human security, and economic growth are projected to increase with global warming of 1.5°C and increase further with 2°C. Limiting warming to 1.5°C could reduce the number of people both exposed to climate-related risks and susceptible to poverty by up to several hundred million by 2050 (medium confidence).
- Pathways limiting global warming to 1.5°C with no or limited overshoot would require rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and buildings), and industrial systems (high confidence). These systems transitions are unprecedented in terms of scale, but not necessarily in terms of speed, and imply deep emissions reductions in all sectors, a wide portfolio of mitigation options, and a significant upscaling of investments in those options (medium confidence).
- Estimates of the global emissions outcome of current nationally stated mitigation ambitions as submitted under the Paris Agreement would lead to global [GHG] gas emissions in 2030 of 52-58 Gt CO₂eq yr⁻¹ (medium confidence). Pathways reflecting these ambitions would not limit global warming to 1.5°C, even if supplemented by very challenging increases in the scale and ambition of emissions reductions after 2030 (high confidence). Avoiding overshoot and reliance on future large-scale deployment of carbon dioxide removal (CDR) can

only be achieved if global CO₂ emissions start to decline well before 2030 (high confidence).

B. Federal Climate Policy

110. In 2001, at the start of the George W. Bush Administration, the Secretary of the Interior established Interior policy in Secretarial Order 3226, stating: “There is a consensus in the international community that global climate change is occurring and that it should be addressed in governmental decision making.” Secretarial Order 3226 established the responsibility of Interior agencies, such as BLM, to “consider and analyze potential climate change impacts when undertaking long-range planning exercises, when setting priorities for scientific research and investigations, when developing multi-year management plans, and/or when making major decisions regarding potential utilization of resources under the Department’s purview.”

111. In a 2007 report, entitled *Climate Change: Agencies Should Develop Guidance for Addressing the Effects on Federal Land and Water Resources*, the U.S. Governmental Accountability Office (“GAO”) concluded that the Department of the Interior had not provided specific guidance to implement Secretarial Order 3226, that officials were not even aware of Secretarial Order 3226, and that Secretarial Order 3226 had effectively been ignored.

112. Secretarial Order 3289 reinstated the provisions of Order 3226, and recognized that “the realities of climate change require us to change how we manage the land, water, fish and wildlife, and cultural heritage and tribal lands and resources we oversee,” and acknowledged that Interior is “responsible for helping protect the nation from the impacts of climate change.”

113. In Executive Order No. 13514, *Federal Leadership in Environmental, Energy, and Economic Performance* (Oct. 5, 2009), President Obama called on all federal agencies to “measure, report, and reduce their GHG emissions from direct and indirect activities.” 74 Fed.

Reg. 52,117 (Oct. 8, 2009) (revoked by Executive Order No. 13693, revoked by Executive Order No. 13834). This directive was followed up by Executive Order No. 13693, Planning for Federal Sustainability in the Next Decade (March 25, 2015), which reaffirmed the federal government's commitment to reducing GHG emissions. 80 Fed. Reg. 15,871 (March 25, 2015).

114. In 2009, the Environmental Protection Agency (“EPA”) issued a formal finding under the Clean Air Act, 42 U.S.C. § 7521(a), that the changes in our climate caused by elevated concentrations of GHGs in the atmosphere are reasonably anticipated to endanger the public health and welfare of current and future generations. 74 Fed. Reg. 66,496 (Dec. 15, 2009). EPA concluded that “the body of scientific evidence compellingly supports” the finding and recognized the potential for human-induced climate change to have “far-reaching and multidimensional” impacts. *Id.* at 66,497. In 2015, EPA acknowledged more recent scientific assessments that “highlight the urgency of addressing the rising concentrations of CO₂ in the atmosphere.” 80 Fed. Reg. 64,661 (Oct. 23, 2015).

115. The White House Council on Environmental Quality (“CEQ”) has also recognized the unique nature of climate change and the challenges it imposes on NEPA compliance. On August 1, 2016, the CEQ released 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 (hereafter, “2016 Climate Guidance”) (withdrawn on April 5, 2017, 82 Fed. Reg. 16,576 (Apr. 5, 2017)). Applicable to all proposed federal agency actions, “including land and resource management actions,” the 2016 Climate Guidance recognized that:

Climate change results from the incremental addition of GHG emissions from millions of individual sources, which collectively have a large impact on a global

scale. CEQ recognizes that the totality of climate change impacts is not attributable to any single action, but are exacerbated by a series of actions including actions taken pursuant to decisions of the Federal Government. Therefore, a statement that emissions from a proposed Federal action represent only a small fraction of global emissions is essentially a statement about the nature of the climate change challenge, and is not an appropriate basis for deciding whether or to what extent to consider climate change impacts under NEPA. Moreover, these comparisons are also not an appropriate method for characterizing the potential impacts associated with a proposed action and its alternatives and mitigations because this approach does not reveal anything beyond the nature of the climate change challenge itself: the fact that diverse individual sources of emissions each make a relatively small addition to global atmospheric GHG concentrations that collectively have a large impact.

116. The Trump Administration’s withdrawal of the 2016 CEQ Climate Guidance and other climate policies does not alter BLM’s obligation under NEPA to take a hard look and fully assess the significance, context, and severity of the GHG emissions and climate impacts of its oil and gas leasing decisions. BLM has also refused to avail itself of readily-available, scientifically-accepted tools, such as the social cost of carbon and carbon budgeting, for evaluating the severity, context, and significance of GHG emissions and climate impacts.

C. Cumulative GHG Emissions and Impacts of the Challenged Leasing Activities

117. BLM is responsible for the management of nearly 700 million acres of federal onshore subsurface minerals.

118. In spite of the worsening climate crisis, BLM continues to authorize the sale and issuance of hundreds of new federal oil and gas leases and subsequently approve thousands of new APDs on public lands across the Interior West without meaningfully acknowledging or fully evaluating the climate change implications of its actions.

