

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEW MEXICO**

SAN JUAN CITIZENS ALLIANCE, )  
WILDEARTH GUARDIANS, AMIGOS )  
BRAVOS, DINÉ CITIZENS AGAINST )  
RUINING OUR ENVIRONMENT, and )  
SIERRA CLUB, )

Case No. 1:16-cv-00376

Plaintiffs, )

PETITION FOR REVIEW OF  
AGENCY ACTION

v. )

UNITED STATES BUREAU OF LAND )  
MANAGEMENT, SALLY JEWELL, in her )  
official capacity as United States Secretary )  
of the Interior, UNITED STATES FOREST )  
SERVICE, and TOM VILSACK, in his )  
official capacity as United States Secretary )  
of Agriculture; )

Federal Defendants. )

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**INTRODUCTION**

1. Plaintiffs San Juan Citizens Alliance, WildEarth Guardians, Amigos Bravos, Diné Citizens Against Ruining Our Environment, and the Sierra Club (collectively “Citizen Groups”) hereby bring this civil action for declaratory and injunctive relief against the United States Bureau Of Land Management (“BLM”), Sally Jewell, the United States Forest Service (“Forest Service”), and Tom Vilsack (collectively “Federal Defendants”), for their authorization and issuance of 13 oil and gas lease parcels covering 20,146.67 acres of land administered by the Forest Service in the Santa Fe National Forest, with the subsurface mineral estate administered by BLM’s Farmington Field Office (“FFO”), in accord with the Administrative Procedure Act (“APA”), 5 U.S.C. § 701 *et seq.*, for violations of the National Environmental Policy Act (“NEPA”), 42 U.S. C. §§ 4321 *et seq.*, and its implementing regulations.

2. The issuance of the challenged leases confers the right to expand oil and gas development into previously undeveloped areas of the Santa Fe National Forest, which is characterized by steep forested slopes, remote wilderness, and vital wildlife habitat. 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 wilderness, air and water quality, and climate. Federal Defendants also failed to take into account the greater magnitude of environmental harms caused by horizontal drilling and multi-stage fracturing, a relatively new technology currently being used to expand oil and gas development in the San Juan Basin and, according to BLM, a technology that will likely be used to develop the leases challenged herein that overlay the Mancos Shale formation.

3. Horizontal drilling and multi-stage fracturing of the Mancos Shale have environmental impacts that are very different in both kind and intensity from previously employed drilling techniques in the San Juan Basin. Moreover, horizontal drilling and multi-stage fracturing have altered the economics of drilling, allowing development of Mancos Shale for the first time in some areas and intensifying the scale of reasonably foreseeable development of this formation in other areas. Fundamentally, horizontal drilling and multi-stage fracturing pose a great risk of significant environmental and public health impacts due to the intensity of development enabled by this technology, including the contamination of surface and groundwater supplies, the emission of hazardous air pollutants and potent greenhouse gases, as well as the potential to threaten the area's wilderness value.

4. This lawsuit challenges the final agency actions of both BLM and the Forest Service, which give rise Citizen Groups' claims. First, Citizen Groups challenge the Forest

Service's September 25, 2013 leasing decision authorizing the sale of the 13 Santa Fe National Forest lease parcels by BLM. Second, Citizen Groups challenge BLM's leasing decisions, which consisted of: (a) BLM's decision to proceed with the October 22, 2014 lease sale on the basis of an inadequate EA and FONSI; (b) BLM's denial of Citizen Groups' Protest on October 23, 2015; and (c) BLM's issuance of all 13 lease parcels to Lessees on October 28, 2015.

5. In authorizing and issuing the 13 lease parcels, Federal Defendants failed to provide a convincing statement of reasons to justify their decisions to forego an environmental impact statement ("EIS"), failed to take a hard look at the direct, indirect, and cumulative impacts of oil and gas leasing and development on the 13 lease parcels, and unlawfully proceeded with an action that will prejudice BLM's pending revision of its Mancos Shale Resource Management Plan Amendment ("RMPA") and accompanying EIS.

#### **JURISDICTION & VENUE**

6. This action arises under NEPA, 42 U.S.C. §§ 4321-4370h, and the Administrative Procedure Act ("APA"), 5 U.S.C. §§ 701-706.

7. 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.

8. 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'

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

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

**11.** Venue in this Court is proper pursuant to 28 U.S.C. § 1391(e). A substantial part of the events and omissions giving rise to the this case occurred in BLM and Forest Service offices located in New Mexico, and this case involves public lands and environmental interests located in New Mexico.

### **PARTIES**

**12.** Plaintiff SAN JUAN CITIZENS ALLIANCE is a grassroots organization dedicated to social, economic, and environmental justice in the San Juan Basin. 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 will irreparably harm these treasured landscapes. 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.

**13.** Plaintiff WILDEARTH GUARDIANS is a non-profit membership organization based in Santa Fe, New Mexico, with offices throughout the West. Guardians has more than 168,000 members and activists, some of whom live, work, or recreate on public lands on and near the Santa Fe National Forest lease parcels challenged herein. Guardians and its members are dedicated to protecting and restoring the wildlife, wild places, and wild rivers 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.

**14.** Plaintiff AMIGOS BRAVOS is a nonprofit river conservation organization whose mission is to preserve the ecological and cultural integrity of New Mexico's rivers and watersheds by assuring compliance with environmental laws and holding polluters and governments accountable for their actions. Through this work, Amigos Bravos ensures that New Mexico's rivers and watersheds provide clean water for irrigating, swimming, fishing, and boating. Amigos Bravos' effort is inspired by New Mexico's traditional water users and guided by the vision of water as both a cultural and natural resource. Amigos Bravos has members throughout New Mexico that use and enjoy the water resources of New Mexico for irrigation, livestock watering, fishing, recreation, spiritual pursuits, and aesthetic interests. Amigos Bravos is increasingly concerned that the observed and anticipated impacts of global warming and climate change will compromise its interests and the interests of its members. Amigos Bravos brings this action on its own behalf and on behalf of its adversely affected members.

**15.** Plaintiff DINÉ CITIZENS AGAINST RUINING OUR ENVIRONMENT ("Diné C.A.R.E.") is an all-Navajo organization comprised of a federation of grassroots community activists in the Four Corners region of Arizona, New Mexico, and Utah who strive to educate and advocate for their traditional teachings derived from Diné Fundamental Laws. Diné C.A.R.E.'s goal is to protect all life in its ancestral homeland by empowering local and traditional people to organize, speak out, and assure conservation and stewardship of the environment through civic involvement, engagement and oversight in decisionmaking processes relating to tribal development, and oversight of government agencies' compliance with all applicable environmental laws. Diné C.A.R.E. members live, use, and enjoy the areas and landscapes,

including cultural resources in the area, that are affected and harmed by oil and gas development authorized by Defendants. Diné C.A.R.E. brings this action on its own behalf and on behalf of its adversely affected members.