119. As of October 2018, BLM-managed lands contained 38,147 individual oil and gas lease parcels, covering over 25.5 million acres of public lands, on which 96,199 active

producible wells are drilled. The area already leased for oil and gas extraction covers an area nearly as large as all federal lands combined in the State of New Mexico (27.5 million acres), and would cover more than 35% of the entire State of New Mexico.

120. BLM's Oil and Gas Leasing Program already contributes vast amounts of GHGs into the atmosphere, posing a threat to climate, the natural environment, and public health. According to a 2018 report from the U.S. Geological Survey ("USGS"), fossil fuel development on federal lands in 2014 released 1.279 GtCO₂ emissions, or 23.7% of the nation's CO₂ emissions. Based on EPA data, this is the equivalent of annual greenhouse gas emissions from over 329 coal-fired power plants.

121. New Mexico in particular was reported to be the source of 6% of all CO₂ emissions from federal fossil fuel production, higher than all but one other state. New Mexico was also found to be the source of 23% of all methane emissions from federal lands, higher than every state except Wyoming.

122. The issuance of leases resulting from the RPFO December 2018 lease sale, the RPFO November 2019 lease sale, and the RPFO and FFO February 2020 lease sales will lead to new oil and gas development on almost 45,000 acres of public lands in a region that is already over 90% leased for oil and gas activity, with over 40,000 wells already drilled in the area.

123. The RPFO December 2018 EA Addendum, the November 2019 RPFO Supplemental Analysis, and the February 2020 RPFO and FFO Supplemental Analyses all cite to the Mancos-Gallup RFD scenario (Crocker and Glover 2018) projecting 3,200 new oil and gas wells within the San Juan Basin between 2018 and 2037, the majority (2,300) of which are predicted to be horizontally drilled.

124. Collectively, based on BLM’s projections, the challenged lease sales would result in 42 new wells (including both horizontal and vertical wells) that emit 50, 279.3 metric tons of additional CO₂e *each year*. BLM cannot simply quantify these emissions, whether direct, indirect, or cumulative—it must actually *analyze* their significance in the context of the global climate crisis.

125. For each of the challenged lease sales, BLM lists annual well completions and annual CO₂e emissions in the Mancos-Gallup Planning Area over a recent five-year period[§] but does not actually *analyze* these emissions, their effects, or their significance, in the context of the global climate crisis or otherwise.

126. BLM acknowledges that the production of fossil fuels on federal lands accounts for approximately 20% of total national GHG emissions; yet the agency fails to acknowledge the *additive* effects of emissions resulting from each of the challenged lease sales to this cumulative total. Nor did BLM provide any context for the significance of these cumulative emissions, or apply available tools such as carbon budgeting, as discussed below, which would benefit the decisionmaker and public in understanding these emissions in the context of the global climate crisis. Despite BLM’s central role in facilitating fossil fuel production and GHG emissions, the agency arbitrarily failed to account for the cumulative impacts of its decisions to issue the new oil and gas leases in the context of BLM’s other oil and gas leasing, development, and management activities.

[§] For the RPFO December 2018 lease sale, BLM lists annual well completions and annual CO₂e emissions for 2014-2018 in the RPFO December 2018 EA Addendum. For the November 2019 and February 2020 lease sales, BLM lists historical annual well completions and annual CO₂e emissions for 2014-2018 in the EAs, and annual well completions for 2015-2019, along with a 5-year average, in the Supplemental Analyses.

127. Neither the RPFO December 2018 EA Addendum nor the November 2019 and February 2020 Supplemental Analyses cure BLM's failure to take a hard look at cumulative GHG emissions and climate impacts in its EAs for each of the challenged lease sales.

D. Tools for Understanding the Significance and Severity of Cumulative Greenhouse Gas Impacts: Social Cost of Carbon and Carbon Budgeting

128. BLM's analysis must do more than merely identify impacts, including cumulative and potentially disproportionate impacts; it must also "evaluate the severity" of effects. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 352 (1989); 40 C.F.R. § 1502.16(a)-(b) (explaining their "significance"). In order to evaluate the severity and significance of effects, including context and intensity and cumulative impacts, BLM must use available tools to take a hard look at all the relevant factors as NEPA requires.

a. Social Cost of Carbon

129. Tools for evaluating the severity of climate change are readily available to BLM. In recognition of the consequences of human-caused climate change, federal agencies have developed a protocol for assessing the social cost of carbon dioxide emissions. The social cost of carbon is "an estimate of the monetized damages associated with an incremental increase in carbon emissions in a given year." Conversely, the social cost of carbon can represent "the value of damages avoided for a small emission reduction (i.e., the benefit of a CO₂ reductions)." The EPA has explained: "The [social cost of carbon protocol] is meant to be a comprehensive estimate of climate change damages and includes changes in net agricultural productivity, human health, property damages from increased flood risk, and changes in energy system costs, such as

reduced costs for heating and increased costs for air conditioning. However, given current modeling and data limitations, it does not include all important damages.”**

130. A federal Interagency Working Group (“Working Group”)—consisting of the EPA, Center for Environmental Quality, Department of Energy, National Economic Council, Office of Management and Budget, Department of Agriculture, Department of Commerce, Department of Transportation, and other agencies—has prepared estimates of the cost that carbon pollution has on society. The IWG prepared their first “Social Cost of Carbon” estimates in 2010. The IWG subsequently updated these estimates in 2013, 2015, and most recently in 2016.

131. The Working Group’s Social Cost of Carbon estimates vary according to assumed discount rates and presumptions regarding the longevity and damages caused by carbon pollution in the atmosphere, which for 2020 produced a range of between \$12 and \$123 per metric ton of CO₂. Accepted practice typically applies the median value (\$42 per metric ton) to determine the social costs of a given project, although the four values provided by the IWG offer a means of comparing alternative courses of action.

132. Although the Trump Administration, through Executive Order 13783, disbanded the IWG, the Social Cost of Carbon protocol is still accepted within the scientific community as a useful tool for assessing the impacts of GHG emissions. BLM has used the Social Cost of Carbon to assess the impacts of its oil and gas lease sales in the past, but did not use this available tool to analyze the impacts of any of the challenged lease sales.

** EPA Fact Sheet, The Social Cost of Carbon (2016), https://www.epa.gov/sites/production/files/2016-12/documents/social_cost_of_carbon_fact_sheet.pdf.

133. BLM’s focus on the economic benefits of leasing, coupled with the agency’s refusal to address the climate costs of leasing and subsequent development, undermines NEPA’s purpose of informed decision-making “based on [an] understanding of environmental consequences.” 40 C.F.R. § 1500.1(c). It also violates NEPA’s mandate to “develop methods and procedures ... which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations.” 42 U.S.C. § 4332(2)(B).

b. Carbon Budgeting

134. Carbon budgeting is another tool BLM should have considered for understanding the context and intensity of cumulative climate impacts from its leasing decisions. Carbon budgeting is a well-established method for estimating the impacts from GHG emissions. A “carbon budget” offers a cap on the remaining amount of GHG emissions that can be emitted while still keeping global average temperature rise below scientifically-based warming thresholds.

135. The 2018 IPCC special report on Global Warming Of 1.5°C provided a revised carbon budget for a 66 percent probability of limiting warming to 1.5°C— a scientifically-determined threshold above which potentially-irreversible tipping points may be reached with catastrophic results. This carbon budget was estimated at 420 gigatons^{††} (Gt) CO₂ and 570 GtCO₂ depending on the temperature dataset used, from January 2018 onwards. The IPCC also explained the global emissions rate has increased to 42 GtCO₂ per year. At this rate, the global

^{††} One gigaton is equivalent to 1 billion tons.

carbon budget would be expended in just 10 to 14 years, underscoring the urgent need for transformative global action to transition from fossil fuel use to clean energy.

136. To put these global carbon budgets in the specific context of domestic U.S. emissions and the United States' obligation to reduce emissions, the United States is the world's largest historic emitter of greenhouse gas pollution, responsible for 26 percent of cumulative global CO₂ emissions since 1870, and is currently the world's second highest emitter on both an annual and per capita basis. Between 2003 and 2014, approximately 25% of all United States and 3-4% of global fossil fuel GHG emissions were attributable to federal minerals leased and developed by the Department of the Interior.

137. To meet the 1.5°C target, the estimated total U.S. carbon budget (for all time) is 25 GtCO₂ to 57 GtCO₂ on average, depending on the sharing principles used to apportion the global budget across countries. The estimated total remaining carbon budget consistent with limiting temperature rise to 2°C ranges from 34 GtCO₂ to 123 GtCO₂, depending on the sharing principles used. EPA estimated 6.5 GtCO₂e total U.S. GHG emissions in 2017. Thus, under any scenario, the remaining U.S. carbon budget compatible with avoiding catastrophic climate change is extremely small or already expended.

138. Citizen Groups described both Social Cost of Carbon and Carbon Budgeting tools to BLM in detail in scoping and protest comments for all of the challenged lease sales, but the agency has repeatedly failed to provide an adequate explanation for its dismissal of Social Cost of Carbon and Carbon Budgeting in the challenged lease sale EAs, the RPFO December 2018 EA Addendum, and the November 2019 and February 2020 supplemental analyses. In the RPFO

December 2018 EA Addendum, BLM failed entirely to address Carbon Budgeting or explain why it did not use this tool.

III. Human Health Impacts of Oil and Gas Production

A. General Background on Health Impacts of Oil and Gas Leasing and Production

139. The reasonably foreseeable development of the 42 challenged lease parcels will result in large quantities of oil and natural gas production through a combination of horizontal and vertical wells and hydraulic fracturing (fracking) in the RPF0 and FFO lease sale areas.

140. Together, development of all 42 parcels from all of the challenged lease sales is estimated to result in the production of 98,044,080 cubic feet (mcf) of gas and 2,828,769 barrels (bbl) of oil. Development of these leases will result in the disruption to community life, public health, and historic and cultural properties that accompany such significant quantities of oil and gas development, especially when coupled with all past, present, and reasonably foreseeable development near the lease sale area, in the San Juan Basin/Greater Chaco area, and in the state of New Mexico and Southwest region overall.

141. Oil and gas operations generate toxic air emissions and large quantities of toxic waste, threaten drinking water sources, and present a range of significant threats to public health and safety. The thousands of people who call the lease sale area home, and many others who live elsewhere and work in the region, including in the oil and gas industry, are exposed and will be exposed to health and safety impacts from oil and gas activities in the area on a regular basis.

142. Yet BLM failed even to mention, let alone analyze, health impacts in its EA for the December 2018 lease sale. The inclusion of the word “health” in two sections of the EA falls far short of the “hard look” at health effects that NEPA requires.

143. The RPFO December 2018 EA Addendum supplements the December 2018 RPFO EA, but similarly fails to meet NEPA’s “hard look” requirement. In the EA Addendum, BLM lists some general categories of public health and safety-related risks that have resulted from oil and gas development in the San Juan Basin in the past, but does not mention specific incidents, nor does it *analyze* these risks or the reasonably foreseeable *effects* of the December 2018 lease sales.

144. Similarly, in the November 2019 RPFO EA, and the February 2020 RPFO and FFO EAs, BLM includes “human health and safety” as an issue “analyzed in brief” (AIB-15 in all 3 EAs), but merely lists a few general categories of health and safety-related risks that have resulted from oil and gas development in the San Juan Basin, without mentioning specific incidents or analyzing these risks or reasonably foreseeable *effects* of the November 2019 or February 2020 lease sales.