**16.** Plaintiff SIERRA CLUB is a national nonprofit organization with 64 chapters and over 630,000 members dedicated to exploring, enjoying, and protecting the wild places of the Earth; to practicing and promoting the responsible use of the Earth's ecosystems and resources; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to use all lawful means to carry out these objectives. The Rio Grande Chapter of Sierra Club has approximately 7,350 members in the State of New Mexico who live in and use the area in and adjacent to the leases for recreational, business, scientific, spiritual, aesthetic, and environmental purposes.

**17.** The Citizen Groups' members use and enjoy the wildlands, wildlife habitat, rivers, streams, and healthy environment on BLM, Forest Service, and other public lands in New Mexico, including lands affected by development of the 13 leases challenged herein, for hiking, fishing, hunting, camping, photographing scenery and wildlife, wildlife viewing, aesthetic enjoyment, spiritual contemplation, and engaging in other vocational, scientific, and recreational activities. The Citizens Groups' members derive recreational, inspirational, religious, scientific, educational, and aesthetic benefit from their activities on these lands, including lands affected by development of the 13 leases challenged herein. The Citizen Groups' members intend to continue to use and enjoy BLM, Forest Service, and other New Mexico public lands, wildlands, wildlife habitat, rivers, streams, and healthy environments, including lands affected by development of the 13 leases challenged herein, frequently and on an ongoing basis in the future.

**18.** The Citizen Groups and their members have a procedural interest in Federal Defendants' full compliance with NEPA's planning and decisionmaking processes for the October 22, 2014 oil and gas lease sale, and Federal Defendants' attendant duty to substantiate their decisions in the record for the lease sale.

**19.** 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 13 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.

**20.** 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.

**21.** Defendant SALLY JEWELL is sued in her 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.

**22.** Defendant UNITED STATES FOREST SERVICE is an agency within the United States Department of Agriculture and is responsible for managing public lands and resources in

New Mexico, including oil and gas exploration and development on and affecting Forest Service lands in the Santa Fe National Forest, and, particularly the lands implicated herein. In this capacity, the Forest Service is responsible for implementing and complying with federal law, including the federal laws implicated by this action.

**23.** Defendant TOM VILSACK is sued in his official capacity as the Secretary of the United States Department of Agriculture 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.

## **LEGAL BACKGROUND**

### **I. Legal Framework for Federal Oil and Gas Lease Authorizations**

#### **A. Mineral Leasing Act**

**24.** 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.

**25.** The Secretary has discretion, though 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. The grant of rights in a federal mineral lease is subject to a number of reservations of authority to the federal government, including reasonable measures concerning the timing, pace, and scale of development. *Id.*

**26.** 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.



27. The MLA also states 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**

28. 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.

29. 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, and analyzes the landscape-level cumulative impacts from predicted implementation-stage development.

30. A reasonably foreseeable development scenario (“RFDS”) underlies BLM’s assumptions regarding the pace and scope of fluid minerals development within the RMP planning area.

31. In the second phase, BLM identifies the boundaries for lands to be offered for sale and proceeds to sell and execute leases for those lands through a lease sale. Leases are sold in accordance with 43 C.F.R. §§ 3120 *et seq.*, with additional agency guidance outlined in BLM Instruction Memorandum (“IM”) No. 2010-117 (hereafter, “Leasing Reforms”).

32. Oil and gas companies typically nominate leaseholds for sale through the

submission of an “Expression of Interest.”

**33.** 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. *Udall v. Tallman*, 380 U.S. 1, 5 (1965).

**34.** Prior to a BLM lease sale, BLM 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 not retroactively impose lease stipulations. Instead, BLM may impose conditions of approval (“COAs”) that are delimited by the terms and conditions of the lease. 43 C.F.R. § 3101.1-2. A lease stipulation is therefore legally and functionally different than a COA, as those terms are used by BLM.

**35.** 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. *Clayton W. Williams, Jr.*, 103 IBLA 192 (1988).

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

**37.** The third-phase occurs once BLM issues a lease, where 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.

**38.** While BLM manages oil and gas resources through a three-phased process, there are important steps that take place between the execution of a lease and the lessee’s submission of an APD to BLM for approval. For example, prior to submitting an APD, BLM requires the

lessee or the lessee's operator to obtain all necessary right-of-way permits. In addition, leases inform well-spacing programs and unitization, communitization, and other types of drilling unit agreements the lessee enters into after BLM sells and issues a lease but prior to the development and submission of APDs. These activities define and delimit APDs and BLM's review and approval of those APDs.

**C. Federal Onshore Oil and Gas Leasing Reform Act**

**39.** The Federal Onshore Oil and Gas Leasing Reform Act ("FOOGLRA") outlines an 8-step process for oil and gas leasing of federal minerals on Forest Service lands.<sup>1</sup> Under FOOGLRA, Forest Service and BLM share responsibility for the issuance of leases on Forest lands. *See* 30 U.S.C. § 226(h). The Forest Service is responsible for implementing those portions of the lease that require lessees to conduct operations in a manner that minimizes adverse impacts to surface resources and other land uses and users.

**40.** The Forest Service is required to comply with NEPA, NEPA's implementing regulations, as well as the Forest Service's own policies and procedures when analyzing oil and gas leasing decisions. 36 C.F.R. §228.102(a).

**41.** At the "leasing decision" stage, the Forest Service identifies specific parcels for leasing, performs specific environmental review on those parcels, and determines whether to authorize BLM to lease those parcels. *See* 36 C.F.R. § 228.102(e). At the "verification" stage, the Forest Service verifies that the leasing was adequately addressed in a NEPA document and is consistent with management plans. *See* 36 C.F.R. § 228.102(e)(1).

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<sup>1</sup> The eight steps are: (1) leasing analysis; (2) leasing decision; (3) verification; (4) BLM assessment; (5) sale by the BLM; (6) issuance of lease; (7) application for permit to drill; and (8) application for permit to drill to develop a field.

**42.** If NEPA has not been adequately addressed, or if there is significant new information or circumstances requiring further analysis, pursuant to 40 C.F.R. § 1502.9, then additional environmental analysis must be completed before a leasing decision for specific lands can be made. *Id.* The Forest Service also ensures that conditions of surface occupancy have been included as stipulations in the lease, and determines that operations and development could be allowed somewhere on the lease (unless stipulations prohibit all surface occupancy). *See* 36 C.F.R. §§ 228.102(e)(2), (3).

## **II. National Environmental Policy Act**

**43.** NEPA is our “basic national charter for the protection of the environment.” 40 C.F.R. § 1500.1. It was enacted—recognizing that “each person should enjoy a healthful environment”—to ensure that the federal government uses all practicable means to “assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings,” and to “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).

**44.** 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.

**45.** “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.

**46.** 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).

**47.** To accomplish this purpose, 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.

**48.** 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.

**49.** 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.

**50.** 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.

“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 [u]nique characteristics of the geographic area[.]” “[t]he degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks[.]” and “[w]hether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.” 40 C.F.R. § 1508.27(b).

**51.** NEPA allows an agency to “tier” a site-specific environmental analysis for a project to a broader EIS for a program or plan under which the subsequent project is carried out. 40 C.F.R. § 1508.28. When an agency tiers a site-specific analysis to a broader EIS, “the subsequent statement or environmental assessment need only summarize the issues discussed in the broader statement and incorporate discussions from the broader statement by reference and shall concentrate on the issues specific to the subsequent action.” 40 C.F.R. § 1502.20.

**52.** The Department of Interior’s NEPA regulations for using tiered documents specify that site-specific EAs “can be tiered to a programmatic or other broader-scope [EIS].” 43 C.F.R. § 46.140(c). As a general rule, an EA that tiers to another NEPA document “must include a finding that the conditions and environmental effects described in the broader NEPA document are still valid or address any exceptions.” 43 C.F.R. § 46.140. If the programmatic EIS analyzes the impacts of the site-specific action, the agency is not required to perform additional analysis of impacts. 43 C.F.R. § 46.140(a). However, if the impacts analysis in the programmatic EIS “is

not sufficiently comprehensive or adequate to support further decisions,” the agency’s EA must explain this and provide additional analysis. 43 C.F.R. § 46.140(b).

### **III. Administrative Procedure Act**

**53.** 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.

**54.** 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).

## **STATEMENT OF FACTS**

### **I. Environmental Impacts of Horizontal Drilling/Multi-Stage Fracking**

**55.** Hydraulic fracturing, or “fracking,” is an oil and gas drilling “stimulation” technique involving the high-pressure injection of large quantities of water, proppants (typically sand), and chemical additives into the wellbore to fracture the targeted geologic formations to enhance the release of oil and natural gas. Some variation of oil and gas stimulation has been used in the San Juan Basin since the 1950s. However, these early stimulation techniques are vastly different from the type of large-volume multi-stage fracking techniques currently employed. Because there is long history of single-stage fracking in the San Juan Basin, BLM’s 2003 RMP only analyzed the environmental impacts of vertical drilling and single-stage fracking and did not analyze the environmental impacts of oil and gas development using horizontal drilling and multi-stage hydraulic fracking techniques.

**56.** As recently as BLM’s 2001 reasonably foreseeable development scenario (“2001

RFDS”), the agency stated that horizontal drilling was theoretically possible but not currently applied in the San Juan Basin due to poor economics. Over the last 10 years, advances in horizontal drilling technology combined with multi-stage and multi-zone fracking have enabled energy development that previously was uneconomic, including in the San Juan Basin. Specifically, improvements and innovations in horizontal drilling technology and multi-stage hydraulic fracturing have enhanced the economics of developing the Mancos Shale.

**57.** Hydraulic fracturing of horizontal shale wells is generally performed in stages. Lateral lengths in horizontal wells may range from 1,000 feet to more than 5,000 feet. During the fracking process within the horizontal portion of the wellbores, a series of charges are set through the producing interval to perforate the production liner and casing to create small fractures in the formation. A fracking fluid mixture is then injected into the formation, at high pressure, to create cracks or fractures. The fluids open or enlarge fractures that typically extend several hundred feet, but can extend more than 1,000 feet away from the well bore.

**58.** In the first several days to weeks after the multi-stage fracking process, the well pressure is released and a portion of the fracking fluid—known as “flowback”—returns to the surface of the wellbore. Over longer time periods, water naturally present in the targeted formation—known as “produced water”—continues to flow through the well to the surface. The flowback and produced water typically contain both the injected chemicals and naturally occurring substances such as brines, heavy metals, radionuclides, and hydrocarbons. Very small quantities of some toxic fracking chemicals, such as benzene, are capable of contaminating millions of gallons of water.

**59.** Horizontal drilling and multi-stage fracking also requires the development of new roads, gathering pipelines, and other infrastructure. Moreover, each well typically requires



thousands of truck trips to transport the water, nitrogen, and chemicals necessary for well completion and subsequent disposal of flowback and produced water.

**60.** The type and magnitude of environmental impacts for horizontal drilling and multi-stage fracking differ from those associated with conventional, vertical drilling practices discussed in the 2003 RMP/EIS. Horizontal wells (5.2 acres) have more than double the surface impacts of vertical wells (2 acres). Horizontally-drilled wells emit over 250 percent more air pollutants than vertical wells. Each horizontal well produces 11.88 more tons of volatile organic compounds and 1.13 more tons of hazardous air pollutants than each vertical well. It takes 5-10 times more water to hydraulically fracture a horizontal well. There are increased noise impacts from a horizontally-drilled well because both drilling and multi-stage fracking treatments take longer to complete.

**61.** BLM has recognized that “[a]s full-field development occurs [as a result of new horizontal drilling technology], especially in the shale oil play, additional impacts may occur that previously were not anticipated in the [2001] RFD or analyzed in the current 2003 RMP/EIS, which will require an EIS-level plan amendment and revision of the RFD for complete analysis of the Mancos Shale/Gallup Formation.” 79 Fed. Reg. 10,548 (Feb. 25, 2014).

**62.** Fracking fluid is a conglomeration of various chemicals and compounds, many of which are highly toxic. Although BLM points out that chemicals typically make up just 1% of the total volume of the fracturing fluid, when millions of gallons of water are being used, the amount of chemicals per fracking operation is very large. For example, the EPA has noted that a 3 million gallon fracturing operation generally uses 15,000 to 60,000 gallons of chemical additives. Many of these fracking fluid chemicals are known to be toxic to humans and wildlife, and several are known to cause cancer. Toxic substances used in fracking include petroleum

distillates such as kerosene and diesel fuel (which contain benzene, ethylbenzene, toluene, xylene, naphthalene and other chemicals); polycyclic aromatic hydrocarbons; methanol; formaldehyde; ethylene glycol; glycol ethers; hydrochloric acid; and sodium hydroxide.