145. In the November 2019 and February 2020 Supplemental Analyses, BLM does not provide any further discussion or analysis of health risks and impacts. The November 2019 and February 2020 Supplemental Analyses do not cure BLM’s failure to take a hard look at health impacts.

146. NEPA and its implementing regulations require BLM to do more than list generalized categories of risks: the agency must analyze and take a hard look at those risks. NEPA also requires BLM to analyze direct and indirect effects (synonymous with impacts), *see* 40 C.F.R. § 1508.8, and cumulative impacts, *see* 40 C.F.R. § 1508.7. *See also* 40 C.F.R. § 1508.25 (c) (stating that, in determining scope of environmental impact statements, agencies shall consider direct, indirect, and cumulative impacts). Thus, while exposure risks are an

important component of NEPA's requisite analysis, a hard look at health also requires analysis and disclosure of the health *outcomes* that may arise from those risks.

147. Citizen Groups have raised concerns and cited studies about numerous potentially significant health outcomes arising from reasonably foreseeable development of the leased parcels in scoping and protest comments, ranging from asthma to birth defects, but BLM fails to analyze such impacts in its discussion of health in the EAs, RPFO December 2018 EA Addendum, or November 2019 and February 2020 Supplemental Analyses for the lease sales challenged herein.

148. The mere existence of other laws, regulations, and policies designed to protect public health and safety—such as OSHA worker safety laws, Department of Transportation traffic and pipeline safety laws, or spill response plans—does not adequately address or mitigate most of the aforementioned health effects. Nor does it eliminate BLM's obligation under NEPA to take a hard look at potentially significant health risks and impacts at the lease sale stage, before the irretrievable commitment of resources, rather than waiting until the APD stage, or worse, waiting until a spill or other incident occurs.

149. In the RPFO December 2018 EA Addendum, BLM states that future potential development on the nominated lease parcels is estimated to be 30 new wells, an “incremental” addition to over 37,000 oil and gas wells already in the area that would “in a small way sustain or increase risks to safety and human health within the San Juan Basin.” BLM uses nearly identical language in its brief discussion of health and safety risks in the RPFO February 2020 lease sale EA (AIB-15). And BLM characterizes exposure to air pollutant emissions as “a temporary nuisance for those living near the future oil and gas development.” But it is precisely these

“incremental impacts,” when combined with other past, present, and reasonably foreseeable future actions, that NEPA and its implementing regulations require BLM to analyze. 40 C.F.R. § 1508.7.

150. For example, even short-term exposure to toxic air pollutants, including VOCs, ozone, and particulate matter, can have significant health impacts. For people living in oil and gas country, headaches, dizziness, vision and memory problems, irritation of the eyes, nose, throat, and lungs, and shortness of breath cannot be dismissed as a mere “nuisance.” And many of these and other health effects can endure long after the acute exposure is gone.

151. Dismissal of these serious health impacts as a “temporary nuisance” is an abdication of BLM’s obligation to take a hard look at the health impacts of these lease sales, especially in the context of 1) social and structural factors that exacerbate exposure risks, health impacts, or both; and 2) other past, present, and reasonably foreseeable future oil and gas development in the region.

152. In the EAs, the RPFO December 2018 EA Addendum, and the Supplemental Analyses for all the lease sales challenged herein, BLM fails to discuss the proximity of the leased parcels to specific area residences, schools, hospitals, day cares, or other places where people live, work, learn, recreate, gather, or engage in important religious and cultural practices. Yet proximity to reasonably foreseeable oil and gas development from these lease sales directly and cumulatively affects health.

153. BLM did not acknowledge or discuss any of the studies or concerns related to public health identified by Citizen Groups, nor did it analyze any of these reasonably foreseeable health risks and effects in the December 2018 lease sale EA. In the RPFO December 2018 EA

Addendum, and in the November 2019 and February 2020 lease sale EAs, BLM listed spills, industrial accidents, and traffic congestion and collision as historical public health and safety risks in the San Juan Basin, but failed to analyze these risks or reasonably foreseeable future effects, and continued to ignore the myriad other health and safety risks and impacts raised by Citizen Groups in scoping and protest comments, such as asthma and other respiratory effects, birth defects, and cancer.

B. Air Pollution Impacts

154. Health effects related to air pollution are reasonably foreseeable and potentially significant, and thus must be included in BLM’s NEPA analysis. Oil and gas drilling, hydraulic fracturing, production, transmission, and processing result in emissions of methane, nitrogen oxides (“NOx”), and VOCs that contribute to ozone formation, hazardous air pollutants, and airborne particulates.

155. Hazardous air pollutants associated with oil and gas production include benzene, toluene, ethylbenzene, and xylene. These hazardous air pollutants are linked to cancer, neurological, cardiovascular, liver, kidney, and respiratory effects as well as effects on the immune and reproductive systems.

156. Ozone is formed in the atmosphere and can move with the wind—causing health problems for entire regions—not just for people living close to oil and gas facilities. BLM acknowledges in the EAs, the RPFO December 2018 EA Addendum, and the November 2019 and February 2020 Supplemental Analyses that ozone is “a criteria pollutant that is of most concern” for the analysis areas.

157. High ozone levels are an increasing concern in oil and gas producing regions.

Ozone exposure is linked to numerous adverse health conditions, including “respiratory, cardiovascular, and total mortality as well as decreased lung function, asthma exacerbation, COPD [chronic obstructive pulmonary disease], cardiovascular effects and adverse birth outcomes.”

158. Ground-level ozone is linked to additional health effects, including: premature mortality for adults and infants; cardiovascular morbidity, such as heart attacks; and respiratory morbidity, such as asthma attacks and acute and chronic bronchitis. These impacts result in more hospital and emergency room visits, lost work and school days, and restricted activity days.

159. Nowhere in the RPFO December 2018 Lease Sale EA does BLM analyze any such reasonably foreseeable health impacts associated with ozone, or any other air pollutants, in the context of these lease sales and other past, present, and reasonably foreseeable future development.

160. In the RPFO December 2018 EA Addendum, and in the November 2019 and February 2020 Supplemental Analyses (which BLM asserts “completely replace” the air quality analyses in the original EAs for those lease sales), BLM does acknowledge that “[b]reathing O₃ can have human health effects particularly for sensitive groups (children, the elderly, and those with chronic lung conditions like bronchitis, emphysema, and asthma).” But in the original EAs, the RPFO December 2018 EA Addendum, and the November 2019 and February 2020 Supplemental Analyses, BLM fails to *analyze* those effects, for “sensitive groups” or otherwise. Nor does BLM’s assertion that the November 2019 and February 2020 Supplemental Analyses “completely replace” the air quality analyses in the EAs for those lease sales cure its failure to take a hard look at air quality and health impacts.

161. Ozone levels in the San Juan Basin are already close to the thresholds for exceeding the NAAQS, and San Juan County received a failing grade of “F” for ozone pollution from the American Lung Association in 2016. In the RPFO December 2018 EA Addendum, and in the November 2019 and February 2020 Supplemental Analyses, BLM acknowledges that ozone levels have come close to exceeding the NAAQS in San Juan County and states that “[I]f such exceedances were to occur, the area would be designated ‘nonattainment,’ which could impact industrial development for the area.”

162. BLM is similarly dismissive regarding emissions of other criteria pollutants protected under the NAAQS. The RPFO December 2018 EA, for example, states, “the small increase in emissions that could result from approval of the proposed action would not result in the area exceeding the NAAQS for any criteria pollutant,” but BLM fails to offer any evidentiary support for this assertion or any explanation for how it reached this conclusion.

163. Particle pollution is of particular concern in the lease sale area. In the RPFO December 2018 EA Addendum, BLM states that “PM_{2.5} is not currently monitored in the analysis area, and there are no areas of high concentrations that would warrant monitoring by the NMED.” At the same time, BLM says in the RPFO December 2018 Addendum, and again in the November 2019 and February 2020 Supplemental Analyses, that particulate matter is of “heightened concern” when emissions are near “sensitive receptors, such as residences” because PM can be present in higher concentrations in a localized area before it settles or disperses. Particularly in light of this “heightened concern,” insufficient PM_{2.5}^{‡‡} monitoring in the area is

^{‡‡} The EPA defines particulate matter, also known as particle pollution or PM, as “a complex mixture of extremely small particles and liquid droplets” that is “made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles.” Particle size is directly linked to the potential to cause health problems. EPA is “concerned about particles that are 10 micrometers in diameter or smaller because

not an excuse for dismissal of the issue—instead, it is a serious problem that necessitates *further* analysis of reasonably foreseeable health effects from exposure to particulate matter, even if exact concentrations are not known.

164. Adverse health effects are well-documented for both short and long-term exposure to particulate matter and other air pollutants from oil and gas operations. Air pollution exposure can affect both short-term and long-term lung function, and exacerbate existing medical conditions, including asthma and heart disease. Even short-term exposure to particulate matter and ozone has been scientifically linked to increased hospital admissions, emergency room visits, and even deaths. EPA’s 1-hour, 8-hour, and 24-hour standards for various National Ambient Air Quality Standards (NAAQSs) reflect this recognition of significant human health effects associated with even short-term exposure. And there is no safe limit for HAPs.

165. BLM also overlooks the Counselor HIA-HNDA Committee’s local air monitoring data. Nowhere in the lease sale EAs, the RPFO December 2018 Addendum, or the November 2019 and February 2020 Supplemental Analyses does BLM mention the HIA-HNDA, or even acknowledge that such localized air monitoring is not only necessary and feasible, but also *ongoing*. Instead, BLM dismisses health concerns altogether by improperly relying on broad regional air quality technical reports, incomplete county-level air quality index (AQI) data, and NAAQS attainment status, none of which adequately reflects the site-specific, direct and cumulative exposures, risks, and reasonably foreseeable health impacts of the challenged lease sales. This cursory treatment of health effects falls far short of the hard look NEPA requires.

those are the particles that generally pass through the throat and nose and enter the lungs. Once inhaled, these particles can affect the heart and lungs and cause serious health problems." Hence, criteria pollutants PM₁₀ (10 micrometers, “inhalable course particles”) and PM_{2.5} (2.5 micrometers, “fine particles.”) *See* www3.epa.gov/region1/eco/uep/particulatematter.html

C. Cumulative Health Impacts and Social Determinants of Health

166. The reasonably foreseeable oil and gas development arising from the December 2018, November 2019, and February 2020 lease sales involves multiple sources of pollutants and disturbance, including but not limited to the operations of wellpads, trucks, wells, compressors, pipelines, tanks, pits, separators, dehydrators, rigs, and more. BLM did not conduct any analysis of the cumulative impacts on human health from lease development, taking into consideration all past, present, or reasonably foreseeable future development in the Greater Chaco area.

167. As part of scoping comments and protest, Citizen Groups provided BLM with a Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking. The Compendium contains peer-reviewed scientific studies about the health effects of fracking and oil and gas development, including multiple sections that discuss cumulative effects, including references to cumulative health impacts. It also describes cumulative impacts and “multiple consequences for public health and safety” arising from “unstable economic fundamentals of the industry as a whole.”

168. BLM failed to acknowledge or consider cumulative health impacts and the multiple studies describing how existing methods of collecting and analyzing emissions data often underestimate health risks, especially for potentially susceptible populations. Overly general methods often fail to measure the true intensity, frequency, and duration of community exposure to toxic chemicals from fracking and drilling; fail to examine the effects of chemical mixtures; and fail to consider “environmental justice” communities and children.