**63.** Given the use of such chemicals and their presence in flowback and produced water, the contamination of domestic and agricultural water supplies from multi-stage hydraulic fracturing is a serious concern. Moreover, if the wellbore is not properly sealed, cased, or its integrity is otherwise compromised, chemicals and other toxic substances can escape as they move through the well. The fracking fluid can also migrate underground, through natural and induced fractures, and lead to contamination of groundwater. Active and abandoned wells can also serve as pathways for the migration of contaminants into water sources. Spills of fracking fluids including the flowback can occur on the surface during storage, transportation and/or disposal.

**64.** Many of the challenged leases straddle the Continental Divide, with some of the leases located east of the Divide in the vicinity of the Rio Chama and Rio Gallina watersheds. In its EA, BLM admits that “[c]ontamination of groundwater could occur without adequate cementing and casing of [] proposed well bore[s].” BLM also admits that “potential impacts to groundwater from the well bores would be long term for the life of the well.” The challenged leases could also result in groundwater contamination through subsurface injection of produced water, the predominant method for wastewater disposal from oil and gas development in the San Juan Basin. The New Mexico Oil Conservation Division’s waste injection well data for the area that includes the challenged leases documents injection pressures between 160 and 250 psi. The EPA recommends a maximum injection pressure for disposal wells of 1.2 psi “to prevent fracturing of the confining zone and possible contamination of underground sources of drinking

water.” The extreme injection pressures used in the area of the challenged leases suggests a serious risk that water back pressures may cause a release of produced and flowback water into the water-bearing strata.

**65.** In addition to the significant risk of groundwater contamination from development of the challenged leases, there is also a significant risk of drawdown of groundwater aquifer levels because horizontal drilling and multi-stage fracturing requires high volumes of water. Groundwater drawdown could significantly impact the land, wildlife, livestock, and human communities in and around the challenged leases.

**66.** Flowback and produced water brought to the surface also contain volatile organic compounds (“VOCs”) and other Hazardous Air Pollutants (“HAPs”), which vaporize and contribute to air pollution.

**67.** According to the EPA, the oil and gas industry is the largest industrial source of emissions of VOCs, a group of chemicals that contribute to the formation of ground-level ozone. These emissions also include air toxics such as benzene, ethylbenzene, and n-hexane, which are “pollutants known, or suspected of causing cancer and other serious health effects.” The EPA reports that the oil and gas industry: “emits 2.2 million tons of VOCs, 130,000 tons of air toxics, and 16 million tons of greenhouse gases (methane) each year (40% of all methane emission in the U.S.). The industry is one of the largest sources of VOCs and sulfur dioxide emissions in the United States.”

**68.** In recent years, the San Juan Basin has seen elevated monitored levels for the 8-hour ozone National Ambient Air Quality Standard (“NAAQS”). Exposure to ozone is a serious concern as it can cause or exacerbate respiratory health problems, including shortness of breath, asthma, chest pain and coughing, decreased lung function and even long-term lung damage, all

of which can contribute to premature deaths. There is no room for growth in emissions that contribute to these harmful levels of ozone pollution in the San Juan Basin, in particular nitrogen oxides (“NO<sub>x</sub>”) and VOCs. Any increase in emissions of ozone precursors will exacerbate the negative health effects of ozone in the region. The expansion of development into the Santa Fe National Forest has the potential to significantly add to emissions of NO<sub>x</sub> and VOCs. San Juan County, New Mexico, has a particularly vulnerable population with high incidence of respiratory disease:

San Juan County has a higher incidence of chronic lower respiratory disease (CLRD) comprised of chronic bronchitis, asthma, and emphysema compared to New Mexico or the rest of the United States. Another study found that elevated levels of ozone in San Juan County were linked to incidence of asthma-related medical visits. The study found that San Juan County Residents are 34 percent more likely to have asthma-related medical visits after 20 parts per billion increases in local ozone levels.

**69.** On December 17, 2014, EPA published a proposal to revise NAAQS for ozone to 65 to 70 parts per billion (“ppb”) from the current 75 ppb. 79 Fed. Reg. 75,234 (Dec. 17, 2014). This decision was driven by significant recent scientific evidence that the current standard of 75 ppb does not adequately protect public health and that ozone concentrations as low as 72 ppb can cause respiratory harm to young, healthy adults following exposure for less than eight hours. Under EPA’s proposed revised ozone standard, San Juan County would be in nonattainment of the NAAQS standard.

**70.** Hydraulic fracturing completions in the Mancos Shale are typically designed with nitrogen foam. While nitrogen foam fracking can minimize water usage and improve fluid recoveries, it necessarily requires flaring and thus contributes to air quality impacts and greenhouse gas emissions. The use of nitrogen foam in the fracking process initially results in upwards of 60% nitrogen content in produced gas, which must be flared for an average of 60-90

days until the nitrogen content is reduced to 10% or less before the gas can enter a pipeline. When the target of development is oil, flaring can take place for much longer. The flaring of produced gas not only wastes important federal mineral resources that could otherwise be used to heat our homes, but also reduces royalty payments to state and federal governments while significantly contributing to the greenhouse gas emissions.

**71.** The Nobel-prize winning Intergovernmental Panel on Climate Change (“IPCC”) has identified the heat-trapping effect of methane—or global warming potential (“GWP”)—as 36 times more potent than carbon dioxide over a 100-year period and 87 times more potent over a 20-year period. In September 2014, scientists from the University of Michigan, NASA’s Jet Propulsion Laboratory, Los Alamos National Laboratory, and California Institute of Technology published the results of a study of atmospheric methane concentrations in the U.S. This study identified what has been described as a methane “hot spot” over the San Juan Basin. Total oil and gas methane emissions in the San Juan Basin reported to the EPA’s Greenhouse Gas Reporting Program were 330,000 metric tons for 2012. Reported methane emissions have grown by over 10% with a total for 2013 of almost 370,000 metric tons. The “hot spot” study conducted simulations of methane emissions for the region for 2012 to estimate what emissions rate would correspond to observed atmospheric methane concentrations. The simulations resulted in average methane emissions from all sources in the San Juan Basin of 590,000 metric tons per year. This level of emissions represents an exceptionally large share of total natural gas methane emissions identified in the U.S. Greenhouse Gas Inventory. The expansion of Mancos Shale development onto the challenged leases has the potential to significantly increase methane emissions in the Santa Fe National Forest in particular and the San Juan Basin in general.

**72.** Carbon dioxide is the leading cause of climate change and the most emitted

greenhouse gas in the United States. According to the most recent EPA report, *Inventory of U.S. Greenhouse Gas Emissions and Sinks, 1990-2013* (“2013 GHG Inventory Report”), carbon dioxide comprised 83 percent of total U.S. greenhouse gas emissions, or 5,505.2 million metric tons. BLM quantified the annual carbon dioxide equivalent (“CO<sub>2</sub>e”) emissions for the estimated 118 oil wells developed on the challenged lease parcels at 11,611 metric tons of CO<sub>2</sub>e per year.

**73.** In recognition of the economic 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 economic damages associated with a small increase in carbon dioxide (CO<sub>2</sub>) emissions, conventionally one metric ton, in a given year.”<sup>2</sup> Conversely, the social cost of carbon can represent “the value of damages avoided for a small emission reduction (i.e., the benefit of a CO<sub>2</sub> reductions).” A federal Interagency 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 have prepared estimates of what the actual social cost of carbon is. The Working Group’s most recent report estimated the cost of carbon dioxide emissions as of 2015 ranged between \$11 and \$105 per metric ton.<sup>3</sup>

**74.** Development of the 13 challenged leases using horizontal drilling and multi-stage fracking will result in significant air, visual, and auditory impacts to the general area, as well as Class I areas such as the adjacent San Pedro Parks Wilderness.

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<sup>2</sup> EPA, “The Social Cost of Carbon,” available at <http://www.epa.gov/climatechange/EPAactivities/economics/scc.html> (last accessed April 13, 2016).

<sup>3</sup> Interagency Working Group on Social Cost of Carbon, United States Government, “Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866” (July 2015) at 3, available at <https://www.whitehouse.gov/sites/default/files/omb/inforeg/scc-tsd-final-july-2015.pdf> (last accessed April 13, 2016).

75. Development of the 13 challenged leases using horizontal drilling and multi-stage fracking can affect the area's viewshed in a number of ways. Ozone is the main component of smog. Gas flares from development on the 13 leases will create light pollution which, when combined with smog, will interfere with the unobstructed viewshed in Class I areas such as the adjacent San Pedro Parks Wilderness.

## **II. BLM's October 22, 2014 Competitive Oil and Gas Lease Sale**

76. On or about March 10, 2014, BLM released a list and map of 26 nominated parcels for inclusion in the October 2014 competitive oil and gas lease sale. BLM then initiated a two-week public scoping period.

77. On March 24, 2014, 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.

78. On or about May 1, 2014, BLM released a "draft" EA and unsigned FONSI for public review and comment. The draft EA stated that 35 parcels had been nominated for the October 2014 oil and gas lease sale, and included a "proposed action" that would lease 25 of those parcels, covering 23,325.4 acres under standard lease terms and conditions.

79. On May 28, 2014, Citizen Groups submitted comments to BLM regarding the agency's draft EA and unsigned FONSI. These comments reiterated many of the concerns raised in scoping, and offered detailed technical information, expert reports, and legal analysis.

80. On or about July 16, 2014, BLM released a "final" EA and unsigned FONSI, initiating the protest period for the October 2014 lease sale.

81. The final EA included a "preferred alternative" wherein 13 parcels covering

20,146.67 acres were included in the October 2014 lease sale. All 13 parcels are located in the Santa Fe National Forest, with a surface estate administered by the Forest Service. BLM identified these parcels in the agency's lease sale notice.

**82.** As described in the final EA, BLM deferred authorizing the other 12 parcels previously included in the proposed action "until the FFO Mancos Shale/Gallup Formation RMPA/EIS alternatives have been developed."

**83.** On August 14, 2014, Citizen Groups filed an administrative protest of BLM's lease authorizations for the October 2014 sale, objecting to the inclusion of all 13 of the parcels in the Santa Fe National Forest.

**84.** On October 22, 2014, BLM held the competitive oil and gas lease sale at the agency's New Mexico State Office in Santa Fe, New Mexico. BLM posted the sale results the same day, indicating that all 13 parcels had been sold.

**85.** On October 23, 2015, a year after all parcels were sold, BLM denied Citizen Groups' Protest of the lease authorizations.

**86.** On October 28, 2015, BLM issued all 13 leases to Lessees.

### **III. The Challenged Leases**

**87.** All 13 parcels included in the October 2014 lease sale are dispersed within the northwestern portion of the Santa Fe National Forest, and are within the oil and gas study area for the 2008 Forest Plan Amendment and 2012 Forest Plan Supplement.

**88.** Citizen Groups are challenging the authorization of all 13 leases. These leases are identified by the following lease numbers:

NM-201410-001, NM-201410-004, NM-201410-005, NM-201410-006,  
NM-201410-007, NM-201410-008, NM-201410-009, NM-201410-010,  
NM-201410-011, NM-201410-012, NM-201410-013, NM-201410-014,  
NM-201410-015,



The leases are referred to generally as Parcel Nos. 1, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, and 15.

**89.** With the exception of Parcel No. 14, each of the leases has a partial no surface occupancy (“NSO”) stipulation for steep slopes, precluding surface-disturbing activities on slopes with an incline of 40 percent or greater. BLM can grant an exception, modification, or waiver of this stipulation. BLM does not identify in its decision record for the leases the specific locations of the steep slopes, or the amount of lease acreage subject to the NSO stipulation for steep slopes.

**90.** Parcel Nos. 7, 9, 10 and 11 have a NSO stipulation for roadless recreation to keep surface disturbance outside of designated roadless recreation areas. BLM can grant an exception, modification, or waiver of this stipulation. BLM does not identify in its decision record for the leases the specific locations of the roadless recreation areas, the amount of lease acreage subject to the NSO stipulation for roadless recreation, or the number of parcels that are included in BLM’s Inventoried Roadless Areas (“IRAs”).

**91.** Parcel Nos. 7, 9, 10 and 11 appear to be located directly adjacent to the San Pedro Parks Wilderness, which Congress accorded Wilderness status in 1964. The use of motorized or mechanized vehicles, mining, and the construction of roads and buildings are not permitted within Wilderness Areas.