169. While BLM acknowledges the high fraction of children among the population in the lease sale area, it fails to link this information to children’s increased susceptibility to health

risks. In the case of children, exposure during critical development stages in early life (including prenatal exposure) can affect their health throughout the life course, and even trigger cumulative health effects that persist across generations through epigenetic mechanisms. The RPFO December 2018 EA Addendum and the November 2019 and February 2020 Supplemental Analyses do not cure this failure to analyze direct or cumulative health risks in children.

170. In assessing cumulative health impacts associated with the December 2018, November 2019, and February 2020 oil and gas lease sales, BLM must analyze “the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.” 40 C.F.R. § 1508.7. This includes underlying exposures and susceptibilities, whether they result from ongoing oil and gas development, topography and wind and weather patterns, or “social determinants of health.”

171. The U.S. Office of Disease Prevention and Health Promotion, a branch of the U.S. Department of Health and Human Services, defines social determinants of health as:

conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. Conditions (e.g., social, economic, and physical) in these various environments and settings (e.g., school, church, workplace, and neighborhood) have been referred to as ‘place.’ In addition to the more material attributes of ‘place,’ the patterns of social engagement and sense of security and well-being are also affected by where people live. Resources that enhance quality of life can have a significant influence on population health outcomes. Examples of these resources include safe and affordable housing, access to education, public safety, availability of healthy foods, local emergency/health services, and environments free of life-threatening toxins.

172. Despite the importance of “place” and the “patterns of social engagement and sense of security and well-being” that can significantly affect health outcomes, BLM failed to analyze or even acknowledge these factors.

IV. Environmental Justice

173. Health impacts, “social determinants of health,” and environmental justice are inexorably linked. Indeed, the CEQ Guidance on Environmental Justice in the NEPA process expressly emphasizes the importance of using public health data to identify “the potential for multiple or cumulative exposure to human health or environmental hazards in the affected population and historical patterns of exposure to environmental hazards...” And like the CEQ Guidance, EO 12898 also states that “[e]nvironmental human health analyses, whenever practicable and appropriate, shall identify multiple and cumulative exposures.” Yet, in the December 2018 EA, BLM does not mention environmental justice, inequities, or disproportionate impacts in the context of health at all, and the agency does not actually analyze or take NEPA’s requisite hard look at environmental justice (EJ) in *any* context. In the RPFO December 2018 EA Addendum, and the November 2019 and February 2020 lease sale EAs, BLM mentions environmental justice, but still falls far short of the hard look at EJ that NEPA requires.

174. For example, in the RPFO December 2018 EA, BLM cites inapposite census data to support its dismissal of EJ. BLM cites 2010 census data to imply that the population in the area affected by the lease sale is not a “minority” population relative to New Mexico’s overall population, and thus presumably does not warrant consideration with respect to environmental justice.

175. BLM’s single comparison based on race and ethnicity in the RPFO December 2018 EA is no substitute for a meaningful environmental justice analysis, including an analysis of disproportionate direct *and* cumulative health impacts. And even in the RPFO December 2018

EA Addendum and the November 2019 and February 2020 lease sale EAs, where BLM has acknowledged that the lease sale area contains a high percentage of “Native American,” “minority,” and “low-income populations,” merely acknowledging this fact and stating that these populations “may be disproportionately and adversely impacted” by the lease sales, without further analysis or consideration of its decision-making, does not constitute a hard look at environmental justice.

V. Public Participation

176. Environmental justice is not only about achieving more equitable *outcomes*, but also more just and inclusive decision-making *processes*. It requires “fair treatment and meaningful involvement” in environmental decision-making, and “equal access to the decision-making process to have a healthy environment in which to live, learn, and work.”

177. The shortened 10-day protest period for all of the lease sales challenged herein, and failure to provide a draft EA for review and comment for the RPFO December 2018 lease sale, further contradict BLM’s assertion that it adequately considered, or even provided adequate opportunity for, public input. Similarly, BLM offered no opportunity to comment on the RPFO December 2018 EA Addendum, which was released the day after its denial of Citizen Groups’ protests, and no opportunity to comment on the November 2019 and February 2020 “Supplemental Analyses,” which purport to replace BLM’s prior^{§§} Air Quality and GHG Emissions analyses entirely.

178. For oil and gas lease sales between 2010 and January 2018, BLM provided minimum 30-day public comment periods for draft EAs, and a 30-day protest period, in

^{§§} From the November 2019 RPFO and February 2020 RPFO and FFO lease sale EAs

accordance with IM 2010-117. BLM has never publicly articulated a reasoned explanation for backtracking from the greater public participation opportunities previously provided or otherwise explained why it is no longer “practicable” to provide 30-day comment periods and protests for oil and gas lease sale EAs. BLM failed to explain why providing a 30-day draft EA comment period or 30-day protest period would have been impracticable for the December 2018, November 2019, and February 2020 lease sales at issue here.

179. In addition to NEPA’s public participation requirements, the BLM must also adhere to the public participation requirements in FLPMA, which states “[T]he Secretary *shall, with public involvement* and consistent with the terms and conditions of this Act, develop, maintain, and, when appropriate, revise land use plans which provide by tracts or areas for the use of the public lands.” 43 U.S.C. § 1712 (a) (emphasis added). FLPMA further states, “The Secretary shall allow an opportunity for public involvement and by regulation shall establish procedures, including public hearing where appropriate, to give Federal, State, and local governments and the public, adequate notice and opportunity to comment upon and participate in the formulation of plans and programs relating to the management of public lands.” 43 U.S.C. § 1712 (f).

180. In *Western Watersheds Project v. Zinke*, the District of Idaho held that the public participation provisions of BLM’s IM 2018-034 violated the statutory and regulatory public participation requirements of NEPA and FLPMA. 441 F. Supp. 3d 1042, 1073, 1085 (D. Idaho 2020), *reconsideration denied, partial stay granted*, No. 1:18-CV-00187-REB, 2020 WL 2462817 (D. Idaho May 12, 2020). Here, for the December 2018 lease sale, BLM followed the inadequate and unlawful public participation provisions of IM 2018-034, including *not* providing

a draft EA for public comment and limiting the protest period to only 10 days. Likewise, for the November 2019 and February 2020 lease sales, while BLM did offer the opportunity to comment on a draft EA, BLM followed the inadequate and unlawful public participation provisions of IM 2018-034, limiting all of the public comment and protest periods to just 10 days.

CLAIMS FOR RELIEF

First Claim for Relief

Failure to Take a Hard Look at Cumulative Greenhouse Gas Emissions and Cumulative Climate Change Impacts (Violation of NEPA)

181. Citizen Groups incorporate by reference all preceding paragraphs.

182. Pursuant to NEPA and NEPA's implementing regulations, BLM must take a hard look at the direct, indirect, and cumulative environmental consequences of a proposed action. 42 U.S.C. § § 4332 (C)(i)-(v); 40 C.F.R. §§ 1502.14(a), 1502.16, 1508.7, 1508.8, and 1508.14.

183. BLM is required to take a hard look at these impacts at the leasing stage, *before* there are "any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented." 42 U.S.C. § 4332(2)(C)(v); *see also* 40 C.F.R. §§ 1501.2, 1502.5(a).

184. To comply with NEPA, BLM was required to take a hard look at cumulative GHG emissions, including the context and severity of the *impacts* of those emissions on climate change and otherwise, for the December 2018 RPFO lease sale, the November 2019 RPFO lease sale, and the February 2020 RPFO and FFO lease sales.

185. Where information relevant to foreseeable adverse impacts is unavailable, agencies must nonetheless evaluate "such impacts based upon theoretical approaches or research

methods generally accepted in the scientific community.” 40 C.F.R. § 1502.22(b)(4). There are several accepted approaches for evaluating the impacts of GHG emissions to climate and society, including the Social Cost of Carbon and Carbon Budgeting.

186. BLM failed to take a hard look at cumulative GHG emissions and cumulative climate impacts, and failed to discuss the severity of those impacts, when proceeding with the RPFO December 2018, RPFO November 2019, and RPFO and FFO February 2020 lease sales. More broadly, BLM has failed to assess the cumulative impacts of the agency’s leasing activities across the Greater Chaco region and has demonstrated a systemic failure to account for the cumulative climate impacts of the agency’s Oil and Gas Leasing Program affecting federal lands across the western U.S. BLM’s systemic and leasing-decision specific failures are “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law,” in violation of NEPA, 42 U.S.C. § 4332(C)(ii), and its implementing regulations at 40 C.F.R. §§ 1508.7, 1508.8, 1508.25, 1508.27, and the APA at 5 U.S.C. § 706(2)(A).

Second Claim for Relief

Failure to Take a Hard Look at Direct and Cumulative Health Impacts (Violation of NEPA)

187. Citizen Groups incorporate by reference all preceding paragraphs.

188. NEPA and its implementing regulations direct agencies to consider “the degree to which the proposed action affects public health or safety.” 40 C.F.R. § 1508.27 (b).

189. NEPA also states it as national policy that federal agencies “shall use all practicable means, consistent with other essential considerations of national policy,” to improve federal plans in order to, inter alia, “assure for all Americans safe, healthful...surroundings [and]

attain the widest range of beneficial uses of the environment without...risk to health or safety.”

42 U.S.C. § 4331(b).

190. Here, for the RPFO December 2018, RPFO November 2019, and RPFO and FFO February 2020 lease sales, BLM failed to satisfy NEPA and its implementing regulations by: (1) failing to adequately analyze the direct and cumulative environmental impacts of oil and gas operations on human health; (2) failing to evaluate and apply recent and relevant scientific and health data; and (3) failing to analyze the full range of foreseeable human health impacts, including cumulative health impacts related to social determinants of health environmental justice.

191. BLM, charged with evaluating reasonably foreseeable, potentially significant adverse effects on the human environment, dismissed the few health and safety risks it analyzed as temporary. However, substantial relevant information on health impacts was available to BLM, and BLM was required to develop all additional health impact information that was essential to a reasoned choice among alternatives.

192. BLM also violated 40 C.F.R. §1503.4 by not responding adequately to Citizen Groups’ comments and the health studies and other information provided therewith on health impacts, and not explaining why it failed to undertake the requested Health Impact Assessment or consider the HIA-HNDA letter and ongoing process.

193. BLM failed to take a hard look at human health impacts of expanded oil and gas leasing and development, including cumulative impacts related to social determinants of health, when proceeding with the RPFO December 2018, RPFO November 2019, and RPFO and FFO February 2020 lease sales. BLM’s failure to examine relevant human health data and articulate a

satisfactory explanation for its actions, or make a rational connection between the facts found and choices made, was arbitrary, capricious, an abuse of discretion, and contrary to NEPA, 42 U.S.C. § 4332(2)(C)(ii) and its implementing regulations, 40 C.F.R. §§ 1508.7, 1508.8, 1508.25, and 1508.27, and the APA at 5 U.S.C. § 706(2)(A).

Third Claim for Relief

Failure to Take a Hard Look at Environmental Justice (Violation of NEPA)

194. Citizen groups incorporate by reference all preceding paragraphs.

195. BLM failed to consider the effects of its lease sale decisions, not only *on* environmental justice “populations” and issues, but also in the *context* of underlying environmental justice issues and how those might amplify or exacerbate reasonably foreseeable health and socioeconomic risks and effects resulting from the RPFO December 2018, RPFO November 2019, and RPFO and FFO February 2020 lease sales.