**92.** The purpose of a Wilderness designation is “to secure for the American people of present and future generations the benefits of an enduring resource of wilderness .... devoted to the public purposes of recreation, scenic, scientific, educational, conservation, and historical use.”

**93.** The San Pedro Parks Wilderness—as well as perhaps nine other Wilderness Areas and National Parks in the area—are designated Class I areas under the Clean Air Act. The Clean

Air Act's visibility provisions set forth a national goal for the "prevention of any future, and the remedying of any existing, impairment of visibility in Class I areas which impairment results from manmade air pollution." The San Pedro Parks Wilderness may be impacted from oil and gas leasing and development of the leases challenged herein.

**94.** The leases challenged herein are located in areas of the Santa Fe National Forest containing important wildlife habitat, including resident elk, mule deer, and pronghorn antelope populations, as well as golden eagle and Rio Grande cutthroat trout.

**95.** The Forest Service parcels are split along the Continental Divide, meaning certain parcels are located within the San Juan Basin, whereas others are located within the Rio Chama Watershed, which is a sub-basin of the Upper Rio Grande Basin.

#### **IV. Federal Split Estate Lands, Forest Service Approval**

**96.** The 13 leases included in the October 2014 lease sale and challenged herein have a surface estate administered by the Forest Service Cuba Ranger District, Santa Fe National Forest. BLM's Farmington Field Office administers the federal mineral estate, creating a federal "split estate" on the leases challenged herein.

**97.** Pursuant to the Energy Policy Act of 2005, a memorandum of understanding ("MOU") was established regarding oil and gas leasing and operations on public lands under joint jurisdiction of BLM and the Forest Service.

**98.** The MOU outlines coordination and responsibilities between BLM and the Forest Service regarding leasing decisions and the application of lease stipulations.

**99.** BLM issues and administers oil and gas leases on Forest Service lands only after the Forest Service authorizes leasing for specific lands.

**100.** In November 2012, the Forest Service issued a Record of Decision for Oil-Gas

Leasing (“ROD”) and Final Supplement to the Final Environmental Impact Statement for Oil-Gas Leasing, Santa Fe National Forest, Rio Arriba and Sandoval Counties, New Mexico (“2012 Supplement”). The Forest Service issued the 2012 Supplement to further complement a 2008 Santa Fe National Forest Oil-Gas Leasing Forest Plan Amendment (“2008 Amendment”), both of which amend and supplement the 1987 Santa Fe National Forest Land and Resource Management Plan (“1987 Forest Plan”).

**101.** The Santa Fe National Forest is currently undergoing a Forest Plan Revision, which, when complete, will replace the 1987 Forest Plan.

**102.** The oil and gas study area for the 2012 Supplement and 2008 Amendment specifically included lands in the northwestern portion of the Santa Fe National Forest. All 13 leases challenged herein are within the study area.

**103.** BLM’s 2003 Farmington RMP addressed management of federal minerals within the New Mexico portion of the San Juan Basin, including the area where the challenged leases are located. Although the 2003 RMP considered the potential for development within the Santa Fe National Forest, “it was not adequate to meet Forest Service National Environmental Policy Act (NEPA) requirements.”

**104.** The 1987 Forest Plan provided no site-specific direction regarding the management of oil and gas on the Santa Fe National Forest. The Forest Plan included broad direction regarding leasing categories of standard and limited surface use, but included no direction regarding the location or purpose of such stipulations.

**105.** The Forest Service recognized the need for site-specific evaluation of oil and gas leasing availability, as well as the insufficiency of both the 1987 Forest Plan and BLM’s 2003 RMP to provide the level of analysis necessary to guide the Forest Service’s decisionmaking.

The Forest Service issued the 2008 Amendment and 2012 Supplement to address the fundamental NEPA deficiencies in BLM's 2003 RMP.

**106.** Many of the Forest Service's assumptions in developing the 2008 Amendment and 2012 Supplement, including an estimate of surface disturbance associated with current gas development, were premised on BLM's 2003 Farmington RMP.

**107.** Neither the 2008 Amendment nor the 2012 Supplement replaces or supplants the need for site-specific analysis of the challenged lease parcels.

**108.** The 2012 ROD amended the Forest Plan to incorporate specific stipulations, including no surface occupancy ("NSO"), controlled surface use ("CSU"), and timing limitations ("TL"), which were added to specific lands and resources within the study area. The NSO stipulation was established to protect steep slopes, roadless recreation areas, or heritage resources. The CSU stipulation was established to protect riparian areas, wetlands, and high scenic integrity objectives. The TL stipulation was established to minimize impacts to threatened, endangered, or Forest Service sensitive species.

**109.** All Santa Fe National Forest lands included in the study area remain open to development but are now subject to the terms of the stipulations, where applied.

**110.** The Forest Service applied a combination of these stipulations to the 13 leases challenged herein.

## **VII. BLM Planning and Management Governing the October 2014 Lease sale**

**111.** BLM completed the current RMP for the FFO planning area in 2003, with a RFDS that was finalized in 2001.

**112.** BLM makes RMP revisions in accordance with 43 C.F.R. § 1610.5-6, and involves preparation of a new RMP to amend or replace an existing one. RMP revisions are

necessary if monitoring and evaluation findings, new data, new or revised policy, or changes in circumstances indicate that decisions for an entire plan or a major portion of the plan no longer serve as a useful guide for resource management.

**113.** BLM determined that the 2003 RMP is no longer capable of guiding the agency's fluid minerals leasing and development decisionmaking, and is currently engaged in preparing a RMP Amendment and EIS specific to the Mancos Shale/Gallup Formation. All 13 lease parcels challenged herein are within the planning area for the Mancos RMPA.

**114.** Acknowledging the deficiencies of the 2003 RMP, BLM provides that “[a]s full-field development occurs, especially in the shale oil play, additional impacts may occur that previously were not anticipated in the RFD or analyzed in the current 2003 RMP/EIS which will require an EIS-level plan amendment and revision of the RFD for complete analysis of the Mancos Shale/Gallup Formation.” 79 Fed. Reg. 10,548 (Feb. 25, 2014).

**115.** Other parcels originally included in the October 2014 lease sale were “deferred until the FFO Mancos Shale/Gallup Formation RMPA/EIS alternatives have been developed.”

**116.** The 2003 RMP never contemplated commercially viable development of the Mancos Shale—whether for oil or gas and whether for exploration or full-field production—utilizing horizontal drilling and multi-stage fracking techniques.

**117.** At the time of the 2001 RFDS, horizontal drilling and multi-stage fracking were in their infancy. Since 2003, the technology has evolved to be more efficient and less costly.

**118.** Horizontal drilling combined with multi-stage fracking is now a common process in the San Juan Basin and used for nearly all wells drilled in the Mancos Shale formation.

**119.** BLM acknowledges that it is reasonably foreseeable that horizontal drilling and multi-stage fracking will occur on the challenged leases, and that “potential full development of

the proposed lease sale is estimated at 118 oil wells” primarily targeting the Mancos Shale formation.

**120.** BLM encourages industry to incorporate certain measures, including the implementation of directional drilling and horizontal completion technologies.

**121.** The Mancos Shale formation is the producing zone targeted for development of the challenged leases, at an average total depth of 6,700 feet below the ground surface.

#### **VIII. BLM’s Decisionmaking and Analysis for the October 2014 Lease Sale**

**122.** In its Leasing EA for the challenged leases, BLM consistently asserts: “The act of leasing the parcels would, by itself, have no impact on any resources in the FFO. All impacts would be linked to as yet undetermined future levels of lease development.”

**123.** Mitigation measures or conditions of approval cannot take away lease rights or prevent development.

**124.** “Once sold, the lease purchaser has the exclusive 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.”

**125.** When discussing various resource specific concerns, BLM’s Leasing EA consistently relies on possible mitigation measures and best management practices (“BMPs”) that may be required at the APD stage to avoid a finding of significance, for example, “[t]o mitigate any potential impact that oil and gas development emissions may have on regional air quality, Best Management Practice (BMPs) may be required for any development project.”

**126.** By failing to perform the necessary analysis at the leasing stage, BLM presupposes that any site-specific impacts from oil and gas development can be mitigated at the

APD stage to prevent significant impacts before even knowing the type and extent of those site-specific impacts.

**127.** BLM also presupposes that the benefits associated with oil and gas development outweigh the risks to natural resources such as wildlife habitat, and air and water quality. BLM must evaluate the impacts of oil and gas development on these resources prior to allowing lease sales to proceed. In making this predetermined conclusion, BLM makes an irreversible and irretrievable commitment of resources that benefits oil and gas leasing and drilling at the expense of other multiple use resources.

**128.** BLM's Leasing Reforms, discussed above, require "site-specific NEPA compliance documentation for all ... lease sale parcels," which must include "an opportunity for public review ... [and verification] that all legal requirements have been met."

**129.** NEPA requires BLM to provide the information upon which it bases its environmental analysis prior to the implementation of a proposed action.

**130.** By failing to perform any analysis of oil and gas impacts at the leasing stage, BLM also fails to establish any baseline information from which a future impacts analysis at the APD stage can be measured. Once a project begins, the "pre-project environment" no longer exists, and there is simply no way to determine what effect an action will have on the environment.

## **CLAIMS FOR RELIEF**

### **FIRST CLAIM FOR RELIEF**

#### **Failure to Take a Hard Look at the Environmental Impacts of Oil and Gas Development (BLM's Violation of NEPA)**

**131.** The allegations made in all preceding paragraphs are re-alleged and incorporated by this reference.

**132.** Pursuant to NEPA and its implementing regulations, BLM must take a hard look at the direct, indirect, and cumulative environmental impacts of a proposed action before the agency makes any irreversible and irretrievable commitment of resources. 42 U.S.C. §§ 4332(2)(C)(i)-(v); 40 C.F.R. §§ 1502.14(a), 1502.16, 1508.7, 1508.8, and 1508.14.

**133.** Oil and gas development on the 13 leases, individually and when added to other past, present, and reasonably foreseeable future activities have potentially significant direct, indirect, and cumulative impacts on air quality, water quality and quantity, climate, and landscapes (including Wilderness Areas) in the region. In spite of this, BLM did not analyze any of these impacts associated with expanding oil and gas development into a previously undeveloped area of the Santa Fe National Forest.

**134.** BLM's claims that "[t]he act of leasing the parcels would, by itself, have no impact on any resources in the FFO" and "[a]ll impacts would be linked to as yet undetermined future levels of lease development" do not excuse BLM from complying with NEPA's hard look requirement at the leasing stage.

**135.** In its EA, BLM recognized that "[p]otential cumulative effects may occur," but concluded that "[p]reserving as much land as possible and applying appropriate mitigation measures will alleviate the cumulative impacts." BLM failed to identify or quantify the specific mitigation measures or land preservation strategies that will keep the potential cumulative impacts of lease development on air, water, climate, and wilderness resources below significant levels, when considered with past, present, and foreseeable future development in the project area.

**136.** Because BLM failed to take a hard look at direct, indirect, and cumulative impacts of expanding oil and gas development into a previously undeveloped area of the Santa



Fe National Forest, BLM's authorization of the 13 leases challenged herein is arbitrary, capricious, and 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).

**SECOND CLAIM FOR RELIEF**  
**Failure to Provide a Convincing Statement of Reasons on the Record**  
**Justifying Decision to Forego Preparation of an EIS**  
**(BLM's Violation of NEPA)**

**137.** The allegations made in all preceding paragraphs are re-alleged and incorporated by this reference.

**138.** BLM's authorization and issuance of the leases sold through the October 22, 2014 oil and gas lease sale constitute major federal actions under NEPA.

**139.** 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. 40 C.F.R. § 1508.27.

**140.** BLM failed to evaluate the context and intensity of the environmental impacts resulting from its decision to issue the 13 leases challenged herein, pursuant to NEPA. BLM also failed to provide convincing statements of reasons justifying its decision to forego an EIS analyzing the impacts of the 13 lease parcels challenged herein, as required by NEPA.

**141.** BLM's leasing decision could significantly impact air quality, water quality and quantity, climate, and wilderness resources in the region. NEPA therefore requires BLM to identify such impacts and assess their context and intensity on the record to support the agency's decision to forego an EIS.

**142.** BLM's assertion in its EA that it may require mitigation measures at the drilling

stage does not eliminate substantial questions at the leasing stage as to whether lease development may significantly impact the environment and, further, does not support BLM's decision to forgo an EIS.

**143.** Because BLM failed to provide a convincing statement of reasons on the record justifying its decision to forego preparation of an EIS, BLM's actions are arbitrary, capricious, and 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).