196. Environmental Justice is a relevant factor at which federal agencies must take a hard look under NEPA. *See* Council on Env’tl Quality, Environmental Justice: Guidance Under the National Environmental Policy Act (December 10, 1997), at 8 (“[e]nvironmental justice issues may arise at any step of the NEPA process and agencies should consider these issues at each and every step of the process, as appropriate”). BLM’s list of potentially adverse and disproportionate effects of the lease sales on “environmental justice” populations, without analyzing these effects further, failed to satisfy its hard look obligation.

197. BLM’s failure to take a hard look at impacts to environmental justice or articulate a satisfactory explanation for its actions, including a rational connection between the facts found and choices made, was arbitrary, capricious, an abuse of discretion, and contrary to NEPA, 42

U.S.C. § 4332(2)(C)(ii) and its implementing regulations, 40 C.F.R. §§ 1508.7, 1508.8, 1508.25, and 1508.27, and the APA at 5 U.S.C. § 706(2)(A).

Fourth Claim for Relief

**Failure to Provide Adequate Opportunity for Public Participation
(Violation of NEPA and FLPMA)**

198. Citizen Groups incorporate by reference all preceding paragraphs.

199. Both NEPA and FLPMA include public participation requirements, as do BLM's own regulations, *see* 40 C.F.R. § 3120.1-3 (requiring a protest period), § 3120.4-1 (requiring notice of a competitive lease sale).

200. NEPA regulations mandate that agencies “shall to the fullest extent possible . . . [e]ncourage and facilitate public involvement in the decisions which affect the quality of the human environment.” 40 C.F.R. § 1500.2 (d). Agencies are further required to “make diligent efforts to involve the public in preparing and implementing their NEPA procedures,” *id.* § 1506.6(a), and must involve the public “to the extent practicable” in preparation of EAs, *id.* §1501.4(b).

201. FLPMA states, “The Secretary *shall, with public involvement* and consistent with the terms and conditions of this Act, develop, maintain, and, when appropriate, revise land use plans which provide by tracts or areas for the use of the public lands.” 43 U.S.C. § 1712 (a) (emphasis added). And further states, “The Secretary shall allow an opportunity for public involvement and by regulation shall establish procedures, including public hearing where appropriate, to give Federal, State, and local governments and the public, adequate notice and opportunity to comment upon and participate in the formulation of plans and programs relating to the management of public lands.” 43 U.S.C. § 1712 (f).

202. The very definition of “environmental justice” demands “fair treatment and meaningful involvement” in environmental decision-making.

203. BLM violated NEPA and FLPMA when it provided no opportunity for comment on a Draft EA for the December 2018 RPFO lease sale, limited the protest period to only 10 days for all of the lease sales challenged herein, and issued an RPFO December 2018 EA Addendum, and November 2019 and February 2020 Supplemental Analyses, approximately one year after the lease sale protest period with no further opportunity for comment. BLM’s actions and decisions were arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law, in violation of NEPA, FLPMA, and the APA at 5 U.S.C. § 706(2)(A).

Fifth Claim for Relief

Failure to Prepare an EIS (Violation of NEPA)

204. Citizen Groups incorporate by reference all preceding paragraphs.

205. BLM’s authorization and issuance of the leases sold through the December 6, 2018, November 7, 2019, and February 6, 2020 oil and gas lease sales constitute major federal actions under NEPA.

206. BLM does not have to prepare an EIS where it has demonstrated that the proposed action “will not have a significant effect on the human environment[.]” 40 C.F.R. § 1508.13. To assess whether or not an impact is significant, BLM must consider the “context and intensity” of the impact, including cumulatively significant effects and the degree to which an action affects public health and safety. 40 C.F.R. § 1508.27.

207. BLM failed to evaluate the context and intensity of the environmental impacts resulting from its decision to issue the leases challenged herein, pursuant to NEPA. BLM also

failed to provide convincing statements of reasons justifying their decisions to forgo an EIS analyzing the impacts of the lease parcels challenged herein, as required by NEPA.

208. BLM's leasing decision will cause or contribute to greenhouse gas emissions, air pollutant emissions, and other impacts that will significantly and adversely affect air quality, water quality and quantity, climate, public health, and environmental justice in the region. NEPA therefore requires BLM to identify such impacts and assess their context and intensity on the record to support their decisions to forego an EIS for each of the lease sales challenged herein. BLM failed to do this.

209. BLM violated NEPA by failing to prepare an EIS before approving the leasing authorizations for each of the lease sales challenged herein. BLM's failure was arbitrary, capricious, an abuse of discretion, in excess of statutory authority and limitations, short of statutory right, and not in accordance with the law and procedures required by law. 5 U.S.C. §§ 706(2)(A), (C), (D).

RELIEF REQUESTED

WHEREFORE, Plaintiffs respectfully request that this Court:

- A.** Declare that Federal Defendants' leasing decisions violated NEPA and its implementing regulations, and FLPMA and its implementing regulations;
- B.** Vacate, set aside, and remand Federal Defendants' leasing decisions;
- C.** Enjoin Federal Defendants from any further leasing authorizations within the lease sale area pending Federal Defendants' full compliance with NEPA and its implementing regulations, and FLPMA.
- D.** Retain continuing jurisdiction of this matter until Federal Defendants fully

remedy the violations of law complained of herein;

E. Award the Citizen Groups their fees, costs, and other expenses as provided by the Equal Access to Justice Act, 28 U.S.C. § 2412; and

F. Grant Citizen Groups such additional and further relief as this Court may deem just, proper, and equitable.

Respectfully submitted this 19th day of January 2021,

/s/ Allyson A. Beasley

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CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing SUPPLEMENTAL PETITION FOR REVIEW OF AGENCY ACTION was served on all counsel of record through the Court's ECF system on this 19th day of January 2021.

/s/ Allyson A. Beasley