**THIRD CLAIM FOR RELIEF**  
**Unlawful Issuance of Leases During Pending Resource Management Plan Amendment**  
**and Forest Plan Revision**  
**(Federal Defendants' Violation of NEPA)**

**144.** The allegations made in all preceding paragraphs are re-alleged and incorporated by this reference.

**145.** BLM determined, consistent with the agency's obligation pursuant to 43 C.F.R. § 1610.5-6, that a Mancos Shale/Gallup Formation RMP Amendment was necessary to "analyze the impacts of additional development in what was previously considered a fully developed oil and gas play within the San Juan Basin in northwestern New Mexico." BLM recognizes that "[a]s full-field development occurs, especially in the shale oil play, additional impacts may occur that previously were not anticipated in the RFD, or analyzed in the current 2003 RMP/EIS which will require an EIS-level plan amendment and revision of the RFD for complete analysis of the Mancos Shale/Gallup Formation."

**146.** BLM's Notice of Competitive Lease Sale identified the 13 leases challenged herein as available at the October 22, 2014 oil and gas lease sale.

**147.** These 13 leases are located within the Mancos Shale/Gallup Formation RMP

Amendment planning area, as well as the RFD analysis area.

**148.** BLM sold the 13 leases challenged herein according to the conditions and analyses contained in the 2003 Farmington RMP, and as relied upon by the Forest Service in preparing the 2008 Forest Plan Amendment and 2012 Forest Plan Supplement to the 1987 Forest Plan.

**149.** The Santa Fe National Forest is currently undergoing a revision of the 1987 Forest Plan.

**150.** Pursuant to NEPA implementing regulations at 40 C.F.R. § 1506.1(c): “[w]hile work on a required program environmental impact statement is in progress and the action is not covered by an existing program statement, agencies shall not undertake in the interim any major Federal action covered by the program which may significantly affect the quality of the human environment...”

**151.** The sale of the 13 leases challenged herein impermissibly prejudices the decisionmaking process and limits the choices of alternatives in the pending Mancos Shale/Gallup Formation RMP Amendment and EIS, and Santa Fe National Forest Plan Revision, in violation of 40 C.F.R. § 1506.1(c).

**152.** Because BLM and Forest Service authorized an action that could prejudice or limit the choice of alternatives in the programmatic EIS’s that will accompany the ongoing BLM Resource Management Plan Amendment and Forest Plan Revision, Federal Defendants’ actions are arbitrary, capricious, and 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).

**FOURTH CLAIM FOR RELIEF**  
**Failure to Take a Hard Look at the Impacts of Oil and Gas Development and Failure to**  
**Consider Significant New Information and Circumstances**  
**(Forest Service's Violation of NEPA)**

**153.** The allegations made in all preceding paragraphs are realleged and incorporated by this reference.

**154.** The Forest Service is required to comply with NEPA, NEPA's implementing regulations, as well as the Forest Service's own policies and procedures when analyzing oil and gas leasing decisions. 36 C.F.R. §228.102(a).

**155.** The Forest Service is required to conduct leasing analysis in accordance with 36 C.F.R. § 219 (Forest land and resource management planning) and through preparation of NEPA documents. 36 C.F.R. § 228.102(c).

**156.** For leasing decisions on specific Forest Service lands, the Regional Forester is required to “[v]erify[] that oil and gas leasing has been adequately addressed in a NEPA document, and is consistent with the Forest land and resource management plan. If the proposed action has not been adequately addressed, or if there is significant new information or circumstances as defined by 40 C.F.R. § 1502.9 requiring further environmental analysis, additional environmental analysis shall be done before a leasing decision for specific lands will be made.” 36 C.F.R. §228.102(e)(1).

**157.** NEPA regulations provide that every agency “shall” prepare supplements to environmental documents if there are “significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.” 40 C.F.R. § 1502.9(c)(1)(ii).

**158.** BLM's 2003 RMP for the Farmington Field Office considered the potential for development within the Santa Fe National Forest, but the Forest Service determined “it was not

adequate to meet Forest Service National Environmental Policy Act (NEPA) requirements.”

**159.** The Forest Service recognized the need for site-specific evaluation of oil and gas leasing availability, as well as the insufficiency of both the 1987 Forest Plan and BLM’s 2003 RMP to provide the level of analysis necessary to guide the Forest Service’s decisionmaking. The Forest Service drafted the 2008 Amendment and 2012 Supplement to address these fundamental NEPA deficiencies.

**160.** The assumptions the Forest Service relied upon to develop the 2008 Amendment and 2012 Supplement, including an estimate of surface disturbance associated with current gas development, were premised upon BLM’s 2003 RMP.

**161.** BLM is currently preparing the Mancos Shale/Gallup Formation RMP Amendment because: “Subsequent improvements and innovations in horizontal drilling technology and multi-stage hydraulic fracturing have enhanced the economics of developing [the Mancos Shale] horizon... As full-field development occurs, especially in the shale oil play, additional impacts may occur that previously were not anticipated in the RFD or analyzed in the current 2003 RMP/EIS, which will require an EIS-level plan amendment ... for complete analysis of the Mancos Shale formation.”

**162.** Between issuance of BLM’s 2003 RMP and the Forest Service’s 2008 Amendment and 2013 Supplement and the Forest Services approval of the 13 leases challenged herein, new information and circumstances relevant to environmental concerns and bearing on the leases and their impacts arose. This new information and these new circumstances include, but are not limited to: 1) widespread use of a new oil and gas extraction technology—horizontal drilling and multi-stage fracking—allowing production in previously undeveloped areas of the San Juan Basin; 2) BLM’s recognition that its 2003 RMP did not analyze the environmental

impacts oil and gas development using this new technology; 3) data demonstrating that this new technology has environmental effects of a greater magnitude than those associated with conventional drilling technology; and 4) BLM has issued over 300 approvals to drill new wells in the San Juan Basin using this new technology.

**163.** This new information represents significant new information relevant to environmental concerns associated with the challenged leasing decision. Therefore, before authorizing the leases, the Forest Service was required to prepare a supplemental its existing environmental documents and evaluate the environmental impacts of lease development using horizontal drilling and multi-stage fracking.

**164.** Because the Forest Service unlawfully failed to consider the direct, indirect, and cumulative impacts of the proposed action, and consider new information and changed circumstances in energy development, prior to authorizing the challenged leases, the Forest Service's actions are arbitrary, capricious, and 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 violate NEPA and its implementing regulations;
- B.** Vacate and remand Federal Defendants' leasing decisions;
- C.** Enjoin Federal Defendants from any further leasing authorizations within the Santa Fe National Forest pending Federal Defendants' full compliance with NEPA and its implementing regulations;

**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 3rd day of May 2016,

/s/ Kyle J. Tisdell

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